



# One Health in Veterinary Medical Education

## 2014 Annual Conference Program Guide

**March 14-16, 2014**

**Westin Alexandria  
Alexandria, Virginia**



**Global Connections. Spanning Disciplines. Creating Vision.**

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Dear Colleagues,

During the AAVMC's 2014 Deans Conference a couple months ago in Naples, Florida, The Ohio State University dean Dr. Lonnie King described One Health as a major "point of inflection" in the evolution of veterinary medicine. He said he believes it will ultimately create change in our profession on a scale similar to that effected by the development of the internal combustion engine and the emerging role of companion animals in society.

We have been developing interprofessional collaborations and working to educate the public about how the different dimensions of veterinary medicine affect human health and wellbeing for decades. During the past ten years in particular, we have made considerable progress in understanding the necessity of taking a multiprofessional, collaborative approach to working at the intersection of animal, human, and environmental health.

We have made some progress and many opportunities lie ahead. Many recall the American Medical Association's House of Delegates passage of Resolution 530 in 2007, which called for greater collaboration with veterinary medicine on One Health initiatives. The NAVMEC report identified One Health as a major initiative for veterinary medicine, and partner organizations such as the AVMA have fully embraced the concept. Many of our member institutions have major One Health initiatives underway.

We hope this meeting will be a defining moment in the evolving history of the One Health movement. What we do in our classrooms and laboratories shapes the way

new generations practice—it also determines how the public understands our profession, which in turn creates demand and builds support. During this meeting you will hear scores of presentations that detail how curricular innovation, field experiences, and interprofessional collaborations are helping us prepare veterinarians for success in the emerging area of One Health.

You will also hear presentations from leaders representing government agencies and NGOs from the United States and throughout the world that describe the fundamental role veterinary medicine is playing—and must continue to play—if we are to successfully navigate the challenges in food security, infectious disease control, and other public health challenges that are part of the age of globalization.

The AAVMC annual conference is a special opportunity to gather, collaborate, envision, and create a better future. Please make the most of your conference experience by actively engaging and sharing your own ideas and perspectives, both during our program sessions and casual hallway discussions. Our goal is for you to return to your universities and workplaces inspired and motivated, ready to play an even larger role than you already do in building a better future for veterinary medicine.

Kent Hoblet  
AAVMC President

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## IML Connector Instructions

### VOTING

When prompted, press the number that corresponds to the answer you wish to give.

To change your mind, press the Red Triangle to clear and input your new choice.



### MICROPHONE

Hold the keypad 6 inches away.

Press AND HOLD the mic button the entire time you are speaking, then release the button when finished.



### TEXTING

Trackball

Press green submit button when finished.

Symbols, punctuation and space bar.

Text at any time during the conference to let us know what you think.



# Conference Program Overview

## Wednesday, March 12, 2014

Board of Directors Meeting	8:00 a.m.–4:00 p.m.	Edison EF
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## Thursday, March 13, 2014

Breakfast	7:00–8:00 a.m.	
Advocacy Briefing	8:00–9:30 a.m.	Edison ABC
Advocacy Meetings	10:00 a.m.–5:00 p.m.	Off-site
Congressional Reception	5:00–7:00 p.m.	Off-site

## Friday, March 14, 2014

Continental Breakfast	7:00–8:00 a.m.		
Opening Plenary Session	8:00 a.m.–Noon	Edison DABC	Page 7
Academic Affairs Committee Meeting	8:00 a.m.–Noon	Edison EFG	
Research Committee Meeting	8:00–11:00 a.m.	Wright	
AAVMC Distinguished Veterinary Teacher Award Luncheon, Presented by Zoetis	Noon–1:30 p.m.	Edison DABC	Page 7
Educational Session I	1:30–5:30 p.m.	Edison DABC	Page 8
Educational Session II	1:30–5:30 p.m.	Edison EFG	Page 11
AAVMC President's Reception and Poster Session	6:30–8:30 p.m.	Edison Foyer/DABC	Page 25

## Saturday, March 15, 2014

Continental Breakfast	7:00–8:00 a.m.		
Orientation to Twinning Programs	7:00–7:45 a.m.	Edison EFG	Page 13
Educational Session III	8:00 a.m.–Noon	Edison DABC	Page 13
Admissions Educational Session	8:00 a.m.–Noon	Edison EFG	Page 16
AAVMC Recognition Lecture Luncheon	Noon–1:30 p.m.	Edison DABC	Page 18
Educational Session IV	1:30–5:30 p.m.	Edison DABC	Page 18
Admissions Workshop	1:45–4:30 p.m.	Edison EFG	Page 16
JVME Editorial Board Meeting	5:30–6:30 p.m.	Whitney	

## Sunday, March 16, 2014

Continental Breakfast	7:00–8:00 a.m.		
Educational Session V	8:00–11:05 a.m.	Edison EFG	Page 21
Educational Session VI	8:00–11:05 a.m.	Edison DABC	Page 22
Closing Workshop	11:05 a.m.–12:30 p.m.	Edison DABC	Page 24
Career Fair Exhibition Hall	2:30–5:00 p.m.	Edison D	
Career Fair Information Session I	2:30–5:00 p.m.	Edison ABC	
Career Fair Information Session II	2:30–5:00 p.m.	Edison EFG	



Dear Colleagues,

On behalf of our entire staff, it's my pleasure to welcome you to the 2014 AAVMC Annual Conference. We're glad that you're here and we're excited about the opportunity to focus on "One Health in Veterinary Medical Education."

Many exciting and innovative One Health initiatives are occurring right now at schools and colleges of veterinary medicine worldwide. This conference allows us to bring together some of the best minds in academic veterinary medicine and related areas to share successful practices, learn about alternative education models and teaching methods, and brainstorm how we can bring our vision for an interdisciplinary, interconnected medical future to fruition.

Organizing a conference is something that involves our entire staff in one way or another. Project Manager Andrew Zoeller is the "go-to" person for all things conference related, and he's done a great job, as usual. Government Relations Director Kevin Cain organized our Advocacy Day, which provides a great opportunity tell the story of the importance of academic veterinary medicine to our legislative representatives. Ted Mashima has done an outstanding job in organizing NIH and USDA visits for AAVMC representatives, including deans and associate deans of research, and Tony Wynne has worked with the Admissions and Recruitment

committee to develop an exceptional program. And I extend my special thanks to Lisa Greenhill for her work in organizing the AAVMC Career Fair, which pertains so directly to "the future of veterinary medicine."

Chief Operating Officer Dotty Gray keeps all the wheels turning, Jeff Douglas and Jeanne Johnson help to get our message across by providing outstanding communications products, and McKensie Carr, Mark Stodter, and Lawann Smith-Johnson provide the necessary support so we can all get the job done.

My hope is that this conference will be an enriching, transformative experience for you, where you will learn together, interact with others, and get inspired.

Please let us know if you have any questions or concerns. We are here to make this event as professionally enriching as it can be for you, in every possible way.

Thanks for coming and have a great meeting!

Andrew Maccabe  
Executive Director

8:00–8:10 a.m.

**Welcome and Introductions**

*Kent Hoblet, AAVMC President*

8:10–8:20

**AAVMC Excellence in Research Award**

*Kent Hoblet*

The 2014 Excellence in Research Award will be presented to Yoshihiro Kawaoka of the University of Wisconsin for advancing the fundamental boundaries of knowledge in the veterinary profession and for facilitating the research careers of veterinarians. See our award winners on page 28.

8:20–8:30

**AAVMC Senator John Melcher, DVM Leadership in Public Policy Award**

*Kent Hoblet*

The 2014 Senator John Melcher, DVM Leadership in Public Policy Award will be presented to John Herrmann of the University of Illinois for his significant contributions to and leadership in public policy for the advancement of veterinary medical education. See our award winners on page 28.

8:30–8:45

**Connecting at the Conference: Audience Feedback and Participation**

*Andrew Maccabe, AAVMC Executive Director*

Guest Speakers

8:45–9:00

**Keith Martin**

*Executive Director, Consortium of Universities for Global Health*

9:00–9:20

**John Clifford**

*Chief Veterinary Officer and Deputy Administrator for Veterinary Services, Animal and Plant Health Inspection Service, U.S. Department of Agriculture (USDA)*

9:20–9:40

**Bernadette Dunham**

*Director, Center for Veterinary Medicine, U.S. Food and Drug Administration*

9:40–10:10

**Break**

10:10–10:30

**John Finnegan**

*Chair of the Board of Directors, Association of Schools and Programs in Public Health  
Dean, School of Public Health, University of Minnesota*

Keynote Addresses

10:30–11:15

**The Honorable Catherine Woteki**

*Chief Scientist and Under Secretary for Research Education, and Economics, USDA*

11:15–12:00

**Juan Lubroth**

*Chief Veterinary Officer, Food and Agriculture Organization of the United Nations*

AAVMC Distinguished Veterinary Teacher Award Luncheon, Presented by Zoetis

The 2013 Distinguished Veterinary Teacher Award will be Presented by Zoetis to Matthew Mellema of the University of California, Davis, designating him as the outstanding veterinary medical educator of the year in the United States and Caribbean. See our award winners on page 28.

12:00 p.m.

**Lunch Begins**

12:45 p.m.

**Welcome and Introduction**

*Kent Hoblet*

**Presentation of Award**

*Vanessa Mariani*

*Director of Innovation and Strategic Initiatives, Cattle and Equine, U.S. Operation, Zoetis*

**Award Lecture**

*Matthew Mellema*



1:30–2:15 p.m.

**Interprofessional Integration and Sustainability of One Health in Education and Beyond**

*Kaja Abbas, Virginia-Maryland Regional College of Veterinary Medicine*

*Francois Elvinger, Virginia-Maryland Regional College of Veterinary Medicine*

Learn about how the Virginia Tech Public Health and Master of Public Health (MPH) Program in the College of Veterinary Medicine, in partnership with the Carilion School of Medicine, responded to the One Health challenge by integrating human, animal, and environmental health competencies into core and concentration courses, experiential learning, and professional preparation activities. The diverse experiences of students from across multiple disciplines, including full-time MPH students, medical and veterinary students, PhD students in various disciplines of science and engineering, and mid-career health professionals, brought many perspectives to this initiative, which can serve as a model for the future. Community organizations, government, and public, private, and academic institutions all partnered to implement the program.

2:15–2:30 p.m.

**Imagine! One Health, One World, One Future—The Solution for a World at Risk**

*Eleanor Green, Texas A&M University*

*Michael Chaddock, Texas A&M University*

This presentation takes the audience on a journey from a vision to the reality of the Texas A&M University (TAMU) One Health program and TAMU One Health Grand Challenge. The presentation will describe the challenges involved; how the vision for the TAMU One Health program evolved; how the program built a foundational transdisciplinary coalition of support; how it integrated One Health opportunities into a capital campaign and college development; and how the program required support and focused expertise.

2:30–2:45 p.m.

**Strategies for Developing a Successful One Health Initiative**

*Mark Stetter, Colorado State University*

Discover how Colorado State University developed a One Health Initiative, including the development of a steering committee, distribution of a stakeholder survey, and the identification of the top five “One Health” issues: infectious/zoonotic disease, food safety/security, wildlife/ecosystem/environmental, climate change, and human impact. As part of the planning process, CSU is also examining how to leverage areas of expertise to develop

successful One Health initiatives and, eventually, a One Health Institute.

2:45–3:00 p.m.

**Operationalizing One Health**

*Susan Sanchez, University of Georgia*

As a concept, One Health needs a common platform for collaborating among all potential partners. The need for coordination in One Health formed the basis of a project tasked to a group of University of Georgia Master of Business Administration (MBA) students whose job was to develop value propositions as marketing tools for potential partners. The project examined the operational, financial, educational, advocacy, and legislative responsibilities of partner organizations involved in One Health. The project’s results will be presented and discussed.

3:00–3:15 p.m.

**Building a One Health Program: The Public Engagement Side of One Health**

*John Herrmann, University of Illinois*

*Yvette Johnson, University of Illinois*

The Center for One Health Illinois (COHI) at the University of Illinois College of Veterinary Medicine conducts a One Health public engagement program that provides education and training opportunities for several segments of the community, from the general public to public health professionals and local health departments. This presentation highlights opportunities for public engagement with community stakeholders and how a university-based One Health Program can assume a leadership role in educating and training community members.

3:15–3:45 p.m.

**Break**

3:45–4:15 p.m.

**One Health Initiative at Iowa State University – Connecting Education, Research, and Outreach**

*Qijing Zhang, Iowa State University*

*Lisa Nolan, Iowa State University*

*Claire Andreasen, Iowa State University*

The Iowa State University and the College of Veterinary Medicine (CVM) integrated the One Health approach to augment collaboration among colleagues in human and animal health, and produce educational materials, opportunities, and outcomes. Learn about the CVM’s approach, which included creating a number of opportunities for researchers to apply their expertise and also educate the public through community awareness initiatives.



4:14–4:30 p.m.

**One Health Track in the Danish Veterinary Medicine Curriculum**

*Liza Rosenbaum Nielsen, University of Copenhagen*

Starting in 2015, the University of Copenhagen in Denmark plans to implement a curriculum change that will allow students to choose a One Health track. Learn about the development of this One Health track, which will be designed to develop strong competencies in public health-related topics and methodologies, including global preparedness through surveillance and disease control; molecular typing methods; outbreak investigation; food safety; zoonoses and the role of the external environment; antimicrobial use; and resistance in livestock production and companion animals.

4:30–5:15 p.m.

**Fostering One Health Approaches through Public-Private-Academic Partnerships**

*Will Hueston, University of Minnesota*

*Tracey Lynn, U.S. Department of Agriculture*

*Linda Valeri, University of Minnesota*

*Sylvia Wanzala, Makerere University*

Successful One Health approaches demand dynamic partnerships that span the public, private, and academic sectors (PPAP) as well as different disciplines. This session covers a cross-section of public-private-academic partnership activities that address a number of different needs. Key participants will discuss examples that provide personal perspectives and insights. The session will also highlight key learning experiences about the power of public-private-academic partnerships and provide guidelines for development of future successful PPAPs.

5:15–5:30 p.m.

**Professional Certificate in Global Animal Health at Washington State University: An Opportunity to Combine One Health Training with Traditional Veterinary Education**

*Gretchen Kaufman, Washington State University*

Some students who want to pursue careers that involve One Health issues will need more than what a traditional framework can reasonably offer. Learn how the addition of the Paul G. Allen School for Global Animal Health at Washington State University (WSU) allows veterinary students to have increased exposure to important global one health issues in the classroom, laboratory, and the field by creating a global animal health pathway leading to a professional certificate degree for selected students that are seeking careers in global animal health.



## The Right Place to Find the Right People.

When you're responsible for hiring veterinary professionals and support staff, the AAVMC Career Center can save you time and money by helping you find the right people faster. As a member of the Veterinary Career Network (VCN), the AAVMC Career Center gives you access to the best source of local and national professionals, as well as to veterinary and vet tech schools and colleges. When you want the best, go to where the best are, the AAVMC Career Center.

- The AAVMC CAREER CENTER is your portal to the VCN. When you post your jobs with us, they are automatically distributed to our 50+ VCN partner job boards, giving you access to 10's of thousands of veterinary professional and support staff candidates to work in private and corporate practice, government, industry, academia, and uniformed services positions
- Our impressive network statistics prove the effectiveness in delivering excellent value for finding quality employees
- Grab even more attention with a Featured Job or by adding Premium Featured Employer for as little as \$59.00 for 30 days (banner ad, enhanced job posting and customized employer profile)
- Posting jobs is quick and convenient
- Resume access to more than 25,000+ current resumes is included with your active job posting
- Our members automatically qualify for the lower job posting rate

Visit [jobs.aavmc.org](http://jobs.aavmc.org) and start getting results today!





1:30–1:45 p.m.

**Veterinary Public Health Degree Programs:  
Assessing and Comparing Organization,  
Implementation, and Design**

*Joann Lindenmayer, Tufts University  
Miranda Hillyard, Friendship Hospital for Animals*

Veterinary public health degree programs, including joint Doctor of Veterinary Medicine/Master of Public Health (DVM/MPH) degree programs, are gaining popularity worldwide and growing both in number and participation. To assess the roles played by the veterinary medical profession in the development, organization and implementation of these programs, the presenters conducted interviews with the leaders of 14 veterinary public health degree programs in North America. Results provide a useful assessment that new and existing programs alike can use to develop and refine their veterinary public health programs.

**Veterinary Public Health: Beyond Zoonoses**

*Michael McGuill, Tufts University*

Presenters will discuss a broader definition of veterinary public health; its relevance to veterinary clinicians and veterinary public health workers; how it may be incorporated into veterinary public health curricula; and lessons learned from Tufts' experiences with the Public Health and DVM-MPH curricula at the Cummings School of Veterinary Medicine.

1:45–2:00 p.m.

**The Benefits and Challenges of Developing a  
Practice-based MPH Program within a Veterinary  
School: The Case of the University of Guelph's  
Solid Beginning and Bright Future**

*Cate Dewey, University of Guelph*

The University of Guelph created the MPH program in 2008 to respond to the need for graduate-level trained professionals to work in the public health sector. The Ontario Veterinary College of the University of Guelph embarked on developing a program that would focus on the human-animal interface of public health, include a practicum placement and use case-based and practice-based learning wherever possible. Learn the methodology and results of an outcome assessment the university conducted to determine whether graduates are receiving adequate public health training and meeting a societal need.

2:00–2:15 p.m.

**Public Health Inclusiveness: Multifaceted One  
Health/Public Health Education for Undergraduate  
and Veterinary Students at Auburn University**

*Stephanie Ostrowski, Auburn University*

Discover the ways in which the Auburn University (AU) College of Veterinary Medicine (CVM) engages undergraduate and veterinary students in the issues, programs, and services that constitute One Health/public health. Initiatives include a public health minor, which 14 undergraduates have earned so far, and a cooperative relationship with the MPH program at the University of Alabama – Birmingham (UAB).

2:15–2:30 p.m.

**Flooding the Market or Empowering for Success?  
Delivery and Outcomes of a Flexible Public Health  
Training Program for Veterinary Students**

*Larissa Minicucci, University of Minnesota*

This presentation describes the design of the DVM/MPH program at the University of Minnesota, documents program demand, and highlights program features – identified by students in a survey evaluation – that foster feasibility and success. The program is unique in that students can complete the MPH concurrently with their DVM degree using a combination of in-person and distance courses.

2:30–2:45 p.m.

**Risk Assessment of Canine Influenza A Viruses to  
Public Health**

*Xiu-Feng Wan, Mississippi State University*

In addition to being one of the major causes of respiratory diseases in humans, influenza A viruses (IAVs) naturally infect birds, pigs, horses, sea mammals, and have recently emerged in dogs. Discover the details of how this risk assessment study demonstrates that canine influenza viruses pose a potential threat to public health.

2:45–3:00 p.m.

**The Auburn University Research Initiative in  
Cancer (AURIC): A Model of Breaking Down Walls  
in Cancer Research**

*Bruce Smith, Auburn University*

The interdisciplinary Auburn University Research Initiative in Cancer (AURIC) now numbers more than 70 members from across the Auburn University campus (five colleges) as well as members from other institutions. With more than \$3 million in aggregate funding from the State of Alabama, this growing program aggressively supports research. This session highlights the creation and growth of AURIC as



well as strategies to leverage funding for such programs. It will also present approaches to exploit strengths in often disparate fields and channel these into collaborative interdisciplinary projects.

3:00–3:15 p.m.

**Navigating the One Health Obstacle Course in an Academic Setting**

*Carolyn Henry, University of Missouri*

This session highlights three programs offered at the University of Missouri that serve as examples of innovative interprofessional training programs. Presenters will discuss the lessons learned during programmatic development and the challenges that remain in embracing a One Health-centered approach to education and translational research. Explore the benefits, obstacles, and needs related to developing educational and research programs that truly advocate a One Health approach to real-world problems.

3:15–3:45 p.m.

**Break**

3:45–4:30 p.m.

**Building Ecosystem Health Capacity in Veterinary Medicine**

*Katey Pelican, University of Minnesota*  
*Jonna Mazet, University of California, Davis*  
*Lonnie King, Ohio State University*  
*Dominic Travis, University of Minnesota*  
*Mark Stetter, Colorado State University*  
*Tracey Lynn, U.S. Department of Agriculture*  
*Andrew Tamale, Makerere University*

This panel discussion will cover the development of the Ecosystem Health Initiative at the University of Minnesota College of Veterinary Medicine and the importance of ecosystem health as an attractive career path for many veterinary medical students with One Health interests. Panelists will focus on the Minnesota experience in understanding the job market, program development, ecosystem health scholarship (research, education, and service), and formulating partnerships that create tangible career paths.

4:30–4:45 p.m.

**Accidental One Health: the Unexpected Opportunities, Rewards, and Challenges of Collaboration**

*Andrew Specht, University of Florida*

The presenter's primary research aims to use a large animal (canine) model of GSDIa to develop a gene therapy protocol for translation to clinical trials in human patients. In the process, his research team included veterinarians,

physicians, and scientists as well as a large number of students including undergraduates, graduate students, and veterinary students. This session will illustrate some of the opportunities, rewards, and challenges that are intrinsic to, or can develop from, a project when participants are willing to embrace a One Health perspective.

4:45–5:15 p.m.

**Systems Biology and Unconventional Animal Models as Tools in Basic and Applied Research within a One Health Theme**

*Camilo Bulla, Mississippi State University*

Veterinary and agricultural researchers are beginning to embrace systems biology and high throughput data sets for identification of biomarkers of disease, generation of hypotheses for new basic research, and identification of potential molecular targets for new drugs. The presenters will describe a few examples in which researchers conducted work of this type, with interesting results. This overview of what is happening at Mississippi State University will illustrate the potential value of the One Health approach for improving animal and human health.

5:15–5:30 p.m.

**Teaching Scientific Information Literacy Skills to Veterinary Students: The Missing Link**

*Judy Klimek, Kansas State University*  
*Elizabeth Davis, Kansas State University*

Learn about an elective, interdisciplinary course that aims to teach students to find and critically evaluate relevant literature for improved clinical and academic decision-making, increased confidence with scientific literature, and potential inspiration for the pursuit of academic careers. Session participants will see examples of course assignments and projects and learn about the course's structure and evaluation. In addition, participants will take away practical suggestions for designing a similar course.



## Orientation to Twinning Programs

7:00–7:45 a.m.

### **Orientation to the OIE Veterinary Educational Twinning Programs and Opportunities for Participation**

*Rutch Khattiya, PhD Chiang Mai University*  
*Alain DeHove, World Organisation for Animal Health*  
*Karin Hamilton, University of Minnesota*

The World Organisation for Animal Health (OIE) has proposed a list of Day 1 competencies for new veterinary graduates and provides a model core curriculum that correlates with many One Health competencies. The OIE has begun to fund veterinary educational twinning programs that partner parent institutions from developed countries with institutions in developing countries. Presenters will share the experiences of the University of Minnesota and Chiang Mai University in Thailand as they have launched the first veterinary educational twinning program funded by the U.S. Department of State through the OIE World Animal Health and Welfare Fund.

## Educational Session III

8:00–8:15 a.m.

### **An International One Medicine Approach to Teaching and Learning: Encouraging Critical Clinical Thinking in the Information Age**

*Duncan Ferguson, University of Illinois*

In 25 years, the technical possibilities for sharing instructional expertise have grown exponentially, often changing the role of the instructor to encompass that of a coach who uses classroom experiences to increase engagement, retention, and critical clinical thinking skills. This trend toward technological, interactive teaching tools is increasing as medical colleges integrate new technologies and approaches into their curricula. This presentation will examine that trend and demonstrate a common approach and platform for sharing efforts regionally, nationally, internationally, and across medical professions.

8:15–8:30 a.m.

### **Is There Room for One Health in Veterinary Medical Education?**

*John Herrmann, University of Illinois*

This session will focus on the challenges of integrating One Health concepts into the general veterinary medical curriculum using the Center for One Health Illinois (COHI) at the University of Illinois College of Veterinary Medicine as an example. Topics discussed will include successes and failures of collaborations within and across campuses, and

with local health departments and the medical community. The session includes an update on the DVM/MPH joint degree program, the public policy practicum, the clinical rotation for fourth year veterinary medical students, and other initiatives.

8:30–9:15 a.m.

### **Using One Health Core Competencies to Transform Veterinary Medical Education**

*Carol Rubin, Centers for Disease Control and Prevention*  
*Rebekah Kunkel, Centers for Disease Control and Prevention*  
*Debra Olson, University of Minnesota*  
*William Hueston, University of Minnesota*  
*Felicia Nutter, Tufts University*

Core competencies are knowledge and skills that professionals need for success within a specific discipline. However, the disease threats of the 21st century require a veterinary medical workforce trained to tackle interdisciplinary challenges. Using different approaches, four separate workgroups independently developed the core competencies required by One Health professionals working at the intersection of veterinary medicine, public health, human medicine, and environmental health. Learn how various workgroups identified core competencies, what they are, and how they can help to equip the coming decade's veterinary medical workforce to tackle One Health challenges.

9:15–9:30 a.m.

### **Integration of One Health into Undergraduate and Graduate Education**

*Marcy Souza, University of Tennessee*  
*Merrideth Holub, Texas A&M University*

Presenters will share their experiences delivering undergraduate and graduate courses that focus on a One Health curriculum, including how they incorporated real-life examples of One Health research, education, and outreach endeavors from different fields of study. Alternative methods used to enhance the experiences of the students included creating a learning community, completing service learning projects, and taking educational field trips to local community organizations, as well as more traditional methods such as lectures, discussion, article review, and various topic presentations by students.

9:30–10:00 a.m.

### **Break**

# VETERINARY MEDICAL SCHOOL ADMISSION REQUIREMENTS (VMSAR)

2014 Edition for 2015 Matriculation

## Association of American Veterinary Medical Colleges

Completely redesigned and expanded for 2014, this annually updated publication provides a comprehensive overview of the admission process for the national and international veterinary schools that are members of the Association of American Veterinary Medical Colleges (AAVMC), as well as a variety of valuable guidance about how to achieve your goal of becoming a veterinarian.

The following need-to-know information is provided for each school: summary of application procedure; requirements for application and residency; prerequisites for admission; deadlines for each component of the application process; description of campus and campus life; and cost of tuition and fees. Full-page spreads provide a complete profile of the different campuses and clearly lay out all the details you require to select the school that best matches your needs.

Additional information includes an overview of the Veterinary Medical College Application Service (VMCAS), information about the accreditation of veterinary schools and professional licensure as a veterinarian, and new this year, profiles of veterinary students and practicing veterinarians. The book provides the best concise, current, and comparative information for those students interested in preparing for a career in veterinary medicine, as well as their advisors and counselors. It is the essential guide to becoming a DVM.

*"These are exciting times for veterinary medicine, a profession that bridges animal, human, and ecosystem health. We understand that getting started and making sense of all the choices and requirements can be challenging, but you've come to the right place by accessing this publication, which provides the essential information you need to begin your journey."*

—DR. ANDREW MACCABE,  
AAVMC Executive Director

### KEY POINTS

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- The definitive guide to getting into vet school, expanded and redesigned.
- Up-to-date and comprehensive descriptions of different colleges.
- Now available in e-book formats for easy access on mobile devices.

# Veterinary Medical School Admission Requirements

2014 EDITION FOR 2015 MATRICULATION



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E-book available, \$16.99

250 pages • April 2014 • 8.5 × 11

### ASSOCIATION OF AMERICAN VETERINARY MEDICAL COLLEGES

The AAVMC coordinates the national and international affairs of all 30 veterinary medical colleges in the United States and 5 in Canada, 9 departments of veterinary science, 8 departments of comparative medicine, 13 accredited colleges of veterinary medicine overseas, and 3 affiliate members. The AAVMC fosters the teaching, research, and service activities of its members, both nationally and internationally. The mission of the AAVMC is to improve the quality of life for people and animals by advancing veterinary medical education, improving animal health and welfare, strengthening biomedical research, promoting food safety and food security, and enhancing environmental quality.

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10:00–10:45 a.m.

**A Global Reach for One Health at Tufts University: Technology, Curriculum, Innovation**

*Mark Bailey, Tufts University*

*Gretchen Kaufman, Washington State University*

*Melissa Mazan, Tufts University*

*Diafuka Saila-Ngita, Tufts University*

*Alison Robbins, Tufts University*

This panel will demonstrate One Health in action at Tufts University by briefly discussing four distinct but jointly themed and interrelated approaches to One Health: the Tufts University Sciences Knowledgebase enterprise educational software; conservation medicine; the Patients Without Borders distance learning program; and work under RESPOND in the Democratic Republic of the Congo, where faculty worked collaboratively to create a working definition of epidemiology competencies expected of all health professionals.

10:45–11:00 a.m.

**A Transuniversity Approach for Communicating One Health Concepts to Students and the Public**

*Suzanne Kennedy-Stoskopf, North Carolina State University*

Faculty from North Carolina State University, University of North Carolina, Chapel Hill, and Duke University cooperatively developed and teach a One Health course for graduate students in global health, environmental sciences, and comparative biomedical sciences; veterinary students; medical students; and preprofessional students. The course, now in its third year, includes topics such as the following: environmental health/ecology; zoonoses and emerging infectious diseases; food and water safety; the human and companion animal bond; disease surveillance, informatics, and emergency preparedness; comparative medicine; risk communication; and One Health in policy and education. Learn what elements make the course successful.

11:00–11:30 a.m.

**Using “Twinning” to Enhance One Health Learning Opportunities**

*William Hueston, University of Minnesota*

*Rutch Khattiya, Chiang Mai University*

*Andrew Tamale, Makerere University*

*Sylvia Wanzala, Makerere University*

“Twinning” is an institution-building approach that links organizations or educational programs at different levels of advancement. Twinning programs involve exchange of faculty, staff and even students, plus the sharing of curriculum and processes in order to benefit each other. This session explores two examples of twinning between the University of Minnesota and Makerere University,

Uganda, and one with Chiang Mai University in Thailand.

The presentations will highlight lessons learned in these three twinning initiatives, including the importance of specific objectives, and sharing best practices for the development of new twinning programs.

11:30–11:45 a.m.

**Teaching One Health Principles through Case Studies**

*Jodi Korich, Texas A&M University*

Case studies effectively provide medical students with interactive learning experiences. Online cases can be used for self-directed learning, as a means of assessment, or to stimulate collaborative problem solving. Because of their flexible nature, case studies can also teach One Health principles with relative ease. The Center for Educational Technologies at Texas A&M University College of Veterinary Medicine & Biomedical Sciences recently developed an online case-authoring tool to facilitate the development of robust, media-rich case studies. This presentation will demonstrate how to use the tool to develop branching case studies for implementation in classrooms, clinics, and independent study.

11:45 a.m.–Noon

**University Teaching Hospital Collaboration with Human Medical Facility to Enhance Student Learning at Mississippi State University: A Model for One-Health Delivery**

*Ron McLaughlin, Mississippi State University*

Mississippi State University, College of Veterinary Medicine established a not-for-profit corporation (MSU-CVM-COS, Inc.) to develop and manage private specialty clinics that would enhance teaching and learning for students. This corporation has developed the Veterinary Specialty Center (VCS), a referral veterinary specialty practice, located in a human medical facility four miles from the College of Veterinary Medicine. Learn how this interdisciplinary collaborative relationship with a prominent medical facility in the region provides significant opportunities to enhance the One Health Initiative at the MSU-CVM.

Admissions Educational Session and Workshop  
Edison EFG  
Saturday, March 15



Admissions Educational Session

8:00–10:00 a.m.

**One Health Impacts on Admissions and Recruitment**

*Panel Leader: Pat Conrad, University of California, Davis*

This intrahealth professions discussion will explore One Health and what impact it has on admissions and recruitment. How should we approach perspective students about One Health? What answers should admissions and recruitment have ready?

10:00–10:15 a.m.

**Break**

10:15 a.m.–Noon

**Lessons from the Trenches: VMCAS System Adaptation Stories Breakout & Working Group**

*Facilitator: Michelle Waldron, Oregon State University*

The Veterinary Medical College Application Service (VMCAS) made many changes this year. This session will begin with small group discussions including “Challenges and Obstacles,” “Veterinary Admissions Offices Best Practices,” and more.

Noon–1:30 p.m.

**Lunch**

Admissions Workshop

1:45–2:15 p.m.

**Admissions & Recruitment: An Overview**

*Tony Wynne, AAVMC Director of Admissions & Recruitment Affairs*

This presentation will provide a brief overview of activities at AAVMC related to admissions and recruitment projects and upcoming initiatives.

2:15–2:30 p.m.

**Break**

2:30–4:30 p.m.

**WebAdMIT and VMCAS 2014 Application Town Hall Discussion**

*Moderator: Jim Weisman, Purdue University*

# Journal of Veterinary Medical Education



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Educational Session IV  
Edison DABC  
Saturday, March 15



## AAVMC Recognition Lecture Luncheon

The 2014 Recognition Lecture Award will be presented to Joe Kornegay of Texas A&M University for his significant and exemplary contributions to veterinary medical education and his advancement of the veterinary profession. See our award winners on page 28.

Noon  
**Lunch Begins**

12:45 p.m.  
**Award Presentation**  
Kent Hoblet, AAVMC President

**One Man's View of One Health**  
Joe Kornegay

## Educational Session IV

1:30–1:45 p.m.  
**Development and Use of a Zoonotic Disease Outbreak Scenario as a Professional Development Training Tool**  
*Alicia Humlicek*

Disease outbreaks have an impact on the health of our nation, causing significant morbidity and mortality to humans and animals. These impacts may be mitigated by using a multidisciplinary response that relies on effective communication and coordination between public health and animal health. The U.S. Department of Agriculture's Veterinary Services (VS) is developing a standardized approach to outbreak investigation training for veterinary epidemiologists that relies heavily on case studies as a method of delivering competency-based training. Learn about the development of a training tool based on the scenario of a foodborne disease outbreak involving animals, humans, and wildlife that will be used in a tabletop training course for VS epidemiologists to improve response to zoonotic disease outbreaks.

1:45–2:00 p.m.  
**Getting our Feet Wet: Converting to Online and the Infusion of One Health and Interdisciplinary Views into an Aquatic Animal Conservation Course**  
*Iskande Larkin, University of Florida*

The Aquatic Animal Health Program at the University of Florida cautiously entered into online education through courses that used technology to increase participation by expert lecturers, diversify students in the course, and evaluate student satisfaction. The technology used recorded

lectures, online videoconferencing/discussion, and survey tools to increase participation by expert lecturers, such as biologists, veterinarians, and government employees who provide content. Learn why feedback indicates that this is a promising effort that will continue to receive program resources for further development of distance education curricula and exploration of additional technologies that can further educational improvements.

2:00–2:10 p.m.  
**Integrating One Health into Medical and Veterinary Medical Education: From Trunk to Tail and Head to Toe**  
*Mary Elizabeth Herring, Texas A&M University*

Texas A&M University faculty and students from the College of Veterinary Medicine and Biomedical Sciences and College of Medicine are introducing One Health to professional students from both colleges through innovative social and educational opportunities that span the curriculum. Learn about TAMU's approach, from the first-year introduction of a One Health interdisciplinary club to a senior-year combined veterinary/medical college-required course in disaster preparedness and management.

2:10–2:20 p.m.  
**Compelling Convergence: The Added Societal Value of a One Health Certificate Program**  
*Merrideth Holub, Texas A&M University*

Learn about TAMU's One Health Certificate program, which allows students to become educated on team work and transdisciplinary collaborative work within their fields. The objective of the certificate program is to provide broad subject matter knowledge to professional and graduate students in topics of wide ranging significance to human, animal, and environmental health, such as infectious diseases, epidemiology, food safety, public health, water, role of architecture and engineering, fundamentals of leadership, and policy.

2:20–2:30 p.m.  
**From Concept to Assessment: Developing a One Health Learning Community**  
*Merrideth Holub, Texas A&M University*

The TAMU Undergraduate One Health Learning Community is built from a volunteer faculty member, an advisory committee, and the assistance of a One Health program coordinator. This team developed a 16-week hands-on experiential learning program for 25 students to attend one-hour weekly educational opportunities through numerous colleges across campus. Interdisciplinary educational opportunities ranged from human and animal medicine, architecture, animal reproduction, water,



climate change, food safety, and engineering. Participants will be guided through a development process of concept, implementation, and evaluation of an undergraduate learning community in One Health that can be established on their campus.

2:30–2:45 p.m.

**Impact of an Interprofessional Course on the Knowledge, Attitudes, and Beliefs of Health Sciences Students on One Health**

*Malika Kachani, Western University of Health Sciences*

Intersectoral collaboration is crucial for disease prevention and control. The One Health approach should be applied by health professionals when addressing health issues in order to save resources and share benefits. Western University provides an excellent forum for evaluating the impact of an interprofessional education course on student knowledge, attitudes, and beliefs (KAB) around One Health. With a mandatory first-year course, it brings together more than 1,200 students from multiple health professions for five intersectoral and interdisciplinary case-based scenarios, with accompanying discussion of health issues. Learn about the course and an assessment that evaluated differences in student KAB before and after having taken the course.

2:45–3:00 p.m.

**An Exclusively Veterinary Perspective on Interprofessional Working, Learning, and Education**

*Tierney Kinnison, Royal Veterinary College*

Interprofessional working, learning, and education within a One Health context implies veterinarians collaborating with members of human healthcare due to factors such as zoonotic diseases and comparative medicine. In the modern era, veterinarians are more likely to work alongside professionals such as veterinary technicians/nurses, practice managers, physical therapists, and animal behaviorists. This session explores the evolution of interprofessional interactions between veterinarians and other veterinary-related professions and how they affect each other.

3:00–3:15 p.m.

**Collaborative, Interprofessional Care: What Can We Learn from Each Other to Improve the Health of Animal Patients, Human Patients, and Population Health?**

*John Tegzes, Western University of Health Sciences  
Laura Molgaard, University of Minnesota*

Interprofessional education (IPE) occurs when learners from two or more professions learn from, with, and about each other in order to improve patient care and

outcomes. Human patient-centered, collaborative care is usually the primary focus. This presentation will explore how interprofessionalism can impact animal owners, or clients, who are challenged with health issues, and focus on veterinary education techniques that help to instill a client-service focus in clinical practice.

3:15–3:45 p.m.

**Break**

3:45–4:00 p.m.

**Interprofessional Initiatives between the Human Health Professions and Veterinary Medical Students: A Scoping Review**

*Molly Courtenay, University of Surrey*

Results of intervention initiatives demonstrate a need to further explore, define, differentiate, and validate some of the concepts that surround interprofessional education (IPE) between the human health professions and veterinary medical students. This session presents the findings of a scoping review designed to identify the extent and nature of the literature on IPE initiatives between the human health professions and veterinary medical students, such as panned healthcare professional and postgraduate programs, single and multiple sessions, healthcare professional program courses, and entire MPH and One Health programs.

4:00–4:15 p.m.

**A Nurse among Veterinarians? The One Health Residency Program in Uganda**

*Jacinta Waiba, Makerere University*

The One Health Residency Program at Makerere University-Uganda has three pilot residents; two veterinarians and one nurse. The program seeks to instill residents with a core understanding of One Health concepts. This session presents the impressions of the nurse on that team and the transformational broadening of her perspectives as she participated in a Veterinary Medicine-Nursing-Public Health field practicum organized by Makerere University. Her definition of health now extends beyond the borders of the hospital or community outreach – it includes farms and processing units and zoonotic disease control and recognizes veterinarians as key stakeholders in human health.

4:15–4:45 p.m.

**Experiencing One Health in Action: Creating a Transformative Learning Environment**

*Emma Read, University of Calgary*

This session details the One Health aspects of curricular and experiential programs involving ecosystem and public



health at the University of Calgary Faculty of Veterinary Medicine, such as two weeks in the field experiencing animal industries, followed by a course on animals, health, and society (year one); a DVM capstone experiential program that engages the full class in an original research project (year three); experiential electives (year four); and the Northern Aboriginal Community Health rotation.

4:45–5:15 p.m.

**Enhancing One Health Learning through Experiential Learning**

*Katey Pelican, University of Minnesota  
Larissa Minicucci, University of Minnesota  
Shamilah Namusisi, Makerere University*

The colleges across the University of Minnesota have a rich history of employing field-based experiential learning for One Health. Through these field-based educational activities, students navigate real world scenarios through on-site investigation, interviews, and interaction with diverse One Health stakeholders including local and federal government agencies, the private sector, and faculty from multiple disciplines and, where possible, cultures. This session highlights several examples of One Health experience-based training programs and their role in advancing One Health competencies both in the U.S. and overseas.

5:15–5:30 p.m.

**The Four S's of a Shelter Medicine Rotation: Students, Shelters, Suburban, and Sonic**

*Brenda Stevens, North Carolina State University*

Shelter medicine is a rapidly developing field of great importance to a One Health mission in veterinary medicine. Shelters provide abundant training opportunities for veterinary medical students. Students trained in shelter medicine have opportunities to practice zoonotic and species-specific infectious disease control, behavioral evaluation and management, primary care, as well as animal welfare, ethics, and public policy considerations affecting animal shelters. This session will describe the results of a series of two-week, elective clinical rotations with a focus on field and service-learning in animal shelters. Information will include costs associated with the rotation, a blueprint for how the rotation was conducted, and other operational details.

Upcoming Meetings

<b>2014 Annual Business Meeting</b> <i>Board of Directors Meeting Assembly Meeting</i>	July 27–28, 2014 July 27, 2014 July 28, 2014	Denver, Colorado
<b>2015 Deans Conference*</b>	January 16–17, 2015	Naples, Florida
<b>2015 Advocacy Summit*</b>	March 12, 2015	Washington, D.C.
<b>2015 Annual Conference</b>	March 13–15, 2015	Washington, D.C.
<b>2015 Veterinary Medical Career Fair</b>	March 15, 2015	Washington, D.C.

*\*Open by invitation only*



8:00–8:45 a.m.

**Pan-American Session**

Introduction

*Francisco Suárez-Güemes, National Autonomous University of Mexico (UNAM)*

Organization of the Veterinary Profession on the American Continent

*Luis Zarco-Quintero, Pan-American Association Veterinary Sciences (PANVET)*

Teaching Experiences Related with Animal Welfare and the One Health Concept

*Juan Taylor-Preciado, University of Guadalajara Pan-American Association of Veterinary Medicine Colleges*

The Inclusion of the One Health and Animal Welfare Concepts in Food Animals

*Rafael Gianella Mondadori, National Commission for the Education of Veterinary Medicine, Brazil Federal University of Pelotas*

8:45–9:30 a.m.

**International One Health Challenges — The Hidden Complexities**

*Valerie Ragan, Virginia-Maryland Regional College of Veterinary Medicine*

This discussion will articulate the value of international One Health experiential education for veterinary students, and identify ways to ensure students have an understanding of the complexities of relationships in international one health efforts, which are the basis for knowing insertion points that can lead to successful actions. Challenges that veterinary students have faced internationally in trying to address One Health will be discussed, as well as recognizing challenges to One Health implementation internationally, ways to increase student understanding of the potential impacts of and solutions to those challenges, and how to enhance student involvement and success in international One Health projects.

9:30–9:45 a.m.

**The preVet-DVM Program for Chinese Students in the U.S. — One World One Health in Action**

*Jishu Shi, Kansas State University*

To advance veterinary education and practice standards in China, the U.S.-China Center for Animal Health (USCCAH) at Kansas State University (KSU) has established and coordinated a preVet-DVM program that will train 50 Chinese students in the next 10 years through AVMA-accredited DVM programs in the U.S. This program

is an international partnership of various public and private entities including the International Veterinary Collaboration for China (IVCC), the Chinese Veterinary Medical Association (CVMA), nine Chinese universities, six U.S. universities, and the China Scholarship Council (CSC). These American-trained Chinese veterinarians will enhance veterinary education, the quality of clinical veterinary care in China, and promote One Health initiatives in China.

9:45–10:05 a.m.

**Break**

10:05–10:20 a.m.

**One Health and Higher Education Institutions**

*Sylvia Wanzala, Makerere University  
David Muwanguzi, Makerere University  
Elsa Murhandarwati, Universitas Gadjah Mada*

One Health is an approach that higher education institutions are slowly beginning to embrace. The traditional compartmentalization of disciplines has created silos and duplication of effort as well as multiplication of resources. With the exploding number of emerging and re-emerging diseases occurring at the human-animal interface, working across disciplines and containing diseases at their source would be more cost effective than letting them enter the human population. This session will look at how the One Health approach has been successfully initiated in higher education institutions in both Asia and East Africa and the reasons why such programs strongly need funding.

10:20–11:05 a.m.

**One Health In Action: From the Field to the Classroom**

*Patricia Conrad, University of California, Davis  
Kirsten Gilardi, University of California, Davis  
Carolina Vicario, University of California, Davis  
Woutrina Miller, University of California, Davis*

Learn about three exciting examples of One Health in action led by University of California, Davis faculty and students. The Gorilla Doctors Program is dedicated to providing hands-on medical care to sick and injured mountain gorillas living in the national parks of Rwanda, Uganda, and the Democratic Republic of Congo. PREDICT is a USAID-funded consortium program focused on wildlife surveillance to identify hotspots for emerging diseases of pandemic potential and help countries develop disease control and prevention strategies. The Nicaragua project is a student-lead, community engagement project designed to foster a One Health approach to international outreach in Sabana Grande, Nicaragua.



8:00–8:15 a.m.

**Veterinary Medical Emergency Preparedness & Response: Responding to the Entire Family**

*Wesley Bissett, Texas A&M University*  
*Debra Zoran, Texas A&M University*

The Texas A&M College of Veterinary Medicine and Biomedical Sciences is providing the nation's only required clinical rotation in emergency preparedness and response. Presenters will describe how this rotation, now in its second year, is focused on providing students with the multifaceted skills and knowledge base required to be personally and professionally prepared to weather a disaster situation and also to assist communities in preparing to mitigate and respond to animal issues that emerge during emergencies and disasters.

8:15–8:30 a.m.

**Training Veterinarians in Disaster Management Using a One Health Approach**

*Carla Huston, Mississippi State University*

Most veterinarians are not accustomed to working in the world of disaster management. However, veterinarians often find themselves thrown into the front lines of a natural or manmade disaster response. Successful disaster preparedness, response, and recovery activities require a true One Health approach. Animal care, public health, preventive medicine, food safety, and environmental health are some areas in which veterinarians are well poised to assist following a large-scale disaster. This session focuses on challenges to providing disaster management training for veterinary students and veterinarians along with integrated approaches to providing such training using a One Health approach.

8:30–8:45 a.m.

**Analyzing the Integration of One Health into Professional Training Programs: A Review of Existing Methods and Future Directions**

*Anna Fagre, Colorado State University*

What makes an effective One Health program or how is it even defined? Learn about an analysis of One Health programs that will critically assess the impact of these programs by quantifying examples of past efforts, current undertakings, and potential areas of success for institutions wishing to implement or improve upon their own One Health curricula in the future using examples adopted from the literature well as the recent experiences of students in Colorado State University's One Health Club.

8:45–9:30 a.m.

**RESPOND: Development of a Global Model for University-Based Engagement in One Health**

*Felicia Nutter, Tufts University*  
*Katey Pelican, University of Minnesota*  
*Dominic Travis, University of Minnesota*  
*Saul Tzipori, Tufts University*

Since 2009, with funding from USAID's Emerging Pandemic Threats (EPT) Program, the RESPOND Project has been supporting the development of country-level One Health capacity in Africa and Southeast Asia. Presentations will cover foundational aspects of RESPOND's work, including legal framework and organizational development for the university networks; participatory development of One Health core competencies and curriculum maps; supporting faculty in learning about and teaching One Health; and changing how students learn and engaging them in One Health activities.

9:30–9:45 a.m. **Disparity in Access to Health Care: Causes and Proposed Solutions for Low-Income Countries**

*Grace Thaxton, Auburn University*

People in low-income or developing nations generally have less access to health services than those in wealthier countries. This disparity has been a major global issue for decades, yet little progress has been made to remedy it. Learn about a review paper by Bigdeli et al. that examines four ways to positively affect access to health care: market forces, innovations in medical supply delivery, transparency and sharing of information, and donor agendas for funding. This session will also look at quality factors and tailoring health systems to the local community's needs and expectations.

9:45–10:05 a.m.

**Break**

10:05–10:20 a.m.

**The Hidden Curriculum of Hospital-Based Teaching**

*Carrie Roder, Royal Veterinary College*

Taking the Royal Veterinary College as a case study, this presentation outlines a mixed methods approach to understanding the hidden curriculum of professionalism experienced by students during their final-year clinical rotations. A longitudinal survey uncovered the students' view of professionalism pre- and postrotations, and, hence, any attitude change, while interviews, observations, and further surveys were undertaken to understand the key messages of the hidden curriculum, the means by which they were delivered, and factors that affected the students'



susceptibility to these messages.

**Developing a New Generation of Veterinary Educators and Professionals for the 21st Century**

*Ayona Silva-Fletcher, Royal Veterinary College*

Teaching One Health requires a different kind of pedagogy and approach to problem solving. How feasible is it to transform the veterinary educators with a science-based background to develop their teaching skills in interdisciplinary problem-solving methodologies? This session explores the development of content and structure in a postgraduate veterinary education program to address the educational demand exerted by the One Health concept.

10:20–10:35 a.m.

**Application of CDC's Ten Essential Public Health Services among Veterinarians in HPAI Prevention and Control, Indonesia**

*Joann Lindenmayer, Tufts University  
Iwan Willyanto, InL Veterinary Service*

Highly pathogenic avian influenza (HPAI) emerged in Indonesia in 2003 and is now endemic among poultry populations. Learn how a coalition of stakeholders, including staff members of the Ministries of Health and Agriculture in Indonesia, are responsible for developing, implementing, and evaluating national plans to prevent and control HPAI. Also, learn how the emergence of HPAI has provided numerous opportunities to strengthen the joint participation of human and animal health professionals in carrying out the CDC's Ten Essential Public Health Services Framework.

**Tufts University One Health Twinning Program in the Democratic Republic of Congo: Lessons Learned**

*Diafuka Saila-Ngita, Tufts University*

Tufts University implemented a twinning program involving faculty from various disciplines in the Democratic Republic of Congo (DRC) under the USAID Emerging Pandemic Threats program in 2012. This session outlines the details of this multifaceted twinning program, which was conducted in a resource-constrained environment. The authors conclude that when introducing One Health collaborative programs, it is important to capitalize on past multidisciplinary collaborative experiences, and that One Health collaboration has the potential of generating substantial savings through resource sharing and joint acquisition.

10:35–10:50 a.m.

**Zoonotic Tuberculosis at the Human-Animal-Livestock Interface**

*Meghan Gibas, Colorado State University*

Recently, the World Health Organization classified zoonotic tuberculosis (TB) as a “neglected zoonosis.” Learn about field projects currently underway in Kenya, Zambia, and Uganda to differentiate the specific species of *Mycobacteria* found among human TB patients in Africa. The results of this study will provide an estimate of the prevalence of *M. bovis* infection in humans and information regarding risk factors associated with this zoonotic disease. Interdisciplinary efforts will contribute to the development of the necessary foundation to create integrated preventative strategies and public health interventions to decrease the burden of zoonotic TB among human populations in rural areas of Africa.

10:50–11:05 a.m.

**One Border, One Health: A Novel Binational Approach to an Early Warning Infectious Disease Surveillance System**

*Helen Engelke, Western University of Health Sciences*

Transboundary movements of humans, domestic animals, wildlife, vectors, and vehicles are risk factors for the emergence of infectious diseases. As such, international collaboration is imperative in prevention and control. This session will outline how more than 100 health professionals from the border states of California and Baja, California, have come together to develop a model that integrates human, animal, and environmental health activities with a novel binational (Mexico-United States) approach. The ultimate aim is not only to protect border communities but also to create an early warning system that would allow for actionable and timely interventions to limit emergence, mitigate spread, and enhance prevention and control.

Closing Workshop  
Edison DABC  
Sunday, March 16



11:05 a.m.–12:30 p.m.

**Capturing the Opportunity: Sustaining One Health Approaches as a Competitive Advantage of Veterinary Medical Education**

*William Hueston, University of Minnesota*

*Lonnie King, Ohio State University*

One Health approaches have captured renewed attention as dynamic tools for managing the dilemmas increasingly found at human, animal, and environmental interfaces. While a flurry of national and international meetings, powerful case studies, new educational programs, and faculty titles have ensued, the seminal question is whether transdisciplinary, cross-sectoral, systems-based One Health approaches can be successfully and sufficiently integrated in veterinary medical education programs to assure their sustainability.

Veterinary education introduces the concept of human-animal-environmental interactions and provides a foundation on which One Health principles can be built. At the same time, the veterinary curriculum is packed with didactic courses that often exclude interactions with other disciplines. The typical veterinary student graduates without any experience working in transdisciplinary, cross-sectoral teams that utilize systems thinking in addressing problems.

Global grand challenges, such as global food security, emerging infectious diseases, and ecosystem health and sustainability, create innumerable opportunities for veterinarians to contribute. New career opportunities exist for those veterinarians with meta-leadership skills who are able to contribute in multicultural, dynamic situations in which there are no simple technical solutions.

This interactive workshop will summarize the 2014 AAVMC Annual Conference program to explore the need, challenge, and opportunity provided by curricular integration of One Health approaches. The barriers to One Health approaches becoming the new norm for veterinary education will be identified so that participants can identify strategies for overcoming them. Registrants will be asked to join a call to action for veterinary medical education and commit to next steps in order to assure that concrete actions follow the workshop.

**The Veterinarian's Piece of the Food Safety Puzzle: A One Health Approach**

*A. Arens*

*University of California, Davis*

**Description of Global One Health Core in the DVM Curriculum**

*W. Epperson*

*Mississippi State University*

**Utilizing International University Networks to Deliver One Health Competency Training through Case Based Learning**

*M. Farnham, K. Pelican*

*University of Minnesota*

**Developing One Health Leadership Skills in Democratic Republic of the Congo**

*M. Farnham, University of Minnesota; K. Prince, University of Kinisha; H. Amguni, Tufts University;*

*W. Hueston, University of Minnesota*

**Intravenous Injection and Catheter Placement Teaching Models**

*T. Frank-Cannon, A. Blue-McLendon*

*Texas A&M University*

**A Quantitative Method for Competency Tracking in a Novel Veterinary Public Health and Preventative Medicine Residency Program**

*T. Goldsmith, L. Minicucci, S. Summerbell*

*University of Minnesota*

**Institutional, National, Regional, and Global Development and Use of One Health Core Competencies and Domains in Education**

*K. Hamilton, University of Minnesota; L. Keller, University of Minnesota; S. Fenwick, University of Minnesota; R. Hyatt, Tufts University; D. Qualters, Tufts University; M. Lee, Tufts University; P. Rujisatian, DAI; M. Morehouse, Training Resources Group, Inc.*

**Spirit of Thailand 2013: A Cultural Immersion Program Focusing on Veterinary Public Health**

*K. Hamilton*

*University of Minnesota*

**Public Health Campaign to Promote Hand Sanitation before Meals in a College of Veterinary Medicine**

*E. Heinrick, K. KuKanich, E. Davis, B. White*

*Kansas State University*

**Integrating One Health into Medical and Veterinary Medical Education: From Trunk to Tail and Head to Toe**

*M. Herring, W. Bissett, R. Holdgraf*

*Texas A&M University*

**Development and Use of a Zoonotic Disease Outbreak Scenario as a Professional Development Training Tool**

*A. Humlicek, Zoonotic Disease Outbreak Scenario; T.*

*Lynn, One Health Coordination Office*

**A One Health Perspective on Public Health Issues in Ghana**

*Y. Johnson*

*University of Illinois*

**Designing an Active Learning Classroom for Veterinary Medicine: Asking the Right Questions**

*E. Malone, L. Molgaard*

*University of Minnesota*

**Curriculum Revision 2013: An Aggressive Model for Curriculum Revision and Outcomes Assessment**

*L. Molgaard, R. Kustritz, E. Malone*

*University of Minnesota*

**Australian Abattoir Learning Resource: Putting PHUN into Food Safety Education**

*S. Mor, The University of Sydney; R. Cobbold, University of Queensland; L. Foyle, James Cook University; S. Piripi, University of Sydney; H. White, The University of Sydney; J. Toribio, The University of Sydney*

**Developing a System-Based Approach to Strengthening Cross-Sectoral One Health Collaboration: A Lean Minnesota Model**

*K. Pelican, University of Minnesota; J. Chung, University of Minnesota; H. Kassenbourg, Minnesota Department of Agriculture; T. Lynn, One Health Office*

**Use of the Dundee Ready Educational Environment Measure (DREEM) in a United States Veterinary Professional Program to Influence Curriculum Reform**

*J. Pelzer, J. Hodgson*

*Virginia-Maryland Regional College of Veterinary Medicine*

**Canine Degenerative Myelopathy: An Orthologue of Human Amyotrophic Lateral Sclerosis**

*I. Shafie, University of Glasgow and University of Putra Malaysia; M. McLaughlin, University of Glasgow; J.*

*Pendris, University of Glasgow; T. Anderson, University of Glasgow*

## Posters

### **Bio-Security Education through Experiential Learning with Authentic Applications**

*M. Smith, C. Meehan,  
University of California, Davis*

### **A Partnership in One Health: Khon Kean University, Thailand and Nabong Agricultural College, Lao PDR**

*J. Steele, Tufts University; S. Aiumlamai, Khon Kean University; S. Saengmaneedet, Khon Kean University; S. Porntrakulpipat, Khon Kean University; O. Phonekhampheng, National University of Laos; S. Kaylath, University of Laos; S. Fenwick, Tufts University; S. Tzipori, Tufts University*

### **Disparity in Access to Health Care: Causes and Proposed Solutions for Low-Income Countries**

*G. Thaxton  
Auburn University*

### **One Healthy Village at a Time: Improving Animal Health in Nicaragua in Order to Foster Human Livelihood**

*M. Chaddock, A. Arens, C. Scott, B. Osburn  
Texas A&M University*

### **Rating Scales in Clinical Rotations: Why Words Are Important**

*S. Dawson  
University of Prince Edward Island*

### **Pigs, Poverty and Epilepsy: An International One Health Approach**

*C. Dewey  
University of Guelph*

### **Implementation of a Competency-Based DVM Program at the Université de Montréal**

*M. Doucet, M. Carrier, M. Bélisle  
Université de Montréal*

### **One Health and the LGBT Community, Promoting Mental Health and Well Being for Medical Professionals: Impact of LGBT Clubs on Veterinary Student Health and Experience**

*A. Fischer, Cornell University; N. Wright, University of Pennsylvania; A. Otamendi, Louisiana State University*

### **Competency-Based Learning Objectives for Clinical Rotations offered at Affiliated Institutions**

*C. Fuentealba  
Ross University*

### **Inspiring Veterinary Students of Tomorrow**

*V. Hall  
Mississippi State University*

### **Experiential Education: Creation of a Practice-Based Equine Clerkship Rotation at the University of Florida**

*A. House  
University of Florida*

### **Re-Evaluating the Cat's Image and Encouraging Healthy Pet Ownership**

*A. Romeo  
Texas A&M University*

### **Tufts at Tech: A Working Model for Community One Health**

*J. Rush, G. Wolfus, E. McCobb, E. Rozanski, K. Holmes  
Tufts University*

### **Risk Assessment of an Avian Origin Swine H6N6 Influenza A Virus to Public Health**

*H. Sun, Mississippi State University; J. Ye, Mississippi State University; S. Blackmon, Mississippi State University; D. Smith, Emory University; R. Webby, St. Jude Children's Research Hospital; X. F. Wan, Mississippi State University*

### **One Health, Eco Health, Integrative Health, and Global Health in the Body of Knowledge**

*A. Sutomo  
Occupational Health Department of Gadjah Mada University School of Medicine*

### **One Health, One Influenza: Live Bird Markets Continue to Present Threats to Public Health**

*X. Wan, Mississippi State University; H. Cao, Jiangxi Agricultural University; H. Liu, Institut Pasteur of Shanghai Chinese Academy of Sciences; G. Hu, Jiangxi Agricultural University*

## Student Posters

### **Preparing for Disaster: What Every Health Professional Needs to Know**

*E. Gueta, J. Christman  
Michigan State University*

### **Merging Ecology and Epidemiology to Reduce the Burden of Human and Canine Chagas Disease: A One Health Approach**

*R. Curtis, G. Hamer, S. Hamer  
Texas A&M University*

### **One Health and the LGBT Community, Promoting Mental Health and Well Being for Medical Professionals: Impact of LGBT Clubs on Veterinary Student Health and Experience**

*A. Fischer, Cornell University; N. Wright, University of Pennsylvania; A. Otamendi, Louisiana State University*

**A One Health Review of Newcastle Disease Surveillance in African Union Member Countries**

*E. Gardner, Tufts University; R. Alders, University of Sydney and Tufts University*

**Experimental Veterinary Student Public Health Education in the South Pacific and Vietnam**

*V. Hall  
Mississippi State College*

**Compelling Convergence: The Added Societal Value of a One Health Certificate Program**

*M. Holub  
Texas A&M University*

**From Concept to Assessment: Developing a One Health Learning Community**

*M. Holub  
Texas A&M University*

**One Health in Action: Connecting Poultry Health and Community Welfare**

*R. Landman, M. Morales  
University of California, Davis*

**One Health in Action: UCD-Sri-Lanka Faculty Collaboration to Investigate Milk Quality Juxtaposed with Consumer Beliefs**

*R. Morey, University of California, Davis; A. Salgado, University of Peradeniya; G. Wagolla, University of Peradeniya*

**Assessment of Brucellosis Risk Factors in Trinidad**

*M. Neafsey, Virginia-Maryland Regional College of Veterinary Medicine; V. Ragan, Virginia-Maryland Regional College of Veterinary Medicine and University of Maryland; S. Titus, Animal Production and Health; F. Elvinger, Virginia Tech*

**Development of an International Grass Roots Partnership through Service Learning in Mérida, Nicaragua**

*V. O’Nion, A. Reid, K. Kransa, K. Schoenhals, S. Lapinski, B. Beechler, H. Montilla, S. Tornquist,  
Oregon State University*

**Assessment of Prevalence and Knowledge on Common Tick Borne Diseases with Respect to Public Health**

*N. Pierrot, Umutara Polytechnic University*

**One Health Nicaragua: Past Lessons and Future Directions**

*R. Putnam  
University of California, Davis*

**Fear or Fight? Education of Zoonosis in the Swine Flu of 2009 in China**

*S. Qin, H. Chen, Qian Lu  
University of Maryland*

**Organochlorines in the Marine Environment: Temporal Trends in California Sea Lions and Association with Impaired Health**

*N. Randhawa, University of California, Davis; F. Gulland, The Marine Mammal Center; G. Ylitalo, Northwest Fisheries Science Center; R deLong, National Oceanic and Atmospheric Administration; J. Mazet, University of California, Davis*

**Foaming at the Mouth for Rabies Postexposure Prophylaxis**

*S. Rekant, Virginia-Maryland Regional College of Veterinary Medicine; J. Murphy; Virginia Department of Health; B. Bullock, Fairfax County Department of Health; F. Elvinger, Virginia Tech*

**Reevaluating the Cat’s Image and Encouraging Healthy Pet Ownership**

*A. Romeo, D. Brown  
Texas A&M University*

**One Health in Practice: The “One Health Clinic” as a Healthcare Solution for Underserved Communities**

*J. Sweeney  
University of California, Davis*

**North Carolina One Health Bulletin: Informing and Engaging Diverse Stakeholders**

*C. Trull, North Carolina University; D. Lindquist, North Carolina University; J. Casani, North Carolina Division of Public Health; S. Kennedy-Stoskopf, North Carolina University*

**Estimating Prevalence of *Fasciola Hepatica* in Haiti using Federal Sedimentation in Cattle and Goats**

*C. Vanderhoof, Virginia-Maryland Regional College of Veterinary Medicine; A. Zajac, Virginia-Maryland Regional College of Veterinary Medicine; K. Crowdis, Christian Veterinary Mission; F. Elvinger, Virginia Tech*

**From the Group Up: Building Novel Opportunities for Interdisciplinary Exchange and Education Locally and Globally**

*F. Whitton  
University of California, Davis*

## AAVMC Award Winners

*Presented by Kent Hoblet, AAVMC President*

### Excellence in Research Award



**Yoshihiro Kawaoka, DVM, MS, PhD**  
**University of Wisconsin**

Dr. Kawaoka's scholarly achievements as a veterinary scientist are extraordinary. His groundbreaking work on influenza and his contributions to understanding the relationship of animal and human influenzas is a prime example of research that crosses boundaries by advancing both animal and human health.

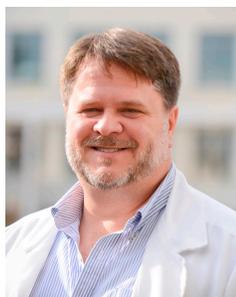
### Senator John Melcher, DVM Leadership in Public Policy Award



**John Herrmann, DVM, MPH, DACT**  
**University of Illinois**

Dr. Herrmann's work on behalf of public health has made the world a safer and healthier place. He understands the value of advocacy and has made it his mission to advocate for public health at the grassroots level and also in the realm of public policy. It is an honor to recognize his efforts with the AAVMC's Leadership in Public Policy Award.

### Distinguished Veterinary Teacher Award, Presented by Zoetis



**Matthew Mellema, DVM, PhD, DACVECC**  
**University of California, Davis**

Dr. Mellema exemplifies the qualities we seek in an honoree. Students and colleagues alike applaud his dedication and passion for education. Teaching is his priority and his emphasis on critical thinking, problem-solving, and self-directed learning maximizes students' chances for lifelong success.

### Recognition Lecture



**Joe Kornegay, DVM, MS, PhD, DACVIM**  
**Texas A&M University**

Dr. Kornegay is a giant in translational research who has conducted pioneering and enduring work in the study of Duchenne muscular dystrophy and diseases such as cancer, heart disease, and epilepsy. His visionary outreach and discipline-spanning scope make him an eminently qualified honoree to present the annual Recognition Lecture at our One Health-focused event.

**Claire Andreasen, DVM, PhD, DACVP**, is a professor and associate dean for Academic and Student Affairs in the Iowa State University (ISU) College of Veterinary Medicine. She was a department chair for 10 years before her appointment as associate dean. Dr. Andreasen was a faculty member at Oregon State University College of Veterinary Medicine before coming to ISU in 1996. She served in the Office of the Provost for faculty advancement and diversity in 2005/2006 as an intern and assistant. Dr. Andreasen received her DVM degree from Texas A&M University in 1982, and then completed a pathology residency and PhD at the University of Georgia in 1990. Her research areas are comparative cell function in infectious disease and emerging and zoonotic disease education, serving in two multi-institutional centers. She has written numerous publications, abstracts, and book chapters. She received the Pfizer Award for Research Excellence in 1994 and the Student Chapter of the American Veterinary Medical Association Clinical Sciences Teaching Award in 2001.

**Mark Bailey, MS**, joined Tufts University in 2008 as manager of support services in the Technology for Learning in the Health Sciences Group. He manages day-to-day support for the Tufts University Sciences Knowledgebase as well as working with health sciences faculty to develop educational multimedia resources. In recent years, Dr. Bailey has worked in various roles in the design and delivery of software for medical education. Before joining Tufts, he worked as a project manager for Custom Learning Designs, Inc. developing e-learning software and educational materials for medical and pharmaceutical companies. Bailey holds a Master of Science degree in bioinformatics from Brandeis University, a Bachelor of Science degree in human nutrition from the University of Massachusetts at Amherst as well as a certificate in web development and design from the University of Massachusetts at Lowell.

**Wesley Bissett, DVM, PhD**, is a 1997 graduate of the Texas A&M College of Veterinary Medicine & Biomedical Sciences. After graduation Dr. Bissett founded a large animal practice on the Texas Gulf Coast and returned to Texas A&M and completed his PhD in Veterinary Microbiology in 2007. He is a founding member and serves as the Director of the Texas A&M Veterinary Emergency Team, a state level responding entity and one of the largest and most sophisticated veterinary emergency teams in the country. In addition, Dr. Bissett is part of the development and delivery team for the nation's only required clinical rotation in emergency preparedness and response.

**Camilo Bulla, DVM, PhD**, is an assistant professor in the department of pathobiology and population medicine at the college of veterinary medicine at Mississippi State University and has held that position since 2008. Dr. Bulla has published 16 primary research papers in peer-reviewed journals, and his current research interests focus on the characterization of the

canine platelet proteome and understanding the role of platelets in cancer progression, metastasis, and control. He received his veterinary degree from the Universidade Estadual Paulista Julio de Mesquita Filho, in Sao Paulo, Brazil where he did a two year residency in clinical pathology and also earned an MS degree. Dr. Bulla began his PhD research at the same institution, and this research project was continued and completed in the department of pathobiology and diagnostic investigation at Michigan State University, in East Lansing, Michigan. He then completed a residency in veterinary clinical pathology at Michigan State University under the mentorship of Dr. Jennifer Thomas.

**Michael Chaddock, DVM, EML**, joined the Texas A&M University College of Veterinary Medicine and Biomedical Sciences, in September 2012, as assistant dean for One Health and strategic initiatives. In 2006, he joined the Association of American Veterinary Medical Colleges where he served as director of communications, associate executive director, and deputy director. Dr. Chaddock was a Kellogg Fellow in food and agricultural policy, a Congressional Science and Engineering Fellow of the American Association for the Advancement of Science sponsored by the American Veterinary Medical Association (AVMA), and a fellow and faculty member in biodefense strategies for the Bloomberg School of Public Health at the Johns Hopkins University. He was appointed director of the AVMA Governmental Relations Division in 2003. Dr. Chaddock received his doctor of veterinary medicine degree from Michigan State University and an executive master's degree in leadership from the McDonough School of Business at Georgetown University. He worked in private mixed practice in Michigan for 13 years and worked in industry for two years before being appointed Michigan state veterinarian and director of the animal industry division of the Michigan Department of Agriculture in 1986. Dr. Chaddock is the recipient of the Distinguished Alumnus Award from the college of veterinary medicine at Michigan State University, the AVMA Political Action Committee Policy Board's Russell H. Anthony Award, the MVMA Public Service Award, and is a two-time recipient of the Michigan Veterinary Medical Association's Award of Appreciation. He is currently a member of the board of directors and treasurer of the Lesbian and Gay Veterinary Medical Association.

**Jeein Chung, DVM, MPH, DACVPM**, is currently a U.S. Agency for International Development RESPOND Capacity Building Technical Consultant at the University of Minnesota (UMN) and has been with UMN since 2011. He will relocate to Southeast Asia this fall to assist the South East Asia One Health University Network in its capacity building efforts. Before joining UMN, Dr. Chung practiced companion animal medicine in the New York-New Jersey metropolitan area while pursuing his Master of Global Public

Health at New York University. He has worked internationally in Bolivia and India, and also has public sector experience at the U.S. Department of Agriculture and the New York City Department of Health & Mental Hygiene. Dr. Chung received his veterinary degree from The Ohio State University and his bachelor's in psychology from Tufts University.

**John Clifford, DVM**, is deputy administrator and chief veterinary officer for Veterinary Services (VS) at the U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS). In his role at USDA-APHIS, Dr. Clifford provides leadership for safeguarding U.S. animal health. Before becoming deputy administrator in May 2004, Dr. Clifford was the associate deputy administrator of the National Animal Health and Policy program, where he led VS' efforts to protect, sustain, and improve productivity, marketability, and health of the nation's animals, animal products, and biologics. Dr. Clifford served as VS' assistant deputy administrator from 1997 to 2002 and also has extensive field experience. Since joining APHIS in 1985, Dr. Clifford has also served as area veterinarian in charge of several areas; the National Health Monitoring System coordinator for one state; and the brucellosis epidemiologist and veterinary medical officer in another state. Before beginning his work with APHIS, he was a private veterinarian in a mixed practice. Clifford received his Doctor of Veterinary Medicine and Bachelor of Science in animal nutrition degrees from the University of Missouri.

**Patricia Conrad, DVM, PhD**, is a veterinarian and professor of parasitology whose research is focused on the transmission of protozoal parasites between wildlife, humans, and domestic animals. Dr. Conrad received her Doctor of Veterinary Medicine from Colorado State University and PhD from the University of Edinburgh. After doing postdoctoral research on molecular epidemiology of East Coast fever at the International Laboratory for Research on Animal Diseases in Nairobi, Kenya, she joined the faculty of the school of veterinary medicine at the University of California, Davis. Dr. Conrad has published more than 200 scientific papers and chapters in the fields of parasitology, emerging infectious diseases, and One Health. She is the recipient of the Carl J. Norden Distinguished Teaching Award, Pfizer Award for Research Excellence, the Oscar W. Schalm and Norman E. Levine Lectureships, and an Aldo Leopold Leadership Fellowship. Dr. Conrad was elected to the Institute of Medicine of the National Academies in 2011 and awarded a fellowship in the American Academy of Microbiology in 2012. She is the co-director of the One Health center of expertise in the University of California Global Health Institute and was recently appointed associate dean for global programs for the school of veterinary medicine.

**Molly Courtenay, PhD, MSc, BSc, Cert Ed, RN**, is a professor at the University of Surrey, United Kingdom, and a visiting

## Speaker Biographies

professor at the University of California (UC), Davis. Dr. Courtenay, a nurse by background, has been actively involved in research for the last 10 years. Her work in the UK has focused on new models of service delivery in primary care, interprofessional education, and interprofessional collaborative practice. Through her visiting post at UC, Davis, Dr. Courtenay now works on examining the interprofessional initiatives between the human health professions and veterinary medical students. She has been the principal investigator on several UK national grants. Published widely in peer reviewed journals, Dr. Courtenay is the author and editor of a number of core texts for nurses.

**Alain Dehove, DVM, advanced master's degree in economics & food industry management**, is coordinator of the World Animal Health and Welfare Fund of the World Organization for Animal Health (OIE), a multi donor trust fund for projects of international public utility relating to the control of animal diseases, including those affecting humans, and the promotion of animal welfare and animal production food safety. Dr. Dehove has previously held short-term replacement jobs in veterinary practices. He was also posted at the French Embassy in London, at the French Ministry of Agriculture and Fisheries in Paris, and at the European Commission in Brussels (Directorate General for Health and Consumers). Dr. Dehove joined the OIE in July 2006.

**Bernadette Dunham, DVM, PhD**, was appointed director of the Center for Veterinary Medicine (CVM) at the Food and Drug Administration (FDA) in 2008. The CVM regulates the manufacture and distribution of drugs and food additives that are given to animals, including animals from which human foods are derived, and companion animals. Previous positions held by Dr. Dunham during her tenure with the CVM include deputy director, director of the Office of Minor Use and Minor Species Animal Drug Development, and deputy director of the Office of New Animal Drug Evaluation. Dr. Dunham is also an adjunct professor in the Department of Biomedical Sciences and Pathobiology at the Virginia-Maryland Regional College of Veterinary Medicine, a position she has held since 1996. Before joining FDA in 2002, Dr. Dunham was acting director for the American Veterinary Medical Association's Governmental Relations Division. She has previously held a position as the director of laboratory animal medicine and adjunct professor of pharmacology at the State University of New York Health Science Center. She also participated in a postdoctoral residency program in the Department of Pathology at the New York State College of Veterinary Medicine at Cornell University, and was a research assistant professor at Boston University from 1984 to 1987. Before returning to academia to pursue her Ph.D., Dr. Dunham was in private practice in Ontario, Canada from 1975 to 1979. Dunham received the degree of Doctor of Veterinary Medicine from the Ontario

Veterinary College at the University of Guelph in Ontario, Canada and a Doctor of Philosophy in cardiovascular physiology from Boston University in Boston, Massachusetts.

**Helen Engelke, BVSc MPVM, DACVPM**, joined the faculty of Western University of Health Sciences in 2006 as an assistant professor in veterinary public health. She is currently a course leader for the veterinary issues course for second-year students as well as course leader for the veterinary public health course, which is delivered to third-year students. Dr. Engelke graduated with a Bachelor of Veterinary Science in 1990 from the University of Liverpool and began her professional career as a state veterinary officer in Trinidad and Tobago while also working part time in a private, small animal clinic. During this time she developed a true passion for public health and epidemiology. With the aid of a Pan American Health Organization fellowship Dr. Engelke graduated with a master's in preventive veterinary medicine from the University of California, Davis in 1994, where her emphasis was public health. She subsequently returned to Trinidad and Tobago and worked as deputy director and then acting director of the veterinary public health unit of the Ministry of Health. Dr. Engelke balanced these governmental responsibilities with a part-time lectureship in food safety at the Trinidad College of Health Sciences.

**Anna Fagre, MPH**, is a third-year veterinary student at Colorado State University (CSU). She completed her Master of Public Health (MPH) in 2012 as part of the dual degree MPH-Doctor of Veterinary Medicine program and currently enjoys participating in student organizations such as the CSU One Health Club, IVSA, and Wildlife Disease Association. Ms. Fagre's passions lie in epidemiology, public health, international food security, and wildlife disease ecology. After graduation in 2015, she hopes to pursue a PhD in epidemiology or wildlife disease ecology.

**Duncan Ferguson, VMD, PhD, DACVIM, DACVCP**, a veterinary educator for 30 years at Cornell University, University of Georgia and University of Illinois, was a co-founder of Veterinary Information Network, directing its continual education division from 1990 to 1999. Dr. Ferguson is currently department head of a preclinical department responsible for first- and second-year instruction in the recently adopted veterinary curriculum at the University of Illinois. He has taken a Fulbright Teaching and Research fellowship at the Hannover University of Veterinary Medicine in Germany to focus on developing portable and culturally sensitive learning materials to encourage critical clinical thinking by veterinary students.

**John Finnegan Jr., MA, PhD**, is dean of the School of Public Health at the University of Minnesota and assistant vice president for public health. He holds Master of Arts and Doctor of Philosophy degrees in mass communication that he earned from the

University of Minnesota. He began his public health career in 1980, following a first career path as a journalist during the 1970s. As a doctoral student, media professional and later as public health faculty, he was a member of the pioneering research team that developed the Minnesota Heart Health Program at the University of Minnesota School of Public Health. Based on this initiative, Dr. Finnegan launched a career specializing in the role of communication and mass media in leveraging change in health knowledge, behavior and public policy in the context of community campaigns to improve the public's health. Central to his research are socioeconomically driven inequities in population exposure to health information, part of the larger problem of health status inequities. He also launched a teaching program in media communication and health in the 1980s as an important addition to the public health intervention curriculum. He was honored in 2007 by the American Public Health Association for career achievement. Dr. Finnegan chairs the board of directors of the Association of Schools of Public Health through October 2014, and is a member of the Framing the Future: The Second Hundred Years of Education for Public Health Task Force. He also sustains strong interest in global health, learning innovations, and interprofessional education among the health professions in the context of better integration of public health and health care systems.

**Meghan Gibas, BS, MPH**, is currently a second-year veterinary student at Colorado State University (CSU). She recently completed her Master of Public Health with a concentration in epidemiology. Ms. Gibas' research interests include epidemiology with special interest in the study, prevention, and control of zoonoses. As a former high school biology teacher in New Mexico, Ms. Gibas became interested in the effects of interactions between humans, other animals, and the environment. She has since worked on research related to One Health at the Connecticut Veterinary Diagnostic Laboratory, University of Connecticut Center for Public Health, and the U.S. Department of Agriculture National Center for Genetic Resource Preservation. Most recently, she has been working as part of the applied veterinary epidemiology group to research zoonotic tuberculosis. Gibas is also the current president of the CSU One Health Club and is enthusiastic about her research and a future career involving public health and veterinary medicine.

**Kirsten Gilardi, DVM, DACZM**, is associate director for global health at the University of California, Davis School of Veterinary Medicine wildlife health center, and health sciences clinical professor in the school's department of medicine and epidemiology. At the wildlife health center, she leads a marine-focused One Health program called the SeaDoc Society and is co-lead for implementation of the U.S. Agency for International Development emerging pandemic threats PREDICT project in Uganda and Rwanda. As well, Dr. Gilardi is

co-director of Gorilla Doctors, a partnership between the wildlife health center and the nonprofit Mountain Gorilla Veterinary Project, which provides lifesaving veterinary care in situ to endangered eastern gorillas as well as preventive health care to the people who protect their forest home. After earning her veterinary doctorate in 1993, she conducted a three-year residency in medical primatology at the California National Primate Research Center. Gilardi is a past-president of the American Association of Wildlife Veterinarians.

**Eleanor Green, DVM, DACVIM, DABVP**, holds the Carl B. King deanship of the Texas A&M University College of Veterinary Medicine & Biomedical Sciences. Dr. Green's clinical interests have included general internal medicine, gastrointestinal disorders, neurologic disorders, diseases of the newborn, and lameness. Her research interests are primarily in the areas of endotoxemia, laminitis, neonatology, and gastric ulcer disease. Dr. Green delivers lectures across the nation and internationally on subjects related to her clinical and research interests as well as equine welfare issues. She also speaks on leadership, delivers keynote addresses and delivered commencement addresses to the graduating classes of veterinary students at Auburn University (1995), Mississippi State University (1995), and Louisiana State University (2010). Additionally, Dr. Green has served as president of three national organizations, the American Board of Veterinary Practitioners, the American Association of Veterinary Clinicians, and the American Association of Equine Practitioners. She has received several notable awards including induction into the National Cowgirl Hall of Fame in 2013, a Distinguished Alumni Award from Auburn University College of Veterinary Medicine in 2011, and in 2004, the CALS Award of Distinction, University of Florida College of Agriculture and Life Sciences Alumni and Friends. Dr. Green is the lead dean of the One Health initiative at Texas A&M University.

**Karin Hamilton, DVM, MPH, DACVPM**, is a public health veterinarian at the University of Minnesota College of Veterinary Medicine (UMN-CVM). She earned her Doctor of Veterinary Medicine at Tufts University, and completed a veterinary public health residency program and a Master of Public Health at UMN. Before working at UMN, Dr. Hamilton served as a veterinarian with the U.S. Army, where she worked in the horn of Africa, the Middle East, and Asia, in addition to the U.S. For the past two and a half years, she has been working with Southeast Asian universities on an U.S. Agency for International Development funded project called RESPOND, which focuses on building public health capacity in disease hotspots around the world. As part of that project, Dr. Hamilton worked with an international, multidisciplinary team which developed global, regional, and national level One Health core competency domains and competencies. She is also working on the new World Organization for Animal Health (OIE) veterinary educational

twinning program between UMN-CVM and the Chiang Mai University Faculty of Veterinary Medicine to assess curricula.

**Carolyn Henry, MS, DVM, DACVIM**, is a tenured full professor with dual appointments in the Department of Veterinary Medicine at the College of Veterinary Medicine and the Department of Medicine, Division of Hematology and Oncology, in the School of Medicine at the University of Missouri. She earned her veterinary doctorate at Auburn University in 1990, her Master of Science from Auburn in 1993, and gained board certification in oncology in 1994. Dr. Henry served on the Washington State University faculty before relocating to the University of Missouri in 1997. She has served on the American College of Veterinary Internal Medicine (ACVIM) Board of Regents and is past president of both the Veterinary Cancer Society and the ACVIM specialty of oncology. In April 2010 she was named faculty facilitator for the Mizzou Advantage One Health/One Medicine initiative by the office of the provost—a position that serves to foster multidisciplinary educational and research opportunities between human and veterinary medicine and the basic sciences, both within the University of Missouri and with outside collaborators. In 2012 Dr. Henry was appointed as interim associate director of research for the Ellis Fischel Cancer Center and in 2013 assumed the role of interim associate dean for research and graduate studies for the college of veterinary medicine. Her research interests include canine bladder cancer, mammary cancer, osteosarcoma, and comparative oncology/cancer epidemiology.

**Mary Elizabeth Herring, JD**, is chair of the department of humanities in medicine, and an associate professor at the Texas A&M University College of Medicine. She teaches medical ethics, health law, and medical jurisprudence. She has also taught undergraduate business law in the department of management in the college of business. Ms. Herring attended Texas A&M University as an undergraduate, receiving a Bachelor of Arts in political science. In 1986, she received her law degree from South Texas College of Law in Houston and immediately moved to Austin, where she engaged in civil practice. In 1989, she accepted a position in the Office of General Counsel for the Texas A&M University system. In 1991 she joined the college of medicine as special assistant to the vice president for health affairs and she joined the college of medicine faculty. She serves on many college of medicine and university committees. She also serves on the board of directors of Hospice Brazos Valley.

**John Herrmann, DVM, MPH, DACT**, joined the faculty of the College of Veterinary Medicine in 2004 to develop and direct the joint Doctor of Veterinary Medicine-Master of Public Health degree program and serves as the director of that program and of the Center for One Health Illinois, which he co-founded in 2007. In 2009, Dr. Herrmann was promoted to clinical associate professor at the University

of Illinois. In 2003, Dr. Herrmann completed his Master of Public Health from the University of Illinois at Chicago School of Public Health in Health Policy and Administration. Through 2004, he continued in private practice and did contract work for the Stephenson County Health Department, primarily in community health assessment. From 2003 to 2004, Herrmann served as a Science and Technology Policy Fellow in the United States Senate in the offices of Sen. Richard Durbin and worked primarily on public health policy legislation. He received a Bachelor of Arts in biology from Illinois Wesleyan University in 1974 and graduated from the University of Illinois College of Veterinary Medicine in 1978. Upon graduation, Herrmann joined a private practice in Freeport, Illinois, focusing on dairy herd health, small animal medicine and wildlife rehabilitation. Since 2003 Dr. Herrmann has also served as an adjunct professor at the University of Illinois at Chicago School of Public Health and at the University of Illinois at Rockford College of Medicine.

**Merrideth Holub, MS**, is currently in her final year of a doctorate program in agriculture education. Dr. Holub received her master's degree in agriculture education in 2009 and bachelor's degree in Animal Science in 2007 at Texas A&M University (TAMU). Her research work focuses on youth education about zoonotic diseases. Dr. Holub served as the Bastrop County 4-H and youth development agent for two years before moving to League City and working for TAMU at Galveston as an instructor, academic advisor, and program coordinator for two years. In June of 2012 she accepted the position of program coordinator for the new One Health program at the TAMU College of Veterinary Medicine and Biomedical Sciences. The One Health program provides research, education, and outreach programs throughout campus and across the state for faculty, students, staff, and society as a whole. Dr. Holub is a member of several professional associations including Gamma Sigma Delta an International Honor Society of Agriculture, the American Association of Agriculture Education, and the Southern American Association of Agriculture Education.

**William Hueston, DVM, PhD, DACVPM**, directs global leadership programs of the Center for Animal Health and Food Safety, University of Minnesota (UMN). He also serves as director of the UMN Food Policy Research Center and the World Organization for Animal Health (OIE) Collaborating Center in Veterinary Services Capacity Building. Dr. Hueston holds faculty appointments in the college of veterinary medicine and the school of public health. Most of his work focuses on One Health capacity-building, public policy, and risk communication. He has a long history of creating and delivering professional development programs for mid career government, industry, and academic professionals in collaboration with an international consortium of universities, government agencies, intergovernmental organizations, and the private sector. Before

## Speaker Biographies

joining UMN in 2001, Dr. Hueston was associate dean for the University of Maryland campus of the Virginia-Maryland Regional College of Veterinary Medicine. He worked for the United States Department of Agriculture's Animal and Plant Health Inspection Service from 1987 to 1996 during which he gained international recognition for his work with the emerging disease, Bovine Spongiform Encephalopathy (BSE). Earlier experience included teaching and research as a faculty member at Ohio State University, serving as a resident veterinarian for a large farmer cooperative, private veterinary practice, and community organizing in rural areas. Hueston holds a Bachelor of Arts in biology from the University of Virginia, and a Doctor of Veterinary Medicine, Master of Science in preventive medicine, and a doctorate in epidemiology from Ohio State University.

**Alicia Humlicek, DVM, MPH, DACVPM**, worked as a small animal veterinarian before pursuing her MPH and also spent several years in medical research. Dr. Humlicek is pursuing employment as a state or federal epidemiologist. She received her DVM from Iowa State University College of Veterinary Medicine in 1998, and her Master of Public Health (MPH) degree from the University of Iowa College of Public Health in 2013. For her MPH capstone project, Humlicek developed a zoonotic disease outbreak training scenario in collaboration with the One Health Coordination Office (OHCO), Veterinary Services (VS), Animal and Plant Health Inspection Service, U.S. Department of Agriculture, and with the chief epidemiologist. Dr. Humlicek also volunteered with the OHCO to finalize and deliver the training scenario in the disease outbreak investigation course for VS epidemiologists.

**Carla Huston, DVM, PhD, DACVPM**, is responsible for teaching veterinary epidemiology, veterinary preventive medicine, beef production medicine, and disaster preparedness in her current position at the Mississippi State University College of Veterinary Medicine (CVM). Outside of teaching, her focus is on production agriculture, agrosecurity, and livestock health and quality assurance programs. Dr. Huston has extensive experience in disaster response and preparedness. She serves as the veterinary services branch director of the state animal response team and also as chair of the CVM animal disaster response committee. She is an active member of numerous federal, state and local animal disaster response organizations and is an appointed part-time peace officer for the local county sheriff's office. Dr. Huston holds her undergraduate, veterinary, and graduate degrees from the Ohio State University. Following graduation, she spent several years in a mixed animal practice in northeast Ohio. Dr. Huston has trained at both the U.S. Department of Agriculture's Agriculture Research Service Plum Island Animal Diagnostic Center and the Department of Homeland Security Center for Domestic Preparedness in the detection and prevention of foreign animal disease and

biological weapons of mass destruction hazards, respectively. Services in several foreign animal disease outbreaks and natural disasters have given her experience in international level disease control, surveillance and monitoring, and national emergency preparedness and response.

**Yvette Johnson-Walker, DVM, MS, PhD**, is currently a clinical epidemiologist at the University of Illinois College of Veterinary Medicine's Center for One Health Illinois. Her research interests include food and water safety and security, and risk factors for interspecies transmission of zoonotic pathogens. Dr. Johnson-Walker has conducted several training and response exercises for public health professionals and infectious disease outbreak responders in association with the Illinois Department of Public Health, the Champaign-Urbana Public Health District, and the Center for One Health Illinois. She continues to serve as the principal investigator for a three year series of U.S. Department of Agriculture-funded projects for development of exercises and training materials for avian influenza outbreak response in zoos and aquariums. Dr. Johnson-Walker is a member of the UIUC Infectious Disease Working Group that is charged with development and coordination of the UIUC campus response to an infectious disease outbreak. She received bachelor's degrees in animal and veterinary sciences from the University of Illinois, Urbana-Champaign (UIUC) in 1987. Johnson-Walker received her Doctor of Veterinary Medicine in 1989 and a master's in veterinary clinical medicine in 1993, both from UIUC. In 1998, she completed a doctorate in analytical epidemiology from Michigan State University.

**Malika Kachani, DVM, PhD**, is a professor of parasitology and global health at the Western University of Health Sciences College of Veterinary Medicine. She is interested in neglected zoonotic diseases, veterinary public health, and One Health. Her current research area is cystic echinococcosis in animals and in humans. Dr. Kachani has developed numerous programs to prevent and control zoonoses and to promote animal and public health involving various target audiences in Morocco and also conducts educational research on interprofessional education and One Health. She works with international organizations, such as The Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO) on numerous parasitic zoonoses, veterinary public health, and dog population management for the control of zoonotic diseases. Dr. Kachani is currently a member of the WHO Strategic and Technical Advisory Group (STAG) for Neglected Tropical Diseases and is the chair of the STAG working group on neglected zoonotic diseases. She is a member of the Stone Mountain One Health Working Group and is a co-chair of the Proof of Concept Sub-group. Dr. Kachani is a member of the One Border One Health Initiative combining scientists from Southern California and Baja California, Mexico.

**Gretchen Kaufman, DVM**, moved to Washington State University, in 2013, to serve as the assistant director for global health education and training in the Paul G. Allen School for Global Animal Health and the coordinator for the global animal health certificate program. In this role she plans to continue to pursue her strong interests in interdisciplinary one health education, conservation medicine and international development. Dr. Kaufman graduated from Tufts University School of Veterinary Medicine in 1986 and completed a residency in zoological medicine at the University of California, Davis in 1989. She returned to Tufts to run the exotic animal medicine service and later joined the faculty at the Tufts wildlife clinic. Dr. Kaufman was a founding member of the Tufts University Center for Conservation Medicine and served as the director from 2007 to 2012. At Tufts, Dr. Kaufman focused much of her time on wildlife and conservation medicine curriculum development in the veterinary program. She also spearheaded the effort to create a professional masters degree program in conservation medicine, the first of its kind in the U.S. In addition, as the chair for the education directorate at the Tufts Institute of the Environment, she also assisted in coordinating environmental educational initiatives at the university level. During this time she also initiated several projects in Nepal on rabies control and wildlife health. In 2004, she was awarded a Fulbright Senior Specialist Award to develop a master's-level wildlife course at the Nepal Institute for Agriculture and Animal Science.

**Yoshihiro Kawaoka, DVM, MS, PhD**, is a professor of virology at the University of Wisconsin-Madison School of Veterinary Medicine, and his groundbreaking work on influenza and his contributions to understanding the relationship of animal and human influenzas are a prime example of research that crosses boundaries by advancing both animal and human health. Dr. Kawaoka's work focuses on better understanding naturally occurring viruses to help government and health agencies improve measures for protecting the population. He achieved global attention in 2011 when he and an international team of researchers showed that the avian H5N1 influenza virus could become transmissible in mammals after just a few genetic mutations. In 2013, Kawaoka and his team collaborated with the National Institute of Infectious Diseases, Japan to conduct a genetic analysis of the avian H7N9 flu virus, which has been linked to several deaths in China. The analysis revealed that the virus can evolve and adapt to human cells, prompting concerns about its potential to launch a global flu pandemic. That same year he was elected to the National Academy of Sciences as a foreign associate. Dr. Kawaoka has actively mentored many students and published more than 450 peer-reviewed research articles, 100 review articles and book chapters, and numerous abstracts in some of the world's foremost scientific journals, including *Nature*, *Proceedings of the National Academy*

of *Sciences, Cell, Science*, and many others. He earned his Doctor of Veterinary Medicine degree from The Ministry of Agriculture and Fishery, Japan, and his bachelor's, master's, and doctoral degrees from Hokkaido University in Japan.

**Suzanne Kennedy-Stoskopf, DVM, PhD, DACZM**, came to North Carolina State University in 1990 and is currently a professor in the department of clinical sciences and fisheries, wildlife and conservation biology program. Her clinical expertise in wildlife combined with her research experience in infectious diseases directs her current interests in transmission of infectious agents at the wildlife, livestock, and human interface. In particular, she is focused on the spatial and temporal interactions of wildlife in relation to extreme weather events and landscape. Dr. Kennedy-Stoskopf received her Doctor of Veterinary Medicine from Michigan State University in 1976. She was a Smithsonian Fellow at the National Zoo and was their first female veterinarian. She then organized and taught one of the first core curricula in zoological medicine at the University of Tennessee College of Veterinary Medicine's department of environmental practice before entering The Johns Hopkins University as a postdoctoral student in neurovirology in the school of medicine. Dr. Kennedy-Stoskopf earned a doctorate in immunology and infectious diseases from the Johns Hopkins School of Hygiene & Public Health in 1986 studying lentiviral infections in sheep and goats. She is actively engaged in novel approaches to teach One Health concepts to diverse student demographics and to provide public outreach for One Health.

**Rutch Khattiya, DVM, PhD**, joined the faculty of veterinary medicine at Chiang Mai University (CMU) as a lecturer in 1996. At CMU, he became involved with the Free University Berlin and the German Technical Cooperation (GTZ) to set up a training course in fundamental serological diagnosis, with a focus on veterinarians in southeast Asia. In 2003, Dr. Khattiya completed a doctorate in aquatic biosciences at the Tokyo University of Fisheries. After returning, he took on responsibilities in fish diseases and is also responsible for program development, as director of the veterinary public health center for Asia Pacific. He received his Doctor of Veterinary Medicine degree in 1994 from Khonkaen University in Thailand. After graduation, Khattiya started work as a technical veterinarian in a veterinary pharmaceutical company with responsibilities in swine and poultry herd health management and disease control. He has served as associate dean for information technology, associate dean for graduate studies, and, currently, as associate dean for academic affairs.

**Lonnie King, DVM, MS, MPA, DACVPM**, became dean of the college of veterinary medicine at The Ohio State University (OSU) in 2009. In addition, Dr. King is a professor in the department of veterinary preventive

medicine and holds the Ruth Stanton Endowed Chair in veterinary medicine. He also serves as the executive dean for the seven health science colleges at OSU. Before becoming dean, he was the director of the National Center for Zoonotic, Vector-Borne, and Enteric Diseases at the Centers for Disease Control and Prevention. Dr. King served as dean of the college of veterinary medicine at Michigan State University from 1996 to 2006. In 1992, Dr. King was appointed administrator for the Animal and Plant Health Inspection Service (APHIS), U.S. Department of Agriculture, in Washington, DC. He also served as the country's chief veterinary officer for five years and received his Bachelor of Science and Doctor of Veterinary Medicine degrees from The Ohio State University. He earned his Master of Science in epidemiology from the University of Minnesota and received his master's degree in public administration from American University. Dr. King served as the chair for the National One Health Task Force for the AVMA, which helped start the One Health initiative in the U.S. He was elected as a member of the Institute of Medicine of The National Academy of Sciences in 2004.

**Tierney Kinnison, MSc**, is a doctoral student at the Institute of Education and the Royal Veterinary College (RVC), University of London. She is funded by the Bloomsbury Consortium. Miss Kinnison originally studied animal behaviour as a Bachelor of Science and Master of Science student and has a special interest in animal welfare. After graduating, Miss Kinnison worked briefly as a receptionist at a charity veterinary clinic before joining the RVC as a research assistant in the Lifelong Independent Veterinary Education (LIVE) center. She worked on a variety of projects focused on veterinary and veterinary nursing education, including preparation for workplace learning, haptic technology, and business skills. In 2012, after almost five years of being a research assistant, Miss Kinnison decided to undertake a doctoral program. Her topic is interprofessional education within a purely veterinary context. Her interest in this topic was sparked by a small scale pilot study in interprofessional education between veterinary nursing and veterinary medicine students at the RVC as well as her experience as a member of a "paraprofession"—a receptionist and animal behaviourist. Kinnison's doctoral work will investigate current interprofessional working and learning in the veterinary field with a view to creating recommendations for colleges and universities with regard to integrating interprofessional education in the curriculum.

**Judy Klimek, BS, DVM, MS**, teaches in all of the anatomy courses in the core curriculum at Kansas State University (KSU) and is the course coordinator for microscopic anatomy, comparative gross anatomy, practical use and interpretation of veterinary scientific literature, and comparative embryology. Her scholarly contribution is in the area of the scholarship of teaching, including investigating how to teach so that students learn effectively. Dr. Klimek's interests include the development

and evaluation of educational techniques for gross and microscopic anatomy. She is especially interested in helping students develop their metacognitive awareness, helping them make connections between their various anatomy courses, and anticipating applying their knowledge of anatomy to their future professional practice. Dr. Klimek is also interested in the application of computer software and platforms in teaching and learning in anatomy. She graduated from veterinary school at Purdue University in 1988, completing a master's in anatomy education in 1996 at Purdue before moving on to KSU. She is a member and former coordinator of the planning committee member for the Faculty Exchange for Teaching Excellence, a group that hosts teaching- and learning-related seminars and workshops for KSU faculty and staff.

**Jodi Korich, DVM**, is the founding director of The center for educational technologies at Texas A&M University College of Veterinary Medicine & Biomedical Sciences. She received her Doctor of Veterinary Medicine from Cornell University in 1997 and practiced companion animal medicine in metropolitan Washington, D.C. from 1997 to 2002. Since 2002, she has worked in academia and was the founding director of the partners in animal health program at Cornell University from 2005 to 2010. In 2010, Dr. Korich established the Center for Educational Technologies at Texas A&M University. The center employs seven full-time educational technologists who work hand in hand with faculty and veterinarians from around the world to design, develop, and deliver innovative instructional materials.

**Joe Kornegay, DVM, MS, PhD, DACVIM**, is a professor of neuroscience in the Department of Veterinary Integrative Sciences in the College of Veterinary Medicine & Biomedical Sciences at Texas A&M University (TAMU). Dr. Kornegay's well-funded research is at the forefront of a revolution in biomedical sciences in which purebred dog populations are ideal subjects for identifying specific genes associated with diseases that affect both dogs and humans, such as cancer, epilepsy, muscular dystrophy, and heart disease. He has been praised as a leader for the advancement of translational medicine who has developed a number of collaborations with schools of medicine and as someone who has worked to highlight the inextricable link between human and animal health and between human and animal medicine. After receiving his Doctor of Veterinary Medicine degree from TAMU in 1973, Dr. Kornegay spent three years in private practice in Ohio and Texas, followed by six years in residency (neurology and pathology) and graduate (master's and doctoral) training at the University of Georgia College of Veterinary Medicine. Upon completion of this training, he served on the faculty of the college of veterinary medicine at North Carolina State University before moving to the college of veterinary medicine at the University of Missouri where he served as dean from 1998 to 2006. Before coming to TAMU in 2012, Dr. Kornegay served as a tenured professor in

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the departments of pathology and laboratory medicine and neurology, and investigator in the Gene Therapy Center, School of Medicine, at the University of North Carolina-Chapel Hill.

**Bekah Kunkel, MS, MPH**, is an Oak Ridge Institute for Science and Education fellow with the One Health office at the U.S. Centers for Disease Control and Prevention (CDC), a position she has held since 2011. During her time with the One Health office, she has worked closely with the Stone Mountain Meeting Training workgroup on a variety of projects to enhance training of the One Health workforce. One of these projects led to the development of One Health core competencies for three different levels of One Health practitioners. Before joining the One Health office, Ms. Kunkel spent two years with CDC's division of global migration and quarantine where she focused on improving infectious disease surveillance at U.S. ports of entry. Ms. Kunkel completed graduate studies in both ecology and epidemiology and has a particular interest in the ecology of zoonotic and vectorborne diseases.

**Iskande Larkin, PhD**, received her Doctor of Philosophy from the University of Florida (UF) College of Veterinary Medicine in 2000. Her work focused on reproductive physiology and behavior of Florida manatees. She was able to continue her research as a postdoctoral student at the UF department of zoology in the college of liberal arts and sciences. The aquatic animal health program at the UF College of Veterinary Medicine hired Dr. Larkin as an assistant research professor and education coordinator for the program in 2005. She has since moved to a lecturer position and become heavily involved in course development, including multiple new online courses and a certificate in aquatic animal medicine. Dr. Larkin has worked with online courses for more than five years, and her courses include aquatic wildlife health, aquatic animal conservation issues, and manatee health and conservation.

**Joann Lindenmayer, DVM, MPH**, is an associate professor in the department of infectious disease and global health at the Tufts University Cummings School of Veterinary Medicine and holds secondary appointments at Tufts University School of Medicine and the Tisch College of Citizenship and Public Service. She is director of the Doctor of Veterinary Medicine-Master of Public Health track at Tufts medical school where she directs and teaches a number of courses that take a One Health approach to teaching and learning. She and faculty colleagues from the medical school and the graduate school of arts and sciences were the first recipients of funding from the provost's inaugural university seminars initiative for their seminar, "One Health: Interdisciplinary Approaches to the Health of People, Animals, and the Environment." A former EIS officer and fellow in the Centers for Disease Control and Prevention's state-based epidemiology for public health practice program, Dr. Lindenmayer joined the faculty at the Tufts Cummings school in 2006. She is

a past chair of the Public Health Committee of the Association of American Veterinary Medical Colleges. Dr. Lindenmayer has been funded for One Health by the Rockefeller Foundation and Cummings school award from the U.S. Agency for International Development's RESPOND program, for which she served as co-principal investigator. She recently co-chaired the national stakeholders meeting organized by the Alliance for the Prudent Use of Antibiotics and sponsored by the Pew Charitable Trusts on the use of antimicrobial drugs in food animal production. Dr. Lindenmayer's primary research interests include expanding use of electronic veterinary medical records, antimicrobial resistance, and integration of veterinarians into the public health system.

**Juan Lubroth, DVM, PhD, DACVPM**, is the chief veterinary officer of the Food and Agriculture Organization of the United Nations (FAO). Dr. Lubroth previously served for seven years as the senior officer of FAO's Animal Health Service and head of the Infectious Diseases Group/Emergency Prevention System in charge of worldwide surveillance, capacity building, and progressive control of transboundary animal diseases. He has worked extensively throughout Latin America, North Africa, and the Middle East. He has initiated several major initiatives for the control of transboundary animal diseases in Central Asia, South Asia, southern Africa, and has served on the Pan African Program for the Control of Epizootics Advisory Committee. Dr. Lubroth was the driving force behind several key cooperative initiatives of FAO with the World Health Organization (WHO) and World Organization for Animal Health (OIE), including the Global Framework for the Progressive Control of Transboundary Animal Diseases, the Global Early Warning System for major animal diseases including zoonoses (GLEWS), the establishment of the Crisis Management Center for Animal Health, and the One Health concept at FAO. As an expert on animal health and infectious disease transmission, Dr. Lubroth is often called to assist in bringing animal production and health perspectives to the work of the WHO on issues related to zoonoses, biological safety of laboratories, and matters regarding bioterrorism and agroterrorism. He leads FAO's animal health activities against H5N1, H1N1, and H7N9, Rift Valley fever, rabies, peste des petits ruminants, brucellosis, and other high-impact diseases as well as strengthening veterinary and links to public health systems around the world and continuing education. Dr. Lubroth received his bachelor's degree in biology from Whitman College and worked as a wildlife biologist before continuing studies at the University of Georgia where he earned both a master's degree in medical microbiology in 1982 and his Doctor of Veterinary Medicine in 1985.

**Tracey Lynn, DVM, MS, DACVPM**, is part of a team coordinating the animal health component of One Health within the U.S. Department of Agriculture's (USDA) Animal

and Plant Health Inspection Service (APHIS). Before joining USDA, Tracey spent seven years as an epidemiologist in federal and state public health agencies, such as the Centers for Disease Control and Prevention (CDC), the Indian Health Service, and the Alaska Department of Health and Human Services working across the spectrum from outbreak investigation and response to policy development. She was initially hired into the APHIS Veterinary Services (VS) division to assist in building effective collaborations and methods for coordinating zoonotic disease surveillance and data sharing activities between VS and CDC. Dr. Lynn spent nine years in various roles, including several managerial positions. She specializes in facilitating the development of innovative partnerships with federal agencies, academia, and industry to increase efficiency and effectiveness of managing complex health threats through cross-disciplinary collaboration. Her current priorities include working with the University of Minnesota to identify applied research projects and enhance One Health training and education opportunities. Dr. Lynn is an alumnus of the CDC Epidemic Intelligence Service.

**Vanessa Mariani, MBA**, is the director of innovation and strategic initiatives for cattle and equine in the U.S. operation of Zoetis. In this role, she is responsible for the development of new business enterprises for the business unit; she serves as the business development liaison and manages the marketing strategy for food safety portfolio. Before assuming her current role, Ms. Mariani served as director of the academic and professional affairs team in the U.S. where she was responsible for Zoetis' interactions and strategic collaborations with colleges of veterinary medicine as well as strategic initiatives to support veterinary students and other emerging veterinary professionals. Ms. Mariani has held several marketing and business functions, from Latin America to global marketing and new product development, across species since joining Pfizer Animal Health in 2000. An industrial engineer, Ms. Mariani holds a Master of Business Administration from the Instituto Tecnológico Autónomo de México.

**Keith Martin, MD**, is a physician who, since 2013, has served as the executive director of the Consortium of Universities for Global Health (CUGH) based in Washington, DC. The Consortium is a rapidly growing organization of over 120 academic institutions from around the world that harnesses a broad range of disciplines across institutions to address global health challenges. It is focused on improving health outcomes for the global poor. From 1993 to 2011, Dr. Martin served as a Member of Parliament in Canada's House of Commons, representing a riding on Vancouver Island. During that time he held shadow ministerial portfolios in foreign affairs, international development, and health and also served as Canada's Parliamentary Secretary for Defense. Dr. Martin's main areas of specialization and interest are global health, international

development, foreign policy, conservation, and the environment. He is particularly interested in building and retaining capacity in low-income settings and scaling up proven interventions that will improve environmental and human security. As a parliamentarian, Dr. Martin created CanadaAid.ca, an online platform to facilitate partnerships between universities, governments, multilateral institutions, NGOs, and the private sector in order to strengthen north-south and south-south partnerships, scale-up research findings in low-income communities, and bridge the knowledge-needs gap. He has also worked to mainstream sustainable conservation and environmental practices into international development initiatives to achieve positive outcomes for the environment and people.

**Melissa Mazan, BA, DVM, DACVIM**, is associate professor and section head for large animal medicine and surgery at the Tufts University Cummings School of Veterinary Medicine. Dr. Mazan's work focuses on using the internet and teleconferencing to bridge the gap in international veterinary medical education. His clinical research includes large animal pulmonology and clinical applications of stem cell biology.

**Jonna Mazet, DVM, MPVM, PhD**, is a professor of epidemiology and disease ecology and director of the One Health Institute in the University of California, Davis School of Veterinary Medicine where she focuses on global health problem solving, especially for emerging infectious disease and conservation challenges. Dr. Mazet is active in international One Health research programs, especially disease transmission among wildlife, domestic animals, and people, such as tuberculosis in Africa, pathogen pollution of California coastal waters, and the development of zoonotic disease surveillance, all using multi-institutional, transdisciplinary approaches. Currently, she is the principal investigator and global director of a \$75 million viral emergence early warning project, named PREDICT, with the US Agency for International Development's Emerging Pandemic Threats Program. Dr. Mazet assists governments, institutions, and the public with emerging environmental and global health threats and emergency response. She was recently elected to the National Academies' Institute of Medicine in recognition of her successful and innovative approach to emerging environmental and global health threats.

**Michael McGuill, DVM, MPH, DACVPM**, is an adjunct assistant professor in public health and community medicine with the Tufts University Cummings School of Medicine, currently teaching in the combined DVM/MPH and the masters in conservation medicine programs at the Cummings School where he has taught biostatistics, epidemiology, research skills, community medicine, and other public and one health-related courses. Dr. McGuill formerly served as the state public health veterinarian with the Massachusetts Department of Public Health for ten years.

More recently he has worked in the field of biopharmaceutical competitive research, and has advised clinical veterinary groups about incorporating electronic medical records to provide evidence-based improvements in patient care into their practices.

**Ron McLaughlin, DVM, DVSc, DACVS**, received a Doctor of Veterinary Medicine degree from the University of Missouri and Doctor of Veterinary Science degree from the University of Guelph. He currently serves as head of the Department of Clinical Sciences and director of special operations at the Mississippi State University College of Veterinary Medicine.

**Matt Mellema, DVM, PhD, DACVECC** joined the faculty at UC, Davis in 2007 as an assistant professor of small animal emergency and critical care. At present his laboratory is heavily focused on vascular pathobiology and the exploration of endothelial microparticles as diagnostic and therapeutic tools in veterinary medicine. Dr. Mellema's other research interests include nitric oxide biology and nonendothelial cellular microparticles in health and disease. He is co-director of the small animal intensive care unit and the small animal emergency critical care residency program at UC, Davis. Dr. Mellema is a native of northern California and did his undergraduate training at the University of California (UC), Berkeley. He received his Doctor of Veterinary Medicine degree from UC, Davis in 1994. Following graduation, Dr. Mellema completed a focused internship in small animal emergency medicine at Tufts University and remained at Tufts as an instructor for an additional year. He then went to work for Cardiopet, Inc., now part of IDEXX, as a consultant in cardiothoracic medicine. Mellema completed a residency in emergency and critical care medicine at UC, Davis in 2000 and is a Diplomate of the American College of Veterinary Emergency and Critical Care. Following his residency, Dr. Mellema went back to Boston to get his Doctor of Philosophy in respiratory physiology at Harvard University. He serves as director of a multi-investigator joint laboratory for the study of comparative critical illness.

**Larissa Minicucci, DVM, MPH, CPH, DACVPM**, is currently the director of the DVM/MPH program and the co-director of the veterinary public health and preventive medicine residency program at the University of Minnesota. She holds a faculty appointment as an assistant professor in the department of veterinary population medicine at the college of veterinary medicine and an adjunct appointment at the school of public health. Before her work at the University of Minnesota, Dr. Minicucci was employed both in private practice as a mixed-animal veterinarian in Pennsylvania and as an epidemiologist (EIS officer) at the Centers for Disease Control and Prevention focusing on vector-borne diseases. Dr. Minicucci currently teaches a senior veterinary rotation in public health and regulatory medicine, an international veterinary

medicine seminar course, and several courses at the Public Health Institute, which address topics such as public health research, interprofessional collaboration, the role of companion animals in public health, and food safety from farm to table. Her research interests include infectious disease epidemiology focusing on the human animal interface. To study these interactions, Dr. Minicucci has current projects looking at influenza, West Nile virus, and neospora caninum. Additionally, she has a developing interest in the areas of cultural competence and zoonotic disease prevention as it relates to community health.

Since 2009 **Rafael Gianella Mondadori, DVM, MSc, PhD**, has worked as a professor and researcher of a Brazilian public university, with papers published in the field of animal reproduction and veterinary education where he teaches courses in the fields of histology and animal reproduction. From 1998 to 2008 he was director of a veterinary medicine college and responsible for its implementation. Dr. Mondadori graduated in veterinary medicine in 1995, received a master's degree in veterinary medicine in 1997, and a Doctor of Philosophy in 2008. For ten years he has been a member of the National Commission on Veterinary Education from the Brazilian Federal Board of Veterinary Medicine.

**Elsa Herdiana Murhandarwati, PhD**, is an academic staff and a researcher at the parasitology department and center for tropical medicine, faculty of medicine, Universitas Gadjah Mada (UGM) in Indonesia. She earned her medical degree from the faculty of medicine in 1998 and her master's from the postgraduate program in tropical medicine in 2000 at the faculty of medicine at UGM. Dr. Murhandarwati obtained her doctorate degree from Monash University in Australia in 2010. She is currently a deputy head of the postgraduate program of tropical medicine at UGM. Her research interest is in malaria and neglected diseases/zoonosis. Dr. Murhandarwati is involved in the Strategic Network on Neglected Diseases and Zoonosis that aims to stimulate and support research related to neglected infectious diseases and zoonoses in the South.

**David Muwanguzi, BVM**, is a One Health resident and a master's student in international infectious diseases management at the College of Veterinary Medicine, Animal Resources and Biosecurity, at Makerere University, where he earned his bachelor's degree in veterinary medicine. Before joining the residency program, Dr. Muwanguzi worked as a veterinary officer with the government of Uganda and gained vast experience in dealing with rural and pastoral communities. His focus areas include farmer training, agricultural extension, medical treatment of animals and herds, public health (food safety zoonotic diseases), disease control, and regulatory and enforcement work. Working with the Ugandan government has enabled Muwanguzi to appreciate the challenges of working with little or no funding.

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**Shamialh Namusisi, BVM**, is currently working on a One Health residents USAID RESPOND capacity building project with technical support from the University of Minnesota. She has One Health interest in the areas of community health improvement through community engagement, evidence-based advocacy, and improved public health practices. Dr. Namusisi has worked at the National Animal Genetic Resource Center and Databank, FARM-Africa Dairy Goat and Animal Healthcare Project that covered Kenya, Uganda, and Tanzania in different capacities at the field and management level. She holds a degree in veterinary medicine from Makerere University and a postgraduate diploma in international animal health from the University of Edinburgh. Dr. Namusisi also has training in livestock, livelihoods, and gender, training of trainers, and community development, among others.

**Lisa Nolan, DVM, PhD**, became the Dr. Stephen G. Juelsgaard Dean of Veterinary Medicine and the college of veterinary medicine's 15th dean in January 2011 at Iowa State University (ISU). She has been a professor, administrator and researcher at ISU since 2003. Dr. Nolan has served the ISU College of Veterinary Medicine as associate dean for research and graduate studies; associate dean for academic and student affairs; chair of the department of veterinary microbiology and preventive medicine; and interim chair of the department of veterinary diagnostic and production animal medicine. She has gained international recognition as a researcher for her rigorous work in the area of *E. coli*, for which she holds three U.S. patents. In recent years, Dr. Nolan has given several invited presentations around the world, written numerous refereed journal articles and book chapters, and garnered millions of dollars in research funds. Before joining Iowa State University, she was a professor in the department of veterinary and microbiological sciences at North Dakota State University where she also was founding director of the Great Plains Institute of Food Safety from 1999 to 2003. Dr. Nolan has served as an associate editor of the *Diseases of Poultry* and on the advisory and editorial boards of *Avian Diseases* and mentored many postdoctoral fellows, graduate students, undergraduate researchers, and visiting scientists. Dr. Nolan is a member of numerous professional associations, including the American Veterinary Medical Association, American Association of Avian Pathologists, American Society for Microbiology, Research Workers in Animal Diseases and Iowa Veterinary Medical Association. She received her Doctor of Veterinary Medicine, Master of Science, and Doctor of Philosophy degrees from the University of Georgia.

**Felicia Nutter, DVM, PhD, DACZM**, is a wildlife veterinarian and epidemiologist working on health issues at the interfaces among wildlife, domestic animals, humans, and the environments they share. She is the director of the International Veterinary Medicine Program (IVM) at the Cummings School

of Veterinary Medicine at Tufts University where she teaches and mentors students in professional and graduate programs. Since 2009, Dr. Nutter has also been the senior veterinary technical officer for the U.S. Agency for International Development's RESPOND Project, a global collaboration among Tufts University, University of Minnesota, DAI, Ecology and Environment, and TRG, which supports capacity development with a One Health approach. Core activities include networking 28 schools of public health, veterinary medicine, nursing, and environment in both Africa and Southeast Asia to promote a One Health approach among future graduates and also developing One Health core competencies, curriculum modules and experiential opportunities to support One Health teaching and training. Dr. Nutter received her undergraduate degree in biology and psychology from Yale University, her veterinary degree from Tufts, and her Doctor of Philosophy from North Carolina State University. Previous work experience includes stints with the Mountain Gorilla Veterinary Project in Rwanda, Uganda, and the Democratic Republic of Congo; The Marine Mammal Center in Sausalito, CA; and as assistant director of Veterinary International Programs at North Carolina State University.

**Debra Olson, DNP, MPH, RN, COHN-S, FAAOHN**, is the associate dean for global health at the University of Minnesota (UMN) School of Public Health and is responsible for developing strategic partnerships for the delivery of lifelong learning opportunities for interdisciplinary health professional students and the public health practice community. These programs are developed to increase the availability of public health education worldwide and to enhance the capability of working professionals through the application of innovative teaching techniques such as technology-enhanced learning. Her years of experience in the practice of public health and an extensive background in the delivery of public health academic and professional education allows for leadership both in the global community and the university. Dr. Olson engages university partners with the Food and Agriculture Organization of the UN addressing global food security issues. As a member of the U.S. Agency for International Development funded RESPOND initiative, Dr. Olson develops education and capacity building opportunities within university networks in Central and East Africa, and Southeast Asia. She is principal investigator for the University of Minnesota Simulations, Exercises and Effective Education (U-SEEE) Centers for Disease Control and Prevention funded centers for public health preparedness research and preparedness education and training. Dr. Olson is a professor in the division of environmental health sciences at the school of public health and an adjunct instructor in the school of nursing and the University of North Dakota School of Medicine and Health Sciences. She also serves as executive director of the UMN AHC Center for Global Health and Social Responsibility.

**Stephanie Ostrowski, DVM, MPVM, DACVPM**, joined the faculty of the Auburn University College of Veterinary Medicine in 2013 following a 21-year career as a U.S. Public Health Service officer (Veterinary Category) at the U.S. Centers for Disease Control and Prevention (CDC). Her career has spanned multiple CDC program areas and exemplifies the One Health triad of people, animals, and the environment. From 1987 to 1993, Dr. Ostrowski worked in environmental health and toxicology, first at the National Center for Environmental Health (NCEH) and then at the Agency for Toxic Substances and Disease Registry (ATSDR). From 1993 to 1999, she worked in the National Center for Infectious Diseases' Division of Global Migration and Quarantine. In 2001, Dr. Ostrowski was appointed as the Terrorism Preparedness Program director for ATSDR; she served in CDC's emergency responses to 9/11, anthrax, H5N1 avian influenza, multiple hurricane seasons, and as animal issues co-lead for 2006 Gulf Coast recovery operations. She currently teaches public health and provides career advice to undergraduate and veterinary professional students at Auburn University.

**Juan de Jesus Taylor Preciado, MV, MSc**, is dean of the veterinary medicine college at the University of Guadalajara. He is also president of the Panamerican Association of Veterinary Medicine Colleges, a past president of the Mexican Veterinary Medicine Colleges Association, and a past president of the Panamerican Veterinary Education Council (COPEVET).

**Valerie Ragan, DVM**, is director of the Center for Public and Corporate Veterinary Medicine on the Maryland campus of the Virginia-Maryland College of Veterinary Medicine (VMRCVM). Dr. Ragan is responsible for expansion of the center in the areas of public health and policy, and international veterinary medicine, with opportunities for student engagement in national and international veterinary and animal health organizations. Dr. Ragan also works globally on the control and eradication of brucellosis, a major disease of importance in livestock and human health. Before joining the VMRCVM, she was the president of AgWorks Solutions LLC, an agriculture and veterinary consulting company. Her activities included resolving animal health issues, such as disease control, eradication, and surveillance, and international veterinary capacity building. From 1988 to 2006, she worked for the Veterinary Services program with U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service. After five years of private practice, Dr. Ragan started with USDA as a veterinary medical officer. She then served as an area epidemiologist, senior staff veterinarian/national brucellosis epidemiologist, and as assistant deputy administrator of the agency's Veterinary Services program. In that capacity, Ragan served as the national animal health surveillance coordinator, and established the National Surveillance Unit at USDA's Center for Epidemiology and Animal Health. After

preveterinary work at Virginia Tech, Dr. Ragan received her Doctor of Veterinary Medicine degree in 1983 from the University of Georgia. She also completed postgraduate work in biostatistics and epidemiology at the University of Michigan School of Public Health.

**Emma Read, DVM, DACVS**, is a graduate of the Western College of Veterinary Medicine in Saskatoon and completed a large animal surgical residency at the University of Georgia. Following board certification with the American College of Veterinary Surgeons, Dr. Read taught on faculty at the Ontario Veterinary College, worked in private referral practice in Alberta and joined the Faculty of Veterinary Medicine at the University of Calgary in 2007. She is the chair of the Clinical Skills Courses, which comprise 20 percent of the DVM program, and teaches students all their hands-on veterinary skills in the first three years of the program. Dr. Read has spoken at national and international conferences, and conducts research into the use assessment methods and clinical simulation.

**Alison Robbins, DVM, MS**, is a research assistant professor, core faculty, and program coordinator for the Masters of Science degree in conservation medicine at Tufts University Cummings School of Veterinary Medicine. Dr. Robbins' research concentrates on infectious wildlife diseases of conservation and public health importance. She received a Bachelor of Science in biochemistry from the University of New Hampshire, a Master of Science in biology with a concentration in conservation biology and a Doctor in Veterinary Medicine both from Tufts University. She was director from 1992 to 2008 for a wildlife rabies control program using oral vaccination of free-ranging raccoons in Massachusetts. In 2006 she was a visiting scholar in Australia for a year studying amphibian chytrid disease epidemiology. Since 2009, Dr. Robbins has focused her research on developing diagnostic and treatment methods for white nose syndrome in bats in North America. For the academic year 2012/2013, Dr. Robbins was program director for the conservation medicine masters' program, and continues to develop interdisciplinary curriculum, teach courses, and mentor students.

**Carrie Roder, BEng, MEd**, is currently a lecturer in veterinary education working in the LIVE center at the Royal Veterinary College, London. After completing a PGCE in Science with physics, she spent three years teaching and developing learning resources, first at a secondary school in Essex and then at the Royal Observatory, Greenwich. She has a master's in education from Cambridge University and is currently writing her doctoral thesis that looks at the hidden curriculum of veterinary education.

**Liza Rosenbaum Nielsen, DVM, PhD, DrVetSci, DECVPH**, works as professor in Disease Control and Prevention at the Faculty of Health and Medical Sciences in Copenhagen. There she is responsible for research and teaching at the only veterinary school in

Denmark working mainly with veterinary epidemiology, surveillance, and disease control in a One Health setting. Dr. Rosenbaum Nielsen has contributed to scientific investigations and development of relevance for elimination of zoonotic and animal health comprising bacteriae, including salmonella, in the Danish cattle population; control of salmonella in pigs and pork; design and evaluation of risk-based surveillance; and control programs for animal diseases and zoonotic infections on-farm, at abattoirs, and meat inspection, economic evaluations and impact assessment of production animal diseases. She has provided scientific support to the relevant ministries on development of legislation related to disease control programs. Dr. Rosenbaum Nielsen is also heavily involved in development of new educational methods and courses, including e-learning courses, One Health scenarios, and a One Health summer school run in collaboration with two universities in Copenhagen.

**Diafuka Saila-Ngita, DVM, PhD**, is a research assistant professor at the Cummings School of Veterinary Medicine at Tufts University. Dr. Saila-Ngita joined Tufts University in 2010. He is a trained veterinarian and has a doctoral degree in economics. He has several years of experience working in human, animal and, environmental health projects in Africa and in the United States. Dr. Saila-Ngita provides technical support to the U.S. Agency for International Development RESPOND Africa project in disease surveillance and outbreak response capacity building for countries in the region and to One Health Central and Eastern Africa, a university network of 14 schools of public health and faculty of veterinary medicine of six African countries. Dr. Saila-Ngita began his career in the Democratic Republic of the Congo in the early 1980s where he worked for the Ministry of Agriculture as an animal health and production outreach officer. He later was transferred to the Ministry of Planning in 1986 where he was in charge of livestock, fisheries, rural development, and environment projects. In the United States, he worked on HIV/AIDS risk reduction program targeting active drug users and also on Medicare programs focusing on breast cancer, diabetes, and low income communities. He coordinated the World Health Organization Macro Economics and Health project in Rwanda managed by Columbia University. He was part of the team that set up a Centers for Disease Control and U.S. President's Emergency Plan for AIDS Relief-funded wireless system for an HIV/AIDS data collection and sharing program in Rwanda in 2004.. In 2008, he led, in Uganda, the first successful registration in Africa of the drug misoprostol for the prevention of postpartum hemorrhage, the leading cause of maternal mortality in Africa.

**Susan Sanchez, PhD, FSB**, serves as section head for microbiology and molecular biology in the University of Georgia's (UGA) College of Veterinary Medicine Diagnostic Laboratory, assistant director for the Biomedical Health Sciences Institute, and chair of One Health.

In this latter position, Dr. Sanchez helps coordinate UGA's efforts in the integration of animal, human, and environmental health teaching, research, and outreach. She has received numerous microbiology and research mentoring awards. Dr. Sanchez's research focuses primarily on studying the ecology of antimicrobial resistance in bacteria isolated from animals and their zoonotic potential. She earned a Doctor of Philosophy and Bachelor of Science from the Universidad Complutense in Madrid and a Master of Science from the Royal Veterinary College in London. Dr. Sanchez is a fellow of the prestigious Society for Biology.

**Jishu Shi, DVM, PhD**, is professor of immunology and the director of the U.S.-China Center for Animal Health, and special assistant to the provost for China Affairs at Kansas State University (KSU). He was instrumental in establishing the Kansas State University and China Scholarship Council joint Doctor of Veterinary Medicine (DVM) program that will train 50 Chinese students in the next 10 years through American Veterinary Medical Association-accredited DVM programs in the U.S. For the first time in 63 years since 1950, students from China are being supported by their home country to earn a Doctor of Veterinary Medicine degree from the United States. As special assistant to the Provost for China Affairs at KSU, Dr. Shi is also working with the Chinese government and universities to set up a special Confucius Institute at KSU with a focus on traditional Chinese veterinary medicine. Dr. Shi teaches veterinary physiology to the first-year students at the KSU college of veterinary medicine. He is an author of more than 100 publications in refereed journals, conference proceedings, and book chapters. Dr. Shi's research focuses on the development of vaccines for high consequence animal diseases and he is a frequent consultant to animal health companies in the U.S., China, and Europe. As the director of U.S.-China Center for Animal Health, Dr. Shi is devoted to advance veterinary education and practice standards in China and around the world.

**Ayona Silva-Fletcher, BVSc, PhD**, is a veterinarian with a doctorate in Animal Nutrition and is a senior lecturer in veterinary education at LIVE (Lifelong and Independent Veterinary Education) at the Royal Veterinary College, London. Dr. Silva-Fletcher is the course director for the Master of Science program in veterinary education, the first discipline-specific veterinary education program developed anywhere in the world. The program is designed for veterinary and paraveterinary educators and is offered via face-to-face and distance learning. In 2010 she completed a Master of Arts in medical education, and this degree, which was taken more than 20 years after her doctorate, provided not only an opportunity to reconnoiter a different discipline but also to experience andragogy at first hand. Her pedagogic research focuses on the use of online and distance learning for postgraduate and adult education. In 2012, Dr. Silva-Fletcher was awarded the National Teaching Fellowship, awarded by the

## Speaker Biographies

Higher Education Academy, UK for individual excellence.

**Bruce Smith, VMD, PhD**, received his veterinary degree and Doctor of Philosophy in genetics from the University of Pennsylvania in 1988 and 1993, respectively, following graduation from Haverford College, with a bachelor's in biology. While at the University of Pennsylvania, he was a member of the Veterinary Medical Scientist Trainee Program and a Kleberg Fellow. In 1993, he joined Auburn University where he is currently a scientist in the Scott-Ritchey Research Center and a professor of pathobiology at the college of veterinary medicine. Dr. Smith is the director of the Auburn University Research Initiative in Cancer (AURIC). This program seeks to enhance and expand cancer research at Auburn University and to build collaborations and research partnerships throughout the region and the country. Dr. Smith's teaching focuses on genetics and molecular biology and his research focuses on genetic and cell-based therapies of cancer and muscular dystrophies and the translation of these therapies into a clinical setting.

**Woutrina Smith, DVM, MPVM, PhD**, is a veterinarian and an associate professor of infectious disease epidemiology in the school of veterinary medicine at the University of California (UC), Davis. She attended Pomona College and obtained veterinary, masters, and doctoral degrees at UC, Davis. Dr. Smith's research focuses on the epidemiology of zoonotic pathogens in coastal ecosystems of California and at human-animal:environment interfaces internationally, such as current projects in Tanzania, India, and Sri Lanka. As education coordinator for the One Health Center of Expertise of the UC Global Health Institute and as capacity building coordinator for the U.S. Agency for International Development PREDICT program, she works to promote collaborative One Health research and education locally and globally.

**Marcy Souza, DVM, MPH, DABVP, DACVPM**, is an assistant professor of public health and wildlife medicine at the University of Tennessee College of Veterinary Medicine. She received her Doctor of Veterinary Medicine (DVM) degree from North Carolina State University and her Master of Public Health (MPH) from the University of Tennessee. Dr. Souza teaches infectious and zoonotic diseases in both the DVM and MPH programs at the University of Tennessee. She also researches infectious disease and therapeutics in nondomestic animals and is a zoo vet in the college's clinical service.

**Andrew Specht, DVM, DACVIM**, is currently a clinical assistant professor at the University of Florida (UF). He obtained his DVM from the University of Minnesota in 2000, then completed a one-year rotating internship at Tufts University in 2001 and a residency in small animal internal medicine at Michigan State University in 2004 before starting at

UF. Dr. Specht's primary clinical and research interests are in the areas of urology/nephrology and hematology/hemostasis, but since 2005 he has been part of a multidisciplinary team working to develop and improve gene therapy protocols for glycogen storage disease type Ia utilizing a canine model colony at UF.

**Brenda Stevens, DVM, DABVP**, was in private small animal practice in New Jersey and Connecticut until relocating to North Carolina in 2003 following graduation from the Michigan State University College of Veterinary Medicine. In 2003, she began volunteering with the Community Practice Mobile Unit at North Carolina State University and continued volunteering until hire in 2006. As a clinical assistant professor for the community practice, Dr. Stevens also developed and directed the shelter medicine program. In 2011, she transitioned to direct the general practice for the college.

**Francisco Suárez-Güemes, DVM, MSc, PhD**, is the associated dean of planning at the National Autonomous University of México (UNAM) College of Veterinary Medicine, and the president of the National Council for Animal Health of México. Dr. Suárez-Güemes is also a past president of the Veterinary Academy of México and a member of the Conference of Research Workers in Animal Diseases. He received his Doctor of Veterinary Medicine and Master of Science in microbiology from UNAM, and his Doctor of Philosophy from Colorado State University.

**Andrew Tamale, MVPM**, is an educator and researcher at Makerere University and one of the architects of the One Health residency program. He has a passion for development especially job and wealth creation along the fish value chain using the academic, public, and private partnership in AFRISA. He is also interested in a multidisciplinary approach to problem solving, and as such is a One Health enthusiast. Dr. Tamale was trained as a veterinarian in 2002 at Makerere University; undertook the Masters of Veterinary Preventive Medicine, which he completed in 2010 and is currently pursuing a Master of Public Health at the University of Minnesota. He has had various trainings in scholarly writing, statistical analysis, proposal and grant writing, adult learning, risk analysis, and geo-spatial mapping and remote sensing. He has served and worked for government consultancies, private sector, rural communities and in hard to reach areas in various capacities. Dr. Tamale has also won research grants and worked with the Inter University Council of East Africa, Victoria Researchers, U.S. Agency for International Development and has presented in various conferences and other international fora in Rwanda, Kenya, Ethiopia, Belgium, Senegal, and the U.S. Dr. Tamale's research interests are food safety, risk analysis, and epidemiology, especially of zoonoses that are constantly threatening world ecosystems. He is committed to making Africa and the world a better place through an ACP3 approach and achieving the

One health ultimatum.

**John Tegzes, MA, VMD, DABVT**, is the director of interprofessional education at Western University of Health Sciences. Dr. Tegzes is a founding faculty member of the College of Veterinary Medicine at Western where he was instrumental in the development and implementation of the Problem-Based Learning curriculum. He has trained more than 400 faculty from three institutions, in small group facilitation practices and skills and is passionate about veterinary education, currently serving as president of Veterinary Education Worldwide (VIEW.) His educational experience includes a BSN in Nursing from Thomas Jefferson University, a Master of Arts in Applied Psychology from the University of Santa Monica, and a veterinary doctorate from the University of Pennsylvania. Tegzes completed residency training in clinical and diagnostic toxicology at the University of California, Davis. He has worked interprofessionally as both a nurse and a veterinarian, and has presented extensively on interprofessional education and practice topics.

**Grace Thaxton** is a senior at Auburn University majoring in microbiology and minoring in public health. She plans to pursue a Doctor of Philosophy in public health and tropical disease following graduation. Throughout her undergraduate career, Ms. Thaxton has been awarded several research fellowships to study avian infectious bronchitis virus genomes. She hopes to combine her experience in viral genetics with her interest in vector-borne diseases, and ultimately attain a research position in tropical disease prevention and control.

In 2010, **Dominic Travis, DVM, MS**, became associate professor of wildlife epidemiology in the ecosystem health initiative at the College of Veterinary Medicine, University of Minnesota (UMN) in 2010, with an adjunct appointment in the UMN School of Public Health. In this role, he has been highly involved in the U.S. Agency for International Development Emerging Pandemic Threats RESPOND program, and spent much of his recent time teaching and conducting ecosystem health research in Africa. In 2008, he became vice president of conservation and science at LPZ with oversight of five research centers consisting of more than 50 scientific staff in North America, Latin America, and Africa. From 2000 to 2010, Dr. Travis served as veterinary epidemiologist at the Lincoln Park Zoological Society (LPZ) in Chicago where he created a research center in ecosystem health, co-founding the Zoo Animal Health Network (ZAHN) in North America and two projects in Tanzania—the Gombe Ecosystem Health Project and the Serengeti Health Initiative. He received his Doctor of Veterinary Medicine from Michigan State University in 1997, and a Master of Science in epidemiology from the University of Maryland in 2000. Postgraduate work included an internship at the U.S. Department of Agriculture Plum Island Animal Disease Center,

which focused on foot and mouth disease and African swine fever, and a residency in applied epidemiology at the Virginia-Maryland Regional College of Veterinary Medicine. Dr. Travis' current research includes disease surveillance and risk analysis of emerging zoonotic infectious diseases from an ecosystem health perspective. Teaching interests include epidemiology, infectious diseases, international medicine, and co-creation of an integrative program exploring relationships between biodiversity and health.

**Saul Tzipori, DVM, PhD, DSC, FRCVS**, has many years of research experience working with infectious diseases of humans and domestic animals, with particular reference to food and waterborne enteric pathogens (viral, bacterial, fungal, protozoa) and bacterial toxins. This includes investigating disease pathogenesis, screening and evaluation of chemical or immune-based therapeutic agents, and vaccines. He is best known for his expertise and contribution to zoonotic pathogens cryptosporidiosis, microsporidiosis, *E. coli* O157:H7, shigellosis, and *Clostridium difficile* in terms of model-development, vaccine, and therapeutics. PubMed currently lists more than 260 publications accurately reflecting the nature of Dr. Tzipori's scientific work. He has directed multiproject and multicenter scientific programs nationally and globally, funded by various government and nongovernmental organizations. Tzipori led programs devoted to development of countermeasures against biodefense agents. He currently is the Tufts principal investigator of a project on global health, funded by the U.S. Agency for International Development under the umbrella of Emerging Pandemic Threats.

**Linda Valeri, MBA**, is the director of operations for the Center for Animal Health and Food Safety (CAHFS) in the College of Veterinary Medicine (CVM) and the Global Initiative for Food Systems Leadership (GIFSL). The initiatives of the center are focused on collaborative research and education on issues at the interface of human, animal, and environmental health. As director for the center, Ms. Valeri develops and nurtures strategic partnerships with national and global stakeholders in industry, governmental, and intergovernmental organizations. She also identifies and develops strategic partnerships across the University of Minnesota to advance and support the center's One Health initiatives. Before coming to the University, she held executive leadership roles in healthcare, environmental science, and clinical chemistry. Ms. Valeri also serves as a community facilitator for InCommons: a new model for community problem solving supported by the Bush Foundation.

**Carolina Vicario** is a second-year student at the School of Veterinary Medicine, University of California (UC), Davis. She attended Claremont McKenna College where she completed her senior thesis in neuroscience. As co-president of the Students for One Health Club at UC, Davis, Ms. Vicario's goal is to promote student

enthusiasm for the One Health approach and its applications to solving complex health problems locally and abroad. She is the co-project director of their student-lead One Health project in Nicaragua.

**Jacinta Mukulu Waila, BScN, Kenya Registered Community Health Nurse**, is a One Health resident and a Master of Public Health student at Makerere University Kampala, Uganda. She is a Kenyan graduate nurse from the University of Nairobi. Before joining the One Health residency program, Ms. Waila worked in the Ministry of Health in Kenya based at Nyeri provincial general hospital where she rotated in all the departments and performed technical and managerial duties. She also worked among the Turkana and Maasai pastoral communities in Kenya implementing maternal child health and nutrition and HIV prevention projects, respectively. The residency program has been a great exposure for her in appreciating the role veterinarians and other health professional play in health promotion, protection, and disease prevention through involvement in various projects and training. Some of the major projects undertaken so far include the joint vet-nursing-public health field attachment and the farm to table study program in Uganda and Minnesota, among others. Dr. Waila hopes that she will be able to use One Health competencies gained through experiential learning under the residency program in tackling public health challenges, especially with regard to maternal child health and nutrition, which is her main area of interest.

**Xiu-Feng Wan, DVM, MS, PhD**, is an associate professor in systems biology at the Department of Basic Sciences, the College of Veterinary Medicine, Mississippi State University (MSU). Dr. Wan's long-term career goal is to understand how zoonotic pathogens especially influenza A viruses emerge and reemerge at the animal-human interface by developing and applying systems biology approaches. He identified A/goose/Guangdong/1/1996 (H5N1), the precursor virus causing current H5N1 bird flu threat, during his graduate study in China. He recently developed AntigenMap, which is useful for antigenic variant detection and vaccine strain selection. Before joining MSU, Dr. Wan was a senior service fellow in the Influenza Division of the Centers for Disease Control and Prevention. He was appointed as an assistant professor in the Department of Microbiology at Miami University from 2005 to 2007. Dr. Wan received his veterinary degree from Jiangxi Agricultural University, a Master of Science in avian medicine from South China Agricultural University, and his Doctor of Philosophy in veterinary medicine and minor in biochemistry and molecular biology from MSU in 2002. He also earned his master's degree in computer science from MSU in 2002. From 2002 to 2003, he joined the Microbial Ecology and Functional Genomics Group at Oak Ridge National Laboratory as a postdoc fellow, and his training focused on bioinformatics, functional genomics, and environmental ecology. From 2003 to

2005, he had his second postdoc training at University of Missouri-Columbia, where his training focused on algorithm development for RNA folding as well as evolutionary studies on infectious diseases.

**Sylvia Wanzala, BVM**, is a veterinarian from Makerere University, Uganda. She is also the One Health resident mentor for the first One Health residency program in the world housed at the College of Veterinary Medicine, Animal Resources and Biosecurity (COVAB), Makerere University. The program is currently funded by the U.S. Agency for International Development RESPOND program through the One Health for Central and Eastern Africa (OHCEA) secretariat. Dr. Wanzala has great interest in infectious diseases with particular emphasis on the zoonotic aspects of the *Mycobacterium tuberculosis* complex and its debilitating effects on the health of people and animals particularly in resource limited settings. Dr. Wanzala received her master's degree in molecular biology and biotechnology and is also completing her Master of Public Health degree from the University of Minnesota. This has helped her further appreciate the role of various factors in public health. In addition Wanzala has worked with local communities in Uganda which have helped shape and inform her desire to pursue and focus her career on public health.

**Iwan Willyanto, DVM, MSc, PhD**, is employed by InI Veterinary Service Education and is founder and owner of InI Veterinary Service, a small animal clinic and animal health consultation, in Surabaya, Indonesia. Dr. Willyanto has worked as a lecturer on small and large animal internal medicines, Airlangga University and as head of the Department of Veterinary Internal Medicine and vice director on academic affairs of Airlangga University Veterinary Teaching Hospital. He is a member of The Expert Group on Animal Health of the Ministry of Agriculture, The Republic of Indonesia. Dr. Willyanto is also national consultant on epidemiology of avian influenza control at the United Nations Food and Agriculture Organization. He is also consultant for several research projects of Tufts Cummings School of Veterinary Medicine in Indonesia, several ILRI research projects on Avian Influenza in Indonesia, and for an EcoZD Bali Rabies study and APEIR Antimicrobial Residue Research. Dr. Willyanto also works on the Indonesia Focal Point of VWB-BECA Project and the U.S. Agency for International Development RESPOND Project. Willyanto graduated as a Doctor of Veterinary Medicine from Airlangga University, Surabaya on 1979. He was awarded a Master of Science in veterinary pathology (1982) and Doctor of Philosophy in veterinary epidemiology (1994) from James Cook University, Australia.

**Catherine Woteki, MS, PhD**, is undersecretary for the U.S. Department of Agriculture's (USDA) Research, Education, and Economics (REE) mission area and the USDA's chief scientist. Before joining USDA, Dr. Woteki served as global director of scientific affairs for

## Speaker Biographies

Mars, Inc. where she managed the company's scientific policy and research on matters of health, nutrition, and food safety. From 2002 to 2005, she was dean of agriculture and professor of human nutrition at Iowa State University. Dr. Woteki served as the first undersecretary for food safety at the USDA from 1997 to 2001, where she oversaw U.S. Government food safety policy development and USDA's continuity of operations planning. Dr. Woteki also served as the deputy undersecretary for REE at USDA in 1996. Before joining USDA, she served in the White House Office of Science and Technology Policy as deputy associate director for science from 1994 to 1996. Dr. Woteki has also held positions in the National Center for Health Statistics of the U.S. Department of Health and Human Services. In 1999, Dr. Woteki was elected to the Institute of Medicine of the National Academy of Sciences, where she has chaired the Food and Nutrition Board. She received her Master of Science and Doctor of Philosophy in human nutrition from Virginia Polytechnic Institute and State University, and her Bachelor of Science in biology and chemistry from Mary Washington College.

**Luis Zarco, MVZ, PhD**, has been a professor of animal reproduction at UNAM's veterinary college since 1985 and was dean of the college from 1997 to 2005. His lines of research include seasonality of small ruminants in tropical and subtropical regions, as well as embryo and fetal mortality of endocrine origin in domestic animals. Dr. Zarco studied veterinary medicine at the National Autonomous University of

Mexico (UNAM) and received a Doctor of Philosophy in endocrinology at the University of California, Davis. In México he has been president of the Academy for Research in Reproductive Biology, the Mexican Association of Veterinary Schools, the Mexican Veterinary Medical Association, the National Council of Veterinary Education, and the National Council of Animal Health. At the international level Zarco has been president of the Panamerican Federation of Veterinary Medical Colleges and councilor from Latin-America to the World Veterinary Association. At the present time he is the president of the Panamerican Association of Veterinary Sciences (PANVET) and member of UNAM's Board of Governors.

**Qijing Zhang, BVSc, MS, PhD**, is a professor in veterinary microbiology and preventive medicine and associate dean for research and graduate studies at the College of Veterinary Medicine at Iowa State University (ISU). Dr. Zhang's research focuses on foodborne zoonotic pathogens and antimicrobial resistance. Particularly, he has devoted his efforts to understanding the development, persistence, and ecology of antibiotic resistance in *Campylobacter*. Dr. Zhang has published extensively in the area of antibiotic resistance and served on a number of National Institutes of Health and U.S. Department of Agriculture grant review panels. He has also served as a reviewer or an editorial board member for many scientific journals. Dr. Zhang was a recipient of the Pfizer Award for Research Excellence in 2007 and the holder of Frank K. Ramsey

Endowed Chair at ISU from 2003 to 2012. He recently served as chair-elect, chair, and councilor for Division Z (Animal Health) of the American Society for Microbiology from 2008 to 2011.

**Debra Zoran, DVM, PhD, DACVIM**, is an associate professor and chief of small animal internal medicine in the Department of Veterinary Small Animal Clinical Sciences at Texas A&M University (TAMU), where she has been a member of the faculty since 1996. There she completed a Doctor of Philosophy in nutrition in the laboratory of Dr. Joanne Lupton in 1992. A 1984 graduate of Kansas State University's College of Veterinary Medicine, Dr. Zoran next entered private clinical practice in the Phoenix, Arizona area, returning to Iowa State University in 1987 for her small animal internal medicine residency. She completed a master's degree and became a Diplomate of the American College of Veterinary Internal Medicine in small animal internal medicine during her time there. At TAMU, Zoran is actively involved with clinical, teaching, and research activities in small animal nutrition, disaster preparedness, gastroenterology, and feline medicine. Since 2011, she has been the medical operations chief of the TAMU Veterinary Emergency Team and has worked with the Texas Task Force 1 Search and Rescue dogs since 2000. Dr. Zoran is currently the president of the American College of Veterinary Internal Medicine.



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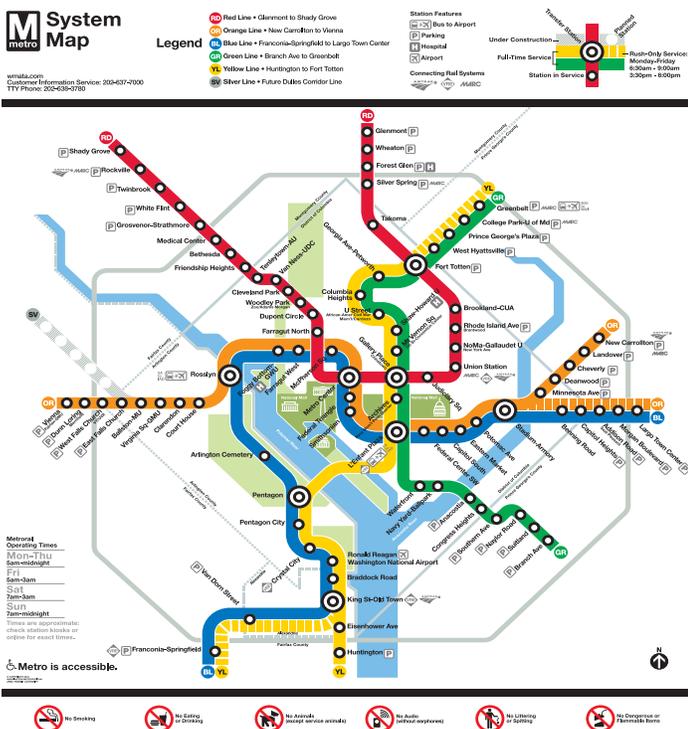
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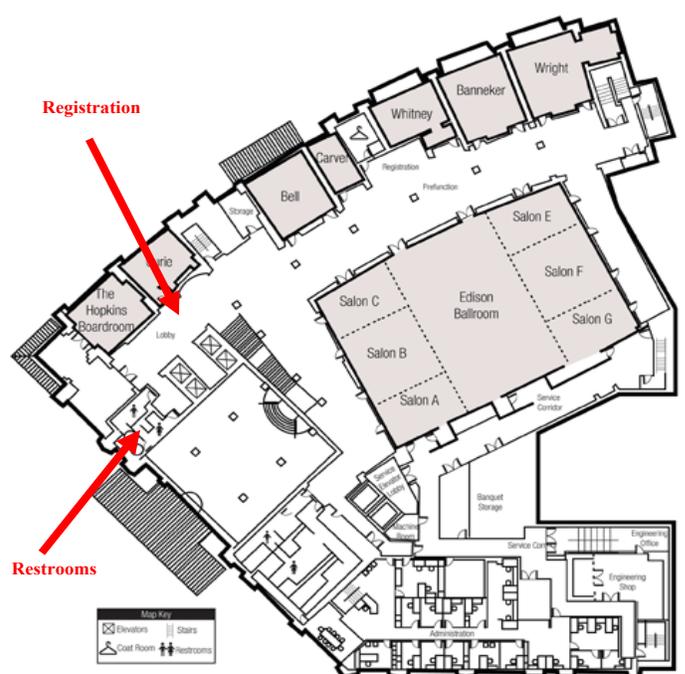
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## MetroRail System Map



## Westin Alexandria Room Diagram



Conference Program Overview

7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30 and Later	
Wednesday, March 12																								
Board of Directors Meeting Edison EF																								
Thursday, March 13																								
Breakfast	Advocacy Briefing Edison EFG																					Congressional Reception Capitol Hill 5:00 – 7:00		
Friday, March 14																								
Breakfast	Opening Plenary Session Edison DABC				AAVMC Distinguished Veterinary Teacher Award Luncheon, Presented by Zoetis Edison DABC				Educational Session I Edison DABC				Educational Session II Edison EFG				New Reqs Welcome Reception				President's Reception and Poster Session Edison DABC and Foyer 6:30 - 8:30			
	Academic Affairs Committee Edison EFG				Research Committee Wright																			
Saturday, March 15																								
Breakfast	Educational Session III Edison DABC				Recognition Lecture Luncheon Edison DABC				Educational Session IV Edison DABC				Admissions Workshop Edison EFG				JVME Editorial Board Whitney							
Twining Orientation Edsn. EFG	Admissions Educational Session Edison EFG																							
Sunday, March 16																								
Breakfast	Educational Session VI Edison DABC				Closing Workshop Edison DABC				Career Fair Information Session I Edison ABC				Career Fair Information Session II Edison EFG				Veterinary Medical Career Fair Edison D							
	Educational Session V Edison EFG																							
Open Session	Business Meeting				Advocacy				Reception/M Meal Function				Career Fair											