



Twenty-Ninth Annual Research Symposium

March 15, 2018

Blacksburg,

Virginia



Virginia-Maryland
College of **Veterinary Medicine**



Dr. Jennifer McQuiston, DVM, MS, (CAPT, USPHS)
Deputy Director of the Division of High
Consequence Pathogens and Pathology
National Center for Emerging and Zoonotic
Infectious Diseases
Centers for Disease Control
Keynote Speaker: 9:30 am Classroom 102

Jennifer McQuiston, DVM, MS (CAPT, USPHS) is the deputy director of the Division of High Consequence Pathogens and Pathology within Centers for Disease Control's (CDC) National Center for Emerging and Zoonotic Infectious Diseases. She is also a captain in the US Public Health Service. As a veterinarian, Dr. McQuiston specializes in outbreak investigations and research involving diseases that spread from animals to people (zoonotic diseases). During much of her career at CDC, she has worked on diseases such as Rocky Mountain spotted fever, Q fever and rabies. Her interests include diseases transmitted to humans by ticks, fleas and livestock.

Dr. McQuiston received the Doctor of Veterinary Medicine from the Virginia-Maryland Regional College of Veterinary Medicine. She earned the Masters degree in molecular biology and the BS in biology from Virginia Polytechnic Institute and State University. She began her public health career at CDC in 1998 as an Epidemic Intelligence Service officer assigned to work on rabies and other zoonotic diseases.

Widely recognized for her expertise on zoonotic diseases, Dr. McQuiston has received numerous national awards, including the Daniel E. Salmon award from the National Association of Federal Veterinarians and CDC's James H. Steele Award for outstanding work on veterinary public health issues. She has more than 50 scientific publications and frequently is requested to speak at conferences and meetings. As a scientist, mother and veterinarian, Dr. McQuiston believes that helping people understand how to prevent disease is her most important job. Her life's passion is translating science into easy-to-understand disease detection and prevention strategies to keep both people and animals healthy and on the go.



Dr. Amy Pruden, Ph.D.
W. Thomas Rice Professor
Department of Civil and Environmental Engineering
Global Change Center
Virginia Tech

Keynote Speaker: 12:30 pm Classroom 102

Dr. Pruden is the W. Thomas Rice Professor in the Department of Civil and Environmental Engineering. Her research program at Virginia Tech focuses on applied environmental microbiology.

In relation to global change, Dr. Pruden studies the role of microbial communities in dynamic environmental systems. For example, there is currently a boom in the manufacture of nanomaterials, and therefore a need to understand the implications of these new products in terms of biodegradability by and toxicity to microbes in wastewater treatment plants. Similarly, efforts to conserve water and energy result in new "green" building designs that impose atypical water flow regimes in pipes. This will shift the kinds of microbes that reside there and the potential for pathogens to establish. A third example: how will changes in antibiotic use guidelines for livestock impact the actual attenuation of antibiotic resistant bacteria and the antibiotic resistance genes that they carry?

Dr. Pruden serves as an Associate Editor for the journal Environmental Science & Technology and has published more than 100 peer-reviewed manuscripts and book chapters on subjects pertaining to bioremediation, pathogens, and antibiotic resistance. She is currently the PI on a USDA CAP grant focusing on farm-to-fork sources for the spread of antibiotic resistance and Co-PI on an NSF Partnership for International Research and Education grant where students have the opportunity to collaborate abroad in examining antibiotic resistance genes in wastewater treatment plants in different countries.

At Virginia Tech, Dr. Pruden teaches CEE 5194 Environmental Engineering Microbiology and an IGEP Course on Interdisciplinary Research, GRAD 5134. She is a core faculty member in three interdisciplinary graduate education programs, Water for Health, Sustainable Nanotechnology, and Interfaces of Global Change.



Dr. Tim LaBranche, DVM, Ph.D., DACVP

Senior Director, Drug Safety Evaluation
Blueprint Medicines

Alumni Speaker: 3:00 pm Classroom 102

Dr. Tim LaBrache serves as the Senior Director of Drug Safety Evaluation at Blueprint Medicines in Boston, MA. As a leader in the Drug Safety Evaluation group, Dr. LaBranche is responsible for leveraging his toxicology and veterinary pathology expertise to perform the nonclinical evaluation of potential drug candidates across Blueprint Medicines' portfolio of anti-cancer and rare genetic diseases drugs. He is involved in all steps of drug evaluation from evaluating target safety, leading GLP toxicology studies, and writing relevant sections of the Investigational New Drug (IND) and New Drug Application (NDA) regulatory submission documents. Blueprint's lead programs include BLU-285, in clinical trials for systemic mastocytosis (SM) and gastrointestinal stromal tumors (GIST), BLU-554 for the treatment of hepatocellular carcinoma (HCC), and BLU-667 which is the first selective RET inhibitor to reach the clinic and is being investigated in patients with non-small cell lung cancer (NSCLC) and medullary thyroid carcinoma (MTC).

Dr. LaBranche is a three-time Virginia Tech alumni receiving his BS in Animal Sciences, DVM, and Ph.D. from the university. Following his training at Virginia-Maryland College of Veterinary Medicine, Dr. LaBranche completed a residency in Anatomic Pathology at the University of Georgia. In 2007, he became board certificated by the American College of Veterinary Pathologist. He continues to serve as an Adjunct Assistant Professor for the College of Veterinary Medicine at the University of Georgia and the Advisory Committee for the Center for Public and Corporate Veterinary Medicine at the Virginia-Maryland College of Veterinary Medicine. Dr. LaBranche has published in several leading journals such as Journal of Autoimmunity, Science Translational Medicine, and Journal of Immunology.

PROGRAM AT A GLANCE

7:30 am Registration and Continental Breakfast

8:00 am Poster Session I

9:30 am Keynote Speaker, Dr. Jennifer McQuiston

10:30 am Oral Session I: Masters Student Presentations

11:30 am LUNCH – Commons Area for Registered Participants

12:30 pm Keynote Speaker, Dr. Amy Pruden

1:30 pm Poster Session II

3:00 pm Alumni Speaker, Dr. Tim LaBranche

4:00 pm Oral Session II: Ph.D. Student Presentations

6:00 pm Banquet Registration – Inn at Virginia Tech

6:30 pm Banquet Dinner and Award Ceremony

*Oral Presentations & Keynote Speakers - Classroom 102

*Poster Sessions - CVM Student Lounge

29th Annual Research Symposium

