1st International NADC Animal Health and Food Safety Research Symposium: Building Upon 50 Years of Science to Feed a Growing World

Wednesday November 9, 2011

08:00h - 08:30h Registration

08:30h - 09:00h
50 Years of NADC Research and the Grand Animal Health Challenges that Lie Ahead
Dr. Kurt Zuelke, Director, USDA ARS National Animal Disease Center

Session I: Microbial Ecology in Animal Health and Food Safety
Moderator: Dr. Thad Stanton, Research Leader, NADC Food Safety and Enteric Pathogens Unit

09:00h - 09:30h
Historical Perspectives on Microbial Ecology and NADC’s Enteric Disease Research
Dr. Mark Rasmussen, Division Director and Microbiologist, Division of Animal and Food Microbiology, Office of Research, Center for Veterinary Medicine, U.S. FDA

09:30h - 10:15h
Exploring the Genetic Basis by Which Bacteria Colonize, Invade, and Cause Disease
Dr. Roy Curtiss, Director of the Center for Infectious Diseases and Vaccinology, The Biodesign Institute, Arizona State University, Member US Nat’l Academy of Sciences

10:15h - 10:30h Break

10:30h - 11:15h
Exploring the Animal Intestinal Microbiome for Antibiotic Alternatives
Dr. Heather Allen, Research Scientist, NADC Food Safety and Enteric Diseases Unit

11:15h - 12:00h
Targeted and Global Approaches for Understanding Persistence and Developing Interventions Against Foodborne Human Pathogens
Dr. Vijay Sharma, Research Scientist, NADC Food Safety and Enteric Diseases Unit

12:00h - 13:00h Lunch

Session II: Ruminant Immunology and Diseases of Cattle
Moderator: Dr. Eduardo Casas, Research Leader, NADC Ruminant Diseases and Immunology Unit

13:00h - 13:30h
Historical Perspective on NADC’s Metabolic Disease and Ruminant Immunology Research
Dr. Ronald Horst, Former NADC Research Leader and Acting Center Director, ARS Hall of Fame Member

13:30h - 14:15h
Transitioning Animal Health Research Discoveries from the Laboratory to the Field
Dr. Jesse Goff, Professor of Biomedical Sciences, Iowa State University, College of Veterinary Medicine

14:15h - 14:30h Break
14:30h - 15:15h
Comparative Mammalian Models of Innate Immune Function During Respiratory Disease
*Dr. Randy Sacco, Research Scientist, NADC Ruminant Diseases and Immunology Unit*

15:15h - 16:00h
Proteome Profiling of Innate Immune Responses to Bacterial Challenge in the Bovine Mammary Gland
*Dr. John Lippolis, Research Scientist, NADC Ruminant Diseases and Immunology Unit*

16:00h - 16:15h
Historical Perspective: Life as an NADC Veterinary Research Pathologist
*Dr. Janice Miller, Former NADC Research Pathologist, Member ARS Hall of Fame, Member US Nat’l Academy of Sciences*

16:15h - 16:30h
One Health in Animal and Human Medicine and Research
*Dr. Roger Mahr, CEO, One Health Commission, Ames, IA*

16:30h - 17:30h
NADC Poster Session

18:00h
Dinner: Off-Site Venue
Thursday November 10, 2011

**Session III: Zoonotic and Wildlife Diseases**
*Moderator: Dr. Steven Olsen, Research Leader, NADC Infectious Bacterial Diseases Unit*

08:30h - 09:00h
Historical Perspective on NADC’s Zoonotic Disease Research  
*Dr. Norman Cheville, Former NADC Director, Former Dean Iowa State University, College of Veterinary Medicine*

09:00h - 09:45h
Pathogenesis and Epidemiology of Brucellosis in Yellowstone Bison  
*Dr. Jack Rhyan, USDA APHIS Veterinary Services, National Wildlife Research Center*

09:45h - 10:00h
Break

10:00h - 10:45h
Sequencing-based Strategies to Tackle TB  
*Dr. Tyler Thacker, Research Scientist, NADC Infectious Bacterial Diseases Unit*

10:45h - 11:30h
Johnes Disease: From Glove to Genome  
*Dr. Judy Stabel, Research Scientist, NADC Infectious Bacterial Diseases Unit*

11:30h - 12:30h
Lunch

**Session IV: Emerging Diseases**
*Moderator: Dr. Mark Kehrli, Research Leader, NADC Virus and Prion Diseases Unit*

12:30h - 13:00h
Historical Perspective on Endemic and Emerging Viral Disease Research at NADC  
*Dr. William Mengeling, Former NADC Research Leader, Member ARS Hall of Fame*

13:00h - 13:45h
Epidemiology and Pathogenicity of Emerging Influenza Viruses  
*Dr. Ruben Donis, Molecular Virology and Vaccines Branch Chief, Influenza Division, US Centers for Disease Control and Prevention*

13:45h - 14:30h
Novel BSE Pathogenesis and Diagnostic Methods  
*Dr. Justin Greenlee, Research Scientist, NADC Virus and Prion Diseases Unit*

14:30h - 15:15h
Emerging Viral Diseases in US Swine  
*Drs. Kay Faaberg, Kelly Lager, and Jamie Henningson, Research Scientists, NADC Virus and Prion Diseases Unit*

15:15h - 15:30h: Conclusion and Wrap-up  
*Dr. Kurt Zuelke, NADC Director*
15:00h - 17:00h
Employee/Alumni Reception and Recognition (Cafeteria)

Dr. Kurt Zuelke