

**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

Modulation of the Bovine Immune System with 25-Hydroxyvitamin D3
Dr. John Lippolis, Research Scientist, NADC Ruminant Diseases and Immunology Unit

14:15h - 14:30h

Break

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14:30h - 15:15h

Future Directions in Bovine Respiratory Disease Research at NADC: an Immunologist's Biased Response

Dr. Randy Sacco, Research Scientist, NADC Ruminant Diseases and Immunology Unit

15:15h - 16:00h

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

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

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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 Research Leader, 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

In Vitro and In Vivo Studies on Highly Pathogenic Porcine Reproductive and Respiratory Syndrome Virus

Drs. Kay Faaberg and Kelly Lager, Research Scientists, NADC Virus and Prion Diseases Unit

15:15h - 15:30h: Conclusion and Wrap-up

Dr. Kurt Zuelke, NADC Director

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15:00h - 17:00h

Employee/Alumni Reception and Recognition (Cafeteria)

Dr. Kurt Zuelke