



United States  
Department of  
Agriculture

National Institute of  
Food and  
Agriculture

**Agriculture and Food Research Initiative  
Animal Health and Well-being Program Areas  
Annual Project Director Meeting**

December 1, 2017

Chicago Marriott Downtown Magnificent Mile  
540 North Michigan Avenue  
Chicago, IL 60611



<b>Friday,</b>	<b>December 1, 2017</b>	<b>Clark Marriott Ballroom</b>
<b>7:00 am</b>	<b>Registration opens/Set-Up for Poster Session; Breakfast (on your own)</b>	
<b>7:45 am</b>	<b>Welcome from NIFA</b> <i>Drs. Peter Johnson and Margo Holland, National Program Leaders (Animal Health &amp; Well-being) Desiree Abrams and Davida Tengey, Program Specialists (Animal Division)</i>	
<b>Oral Presentations (TED TALKS; 10 minutes oral + 3 minutes Q/A + 2 minute transition to next speaker)</b>		
<b>8:00 am</b>	<b>Southeast Quality Milk Initiative: Controlling Mastitis And Improving Milk Quality (2013- Jan. 2018)</b> <i>Steve Oliver, University of Tennessee (AFRI Food Security Challenge)</i>	
<b>8:15 am</b>	<b>An Integrated Extension And Education Project To Reduce Mastitis And Antimicrobial Use (2013-Jan. 2019)</b> <i>Ronald Erskine, Michigan State University (AFRI Food Security Challenge)</i>	
<b>8:30 am</b>	<b>New Mucosal Vaccines For Aquaculture: Intranasal Vaccines For Finfish (2015- Jan. 2018)</b> <i>Irene Salinas, New Mexico State University (AFRI Animal Health &amp; Disease Foundational)</i>	
<b>8:45 am</b>	<b>Identification Of Genetic Factors Responsible For Establishment Of Equine Arteritis Virus Carrier State In Stallions (2013- Dec. 2018)</b> <i>Udeni Balasuriya, University of Kentucky (AFRI Food Security Challenge)</i>	
<b>9:00 am</b>	<b>A Novel Two-Step Gas System to Allow for Humane On-Farm Euthanasia (2015- Jan. 2018)</b> <i>Don Lay, USDA-ARS (AFRI Foundational Animal Well-Being Award)</i>	
<b>9:15 am</b>	<b>15 minute Break (Coffee, tea, water, or soda)</b>	
<b>9:30 am</b>	<b>FOUR MINUTE LIGHTNING TALKS (maximum of 4 slides/project; strict timing)</b> <i>(7 presenters come to front of room prior to start.)</i>	
	<b>(1) Immune evasion of PRRS virus and a novel strategy for vaccine design (2013- August 2018)</b> <i>Dongwon Yoo, University of Illinois</i>	
	<b>(2) Determinants of antibody-mediated protection against Theileria equi infection (2013- Aug. 2018)</b> <i>Robert Mealey, Washington State University</i>	
	<b>(3) US-UK Collab: Mycobacterial Transmission Dynamics in Agricultural Systems: Integrating Phylogenetics, Epidemiology, Ecology, and Economics (2014- Aug. 2018)</b> <i>Yrjo Grohn, Cornell University (USDA-NIFA + NSF + NIH + BBSRS Ecology &amp; Evolution of Infectious Disease program)</i>	
	<b>(4) The effect of ORF1 and ORF2 gene expression on innate and adaptive immunity and protection against equine herpes virus type 1 (EHV-1) (2015- Jan. 2018)</b>	

Bettina Wagner, Cornell University

**(5) US-UK Collaborative: Evolution Of The High Pathogenicity Phenotype In Avian Influenza Virus (2015- Jan. 2019)**

Darrell Kapczynski, USDA-ARS-SEPRL (AFRI Animal Health & Disease Foundational)

**(6) Characterization of Influenza Diversity in Piglets and Risk Factors for Diversity (2015- Feb. 2018)**

Montserrat Torremorell, University of Minnesota

**(7) Evaluation of Acclimation and Low Stress Cattle Handling on Health and Performance of Feedlot Cattle (2015- Feb. 2018)**

Grant Dewell, Iowa State University

10:00 am

15 minute Break

10:15 am

**Poster Presentations - Session A (90 minutes)**

→ If you are not assigned a 10 minute TED talk, then you will present a poster in session A or B.

→ Lightning talks do posters.

11:45 pm

**Interactive Networking/Coordination Session**

*Working Lunch (Box Lunch provided for registered awardees)*

**(a) INSTRUCTIONS & FORMATION OF SELF-SELECTED SUB-GROUPS**

**(b) DISCUSSIONS AT FOCUS AREA TABLES- All participate**

*Purpose: share research activities & identify potential new collaborations/ new ideas to pursue*

**(1) VACCINOLOGY**

**(2) DIAGNOSTICS**

**(3) IMPROVED MANAGEMENT**

*(including epidemiology, biosecurity, risk-assessment, disease models, surveillance...)*

**(4) THERAPEUTICS**

*(including alternatives to antimicrobials-antibiotics, anthelmintics...)*

**(5) Maintenance or disruption of HOMEOSTASIS**

*(including pathogenesis, microbiomes, innate immunity...)*

**(6) Breeding animals for DISEASE RESISTANCE**

**(7) ANIMAL WELL-BEING**

**(8) EVERYTHING ELSE**

1:00 pm

**FOUR MINUTE LIGHTNING TALKS** (maximum of 4 slides/project; strict timing)

(7 presenters come to front of room prior to start.)

**(1) US-UK Collaborative: Reassembly Of Cattle Immune Gene Clusters For Quantitative Analysis (2015-Jan. 2018),**

Derek Bickhart, USDA-ARS (AFRI Foundational Animal Health & Disease Award)

**(2) Towards novel acaricide development against cattle fever tick: GPCR target validation and identification of chemical leads (2015- Sept. 2018)**

Patricia Pietrantonio, Texas A & M University

**(3) Correlates of cross-protective immunity to porcine reproductive and respiratory syndrome virus (2015- Sept. 2018)**

Hiep Vu, University of Nebraska

**(4) Novel bovine herpesvirus type 1 (BHV-1) vectored vaccine against viral infections associated with bovine respiratory disease complex (2015- Feb. 2018)**

Shafiqul Chowdury, Louisiana State University

**(5) Novel Approaches to Controlling Bovine Digital Dermatitis (2015- Feb. 2018)**

Paul Plummer, Iowa State University

**(6) Quantification of the Prevention Efficacy of Vaccines Against Virulence Evolution of Infectious Hematopoietic Necrosis Virus in Aquaculture (2015- Jan. 2018)**

1:30pm 10 minute Break

**1:40 pm Poster Presentations - Session B (70 minutes)**

→ If you are **not** assigned to a 10 minute TED talk, then you present a poster in session A or B.

→Lightning talks do posters.

**2:50 pm 10 minute Break (Coffee, tea, water, or soda)**

**Oral Presentations (TED TALKS; 10 minutes oral + 3 minutes Q/A + 2 minute transition to next speaker)**

**3:00 pm *Enabling Network Analysis Of Host-Pathogen Interactions (2015- March 2018)***  
*Fiona McCarthy, University of Arizona (AFRI Foundational Animal Health & Disease Award)*

**3:15 pm *Whole Genome Mapping Of Disease Resistance/Susceptibility-Associated SNPs In Catfish (2015- Jan. 2018)***  
*Zhanjiang (John) Liu, Syracuse University (AFRI Animal Health & Disease Foundational)*

**3:30 pm *US-UK Collaborative Research: Host Resistance To Avian Pathogenic E. Coli (2015- Jan. 2018)***  
*Susan Lamont, Iowa State University (AFRI Animal Health & Disease Foundational)*

**3:45 pm *Marker Assisted Selection For Ascites Resistance In Broilers (2015- Jan. 2018)***  
*Douglas Rhoads, University of Arkansas (AFRI Animal Health & Disease Foundational)*

**4:00 pm 15 minute Break ( Coffee, tea, water, or Soda)**

**Oral Presentations (TED TALKS; 10 minutes oral + 3 minutes Q/A + 2 minute transition to next speaker)**

**4:15 pm *Novel Vaccines To Prevent Bovine Mastitis Caused By Staphylococcus Aureus And Streptococcus Uberis (2014- Dec. 2017)***  
*Juliette Tinker, Boise State University (AFRI Foundational Animal Health & Disease Foundational)*

**4:30 pm *Molecular Attenuation Mechanisms Of Porcine Epidemic Diarrhea Virus In Pigs (2015- Jan. 2018)***  
*Qihong Wang, Ohio State University (AFRI Foundational Animal Health & Disease Foundational)*

**4:45 pm *BOVINE HERPESVIRUS LATENCY UPDATES: Analysis Of Bovine Herpesvirus 1 Stress Induced Reactivation From Latency (2015- Aug. 2018)***  
***Regulation Of Latency-Reactivation Cycle By Orf2 And Beta-Catenin/Wnt Signaling Pathway (2017- July 2020)***  
*Clinton Jones, Oklahoma State University (AFRI Foundational Animal Health & Disease Foundational)*

**5:00 pm**      **UNIVERSAL FLU VACCINE BY A NOROVIRUS P PARTICLE PLATFORM (2013- Jan. 2018)**  
*Chang-won Lee, Ohio State University (USDA-NIFA + NIH Dual Purpose for Dual Benefit program)*

**5:15 pm**      **15 minute BREAK**

**5:30 pm**      **NIFA FUNDING UPDATES/ Q& A/ Impact Reporting/ Informal networking**

*(1) Impact reporting (NIFA Planning, Accountability, & Reporting Instructional)*

*(2) NIFA funding updates & opportunities (Margo & Peter)*

*(3) Q/A: What else do you want to know? (All)*

*(4) Informal networking (All-optional)*

**6:30 pm**      **Adjourn**