

CRWAD 2025 PROGRAM

CRWAD 2025 Program

updated 01/15/2025 @8:37 pm Central

Saturday Jan 18 4:00-6:00 pm	CRWAD 3 Minute Thesis Competition -- Salon II (7th floor)
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* Denotes student award competitor

Sunday, January 19	Presenter Abstract #	Salon II (7th) Title	Presenter Abstract #	Chicago A/B (5th) Title	Presenter Abstract #	Chicago C (5th) Title	Presenter Abstract #	Chicago D (5th) Title	Presenter Abstract #	Chicago E (5th) Title	Presenter Abstract #	Chicago F/G (5th) Title	
Time	Session 1	ACVM - Featured Speakers	Session 2	Companion animal health 1	Session 3	Aquaculture	Session 4	Epidemiology 1	Session 5	General health and physiology	Session 6	Diagnostic testing - Cattle	
Sunday, Jan 19	1	Dr. John Ellis ACVM Distinguished Microbiologist	Hasan* 3	Epidemiology and case fatality associated factors of atypical canine infectious respiratory disease complex	Dawood 9	Understanding antimicrobial action and resistance of Edwardsiella ictaluri in response to trans-cinnamaldehyde	Elderd 15	Effects of varying temperatures on host-pathogen coevolution and disease transmission	Ziegler 21	Organ-dependent intestinal barrier restitution is impaired by prebiotics	Adewusi* 27	Integration of laboratory testing for bovine respiratory disease: Perceptions of Canadian feedlot veterinarians.	
			8:30 am	Redding 4	Resolution of uncomplicated pneumonia in dogs treated with shorter or longer courses of antimicrobials: a randomized, double-blinded, placebo-controlled study	Dawood* 10	Application of trans-cinnamaldehyde in catfish aquaculture	Barua 16	Seroprevalence of SARS-CoV-2 Delta and Omicron variants in cats and dogs in the USA	Morley 22	Characterizing tight junction protein expression in the gastrointestinal tract of feedlot cattle	Long* 28	Associations of gross and histopathological cardiac and hepatic findings in feedyard mortalities
			8:45	O'Brien* 5	Home-prepared diets for companion dogs are made from a diverse group of food ingredients and few are balanced	Hissen* 11	Glutamate effects on reactive oxygen species in intestinal mucosal leukocytes of juvenile hybrid striped bass	Mundt 17	Evaluating sources of uncertainty in predictions of epidemic spread	Abou-Rjeileh* 23	Oleic acid promotes lipogenesis and improves mitochondrial function in bovine adipocytes: role of PPARα signaling	Jumper 29	Comparing 0.9% sterile saline to phosphate buffered saline as a transport media for Tritrichomonas foetus RT-qPCR testing
	9:00	2	Dr. Matthew Scott	Srinivas* 6	Marked neurotropism and potential adaptation of H5N1 clade 2.3.4.4.b virus in naturally infected domestic cats	Connolly 12	Glycine is a nutritionally essential amino acid in juvenile hybrid-striped bass (Morone chrysops x Morone saxatilis)	Sequeira* 18	ICVI exceptions in U.S. States: A risk to cattle disease traceability and movement networks	Dekkers 24	A genome-wide association study of measures of stress response in young healthy pigs and in grow-to-finish pigs exposed to a natural polymicrobial disease challenge	Jumper 30	Likelihood ratios of F. toetus RT-qPCR around limit of detection
	9:15			Son* 7	Re-purposing arbidol as a potential antiviral agent against canine parvovirus type-2	Fragomeni 13	Evaluation of genomic selection for acute hepatopancreatic necrosis disease resistance in white pacific shrimp: Genomic prediction	Smith 19	Optimizing environmental surveillance	Barber* 25	Novel bovine reference gene candidates for RT-qPCR identified via publicly available tissue RNA-seq datasets	Craig* 31	Optimizing Salmonella Dublin detection in clinically ill dairy calves
	9:30			Nooruzzaman 8	ORF6 contributes to SARS-CoV-2 virulence and pathogenicity in the naturally susceptible feline species	Li 14	Underwater vaccination using biopolymeric microneedles	Tran* 20	Combining machine learning with H3 influenza A virus whole genome sequence data for host prediction	Pace* 26	Intrauterine wildfire: PM2.5 exposure affects calf growth, health, and metabolic and inflammatory markers	Bernal-Córdoba 32	Evaluating the accuracy of brix and serum total protein as proxies for IgG in assessing the transfer of passive immunity in calves
9:45	10:00 - 10:30	Break	Break	Break	Break	Break	Break	Break	Break	Break	Break		
Time:	Session 7	ACVM - Featured Speakers	Session 8	Diagnostic testing 1	Session 9	Tick-borne diseases	Session 10	Epidemiology 2	Session 11	Disease pathogenesis 1	Session 12	Biosecurity and infection control	
Sunday, Jan 19	33	Dr. Scott McVey	Encinosa 35	Screening novel biocides for rapid killing of Salmonella isolates of concern	Black* 41	A survey to assess risk factors associated with tick and mosquito exposure in Illinois	McAtee* 47	Associations between estimated greenhouse gas emissions in feedlot cattle cohorts and their health and performance	Gaber* 53	Testing the pathogenesis of the Louse-borne Relapsing Fever pathogen in the immunocompetent mouse model	Zia 59	Testing alternate biosecurity policy mechanisms to overcome moral hazard problem in indemnifying cattle producers	
			10:30 am	Shrestha* 36	Rapid serotype-independent differential detection of biofilm-positive and biofilm-negative Salmonella using FTIR biotyping	Johnson-Walker 42	Invasive plant species as risk factors for tickborne disease in humans and livestock	Jumper 48	Cross-sectional study estimating seroprevalence of Anaplasma marginale in Mississippi beef cow-calf herds	Ghahari* 54	Inflammatory pathways in Clostridioides difficile infection: A murine spatial transcriptomics study	Herman 60	Enhanced biosecurity planning resources for foot-and-mouth disease preparedness for cattle veterinarians
			10:45	Naseer 37	Comparative analysis of PRRSV RT-qPCR Ct value distributions across various sample types	Oliva Chavez 43	Identification of tick antigens after vaccination with tick extracellular vesicles in white-tailed deer	Howell* 49	Cross-sectional study to determine factors related to gastrointestinal parasite prevalence in Mississippi beef cow-calf herds	Sun 55	The effect of Clostridium perfringens intracellular bile acid levels and growth	Wang 61	Use of an electrostatic precipitator to decrease airborne transmission of viruses in experimentally infected pigs
	11:00	34	Kyounjin J. Yoon	Chung 38	Evaluation of aggregate oral fluids for African swine fever real-time PCR diagnostics using samples collected on Romanian farms with an active outbreak	Yoon 44	Monitoring of various tick-borne viruses in ticks living in the Republic of Korea in 2024	Varga 50	Evaluating beef cattle producers' disease prevention knowledge, attitude, and practices in Illinois, USA	Fillipov 56	Ergot alkaloid dynamics and physiological responses in steers rotating grazing toxic endophyte-infected tall fescue	Smith* 62	A scoping review of Foot-and-Mouth Disease biosecurity practices and farm-level risk factors
	11:15			Reddi* 39	Automated 384-well RT-qPCR assay advances high-volume testing for Porcine Reproductive and Respiratory Syndrome Virus	Shahzad 45	Identification of A. marginale surface-protein binding receptors on Dermacentor andersoni tick cells.	Noyes 51	Prevalence of bovine coronavirus in nasal samples collected from beef calves during a controlled commingling event	Myers* 57	Endotoxemia modulates endocannabinoid and ethanolamide profiles in dairy cows' plasma	Shah 63	Assessing ultrasound probe disinfection in veterinary clinics: A hidden risk for bacterial transmission?
11:30	11:45	Saxena 40	Leveraging automation and 384-well RT-qPCR assays for rapid detection of SARS-CoV-2 in animal species	Latre de Late 46	Inactivated whole cell antigen vaccine confers protection against heterologous Rickettsia rickettsii strains in the canine host.	Botero* 52	Exploring subpopulation dynamics of Salmonella enterica in harvest-ready beef cattle and feedlot environment	Chirivi 58	Cyclooxigenase Activity Determines TLB4-Mediated Lipolysis in Bovine Adipocytes During Endotoxin Challenge	Burgess 64	What would it take to inspire ambulatory veterinary practitioners to make a just-in-time decision to use PPE?		
Lunch - 12:00 to 1:30	Lunch Break (On Your Own)												
Lunch - 12:00 to 1:30	CRWAD Fellows Luncheon (Invitation Only)												

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Time:	Session 13	CRWAD Council Keynote and Special Symposium					
Sunday, Jan 19	1:30 PM	CRWAD Council Keynote Dr. Philip Santangelo "RNA therapy beyond vaccination: possibilities and challenges" 65	CRWAD Featured Presentations Salon II	CRWAD Featured Presentations Salon II	CRWAD Featured Presentations Salon II	CRWAD Featured Presentations Salon II	CRWAD Featured Presentations Salon II
	1:45 PM						
	2:00						
	2:15						
	2:30						
	2:45	CRWAD Special Symposium Dr. R. Jeff Hogan "Development of countermeasures for high consequence zoonotic and human pathogens" 66					
	3:00						
3:15							
3:30 to 4:00	Break	Break	Break	Break	Break	Break	
Time:	Session 14	CRWAD Council Keynote and Special Symposium					
Sunday, Jan 19	4:00 PM	CRWAD Special Symposium Dr. Francois Villinger "mRNA transduction of mucosa generates rapid and potent barrier to infection" 67	CRWAD Featured Presentations Salon II	CRWAD Featured Presentations Salon II	CRWAD Featured Presentations Salon II	CRWAD Featured Presentations Salon II	CRWAD Featured Presentations Salon II
	4:15						
	4:30						
	4:45	CRWAD Special Symposium Dr. Amelia R. Woolums "Opportunities for RNA therapy in animal health" 68					
	5:00						
	5:15						
5:30 - 6:00	Panel Discussion						

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Monday, January 20	Presenter Abstract #	Salon II (7th) Title	Presenter Abstract #	Chicago A/B (5th) Title	Presenter Abstract #	Chicago C (5th) Title	Presenter Abstract #	Chicago D (5th) Title	Presenter Abstract #	Chicago E (5th) Title	Presenter Abstract #	Chicago F/G (5th) Title	
Time	Session 15	AAVI - Distinguished Immunologist	Session 16	Antimicrobial resistance 1	Session 17	Parasitology & Vaccinology	Session 18	Epidemiology 3	Session 19	Disease pathogenesis 2	Session 20	Bacteriology 1	
Monday, Jan 20	8:30 am	69	Dr. Armin Saalmüller, AAVI Distinguished Immunologist	Adegbote* 71	Balancing farm antimicrobial resistance genomic research and data privacy	77	Areeda 83	Analysis of risk factors for Valley Fever in Arizona: application of negative binomial model	Felizari 89	Hepatic transcriptome analysis reveals candidate genes in liver abscesses of beef x dairy crossbred steers	Chen 95	Listeria monocytogenes infection in the bovine ligated ileal loops	
	8:45			L. R. Santana-Pereira 72	Antimicrobial resistance and virulence reservoirs: evolution, distribution and persistence of R. equi in horse farms	Vakamalla* 78	Mapping the neutralizing epitopes of Shiga toxins	Reid 84	Effect of antioxidant supplementation on health and growth of pre-weaned dairy calves in a multi-herd study	Garzon* 90	WGS of intrauterine E. coli from cows with metritis reveals a non-unique genotype and the lack of virulence factors associated with disease	Jacobson* 96	Exploring biofilm formation in Mycoplasma ovipneumoniae: attachment, nuclease activity, and disaggregation
	9:00	70	Dr. Anne DeGroot	Kabir* 73	Whole genome sequence analysis and antimicrobial resistance profiles of Salmonella isolated from necropsied horse	Witola 79	Unique glycolytic enzymes as targets for novel anti-Cryptosporidium drugs in bovine calves	Dunn 85	US-UK Collab: Influence of vaccines, host genetics, and mutation rates on the evolution of infectious diseases	Bromfield 91	Heat stress alters innate immune function of the endometrial mucosa in dairy cows and is associated with increased uterine disease	Atlaw 97	Molecular characterization of uncommon historical isolates of Salmonella
	9:15			Gaire 74	Targeted resistome sequencing and colocalization analysis for assessing antimicrobial resistance genes and their bacterial hosts	McAtee* 80	Aerosolized synthetic mRNA elicits antibodies against Trichomonas foetus in bovine preputial skin	Dunlea* 86	A quantitative model of the risk of FMD transmission following cattle movements during an outbreak	Bradley* 92	Using fluorescent Salmonella serovars to evaluate trafficking and tissue preference in orally challenged calves	Dudley* 98	Identification of virulence genes in Salmonella isolates from cattle.
	9:30			Li 75	Assessment of antimicrobial resistance genes in the bovine gastrointestinal tract	Thoresen 81	Pathogenicity of Trichomonas foetus following exposure to anti-TF1.17 produced via synthetic mRNA transfection	Osagwu* 87	Evaluating FMD spread among U.S. dairy cattle premises: Findings from the InterSpread Plus model	Cao 93	Interactions of Fusobacterium necrophorum, Bacteroides pyogenes and Porphyromonas levis in bovine metritis	Ajulo* 99	Unraveling the antibiotic-dependent evolutionary changes in globally emerging multidrug-resistant Salmonella
	9:45			Gaire 76	The impact of diet and commingling on the fecal resistome of production pigs exposed to metaphylactic antibiotics: a randomized controlled trial in a commercial flow	Gontu 82	A trans-amplifying SARS-CoV-2 mRNA vaccine generates broad antibody responses against multiple virus variants	Vidlund 88	State-level geographic disparities and annual changes in milk somatic cell counts across the United States, 2011-2023	Panda 94	3D bovine endometrium model for studying host-pathogen interactions associated with metritis	Jarvis 100	The development of an axenic medium to support Anaplasma marginale metabolic activity and replication
10:00 - 10:30	Break												
Time:	Session 21	AAVI - Distinguished Immunologist	Session 22	One health / Public health 1	Session 23	Companion animal health 2	Session 24	Bovine Respiratory Disease 1	Session 25	Porcine Reproductive and Respiratory Syndrome	Session 26	Bacteriology 2	
Monday, Jan 20	10:30 am	101	Dr. Colin Parrish	Bradley 103	Behavioral strategies of state animal health officials on national disease reporting	Sexton 109	Testing for heavy metals in drinking water collected from Dog Aging Project participants	Jakes 115	Stress primes a proinflammatory respiratory mucosal immune response in beef stocker cattle	Tang 121	A simple and fast reverse genetics system for porcine reproductive and respiratory syndrome virus and generation of transcription-reprogrammed virus	Runcharoon* 127	Using challenge models to identify pathogenicity traits of novel Avian Pathogenic E. coli (APEC) serogroups
	10:45			Clegggett 104	A survey of emergency preparedness and disaster response in animal shelters located in the United States of America	Sexton 110	How can we achieve more accurate reporting of average dog lifespan?	Ramirez* 116	Multioomic investigation in beef cattle characterizes management-associated immune modulation in context of respiratory disease	Keen* 122	Effect of dietary vitamin D3 on PRRSV disease severity and immune response in nursery pigs	Castillo Espinoza 128	M. hyopneumoniae infects and disrupts the air-liquid cultured porcine-derived primary respiratory epithelial cells
	11:00			McClurg* 105	Are antimicrobial resistance genes transferred to consumers through beef consumption?	Rostami 111	Assessing the application of infrared thermography for measuring unrestrained dog body surface temperature	Donbraye 117	Metagenomic detection of BRD viruses at and shortly after arrival in commercial beef feedlots in Western Canada	Crisci 123	PRRSV-2 immune biobank for vaccine efficacy prediction	Castillo Espinoza* 129	M. hyopneumoniae modulates ciliary and adherens junction gene expression in air-liquid porcine respiratory epithelial cells
	11:15	102	Dr. Shayan Sharif	Brake* 106	An investigation into the suitability of household pets as sentinels for human exposure to Per- and Polyfluoroalkyl Substances (PFAS)	O'Brien 112	Environmental exposures and health outcomes differ according to geographic region among Dog Aging Project participants	Doster 118	Enriching without culture: target-enriched metagenomics allows for strain-level characterization of M. haemolytica	Pasternak 124	Influence of gestational age on vertical transmission of PRRSV2	Mellata 130	Broiler and layer chickens' responses to host-specific bacteria colonization in early life
	11:30			Tasnim 107	Genetic relatedness of beta-lactamase-producing Escherichia coli from different One Health sources.	Davies 113	Companion animal health surveillance systems: an environmental scan	Lamsal* 119	Development and optimization of targeted enriched metagenomics protocol to obtain strain-level data for Mycoplasma bovis in respiratory samples from cattle	Weiderman* 125	Decoding the spatial patterns of PRRS induced cell death	Virgilio Fernandes 131	A novel CRISPR-prime editing strategy for single-nucleotide resolution mutations in Leptospira spp
	11:45			James 108	Close genetic relatedness of carbapenem-resistant Enterobacteriales from companion animals and humans.	McCullough* 114	Diagnoses in dogs with pet health insurance	Kaplan 120	Bovine herpesvirus-1, Mycoplasma bovis co-infection rapidly enhances lung pathogenesis at early timepoints post-infection	Deng 126	A longitudinal trial of fecal microbiota transplant (FMT) therapy to weaned pigs during post-weaning viral co-infection	Meinen-Iochum* 132	Sequencing of the chicken segmented filamentous bacteria genome reveals differences between host-species
Lunch - 12:00 to 2:00	Lunch Break (On Your Own)												

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Monday, January 20		Presenter Abstract #	Salon II (7th) Title	Presenter Abstract #	Chicago A/B (5th) Title	Presenter Abstract #	Chicago C (5th) Title	Presenter Abstract #	Chicago D (5th) Title	Presenter Abstract #	Chicago E (5th) Title	Presenter Abstract #	Chicago F/G (5th) Title					
Time:	Session 27	AVEPM - Schwabe Symposium		Session 28	Antimicrobial resistance 2		Session 29	Disease therapeutics		Session 30	Immunology 1		Session 31	Highly Pathogenic Avian Influenza in Cattle		Session 32	Virology 1	
Monday, Jan 20	2:00 PM	Introduction for the Calvin W. Schwabe Award		Gaonkar* 135	Antimicrobial resistance in the different stages of commercial poultry production environment	Lamichhane* 141	Novel antibiotic alternative approaches for controlling Salmonella infections in vitro	Griffin 147	Interferon stimulated genes as predictive morbidity markers in calves following in-utero viral infection	Cargnin Faccin* 153	Experimental infection and viral pathogenesis of H5N1 in Jersey cattle	Mani 159	Exploring the pathogenesis of newly emerged African swine fever virus in naturally infected pigs from India					
	2:15	Dr. Jan Scarlett, AVEPM Calvin Schwabe Award		Morley 136	Does antibiotic treatment change the microbial resistome of mares?	Helmy 142	Novel quorum sensing inhibitors as potential therapeutics for the control of Salmonella infections	Bastos 148	Bovine humoral immune response to the major piroplasm surface protein of Theileria orientalis Ikeda	Rico 154	Case-control study exploring associations between demographics and HPAI risk in lactating Holstein cows	Yen* 160	Characterization of segment-specific porcine enteroids and susceptibility to porcine epidemic diarrhea virus					
	2:30	133	"Challenges to conducting epidemiologic research regarding companion animal welfare"	White 137	Impact of commercial vaccination on the ecology and antimicrobial susceptibility testing of avian Escherichia coli in turkey production	Harman 143	Treatment of equine thorax wounds with mesenchymal stromal cell secretome	Wilson 149	Immunological impacts following an in-utero BVDV exposure in post-weaning calves	Twu* 155	Distribution of influenza and coronavirus receptors in the respiratory and intestinal tract of beef cattle	Singh* 161	Japanese encephalitis virus expands genomic heterogeneity during fetal infection in the native amplifying host					
	2:45	Dr. Margaret Slater		Weninger* 138	Exploring the intestinal colonization, antimicrobial sensitivity, and resistance gene profiles of Klebsiella in shelter dogs on Long Island, New York	Contreras 144	Endotoxemia and the pathogenesis of lipopolysaccharide dysregulation in periparturient dairy cows	Teddleton* 150	Exploring differential metabolic responses in immune cells from naturally parasite-resistant sheep	Diel 156	The impact of highly pathogenic avian influenza H5N1 virus infection in dairy cattle	Zeller 162	NextLade dataset for the rapid classification of Porcine Circovirus 2					
	3:00	134	"Illuminating the welfare implications of free-roaming unowned cats via epidemiological approaches"	Gregory* 139	Characterization of ceftiofur-resistant Gram negative bacteria recovered from dairy cattle	Viju* 145	Therapeutic efficacy of linalool to reduce Salmonella Enteritidis and Campylobacter jejuni in market-age broiler chickens	Kesler* 151	Utilizing zinc to modulate GLUT4 expression in bovine CD4 lymphocytes	Shi 157	Experimental infection of calves with swine influenza H3N2 virus	Diaz* 163	The SERPIN function of Senecavirus A 2C protein and its regulation of the viral 3C protease					
	3:15	Dr. Margaret Slater		Bahadur* 140	Integron-encoded antimicrobial resistance genes in Salmonella Typhimurium isolated from dairy cattle	Sonar 146	Short-term efficacy of enrofloxacin in reducing Mesomycolasma ovipneumoniae infection without sustained clearance in domestic lambs	Donia 152	Characterization of regional differences in neonatal calf gut-associated lymphoid tissues using high resolution snRNA-sequencing	Britto de Oliveira 158	Highly pathogenic avian influenza H5N1 virus infection in dairy cattle, serologic antibody detection	Kim* 164	A comparative study of structural protein compositions to assemble virus-like particles of Seneca Valley virus					
3:30-4:15 PM CRWAD Business Meeting and Listening Session - Chicago Ballroom D (5th floor)																		
Time:	Session 33	AVEPM - Schwabe Symposium		Session 34	African Swine Fever		Session 35	Antimicrobial use		Session 36	Immunology 2		Session 37	Bovine Respiratory Disease 2		Session 38	Vaccinology 1	
Monday, Jan 20	4:15 PM	165	Dr. Alexandra Protopopova "The use of mixed methods to explore the complex issue of companion animal relinquishment"	Noel* 167	Characterizing pig farmer practices in Trinidad and Tobago in the context of African swine fever surveillance	Koebel 173	AUDIO: An app to aid antimicrobial use monitoring on dairy farms	Diaz 179	Immunogenicity of innate nanoparticles in lambs and efficacy against Respiratory Syncytial Virus infection	Inzana 185	Characterization and resolution of poly-microbial biofilms in bovine respiratory disease	Perez 191	Mass vaccination against avian influenza with novel Modified Live Virus (MLV) vaccines					
	4:30	Dr. Rachel Kreisler "Epidemiological insights: Classic tools for modern animal shelter and community animal health research"		Prezioso* 168	A dynamic network evaluation of human, animal, and truck movement data across a swine farm system	Bhimavarapu* 174	Environmental antimicrobial resistance threats to pollinators	Cohen 180	Modifications of mRNA encoding a monoclonal antibody against Rhodococcus equi for nebulizing foals	McClurg 186	Impact of six different antimicrobial treatments on the microbiome and resistome of feedlot cattle	Bradshaw 192	In silico design and evaluation of a cross-protective, multipeptide vaccine against outbreak-associated Salmonella					
	4:45	166	Dr. Rachel Kreisler "Epidemiological insights: Classic tools for modern animal shelter and community animal health research"	Gladue 169	An innovative and effective CRISPR based anti-viral treatment in pigs infected with African Swine Fever Virus	Bernal-Córdoba 175	Efficacy of antimicrobial drugs in the prevention and control of protozoal and bacterial calf diarrhea: A scoping review	Parcells 181	The Role of exosomes in Marek's disease virus-mediated immunosuppression and vaccine responses	Feltoza 187	Histologic characterization of pulmonary lesions in feedyard cattle mortalities	Conrad 193	Enhancing the production of type I interferons to create rationally-defined Marek's disease vaccines					
	5:00	Panel Discussion		Lee* 170	Molecular characterization reveals novel African swine fever virus recombinant between genotypes I and II	Portillo-Gonzalez 176	Understanding the barriers and drivers influencing treatment decisions in large dairy farms in Ohio and California	Dolatyabi* 182	Probiotic Lactobacilli enhances the efficacy of mannose chitosan nanovaccine against Salmonella food poisoning in broilers	McAllister* 188	How does vaccination and marketing impact bovine respiratory disease and inflammatory mediator production in beef calves?	Suresh* 194	Evaluating the efficacy of mannose conjugated chitosan nanoparticle-based Salmonella subunit vaccine in adult layer chickens					
	5:15	Panel Discussion		Yuan 171	Comparison of immunogenicity among membrane-bound, secreted, and intracellular forms of viral capsid proteins	Bastos 177	Assessment of dual-platform technology for bone regeneration and local antibiotic delivery in a goat osteomyelitis model	Wang 183	Mucosal immune responses to avian influenza virus in the Harderian gland of genetically distinct, highly inbred chicken lines	Rients 189	Disease severity alters mineral metabolism and gene expression in lesion and non-lesion lung tissues of bovine respiratory disease challenged steers	Zafar* 195	Toward a cell-free Marek's disease vaccine					
	5:30	Panel Discussion		Chalkowski 172	Intensive population control for transboundary animal disease control influences space-use; case with wild pigs (Sus scrofa)	Cheng 178	Associations with selective antimicrobial use practices in adult dairy cattle	Slate* 184	Duration and characterization of anamnestic responses following RB51 vaccination in bison	Huertas 190	Nasal and bronchoalveolar BRSV IgG-1 transferred from maternal colostrum or a colostrum replacement in dairy calves	Whelan 196	USDA Salmonella vaccine reduces colonization and dissemination of serovar Enteritidis in chickens					
5:45	Horton 261	Gearhart Award: "Stochastic modelling of economic risk and net return distributions for feedlot steers marketed at alternative endpoints"		Break		Break		Break		Break		Break						
6:00-8:00 PM Poster Session -- Salon III (7th floor)																		

CRWAD 2025 PROGRAM

Tuesday, January 21		Salon II (7th)	Chicago A/B (5th)	Chicago C (5th)	Chicago D (5th)	Chicago E (5th)	Chicago F/G (5th)						
Time:	Presenter Abstract #	Title	Presenter Abstract #	Title	Presenter Abstract #	Title	Presenter Abstract #	Title					
	Session 39	Animal Vaccinology Research Network Symposium	Session 40	One health / Public health 2	Session 41	Salmonella	Session 42	Epidemiology 4	Session 43	Virology 2	Session 44	Vaccinology 2	
Tuesday, Jan 21	8:30 AM	Dr. Daniel O'Connor "Systems vaccinology: utilising the "-omics" toolkit to elucidate the mechanisms underlying immune responses"	Nooruzzaman 199	Thermal inactivation spectrum of influenza A H5N1 virus in raw milk	Allen* 205	Eugenol nanoemulsion in chicken drinking water reduces Salmonella Enteritidis colonization in broiler chickens	Ekakoro 211	Investigation of Burkholderia pseudomallei seroprevalence in pigs slaughtered at selected pig abattoirs in Uganda	Khatiwada* 217	Coinfection of SPF turkeys with arthritic and enteric reovirus alters viral shedding and gut bacterial diversity	Akinsule* 223	Identifying immune correlates of protection against Anaplasma marginale	
	8:45		197	Baye 200	Regional variability in biosecurity investment choices in the United States: the role of socio-psychological and demographic factors	Stapleton 206	Mind the gap: Persistent problems in the world of enteric zoonoses and how data could inform public health action	Hakimi* 212	Molecular epidemiology and population structure of Brachyspira hyodysenteriae and its impact on swine dysentery	Jones 218	Activation of bovine herpesvirus 1 (BoHV-1) infected cell protein 0 (ICP0) early promoter by stress	Angelos 224	Parenteral vaccination with Moraxella bovis cytotoxin and porin adjuvanted with Emulsigen®-D to prevent bovine pinkeye
	9:00		Diaz* 201	Comparing environmental and personal air sampling methods for full-length 16S-based microbiome analysis of samples collected in farms, a pilot study	Singer 207	Emergence of a Salmonella Enteritidis strain with decreased susceptibility to ciprofloxacin in U.S. poultry	Park 213	Characterizing hot spots for avian-equine influenza spillover	Krueger 219	Reduced susceptibility to heparan sulfate-adapted BVDV in primary cells from a CD46 edited bovine heifer	Angelos 225	Ocular IgA and IgG responses in cattle vaccinated intranasally with native M. bovis/M. bovoculi cytotoxin adjuvanted with Carbigen®	
	9:15	Dr. Gavin J. Wright "Genome-led vaccine target discovery for animal African trypanosomiasis"	Koebeel 202	Quantitative risk assessment of human H5N1 infection from consumption of fluid milk	Craig 208	Identifying environmental reservoirs of Salmonella enterica on dairy farms in the northeastern United States	Norton 214	Epidemiological evaluation of equine metabolic syndrome in Arabian horses and their subgroups	Nissly 220	Influenza D virus infection dynamics at the bovine respiratory epithelial barrier: physical and functional impacts	Colombatti Olivieri 226	Evaluation of Mycobacterium avium subsp. paratuberculosis DIVA vaccine in Holstein calves	
	9:30		198	Hagan 203	A One-Health approach in surveilling for emerging respiratory viruses on cattle farms in Kentucky and Indiana	Sohail 209	Prevalence and antimicrobial resistance in Salmonella Infantis isolates detected across the food chain in the United States 2013-2022.	Tomlinson 215	Equine parvovirus-hepatitis infection in horse herds over four years	Kincade* 221	A novel multi-omics perspective on postnatal deficiencies in cattle following transient fetal infection with Bovine Viral Diarrhea Virus	Cohen 227	Serological responses to S protein in vaccinated horses and horses with strangles
	9:45		Macdonald* 204	Determinants of health and disease at the global livestock-wildlife-human interface: a scoping review	Arevalo-Mayorga* 210	Risk factor analysis of Salmonella Dublin in dairy-beef farms: A PCR-based environmental sampling study	Gangwar 216	A multi-host SIR model for community transmission of SARS-CoV-2 among animal species	Thomasovich* 222	Biomarker discovery in pregnant cattle infected with bovine viral diarrhea virus	Sterle 228	Co-vaccination of cattle with RB51 and BCG enhances the BCG-specific CD4+ T cell response	
10:00 - 10:30	Break		Break		Break		Break		Break		Break		
Time:	Session 45	Animal Vaccinology Research Network Symposium	Session 46	Microbiome	Session 47	Diagnostic testing 2	Session 48	Swine influenza	Session 49	Virology 3	Session 50	Vaccinology 3	
Tuesday, Jan 21	10:30 AM	Dr. Laura Miller "Translating omics research into improved swine health"	Mooyottu 231	Fecal microbiota transplantation modulates jejunal host-microbiota interface in weaning piglets	Ossa* 237	Rapid chute-side antibiotic resistance detection tool to improve antimicrobial stewardship and optimize risk management while controlling bovine respiratory disease	Zeller 243	Detections of human seasonal H3N2 influenza A virus reverse-zoonoses in swine during the 2022-2024 influenza season	Singh 249	Zinc finger antiviral protein affects Zika, Japanese encephalitis, and West Nile virus infection phenotypes	Zhang* 255	Heterologous prime-boost immunization of two-component PWDVax protected weaned pigs against F18 enterotoxigenic Escherichia coli (ETEC) post-weaning diarrhea (PWD)	
	10:45		229	Lugo-Mesa* 232	Linking Salmonella populations in feedlot holding ponds to cattle feces and the overall microbial community	Cohen 238	A novel serological test for strangles in horses	Ciaci Zanella* 244	Impact of maternal antibodies and weaning on the replication and transmission of human H3N2 influenza A in piglets	Twu 250	Susceptibility assessment of intestinal organoids from North American big brown bat to swine enteric coronavirus	Inzana 256	Epitope-optimized vaccine elicits cross-species immunity against Influenza A virus for potential pandemic protection
	11:00		Neumann 233	Defining microbiomes of ixodid ticks collected from the Chernobyl Exclusion Zone 30 years post nuclear catastrophe	Prosser* 239	Supervised machine learning to diagnose respiratory disease-affected bovine lung histopathology photomicrographs	Cardenas* 245	Adaptation of a human-origin H3N2 Influenza A virus to pigs restricts receptor specificity for extended glycans and enhances sialic acid binding	Thieulent 251	Equine arteritis virus hijacks the CXCL16/CXCR6 axis to infect Equine CD3+ T lymphocytes	Wilson 257	Intrauterine vaccines using nanoparticles encapsulating antigens and adjuvants to make semen-friendly vaccine formulations	
	11:15	Dr. Yongqun "Oliver" He "Advancing systems vaccinology by leveraging AI"	Doster 234	How relatedness between foals impacts the developing microbiome and resistome	Abbasi 240	A 4-Plex qPCR Assay for the quantification of pathogens in liver abscesses and ruminal tissues of feedlot cattle	Wang 246	Size distribution and viral load of influenza A virus-laden particles emitted from pigs over the course of infection	Bhowmik 252	Investigating the relationship between the cellular protein ZFP36L1 and autophagy in suppressing Norovirus replication	Liu* 258	Engineering a recombination-resistant live attenuated vaccine candidate for Porcine Epidemic Diarrhea Virus	
	11:30		230	Looft 235	Microbiota modulation of chickens impacts Salmonella colonization and host gene expression	Anil 241	Random forest models for antimicrobial minimum inhibitory concentration imputation	Shin 247	Emerging swine influenza virus circulation in Korea challenges the protective efficiency of current SIV vaccines	Momin* 253	ZFP36L1 suppresses virus replication beyond poly(a) tail deadenylation	Wilson 259	Vaccination with a Lawsonia intracellularis vaccine mitigated some disease parameters but failed to affect shedding
	11:45		Noyes 236	Microbiome and Salmonella dynamics in pork trim meat and contact surfaces in a commercial pork processing facility	Kulkarni* 242	Development of digital PCR assay for detection of Taylorella equigenitalis causing Contagious Equine Metritis in horses	Vareze-Norambuena* 248	Detection of distinct hemagglutinin and neuraminidase Influenza lineages in single pigs across production stages	Tomlinson 254	Chronic hepatitis in horses with equine hepatitis virus infection	Kaeser 260	Immunological lessons on how to best protect pigs against porcine reproductive and respiratory syndrome virus.	
12:00	Break		Break		Break		Break		Break		Break		
12:15 - 1:30 PM	Closing Comments and Award Presentations - Chicago D (5th Floor)												