

# CRWAD 2026 ORAL SCHEDULE

## CRWAD 2026 Program

updated 12/22/2025 @12:02 PM Central

Saturday Jan 17 4:00-6:00 pm		CRWAD 3 Minute Thesis Competition -- Salon II (7th floor)										
Sunday, January 18	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	Animal Vaccinology Research Symposium	Session 2	Bacteriology - Cattle	Session 3	Foot and Mouth Disease	Session 4	Epidemiology 1	Session 5	PRRS	Session 6	Pathogenesis and Immunity
8:30 am	1	Dr. Alan Young "It's All Academic Until You Need a Checkbook—Commercial Applications of Immunology"	M. B. Brown	Tet44: A new ribosomal protection protein conferring tetracycline resistance in clinical isolates of <i>Mycoplasma bovis</i>	A Zia	Leveraging intelligent adversarial games to evaluate the impact of artificial intelligence technologies on competition and deterrence dynamics against agro-bioterrorism	AM Tracy	A targeted field survey of parasites on oyster aquaculture farms in the context of the natural environment	J.E. Wiarda	Contemporary United States PRRSV 1-4-4 L1C.5 causes severe infection similar to historic highly pathogenic PRRSV	Luana Camargo	Herd-level risk factors and management practices associated with <i>Mycoplasma bovis</i> in Brazilian dairy farms
8:45			3		9		15		21		27	
9:00			M. L. Hunte	Comparative evaluation of lpd mutant and wild-type <i>Mycoplasma mycoides</i> subsp. <i>mycoides</i> via aerosol challenge in cattle	M. R. Smith	Evaluating electronic identification for cattle traceability through analysis of simulated movement networks.	B. D. Elderd	Effects of varying temperatures on host-pathogen coevolution across populations	Jason Galvis	Vehicle movements and risk of PRRS and PED transmission: What do we know?	Lipika Das	Microbiota's role in inflammatory responses in transitional dairy cows
		4		10		16		22		28		
		J. D. Zehr	Microbial ecology of bovine mastitis: contrasting genomic landscapes in organic and conventional dairy systems	Michael Sanderson	Transmission of FMD through auction market cattle movements during an outbreak	J O'Brien	Grain-free diets and cardiac diagnoses in companion dogs	J Li	Comparative transcriptomics reveals novel and differential circular RNA responses underlying interferon-mediated antiviral regulation in porcine alveolar macrophages	S Zimmerman	Interrogating two overlooked ETEC virulence proteins for their impact on pathogenesis	
5			11		17		23		29			
9:15	2	Dr. Mahesh Kumar "Opportunities and Challenges in the Development of Vaccines for Emerging Diseases of Livestock"	JJ Bromfield	The effect of heat stress and disease on the postpartum uterine microbiome of dairy cattle.	Towfiq Rahman	Integration of sensor data and lesion history for predictive modeling of dairy cow lameness	J O'Brien	Diet type and cardiac and cancer diagnoses in the Dog Aging Project cohort	M Zeller	PRRSView: Expanded analytical capabilities to empower swine producers	L.C. Gay	Do animal models overestimate the pathogenesis of recent H5N1 clade 2.3.4.4b?
9:30			6		12		18		24		30	
			Tu-Anh Huynh	Identifying <i>Listeria monocytogenes</i> colonization factors in the bovine gastrointestinal tract	Johnbosco U. Osuagwu	Evaluating Regional Zoning for Foot-and-Mouth Disease Control in the New England Milkshed Using InterSpread Plus	C.L. Sexton	Development of a novel survey instrument to assess the impact of companionship loss on physical and behavioral health outcomes in household-living dogs	R.T. Hassanien	Construction of arterivirus infectious clones using circular polymerase extension reaction (CPEP)	Yijia Yang	Assessing in vitro protection from antibodies derived from adhesins against <i>Campylobacter</i>
9:45	7			13		19		25		31		
	E. Doster		Gastrointestinal microbiome alterations in dairy cows with hemorrhagic bowel syndrome	Abdul kabir	Silent Spreaders: The Overlooked Role of Asymptomatic Small Ruminants in the Persistence of Foot-and-Mouth Disease in Pakistan-Afghanistan Border Areas	A McCullough	Demographic factors of dog owners and dogs with pet health insurance.	H Tong	Shedding patterns of PRRSV vaccine viruses in multiple specimens from weaned pigs vaccinated with six MLV vaccines under experimental conditions	I Tobin	Megasphaera stantonii , a commensal bacterium, confers colonization resistance against necrotic enteritis in chickens	
8			14		20		26		32			
10:00 - 10:30	Break		Break				Break		Break		Break	
Time:	Session 7	Animal Vaccinology Research Symposium	Session 8	Bacteriology - Avian	Session 9	Antimicrobial Use	Session 10	Epidemiology 2	Session 11	Swine Influenza 1	Session 12	BRD 1
10:30 am	33	Dr. Meghan May "Bridging the Translation Gap: How to Develop Tools for Animal Disease Control by Getting the Best of Both Worlds"	R.G Ozyck	Identifying <i>Mycoplasma gallisepticum</i> primary adhesins, GapA and CrmA, receptor protein(s)	K. Bhimavarapu	Impact of exposing bees to antibiotic residues in pollen	K. M. Jones	Optimizing vector capture methods on beef cow-calf farms in Mississippi	T Suzuki	The effect of swine influenza on fattening pig productivity on Japanese commercial farms	R.A. Bigelow	Influence of age and contact status on BRD risk between adjacent hutch calves within a commercial calf ranch
10:45			35		41		47		53		59	
			T. Alanazi	Evaluating <i>Campylobacter jejuni</i> Tn5 single mutants responding to acidity	G. Vinci Roberto	Using the AMR Visualizer tool to track Antimicrobial Resistance (AMR) trends in small animal veterinary practice	Luis A. Torres	The relationship between fecal microbiome and liver abscesses in Beef-Dairy crossbred cattle	K. Hu	Longitudinal surveillance of influenza A virus at the human-swine interface in Midwest swine farms in the United States	S. E Erickson	Nasal microbiome markers are related to respiratory health outcomes
11:00		36		42		48		54		60		
		M. Abo Zahrah	Chicken bile metabolites by <i>Lactobacillus johnsonii</i> attenuates <i>Clostridium perfringens</i> growth	K. L. Jones	Genomic insights into the association of antimicrobial resistance and mobile genetic elements in coagulase-negative <i>Staphylococci</i> across hosts	H. Henderson	Microbial profiling of <i>Mycoplasma bovis</i> associated with polymicrobial infections in feedlot cattle mortalities	J Alvarez-Norambuena	Hemagglutination inhibition antibody profiles against multi-lineages of co-circulating influenza A virus in cohorts of pigs from weaning to near market	T. B. McAtee	Role of control and detection strategies for bovine respiratory disease on feedlot cattle performance and emissions	
37			43		49		55		61			
11:15	34	Panel Discussion  (moderated by Dr. John Wycoff)	M. K. Fakhr	Comparative transcriptomics of <i>Campylobacter jejuni</i> and <i>Campylobacter coli</i> in aerobic conditions	S-W Chen	Identification of a novel telithromycin resistance mechanism in <i>Campylobacter</i>	F Oyervides	Identifying protective and disease risk-associated fecal microbiomes in neonatal calves	J Mena-Vasquez	Dynamics of influenza virus A infection across wean-to-finish herds in the United States Midwest	M. A. Scott	Impact of preweaning vaccination on gene expression profiles in healthy and BRD-affected cattle during backgrounding
11:30			38		44		50		56		62	
			C Skow	The potential of a host-specific gut bacterium in modulating chicken lung immunity	A Jacobsen	Co-designing an antimicrobial resistance intervention with poultry farmers and animal health professionals in Nigeria	A.R.S. Oliveira	Factors affecting the decision of veterinary students to pursue a career in food animal practice: a survey among veterinary students	V. Mendieta-Reis	Live attenuated Influenza A virus vaccines with improved safety profile induce strong mucosal immune responses in swine	N. D. Hacker	Precision metagenomics: adaptive sampling for improved detection of <i>Mannheimia haemolytica</i>
39				45		51		57		63		
11:45		Jonathan Rodriguez-Gallegos	Impact of a Segmented Filamentous Bacteria treatment on Gut Microbiota and Function	V. Lugo-Mesa	Copper sulfate treatment and effects on biofiltration in saltwater aquaria	A. Regassa	Transforming livestock information systems through standardized and interoperable data for disease control and one health	A Madapong	Systemic and mucosal immune responses induced by adenoviral-vectored consensus H5 influenza A vaccines in mice and swine	H. Sang	Broadly protective bovine parainfluenza 3 virus and bovine viral diarrheavirus vaccine	
40			46		52		58		64			
Lunch - 12:00 to 1:30	Lunch Break (On Your Own)											
Lunch - 12:00 to 1:30	CRWAD Fellows Luncheon (Invitation Only)											

# CRWAD 2026 ORAL SCHEDULE

Time:	Session 13	CRWAD Council Keynote and Special Symposium	CRWAD Council Keynotes and Special Symposium		CRWAD Council Keynotes and Special Symposium		CRWAD Council Keynotes and Special Symposium		CRWAD Council Keynotes and Special Symposium		
1:30 PM	Opening Remarks & Introduction of Fellows		CRWAD Featured Presentations Salon II		CRWAD Featured Presentations Salon II		CRWAD Featured Presentations Salon II		CRWAD Featured Presentations Salon II		
2:00 PM	CRWAD Keynote										
2:15	Dr. Qijing Zhang										
2:30	"The Dark Alliance: Co-evolution of Antimicrobial Resistance and Bacterial Virulence"										
2:45	65										
3:00	CRWAD Special Symposium	Dr. Cesar De La Fuente									
3:15	"Accelerating Antibiotic Discovery Using AI"										
3:30	66										
3:45 to 4:15	Break		Break		Break		Break		Break		
Time:	Session 14	CRWAD Special Symposium	CRWAD Special Symposium		CRWAD Special Symposium		CRWAD Special Symposium		CRWAD Special Symposium		
4:15 PM	CRWAD Special Symposium	Dr. Beatriz Martinez Lopez									
4:30	"Advances in Artificial Intelligence for Population Medicine and Disease Dynamics: Current Progress and Future Opportunities"										
4:45	67										
5:00	CRWAD Special Symposium	Dr. Brad White									
5:15	"Integrating AI in Animal Health Research and Graduate Education: Challenges and Opportunities"										
5:30	68										
5:45 - 6:15	Panel Discussion										

# CRWAD 2026 ORAL SCHEDULE

Monday, 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	Presenter Abstract #	Chicago H (5th) Title	
Time	Session 15	ACVM Symposium	Session 16	One Health & Public Health 1	Session 17	Artificial Intelligence & Data Analytics	Session 18	Immunology 1	Session 19	Virology 1	Session 20	Disease Pathogenesis - Avian	Session 21	Tick-borne diseases	
Monday	8:30 am	69	I Agrawal	Strengthening foot and mouth disease preparedness in Puerto Rico	G. Anil	Random forest imputation is less biased than other imputation methods when capturing antimicrobial resistance trends over time	J.O. Suyver	Induction of secondary and tertiary lymphoid microstructures in fish	V Bamrung	Divergent porcine astrovirus 4: Distinct respiratory and gastrointestinal genetic clades	S. Mainali	Clostridium parvulificum metabolized chicken bile reduces Clostridium perfringens virulence	F. L. Crosby	Infection with four geographically distant isolates of Anaplasma marginale in two-year-old heifers caused a severe form of bovine anaplasmosis	
	8:45		C. A. Snyder	Neuraminidase-mediated antibody immunity against highly pathogenic avian influenza H5N1 in humans with occupational exposure to swine.	M. Curlee	Spatiotemporal analysis of highly pathogenic avian influenza A (H5N1) occurrence in wild birds in the United States, 2021-2025	A.C. Calhoun	Exploring and exploiting immune priming and its specificity in Eastern oysters, Crassostrea virginica	Q Wang	Mutations in the macrodomain 1 of NSP3 attenuate PEDV virulence in vivo without impairing in vitro replication	D. Yeboah	Developing bile acid metabolizing enzyme expression system.	M Tawana	Farmers'asq; perception and attitudes towards tick control strategies in communal areas at Eastern Cape province, South Africa.	
	9:00		S Ramasamy	Influenza D virus at the wildlife-livestock Interface: emerging cross-species dynamics	S Dey	AstraMEV (AI-guided Structural Assembly of Multi Epitope Vaccines) Against Infectious Bronchitis Virus	Karin E. R. Borba	Neutralized mRNA encoding an anti-VapA monoclonal antibody provides partial protection from Rhodococcus equi	B. Igriczi	Prevalence estimation and phylogenetic analysis of porcine rotavirus C in Hungarian pig herds	M Parcels	The effect of exosomes from tumor-bearing chickens (TEX) on innate immune signaling	S Madesh	The effect of exosomes from tumor-bearing chickens (TEX) on innate immune signaling	
	9:15		R.L. Smith	Tick-borne Diseases in Illinois: A One Health Analysis	Sara C. Sequeira	Assessing connectivity and biosecurity compliance of personnel and vehicles among a Spanish poultry production system	K.E.R. Borba	A novel polymeric carrier improves transfection of foal-reloaded with mRNA encoding a monoclonal antibody targeting the pulmonary pathogen Rhodococcus equi	L Dénes	Prevalence and genetic characterization of porcine rotavirus B in Hungarian pig farms	J. Shrestha	The role of chuA on Campylobacter jejuni responding to bile acid 78beta; cholic acid	P. V. Pietrantono	Towards novel acaricide development against cattle fever tick transcriptomics and GPCR localization with labeled neuropeptides	
	9:30		J Kaneene	Understanding Public Knowledge, Attitudes, and Practices Toward PFAS Exposure in Michigan Communities with and without Known Environmental Contamination	J.S. Dean	Planners, Balancers, and Drifters: a forward induction approach to understanding learning archetypes in biosecurity decision-making	R. L. Klein	Intestinal immune responses in foals to enteral immunization with live virulent Rhodococcus equi	M Frias Harriague	The association of Rotavirus species with gastrointestinal and respiratory illness in suckling and weaned pigs under field conditions.	S. Al gehani	Identifying Clostridium perfringens genes responding to bile acids using single mariner-based mutants	N Nyangwe	Habitat characteristics and tick diversity: A focus on invasive tick, Rhipicephalus microplus (Acari: Ixodidae) impacting communal grazing cattle in the Eastern Cape Province, South Africa	
	9:45		70	A. Cheemadan	Proof-of-Concept: Engineered E. coli Nissle 1917 to stably express bacteriophage derived CD271 endolysin enables targeted and sustained treatment of Clostridioides difficile infection.	K. H. Hazlett	Beyond the flavor: shotgun metagenomics for functional insights and MAG recovery in bovine liver abscesses	WeiHong Gu	Analysis of porcine gamma&delta; thymocyte development using a new single cell gamma& and delta; chain TCR profiling assay	Weronika Rybkowska	Prevalence of Rotavirus A and C in Polish Pig Herds	S. Al Gehani	Evaluating components of Lactobacillus johnsonii metabolized chicken bile against Clostridium perfringens growth	T Saito	Shifts in the distribution ranges of Rhipicephalus (Boophilus) ticks in South Africa: Displacement of the native tick, Rhipicephalus decoloratus by the invasive cattle tick, Rhipicephalus microplus in communal areas of the Eastern Cape
10:00 - 10:30		Break		Break		Break		Break		Break		Break		Break	
Time:	Session 22	ACVM Symposium	Session 23	One Health & Public Health 2	Session 24	HPAI 1	Session 25	Immunology 2	Session 26	Virology 2	Session 27	Vaccinology 1	Session 28	Parasitology	
Monday	10:30 am	107	N. R. Noyes	Species-level characterization of the personal air microbiome collected with two devices in a dairy farm setting	K Mohanto	Understanding knowledge and perception of dairy producers regarding HPAI in dairy cattle	A. S. Sipka	The use of a fluorescent bead-based multiplex assay to measure cytokine concentrations in bovine quarter milk samples with different culture outcomes	R. N. Fonseca	Antiviral Activity of kaempferol and isocoumarin against Bovine Respiratory Syncytial Virus: Evidence for interference in the replication cycle and high-affinity binding to viral proteins	J Angelos	Reduced severity of bovine pinkeye following intranasal vaccination with secreted Moraxella bovis and Moraxella bovoculi antigens adjuvanted with Carigen and Emulgen	A Karunakaran	Functional characterization of Ostertagia osteragi cathepsin L-like proteases	
	10:45		R. Rios	Prevalence, resistance, and genomic characterization of Staphylococcus aureus from animal, food, and environmental sources: A One Health perspective	N Uribe Corrales	Survey of impacts of Avian Influenza type A on a convenience sample of California dairies	K Kesler	Effect of zinc on lymphocyte functions relevant to vaccine responsiveness in vitro.	Eulhae Ga	Pandemic M gene reassortment in canine H3N2 influenza virus acquired amantadine resistance.	J Angelos	Ocular immune responses in cattle after intranasal vaccination with secreted Moraxella bovis and Moraxella bovoculi antigens containing native Moraxella spp. cytotoxin	T.A. Quintana	Canine fecal microbiome alterations associated with experimental Cystosporospora spp. infection	
	11:00		S. Arnold	Characterization of outreach and communication from mosquito abatement districts and local public health	Al Loreda	Epidemiology of Avian Influenza Type A in lactating California dairy cattle	M. Cid de la Paz	The impacts of colostrum on systemic immune response in dairy calves	H. Cluett	The characterization of viral diversity in white-tailed deer (Odocoileus virginianus) respiratory tracts: Implications for cross-species transmission	J Santamaria	Immunogenicity and protective efficacy of a recombinant Histomonas meleagridis cathepsin L-like protease in turkey poults	J Jesudoss Chelladurai	Pharmacokinetic analysis of bumped-kinase inhibitor 1553 reveals potential for treatment of equine protozoal myeloencephalitis	
	11:15		Dr. Mark Lawrence	M.C. Metralier	Identifying dominant trade distributors and potential co-mingling events in native and exotic species trade between deer farms across Florida (2014-2020)	L. Martinez Penedo	Risk factors and shedding patterns on milk, nasal, and vaginal samples for HPAI H5N1 in dairy cattle.	R. Santos	Assessment of immune-related microRNAs in bovine colostrum and newborn calves&rsquo; circulation	Diego G. Diel	Investigating the mechanisms underlying Senecavirus A persistence	Adela S. Oliva Chávez	Evaluation of extracellular vesicles as candidates for anti-tick vaccines in cattle	M Smith	Eimeria maxima protein expression in chicken ileum during necrotic enteritis
	11:30		"Edwardsiella ictaluri Attachment Mechanisms: A Novel Approach to Prevent Enteric Septicemia of Catfish"	EO Njoga	First insight into human&ndash;animal Campylobacter epidemiology in Southeast Nigeria	C Picasso Rizzo	Association between comorbidities and HPAI-H5N1 virus shedding during outbreak investigations in dairy cattle	E Owczarzak	Effect of isoprostane class on bovine monocyte-derived macrophage function under in vitro inflammatory and oxidative stress challenge.	H Tong	Evaluation of PEDV non-S INDEL and S INDEL spike gene-based differential PCR assays and epidemiological analysis of the detection frequency of these two PEDV strains in U.S. swine.	P.P. Singh	West Nile virus vaccine candidates attenuated by dinucleotide enrichment are immunogenic and protective against lethal infection	I. De Assis Rocha	Enhanced Metagenomic Detection of Equine Neurotropic Viruses with Syndrome-Based Probe Capture Enrichment
	11:45		108	O A Akerlele	Spatial-distribution of Dog Rabies in Gauteng Province using the Average Nearest Neighbour from 2009 – 2025	C Lane	Epidemiologic investigation of disease burden and transmissibility of highly pathogenic avian influenza in Michigan dairy cattle	Thaddeus Deiss	Systemic perturbations in immunity elicited by SARA in dairy cattle	N.R. Noyes	Culture-independent whole-genome reconstruction of porcine astrovirus 4 from oral fluid samples	B.M Edao	Harnessing an enterotoxigenic E. coli multiple epitope fusion antigen (MEFA) vaccine candidate (MecVax): adjuvanticity and thermostability	S. Mainali	Development of a rapid, on-site diagnostic test for the detection of mycoplasmosis in bison
Lunch - 12:00 to 2:00							Lunch Break (On Your Own)								
Lunch - 12:00 to 2:00							AAVI Business Luncheon (Ticket purchase before conference needed)								

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Monday, 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	Presenter Abstract #	Chicago H (5th) Title	
Time:	Session 29	AAVI Symposium	Session 30	Diagnostic testing	Session 31	HPAI 2	Session 32	Epidemiology 3	Session 33	Bacteriology 1	Session 34	Salmonella 1	Session 35	Coronavirus	
Monday	2:00 PM	145	Dr. Jodi L. McGill	Leyi Wang 147	Enhanced Metagenomic Detection of Equine Neurotropic Viruses with Syndrome-Based Probe Capture Enrichment	Mohammed Noorzaman 153	HSN1 influenza virus stability and transmission risk in raw milk and cheese	K Giri 159	Highly pathogenic avian influenza A H5N1 surveillance in U.S. horses	A. Cheemadan 165	Effect of dietary transition between raw and kibble diets on the canine fecal microbiome in a randomized crossover study	S. Ajulo 171	Antibiotic Class-Dependent Evolution of Multidrug Resistance and Fitness in <i>Salmonella</i> Kentucky ST1398	L. Yen 177	Porcine enteroids as a platform for coronavirus viability testing: initial assessment using porcine deltacoronavirus (PDCoV)
	2:15		"Optimizing Innate Immunity to Protect Against Bovine Respiratory Disease"	Diba Yaghoubi 148	Development of a rapid, on-site diagnostic test for the detection of mycoplasmosis in bison	W. Ma 154	Understanding influenza A virus infections in cattle	J.E. Tomlinson 160	Equine hepatitis virus infection in horse herds over four years	B Lamichhane 166	<i>Rhodococcus equi</i> in horses: Prevalence, Multidrug Resistance, Virulence Gene Profiles, and Survival in Macrophages	K Bentum 172	Adopting a metagenomic and quasimetagenomic approach to comparatively investigate the microbial diversity of bovine feces cultured for <i>Escherichia coli</i> , <i>Salmonella</i> , <i>Campylobacter</i> , and <i>Listeria</i> spp	G Beddingfield 178	Effects on viral shedding of bovine coronavirus under stressful conditions
	2:30		KE Mara 149	Standardizing an antimicrobial susceptibility testing protocol for <i>Mycoplasma bovis</i>	Eric Weaver 155	A Multiplexed Livestock H5N1 Influenza Vaccine	S. Barua 161	Molecular survey of equine parvovirus-hepatitis, equine hepatitis, <i>Pegivirus caballi</i> and <i>Pegivirus equi</i> , USA	Prajwal Shrestha 167	Combinatorial in silico and phenotypic characterization to identify novel small molecules antimicrobials against ESXAPe pathogens	Nada Abdelkader 173	Genotypic and Phenotypic Characterization of Multidrug Resistance in <i>Salmonella</i> Isolated from Cattle	S.V Kuchipudi 179	White-Tailed Deer as a Cryptic Reservoir for Both Ancestral and Emerging SARS-CoV-2 Variants	
	2:45	146	Dr. Bonnie Mallard	Hossam El-Sheikh Ali 150	Uncovering Circulating Biomarkers for Nocardioform Placentitis through Equine Serum Proteomics	Richard Pereira 156	Inactivation of H5N1 in raw whole milk through milk acidification	M Hothem 162	Factors Influencing Veterinary Student Interest in Equine Practice: A Focus Group Study	S Stolworthy 168	Interrogating the clinical outcomes and genetic fitness of <i>Coagulase-Negative Staphylococcus</i> in the udder of range sheep using an experimental model of mastitis	S.A. Arevalo-Mayorga 174	Prevalence, serovar diversity, and antimicrobial resistance of <i>Salmonella</i> in mesenteric lymph nodes of dairy-origin steers at harvest	Xufang Deng 180	Inactivation of dual IFN antagonists in PEDV as a strategy for live-attenuated vaccine design
	3:00		"From Concept to Commercialization: Using Immunogenetics and Immunocellulars to Naturally Improve Animal Health"	P Reed 151	Detection of asymptomatic ocular <i>Leptospira</i> colonization in horses: Implications for equine recurrent uveitis	Mohammed Noorzaman 157	Infection dynamics and transmission of bovine and human influenza A H5N1 (genotype B3.13) viruses in mammalian models	C.R. Myers 163	Predicting and controlling spillover in multispecies disease transmission networks	S. M. Howe 169	The effect of commensal <i>Corynebacterium</i> on BRD-associated <i>Mannheimia haemolytica</i> growth in vitro	I. M. Leon Moreno 175	Phagocytic Uptake and Intracellular Replication of Fluorescently Modified <i>Salmonella</i> Newport and Lubbock	T Momin 181	Characterizing the antiviral role of ZFP81.1 in suppressing RNA viruses associated with gastroenteritis
	3:15		A. Chakrawarti 152	A reduced probe set robustly captures antimicrobial resistance genes in metagenomic samples in an enriched long-read workflow	K Kulchitsky 158	Durable protective immunity to bovine H5N1 influenza virus in dairy cattle following natural infection	Lauren Wisniewski 164	Development and validation of the Veterinary Career Preferences Factors Survey (VCPFS)	A.F. Castillo-Espinoza 170	Resembling epithelial responses to swine mycoplasmas in vitro : An organotypic 3D tracheal model captures species- and strain-specific divergences	B. O. Hunt 176	Targeted shotgun sequencing improves the ability to detect and characterize <i>Salmonella enterica</i> in metagenomic samples	D Lee 182	Virulence investigation of a novel porcine epidemic diarrhea virus variant harboring a 32-amino acid deletion in nonstructural protein 3	
3:30-4:15 PM															
CRWAD Business Meeting and Listening Session - Chicago Ballroom E (5th)															
Time:	Session 36	AAVI Symposium	Session 37	Diagnostics & Biomarkers	Session 38	Disease Control & Economics	Session 39	Epidemiology 4	Session 40	Bacteriology 2	Session 41	Salmonella 2	Session 42	Statistical Methods & Mathematical Modeling	
Monday	4:15 PM	183	Dr. Crystal Loving	C Menk 185	Hapten-mediated signal amplification frequency, and time on acidified milk: immunohistochemical detection of CWD prion protein	Richard Pereira 191	Evaluation of temperature, mixing frequency, and time on acidified milk: quality parameters, physical characteristics, and coliform counts	Rohit Reddy Nallari 197	Characterization of swine interstate transportation networks using multi-source records	S. I. Enem 203	Antibacterial Activity of <i>Apis Mellifera</i> and <i>Vespa Vulgaris</i> Venom Against Selected Antibiotic – Resistant Pathogens	R. Nyarku 209	Rapid, field-ready multiplex qPCR for same-day detection of priority <i>Salmonella</i> serovars in poultry production	Yanqi Zhang 215	NIMForest: An R Package for Generating Forest Plots in Network Meta-Analysis with Decomposition of Direct, Indirect, and Study Level Evidence Contributions
	4:30		"Lifting the Veil: Modern Approaches to Addressing Salmonella Persistence in Porcine Macrophages"	S Rostami 186	Reference range and predictors of eye temperature in pre-weaned dairy calves	David Kiiza 192	Benefit-cost analysis of enhanced vaccination program to control brucellosis in cattle in different farming systems in Rwanda.	S. Edache 198	First characterization of feeding patterns and habitat preferences of mosquito vectors on commercial swine farms in the United States	Dipak Kathayat 204	Characterization of the cell envelope of <i>Coxiella burnetii</i> propagated in ovine trophoblastic cells	Asmita Shrestha 210	FTIR Spectroscopy combined with machine learning for rapid serotype-independent differential detection of biofilm-positive and biofilm-negative <i>Salmonella</i>	C. Mundt 216	Models to infer locations of epidemic outbreaks
	4:45		S Rostami 187	Establishment of reference intervals for ocular surface temperature in canines via infrared thermography	O. Suzuki 193	The relationship between milk compositions around the first service and conception rate in dairy cows	J Mena-Vasquez 199	Dynamics of PEDV infection across wean-to-finish herds in the United States Midwest	B. Rowas 205	Characterization of unannotated transcripts in <i>Leptospira</i> reveals mechanisms of host adaptation and environmental persistence	Y. Botero 211	Tracking <i>Salmonella enterica</i> within the gastrointestinal tract, lymph nodes, and liver abscesses of feedlot cattle	D Areda 217	Predicting Influenza Incidence in Arizona: Comparative Evaluation of Statistical and Machine Learning Approaches	
	5:00	184	Dr. John Driver	D.G. Diel 188	Differentiating vaccinated from infected animals (DIVA) using a multiplex Luminex assay for HPAI	C. K. Wingert 194	Factors associated with veterinarian longevity in rural practice	MJ Jahid 200	Beyond the Flock: Tracking H5N1 in Wild Mammals	H Yahyaoui Azami 206	<i>Mycobacterium bovis</i> shows increased virulence compared to <i>Mycobacterium tuberculosis</i> in a susceptible mouse model	S. Correia Sequeira 212	Navigating complexity: <i>Salmonella</i> Dublin risk factors in a Midwestern US calf movement system	D Areda 218	Time Series Forecasting of Valley Fever in Arizona Using Machine Learning and Deep Learning Algorithms
	5:15		"A Single-cell Level Exploration of the Pig's Immune System in Health and Disease"	V. A. Avila Reyes 189	Semi-targeted strand-switching coupled MiniON sequencing (ST-PCR-Seq) for Avian Reovirus	S. Akiyama 195	Assessment of the economic impact of porcine reproductive and respiratory syndrome (PRRS) on Japanese swine commercial farms	K. Ward 201	Targeted metagenomic characterization of the resistome in free-ranging white-tailed deer in New York State	A. Patel 207	Optimization of an in vitro <i>Leptospira</i> growth inhibition assay to evaluate the protective efficacy of anti- <i>Leptospira</i> antibodies.	Shamim Sarkar 213	Prevalence and predictors of tetracycline resistance in <i>Salmonella</i> and <i>Campylobacter</i> spp isolated from Cecal Samples of Minor Meat-Producing Animals at Slaughterhouses in the United States, 2020...	M. J. Woodruff 219	Enhancing Disease Risk Analyses: Country Variation in Predicted Contaminated Meat Supply
	5:30		H. E. Kunnary 190	Assessing repeatability of ultrasound-based prognostic models for bovine respiratory disease in feedyard cattle	S Yoshikawa 196	Impact of porcine reproductive and respiratory syndrome (PRRS) on greenhouse gas emissions on commercial swine farms	MJ Jahid 202	Diverse Avian Influenza in Waterfowl: Eurasian highly pathogenic and North American low pathogen avian influenza in the Mississippi flyway	N Ghahari 208	Neurophysiological and Morphological Signatures of <i>Clostridioides difficile</i> Toxin Exposure in a Brain-on-a-Chip Model	V Lima 214	Design and construction of genetically modified <i>Salmonella</i> strains for in ovo administration	V.S. Raghunath 220	Fitness learning of evolutionary variants over time for surveillance of emerging PRRS viral strains	
5:45	Break		Break		Break		Break		Break		Break		Break		
6:00-8:00 PM															
Poster Session -- Salon III (7th)															

# CRWAD 2026 ORAL SCHEDULE

Tuesday, 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 43	AVEPM Calvin Schwabe Symposium	Session 44	Swine Influenza 2	Session 45	BRD 2	Session 46	Immunology 3	Session 47	Vaccinology 2	Session 48	Virology 3
Tuesday	8:30 AM	Dr. Stuart Reid	G Ciacci Zanella	A multivalent mRNA-lipid nanoparticle vaccine against influenza A virus circulating in swine	G.M. Jakes	Non-specific immune stimulation induces innate tolerance in bovine monocyte-derived macrophages	S. M. R. Rahman	Structural and antigenic characterization of Babesia bovis HAP2 domains	SL Zeichner	Recombinant bacterin vaccines targeting class 1 viral fusion protein highly conserved regions	K.K. Yadav	Phosphatidylethanolamine modulates genotype 3 hepatitis E virus replication during pregnancy in rabbits.
	8:45		223		229		235		241		247	
			H Vu	A versatile noninfectious platform for the rapid development and updating of vaccines against influenza a virus of swine	G. Jakes	Immune stimulation prior to vaccination to prevent respiratory disease attenuates ex vivo alveolar macrophage cytokine production in pre-weaned calves	K. A. Thompson	Effect of vaccinating cows once at pregnancy check on clostridial antibody titers in calves at branding age	Chongyang Zhang	Immunogenicity Characterization of SecVax, A Combined Acellular Vaccine against Shigella , Vibrio cholerae , and Enterotoxigenic Escherichia coli	J. B. Darkwah	In vitro proof-of-concept evaluation of an enzyme-gated nanoparticle mRNA therapeutic platform for avian influenza virus
	9:00	221	M Zeller	Human H3 3a.1 clade influenza A virus detected in swine	Cassandra Barber	Bovine cathelicidins expression in respiratory tissues during bovine respiratory syncytial virus infection	M Chirivi	Repeated endotoxic challenges in lactating dairy cows under negative energy balance: trained immunity or endotoxin tolerance?	S.S.R Vakamalla	Functional epitope mapping of Vibrio cholerae TcpA protein and Cholera toxin	M Martins	Emergence of turkey orthoreovirus as a cause of neurological disease in poult
	9:15	Dr. H. Morgan Scott	225		231		237		243		249	
	J.A Fusco		Modeling influenza virus host adaptation and tropism using precision-cut tissue slices	L. C. Makratzakis	Associations of antibiotic treatment for preweaned bovine respiratory disease on the periparturient peripheral leukocyte transcriptome of primiparous Holstein dairy cows	M. Bhowmik	ZFP36L1 negatively regulates autophagy to suppress murine norovirus replication	Banikalyan Swain	Self-Destructing Attenuated Adjuvant Salmonella (SDAAS) strains function as safe live adjuvants to enhance mucosal and systemic vaccine immunity	K. Jarosinski	Toward a cell-free Marek&rsquo;s disease vaccine	
	226			232		238		244		250		
9:30	Dr. H. Morgan Scott	J Alvarez-Norambuena	Characterization of influenza A virus lineages in cohorts of pigs from weaning to near market	Thomas Inzana	Bovine response to outer membrane vesicles and biofilm matrix antigens of Histophilus somni when grown to simulate the in vivo environment	A.B. Mara	Of mice and cattle: toward the development of mouse models for ruminant respiratory Mycoplasmoses	T Lu	Impact of an intranasal L-DBF vaccine on the gut microbiota in young and elderly mice	A. J. Broadbent	Molecular characterization of Infectious Bursal Disease Virus (IBDV) strains of genogroup A281 circulating in Delaware, Maryland and Virginia from 2018-2023 uncovers an amino acid signature in the consensus sequence of the capsid	
9:45		227		233		239		245		251		
222		K. Hu	Establishment of human H3 2a.1 clade influenza A virus in swine	C Jones	Bovine alphaherpesvirus 1(BoHV-1) promotes neuron survival and ribosomal remodeling in trigeminal ganglia of latently infected calves	L.S. Mansfield	Anti-inflammatory fecal microbiota transplant in neonates, but not adults, prevented lung damage in asthmatic mice	S. Sonar	Safety and immunogenicity of a novel planktonic and biofilm-targeting vaccine to prevent Mesomyxoplasma ovinipneumoniae infection in domestic lambs	D. Prakoso	Surveillance of Avian Metapneumovirus in Live Bird Markets and Domestic Poultry Farms in Pennsylvania	
228		234		240		246		252				
10:00 - 10:30	Break		Break		Break		Break		Break		Break	
Time:	Session 49	AVEPM Calvin Schwabe Symposium	Session 50	ASF	Session 51	Salmonella 3	Session 52	Immunology 4	Session 53	Vaccinology 3	Session 54	Virology 4
Tuesday	10:30 AM	Dr. Dan O'Neill	F.Y. Yuan	mRNA cocktail vaccination partially protects pigs from lethal challenge by African swine fever virus	E. Teague	Distribution and diversity of Salmonella serovars from beef cattle before, and after processing in relation to human-derived serovars	Melha Mellata	Host Response of Conventional Lohmann Select Layer Chicks to Avian Segmented Filamentous Bacteria post Hatching	L. Bettin	Comparative evaluation of CPAF-based Chlamydia vaccine candidates in the pig model	P.P. Singh	Japanese encephalitis virus infection in pig fetuses causes transcriptional immunopathology sequelae in piglets
	10:45		256		262		268		274		280	
			Asim Zia	Piloting a national scale biosecurity risk assessment and management agent based model for building resilience against transboundary animal diseases	M.F. Emmel	Comparison of bacterial fitness and macrophage invasion and replication among Salmonella serovars recovered from feedlot cattle.	Farhan Anwar Khan	Immunogenic protein profiling of Mycoplasma capricolum subsp. capripneumoniae using proteomic techniques.	J. Shrestha	Developing multipitope fusion antigen vaccines of Clostridium perfringens against chicken necrotic enteritis	L. G. Eerink	Genetic diversity of equine rotavirus A viruses collected within the United States of America between 2021 and 2025
	11:00	253	K. E. Flaherty	Enhancing biosecurity practices and outbreak preparedness for African Swine Fever in Puerto Rico	Juned Ahmed	Lactulose metabolism in Salmonella : Transcriptomic insights and nutrient-based modulation of biofilm and colonization potential	H.G. Teddlton	Single-cell transcriptomic profiling of immune responses in resistant and susceptible sheep to Haemonchus contortus infection	Palmy Jesudhasan	eBeam-Driven Killed vVaccines: a novel approach to preserve antigenic integrity and control bacterial lameness in broilers	A. Naru	Highly Pathogenic Avian Influenza A H5N1 Virus Infection in an Immunocompromised Domestic Cat
	11:15	Dr. Natalia Cernicchiaro	258		264		270		276		282	
	Aniruddha Deka		Early Detection of ASF: Comparing Sampling Strategies in Growing Pig Farms	Yosra A. Helmy	Interrupting microbial cross-talk: Targeting quorum sensing mechanism to control Salmonella virulence across the One Health lens	M Donia	Maternal colostral cells orchestrate intestinal immune and barrier gene networks in neonatal lambs	A Sathish Kumar	Chitosan mannose nanoparticle-based subunit vaccine against Campylobacter jejuni in broilers	Salman L. Butt	Infection dynamics and transmission of H5N1 clade 2.3.4.4b genotypes in cats ( Felis catus )	
	259			265		271		277		283		
11:30	254	V. R. Mareddy	Portable Smartphone-Linked Test for Rapid Field Detection of ASFV	M. Bernad-Roche	A new integrated approach for reducing Salmonella contamination in pig abattoirs	Wenli Li	Unraveling the cellular complexity of ovine colostrum using single-nuclei RNA sequencing	Hyun-Jin Shin	Enhanced Immune Response to Porcine Epidemic Diarrhea Virus (PEDV) harboring swine IgG Fc molecule on its surface	Salman L. Butt	Novel H5 recombinant protein vaccine provides effective protection against H5N1 influenza virus in cats	
11:45	255	Gearhart Awardee Presentation A. Arevalo-Mayorga	de Herman Okah-Nn	Clinical profiling of African swine fever in domestic pigs: towards an early diagnostic model in endemic settings	B. M. C. Terezo	Co-designing evidence-based interventions for Salmonella control with Irish stakeholders	Gracie Hedgpath	Effects of Bd metabolite prophylaxis treatment on amphibian host resistance and tolerance to the deadly chytrid fungus Batrachochytrium dendrobatidis	S Kumari	Lipid nanoparticle-encapsulated DNA vaccine induces robust and durable immunity against avian influenza in chickens	Byunghyun An	Genetic characterization of Influenza D Viruses from South Korean calves between 2022 and 2023
261		267		273		279		285				
12:00	Break		Break		Break		Break		Break		Break	
12:15 - 1:30 PM	Closing Comments and Award Presentations - Chicago D (5th)											