

## 2023 Research Day Abstracts

Abstract #	Presenting Author	Title
1	Divyanshi	Assembly of the germ plasm aggregate.
2	Isha Agrawal	Evaluating the efficacy of an educational website designed to improve the knowledge of swine producers and veterinarians on on-farm biosecurity using Google Analytics
3	Selin Aktuna	Prenatal exposure to an environmentally relevant phthalate mixture in female mice alters male ultrasonic vocalization courtship behavior
4*	Mitchell Ashkin	Propofol-sparing and hemodynamic effects of guaifenesin co-induction in sheep
5	Bushra Azhar	Oocyte Spindle Transfer to Enucleated Oocyte
6	Jessica Barazowski	Assessment and Categorization of Medication Errors in a Veterinary Teaching Hospital
7	Patrick Barko	Microbial Indole Catabolites of Tryptophan in Cats with Chronic Enteropathy
8	Rafael Bautista-Rivas	Role of PSTII in PRRSV-CD163 interaction
9	Matthew Berry	Investigating PSMA differential expression in canine uroepithelial carcinomas to aid disease-based stratification and guide therapeutic selection
10+	Mary Bunnell	Prenatal Phthalate Exposure Alters the Pattern of Fetal and Neonatal Endocrine Puberty in a Sex-Specific Manner
11	Nagabhusan Chandrashekar	CD8+ T cell immunogenicity of fungal antigens is associated with their cellular sources
12	Chi Chen	Spatial and temporal clustering of severe acute respiratory syndrome coronavirus 2 in Illinois household cats, 2021- 2022
13	Sijie Chen	RNAs undergo a phase transition from soluble to insoluble upon oocyte maturation
14	Rujuta Chikodikar	Live-partial Sequencing Reveals Temporal Transcriptional Dynamics During Oocyte Maturation
15	Sook Yin Chong	Comparative analysis of the Streptococcus pneumoniae competence regulon induction in vitro versus in vivo during pneumonia-derived sepsis
16+	Maris Daleo	Development and validation of quantitative PCR assay for detection of Spheniscidae alphaherpesvirus 1 in penguins
17	Ashley Deviney	The effects of imidacloprid on gene expression in the mouse ovary
18	David Doub	Single-cell sequencing analysis of foot-and-mouth disease virus attenuation in porcine cell culture
19	Chloe Dupleix	Serum Protein Analyses in Non-Captive Red Foxes (Vulpes vulpes)
20	Hao-Chun Fan	Regulation of Remodeling of Endoplasmic Reticulum during Xenopus Oocyte

<b>21</b>	Endia Fletcher	The Effects of Prenatal Exposure to an Environmentally Relevant Phthalate Mixture on Ovarian Gene Expression in F1 and F3 Female Mice
<b>22</b>	Sarah Graham	Seeking intestinal inflammatory biomarkers in equine feces as a diagnostic modality for colitis
<b>23</b>	Qinan Hu	Remodeling a testis culture system for in vitro spermatogenic toxicity testing and male contraceptive drug screening.
<b>24</b>	Conghui Huang	A modeling study on the within-school and community SARS-CoV-2 transmissions in K8 schools in Illinois
<b>25</b>	Abrar Hussain	Knowledge, Attitudes, and Practices of para-vets about ticks and tick-borne diseases in Pakistan
<b>26</b>	Zane Inman	Diisononyl phthalate decreases expression of Snurf and Abcb4 in the mouse ovary
<b>27</b>	Jie Ji	The role of PTB in regulating intestinal mobility
<b>28</b>	Reni John	Early and distinct metabolic reprogramming of effector Tc17 cells towards mitochondrial respiration generates superior long-lived memory cells
<b>29</b>	Jerome Joseph	Anesthetic management and complications of severe subaortic stenosis balloon valvuloplasty in 12 dogs
<b>30</b>	Sasha Kakkassery	MINFLUX Nanoscopy Reveals Ultra-fine Two-layer Structure of Axial Elements in Synaptonemal Complex
<b>31</b>	Maltesh Kambali	Engineered 1q21.1 and 15q13.3 genomic copy number variants in mice modeling risk factors for neurodevelopmental disorders
<b>32</b>	Shahbaz Khan	Combination of inhibitors of two glycolytic enzymes shows a highly synergistic effect against <i>Cryptosporidium parvum</i>
<b>33</b>	Simone Kirkland	Getting to the meat of the matter: Does <i>Salmonella</i> antimicrobial susceptibility vary with animal use?
<b>34</b>	Heather Kopsco	Current and future habitat suitability models for four ticks of medical concern in Illinois, USA
<b>35</b>	Nitish Kulkarni	Deciphering the orchestration of fungal vaccine induced CD8+ T cell responses by dendritic cells
<b>36+</b>	Shanny H. Kuo	<i>Pseudomonas aeruginosa</i> volatile organic compounds cause airway mucus hypersecretion by activating the AhR signaling and by polarizing toward a M1 macrophage, neutrophils, and type 17 immune responses
<b>37</b>	Joshua Lain	Uncovering the role of a <i>Cryptosporidium parvum</i> thrombospondin protein (CpTSP8) in host cell attachment
<b>38</b>	Kathryn Lauder	Prevalence of Shiga toxin genes in <i>E. coli</i> DNA extracted from finisher pig feces in Illinois, USA
<b>40*</b>	Siqi Li	Immunogenicity characterization of a multivalent vaccine for porcine post-weaning diarrhea
<b>41</b>	Wei Lu	Hepatic SEC16B Deficiency Protects against Hyperlipidemia and Atherosclerosis
<b>42*</b>	Jinrui Lyu	The $\alpha$ 5-selective positive allosteric modulator, MP-III-022, rescues postoperative cognitive impairments in aged mice

43	Meng Ma	Remodeling of the endoplasmic reticulum (ER) during oocytes maturation
44	Behrokh Marzbanabbasabadi	Sexually Dimorphic Change in Kisspeptin Neuron Population by Neonatal Exposure to Estrogen
45	Jacob May	A Well-Defined Method for Mouse Sperm Cryopreservation
46	Daryl Meling	Genomic Imprinting and the Effects of Puberty on Maternally and Paternally Inherited Allele Expression in the Anterior Periventricular Nucleus of the Hypothalamus
47	Ina Mersich	Impact of Decreased Circulating Red Cell Mass on Viscoelastic Coagulation Results in Healthy Horses
48	Vasiliki Mourikes	The effects of imidacloprid and its bioactive metabolite desnitro-imidacloprid differentially affect ovarian antral follicles in culture
49	Rajasekar Nagarajan	Propofol attenuates surgery-induced cognitive impairment in aged mice via $\alpha 5$ - GABA-A receptors
50+	Maria Nava	Role of <i>Cryptosporidium parvum</i> calcium-dependent protein kinase 5 (CDPK5) in parasite virulence and transmission
51+	Alison Neff	Mono-2-ethylhexyl phthalate alters the expression of oocyte-derived factors and functional targets in ovarian antral follicles
52	Ka Lam (William) Nguyen	<i>Bacteroides intestinalis</i> DSM 17393 modulates goblet cell differentiation and enhances mucus barrier function
53+	Ana Nobrega	Is it really expired? Comparisons of NEW and EXPIRED VCM VET™ Viscoelastic Coagulation Testing Cartridges Using Horse Blood
54	Myung Whan Oh	Time-resolved RNA-seq analysis upon pneumococcal infection in mouse to decipher the pneumococcal competence development in vivo
55	Ji Eun Oh	Conversion of ESR1- to ESR2- expressing cells in the granulosa cell lineage
56	Maryanna Parker	Toward an Epigenetic Classification of Human Testicular Germ Cell Tumors (TGCTs): Preliminary Assessment of Histone H3-K27 Trimethylation According to TGCT Subtype, Aggressiveness, and Response to Therapy.
57	Aimee Pepper	Validating a loop-mediated isothermal amplification assay for the detection of SARS-CoV-2 in animals
60	Valentina Poggi	Staging of the seminiferous cycle of the canine using H&E, PAS, and SP-10 antibody staining
61	Brianna Salgado	Deletion of CD163 domain five protects pigs from infection with porcine reproductive and respiratory syndrome virus (PRRSV) infection
62	Ramses Santacruz Marquez	Long-term dietary di-(2-ethylhexyl) phthalate exposure affects ovarian follicle populations and hormone levels in mice
63*	Amanda Seelman	Receptor tyrosine kinase target validation and combinatorial strategies to circumvent small molecule therapeutic resistance in canine metastatic insulinoma
64	Jaishree Sharma	Myeloid-specific ablation of <i>Cblb</i> is necessary to bolster defense against pulmonary fungal infection

65	Ruicheng Shi	Intestinal SEC16B modulates obesity by regulating chylomicron metabolism
66	Lew Shi Qian	Airway Protein Citrullination by the Pseudomonas aeruginosa Pyocyanin
67	Adam Tatnall	A Pilot Study Using Swine Influenza A Virus as a Model to Evaluate of On-Farm Testing
68*	Ye Tian	Membrane phospholipid remodeling modulates nonalcoholic steatohepatitis progression by regulating mitochondrial homeostasis
69*	Yung-Tien (Yvette) Tien	Unraveling the “lytic switch” switch from latency to reactivation of Marek’s disease virus (MDV)
70	Adam Tonks	Forecasting West Nile Virus by Harnessing Spatial Dependence in Irregularly Sampled Geospatial Data: An Application of Graph Neural Networks
72	Ipshtita Upadhyay	Immunization with a polyvalent multiepitope fusion antigen (MEFA) protects against Vibrio cholerae challenge in an adult rabbit intestinal colonization model and an infant rabbit passive protection model
73	Kathrine Van Etten	Role of glycoprotein C in replication of varicella-zoster virus in an ex vivo skin organ culture model
74	Janice Viary	Inhibition of cellular glutamate efflux as a novel strategy to curb canine hemangiosarcoma proliferation and survival
75	Shuangqi Wang	A novel method for studying chromatin conformation between and along sister chromatids in mammals.
76	Yuexi Wang	PTBP1 is indispensable for male fertility through controls Sertoli cell cytoskeleton
77	Muxiao Wang	Functional Significance of Astrocytic Calcium Activity in the Mouse Dentate Gyrus
78	Huai Xu	Characterization of chicken complement C3/C4 binding proteins
79	Lufan Yang	A neonatal piglet model reveals interactions between nasal microbiota and viral pathogenesis
80	Setyo Yudhanto	Spatial analysis approach on Illinois small animals veterinarian knowledge and attitudes toward antimicrobial use practices affecting the selection of antimicrobial resistance in dogs and cats
81	Sohaib Zafar	Identification of the nuclear localization and export signals of pUL47 and their roles in replication and transmission of Marek’s disease virus

+ Poster Competition/Lightning Talks

\* Oral Presentations – No poster presented