

# 2024 PVM RESEARCH DAY

OMICRON CHAPTER OF PHI ZETA 

## LISTING OF POSTERS

PRIZES AWARDED IN THE FOLLOWING CATEGORIES:

- BASIC SCIENCES
- CLINICAL/APPLIED SCIENCE
- DVM

1ST PLACE - \$200

2ND PLACE - \$100

### BASIC RESEARCH

#### 1. Rachel Stingel

*Title:* Excitotoxicity and Acrolein Damage Caused by Spinal Cord Injury - The Role of GLT-1

#### 2. Yanru Ji

*Title:* Developing a Vascularized Neuroimmune Organoid Model for Studying Sporadic Alzheimer's Disease and Drug Discovery

#### 3. Marwa Alashimi

*Title:* An Adenoviral Vector-Based Combinational COVID-19 Vaccine Expressing Spike, Membrane, and Nucleocapsid Proteins Provides Enhanced T-cell Response and Protection Against SARS-CoV-2

#### 4. Ying Cheng Chen

*Title:* Evaluating Human IL27-Expressing Oncolytic Adenovirus for Treating Prostate Cancer

#### 5. Oluwabunmi Oladele

*Title:* Isolation, Culture, and Characterization of Peripapillary Scleral Fibroblasts, Lamina Cribrosa Cells, and Optic Nerve Head Astrocytes in Normal and Glaucomatous Canine Eyes

#### 6. Jeanna Blake

*Title:* Identification of a Novel Genetic Variant in Cats with Ichthyosis

#### 7. Wen-Chien Wang

*Title:* Development of a Nonhuman Adenoviral Vector-based Universal Influenza Vaccine

### BASIC RESEARCH CONT.

#### 8. Chayan Sharma

*Title:* Genomic and Proteomic Profiling of *Acanthamoeba* Isolates

#### 9. Rodrigo Mohallem Ferreira

*Title:* Age-Dependent Changes in the Molecular Signatures of Mouse Brain Elucidated by Multi-Protease Proteomic and Phosphoproteomic Analyses

#### 10. Punyatoya Panda

*Title:* Age-Dependent Changes in Mouse Brain and Liver Lipidomes

#### 11. Martina Dalolio

*Title:* Sleep Pattern and Seizure Susceptibility Analysis in a Mouse Model of Repetitive Blast Traumatic Brain Injury

#### 12. Niloufar Ghahari

*Title:* Innate Immunity Modulates Outcome of *Clostridioides Difficile* Infection in Mice

#### 13. Shatha Mufti

*Title:* Investigation of Changes in Neuronal Network Dynamics and Astrocyte Reactivity Post-Traumatic Brain Injury Utilizing the Novel TBI-On-A-Chip Model: An Electrophysiological and Morphological Study

#### 14. Kerstin Muner

*Title:* MicroRNAs Differentially Expressed in Lung Granulomas of Autopsied Human Patients with Tuberculosis and Coinfection with Tuberculosis and HIV-1

### BASIC RESEARCH CONT.

#### 15. Laura Machado Ribas

*Title:* Mirnas as Potential Biomarkers for Arrhythmogenic Right Ventricular Cardiomyopathy in Boxer Dogs

#### 16. Daniela Castillo-Perez

*Title:* Differences in the Biological Properties of Aluminum-Based Vaccine Adjuvants

#### 17. Grace Mulia

*Title:* Developing an Interleukin-27 Targeted Gene Therapy to Reduce Inflammation in Acute Respiratory Distress Syndrome

#### 18. Diprasom Das

*Title:* Innate Immune Responses to an Emerging Fungal Pathogen *Candida auris*

#### 19. Dingxun Wang

*Title:* PRMT5 Inhibition Impaired DNA Damage Repair in MTAP-Deficient MPNST

#### 20. Garrett Bryak

*Title:* Yeast and Filamentous *Candida auris* Stimulate Distinct Immune Responses in the Skin

#### 21. Abishek Balakumar

*Title:* Cell Aggregation in *Candida auris* Modulates Fungal Colonization and Host Immune Responses in the Skin

#### 22. Casey Adam

*Title:* Decoding Electrical Signals Between Neurons: An Approach to Analyze Voltages from Neuronal Firing

# LISTING OF POSTER CONT.

## BASIC RESEARCH

### 23. Gabriel Harris

*Title:* Investigating the Potential for STING Antagonist Nanoencapsulation to Induce an Anti-Inflammatory Phenotype in Macrophages

### 24. Madeline Coffey

*Title:* Discovery of Genetic Variant Associated with Short Spine Syndrome in a Dog

### 25. Ziyu Dong

*Title:* Characterization of Piezo Genes Expression in Zebrafish Early Embryogenesis

### 26. Nayan Bhowmik

*Title:* Webbed Feet in Dogs: Truth or Fallacy?

### 27. Samuel Leeds

*Title:* CX3CR1 Plays a Crucial Role in Placental Development and Immune Cell Recruitment

### 28. Vishnu Manikantan

*Title:* Differential Gene Expression in *Baylisascaris Procyonis* Infective Larvae and Adults

### 29. Jhon Martinez

*Title:* Mechanistic Investigations of Neuronal Network Activity Changes Utilizing an In Vitro Model of Blast-Induced TBI

### 30. Annapoorani Jegatheesan

*Title:* Does *Sarcocystis Neurona* Dense Granule Protein, SnGRA9, Manipulate the Host Cell?

### 31. Sung Jun Park

*Title:* Transient and Ectopic Expression of a Potassium Channel in Somite Causes Elongated Fins in Zebrafish

### 32. Nikolaos Neokosmidis

*Title:* Placental Immune Responses During Toxoplasmosis

### 33. Faith Scott

*Title:* Identification of Biomarkers of Aging by Targeted Proteomics

## BASIC RESEARCH

### 34. Abhishek Datta

*Title:* Differential Adaptive Immune Response upon Intradermal Injection with *C. auris* and *C. albicans*

## CLINICAL/APPLIED RESEARCH

### 35. Ellen Kuerbitz

*Title:* Characterization of Gene Expression Signatures in the Urine of Dogs with Invasive Urothelial Carcinoma

### 36. Jordan James

*Title:* Complications and Putative Risk Factors for Cecal or Colonic Surgery in Dogs: 79 Cases (2002-2015)

### 37. Eva Kao-Whitesell

*Title:* Oxidative Stress Induces Phosphatidylserine Externalization in Canine Erythrocytes *In Vitro*

### 38. Conor Williams

*Title:* Analysis and Quantification of Mutations in Circulating Cell-Free DNA in the Plasma of Dogs with Invasive Urothelial Carcinoma

### 39. Jillain Grantz

*Title:* Evaluation of the Plasma Oxylinin and Endocannabinoid Profile and the Platelet and Plasma Proteome in Postpartum Dairy Cows Experiencing Elevated Systemic Inflammation

### 40. Natnicha Taechachokevivat

*Title:* Associations of Plasma Haptoglobin in the First Week Postpartum with Disease and Culling in Holstein Dairy Cows

### 41. Satoshi Haginoya

*Title:* Ultrasonic Doppler as a Guide for Feline Peripheral Arterial Catheterization

### 42. Brad Lytle

*Title:* Comparison of Low and High-Pressure Balloon Valvuloplasty in Dogs with Severe Pulmonary Valve Stenosis

## CLINICAL/APPLIED RESEARCH

### 43. Samrin Habbani

*Title:* Cervical Cancer Screening Based on p16INK4a Protein

### 44. Chenyang Lu

*Title:* Development of a Novel Diagnostic Method, Loop-Mediated Isothermal Amplification (LAMP), for *Balamuthia Mandrillaris*

### 45. Gada Awdalkreem

*Title:* Targeting Folate Receptor- $\beta$  (FR $\beta$ ) in Immunosuppressive Cells, MDSCs & TAMs, in Prostate Cancer TME Induces CD8+ T cell Infiltration and Promotes Antitumor Immunity

### 46. Dielson Vieira

*Title:* Unveiling the Impact of Novel Antibiotics on Bacterial Lipid Dynamics to Detect Early Changes that Predispose to Antimicrobial Resistance

### 47. Kate Spies

*Title:* Clinical Presentation and Short-Term Outcomes of Dogs  $\geq 15$  kg with Extrahepatic Portosystemic Shunts

### 48. Andrew Hopkins

*Title:* Antibiotic Prescriptions Amongst a Cohort of US Golden Retrievers 2012-2022

### 49. Carlos Mendez Valenzuela

*Title:* Radiotherapy for Canine Apocrine Gland Anal Sac Adenocarcinoma: Survival Outcomes and Side Effects of a Palliative Treatment of 20Gy in 5 Consecutive Fractions Protocol

## DVM RESEARCH

### 50. Mollie Madigan

*Title:* Analyzing Mouse Preference in Environmental Enrichment Using Behavioral and Physiological Parameters

# LISTING OF POSTER CONT.

## DVM RESEARCH

### 51. Charlotte Peterkin

*Title:* Non-invasive Measurement of Skin Sympathetic Nerve Activity in Dogs with Naturally Acquired Arrhythmias

### 52. Sarah Kelley

*Title:* Does Host Stress Influence the Virulence of *Clostridioides difficile*?

### 53. Sharon Meoli

*Title:* Antigenic Evaluation and Proteomic Profiling of Excretory-Secretory Proteins of *Sarcocystis Neurona*

### 54. Tara Paalberg

*Title:* Creation of a Method to Cast and Define the Vasculature of the Rat Larynx

### 55. Frank Leitgeb

*Title:* Using Filters in the Sump for Monitoring Health of Laboratory Zebrafish

### 56. Lea Gamez Jimenez

*Title:* Immunocontraception: Zona Pellucida Antigens with AS03-like Adjuvant Decreased Fertility in Mice

### 57. Lisa Hoard

*Title:* Optical Coherence Tomography of Optic Nerve Head in Dogs with Open Angle Glaucoma: Correlation with Axon Counts

### 58. Zack Sayre

*Title:* The Effect of Femur Angle During Computed Tomography Scan on Three-Dimensional Model Compliance

## NON-COMPETITIVE CATEGORY

### 59. Christy Buckley

*Title:* Hepatic Parenchymal Hypoattenuation in Dogs with Diabetes Mellitus on CT Consistent with Hepatic Steatosis

## DVM RESEARCH

### 60. Sushma Gude

*Title:* Design and Evaluation of a Novel Single-Dose, Sustained-Release, Immunocontraceptive Vaccine for Smarter Global Wildlife Management

### 61. Olivia Brancato-Buentello

*Title:* Investigating the Efficacy of a Novel Nanoparticle-STING Adjuvant in a Melanoma Mouse Model for Immunotherapy

### 62. Dem Santiago

*Title:* A Role for the Bacterial Amyloid Protein CsgA in Cross-Seeding Alpha-Synuclein Aggregation

### 63. Shenell Brown

*Title:* The Development of Potential Novel Anti-Cancer Therapeutics to Treat Advanced Prostate Cancer

### 64. Samantha Ruiz

*Title:* Rare Endosome-ER Fusion Phenotype in EGFRvIII Transfected Cells

### 65. Kyra Forsyth

*Title:* Characterization of Flavivirus prM Maturation Cleavage

### 66. Alexander Kacher

*Title:* Dissecting the Molecular and Functional Heterogeneity of Fibro-Adipogenic Progenitors in Different Fascia Connective Tissues in the Skeletal Muscle

### 67. Nicole Gibbs

*Title:* Hypoxia-Inducible Factor 1 $\alpha$  Expression in Canine Urothelial Carcinoma

### 68. Alec Rheinheimer

*Title:* Macrocirculation Effect on Capillary Beds in Equine Musculoskeletal Tissues

## NON-COMPETITIVE CATEGORY

### 69. Erika Schroeder

*Title:* Impact of *Clostridium difficile* Toxins on Human Colonic Epithelial Cells

### 70. Xinqi Guo

*Title:* An In Vivo Multicell Model to Study Human Microglia Phenotypes

### 71. Kyle Barron

*Title:* Characterization of Maternal Care in Dogs in a Small-Scale Breeding Facility



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