



Health Sciences

Research Day

April 26, 2024

Posters:

1. Emma Hornick TRAF3 regulates STAT6 activation and Th2 differentiation by modulating the phosphatase PTP1B
2. Kenda Steffensmeier What's Gender Got to Do with It: Accounting for Differences in Incident Guideline Discordant Prescribing for PTSD Among Women and Men Veterans
3. Deng Guo Angiotensin II regulate primary cilia through AT1aR carboxyl terminus and cyclic AMP pathway
4. Matthew Harper Enhanced attention in rats following blast-induced traumatic brain injury
5. Paige Richards Novel Ebola virus model: Human skin explants robustly support EBOV infection and serve as a highly relevant ex vivo model
6. Yuying Zhao Mitochondrial AKAP1 is Necessary for Obesity- and Angiotensin II-induced Hypertension
7. Chakrapani Vemulawanda CD4 T-cell-intrinsic IL6, but not T-cell-intrinsic IL1 β , is required for Th17 differentiation and acquisition of effector resistance to immune suppression
8. Michelle Mengeling Comparing American Indian and Alaska Native (AI/AN) non-AI/AN Women Veterans: Sociodemographics, Military Characteristics, and VHA Healthcare Utilization
9. Adriana Della Pietra Targeting noradrenergic tone to compensate the glymphatic dysfunction in post-traumatic headaches after mild traumatic brain injury
10. Daniel Sands Exploring the Role of RNA-binding Protein YTHDC1 in Latent HIV-1 Reactivation
11. Christie Penniman Lrrc2 preserves mitochondrial ATP production in diabetic muscle and promotes adaptations to exercise
12. Alessandra Pratt Postpartum Mood and Anxiety Disorder Rates: Women Veterans' Self-reports and Men Veterans' Reports about their Partners
13. Virginia Willour Identification of Demographic, Clinical, and Genetic Profiles for Suicidal Behavior in US Veterans
14. Jinhua Xiang Yellow Fever Virus genome-derived RNA reduces the release of infectious virions and inhibits TCR-mediated IL-2 release
15. Jui-Kai Wang Beyond Retinal Thickness: Textural Changes Precede Retinal Thinning in Acute Non-Arteritic Ischemic Optic Neuropathy (NAION)
16. Kai Vorhies RAIDAR: A tool for examining neurons through their connections
17. Lorellin Durnell Measles virus causes mitochondrial damage and cGAS activation in primary human airway epithelia
18. Andrew Sullivan Obesity Associated SNP rs1421085 Alters IRX3 Expression and Hypothalamic Function
19. Chase Larsson Enhanced Cued Fear Discrimination and Foraging During Dietary Protein Restriction
20. Michelle Tamplin Decreased cerebral blood flow as a predictor of radiation-induced cognitive decline

21. Mary Vaughan Sarrazin Impact of private sector readmissions on hospital performance metric for 30-day readmission after inpatient surgery in VHA hospitals
22. Stephanie Clark A measles virus membrane fusion apparatus trailblazes direct cell-to-cell spread in airway cells
23. Weiyang Zhao A Novel DSG2 Knock-in Model for Arrhythmogenic Right Ventricular Cardiomyopathy (ARVC)
24. Grace Ciampa Examining the Function of a Novel Protein in the Cardiac Junctional Membrane Complex
25. Michaela Zimmer Healthcare Personnel Interactions with Floors and Pathogen Transmission in Long-Term Care: A Qualitative Exploration
26. Samuel Connell CD4 T cells from mice with alopecia areata express an effector like phenotype and can transfer disease
27. Aubrey Chan Acid-sensing Ion Channels Mediate Distinct Neural and Behavioral Responses to Interoceptive Carbon Dioxide
28. Michael Crawford Human Th17 Cells of Different Strokes: Effector Resistance to Suppression Determined by a TG FB1-containing Differentiation Milieu and Resultant IFN γ Downregulation
29. Alexis Ramos Hypoxia-associated mRNA epitranscriptomic modifications block the translation of antigen processing machinery
30. Misty Perez Regulation of Alcohol Consumption by FGF21
31. Amey Holmes Million Veteran Program: A Partnership with Veterans
32. Amy O'Shea A Novel Short-Term Staffing and Telehealth Program in a Post-COVID-19 Pandemic World
33. Miriam McDonough Aldosterone-mediated sodium appetite requires mineralocorticoid receptor expression by hindbrain HSD2 neurons
34. Azaj Ahmed Prediabetes increases platelet activation via SOD2 in young and middle-aged Veterans
35. Mohanraj Sadasivam DLL3-targeted $\gamma\delta$ BiTEs for SCLC Treatment: A Preclinical Exploration
36. Mark Yorek Skeletal muscle disuse atrophy: protection by omega-3 polyunsaturated fatty acids
37. Diva Kerkman A Case Study Data Governance for Sharing and Access to Real-World Data at Ulowa Healthcare
38. Stephanie Nettleton Postpartum depressive symptom severity among child-bearing Veterans: Examining associations of environmental indices
39. Israel Wipf The Role of Lipid Droplets and ATGL During In Vivo Collective Cell Migration
40. Michihiko Goto Personalized Antibiogram to Predict Antimicrobial Susceptibility Results of Escherichia coli Clinical Isolates: A Machine-Learning Pilot Study at the US Veterans Health Administration
41. Ergun Uc Aerobic Fitness is Associated with Better Cognitive and Motor Function in Mild Moderate Parkinson's Disease
42. Michael Ohl Mortality among Veterans admitted to VA vs. community hospitals for Covid-19
43. Piper Wenzel Stensen's Duct Dynamic Anatomy Assessed with Sialography
44. MM Hasibuzzaman In vitro characterization of cellular responses elicited by endosomal TLR agonists encapsulated in Q β virus-like particles
45. Heath Davis The Iowa Heath Data Resource (IHDR): an Innovative Framework for Transforming the Clinical Health Data Ecosystem at the University of Iowa
46. Nandita Raikwar Furosemide-mediated Suppression of p38 MAPK Signaling Abrogates Cholinergic-mediated Salt Sensitive Hypertension in Young Spontaneously Hypertensive Rats
47. Eric Wai Him Tsang TMS-induced auditory evoked potentials can be effectively masked: Evidence from intracranial EEG
48. Carol Gorney Utilizing Obstetric Maternity Simulators to Teach Prenatal Exam Skills
49. Agatha Greenway Chemogenetic Inhibition of the Posterior Thalamus: Effects on Migraine-like Phenotypes in Mice
50. Corey Parlet Protective immunity against recurrent Staphylococcus aureus skin infection requires exposure to agr-regulated virulence factors and robust neutrophil responses
51. Edward Linton Laser Speckle Flowgraphy Reveals Widespread Reductions in Ocular Blood Flow in Non-exudative Age-related Macular Degeneration Independent of Ocular Perfusion Pressure
52. Julie Jacobs MicroRNA-dependent central regulation of blood pressure and vascular function
53. Wade Pingel The Effect of Dietary Interventions on Inflammatory Biomarkers Among People with Multiple Sclerosis: Systematic Review
54. Aidan Drozdick Antiviral impact of the mucinase SmE in TIM-1 mediated Ebolavirus infection

55. Heather Davila Rural-Urban Differences in Home Health Service Utilization in the Veterans Health Administration
56. Kshitija Kale Transforming growth factor-beta 1 (TGF- β 1) promotes effector T-cell resistance in both "pathogenic" and "non-pathogenic" CD4+ T-helper 17 cells
57. Julia Klesney-Tait Triggering Receptor Expressed on Myeloid Cells-1 Promotes Allergic Airway Inflammation and Eosinophil Function
58. Maresi Berry-Stoelzle What comes after being named Emergency Contact: experiences of current and potential surrogate decision makers
59. Ali Khan PI3K regulates TAZ/YAP and mTORC1 signaling in sarcomas
60. Leonid Zingman Cardiac Conditioning Induction by Paced Simulation of Exercise Heart Rate
61. Jeremy Nelson Impact of Removing GRE Requirement on Physician Assistant Applicant Pool
62. Corinne Bovee Perilipin 5 S155 phosphorylation may impact insulin signaling in the liver
63. Anna Klein Efficacy of Diet on Quality of Life in Multiple Sclerosis (EDQ-MS): Study Protocol for A Randomized Controlled Trial
64. Mikayla Gibson Contributing factors for pediatric bystander lawn mower-related injuries: A qualitative study
65. Benney Endoni MIRO1 promotes mitochondria ER contact sites formation in VSMCs during G1/S
66. Hans-Joachim Lehmler Environmental Health Sciences Research Center
67. Carolyn Turvey Veteran Considerations in Choice of VA and Community Providers for Healthcare
68. Kyp Oxley Biological implications of partial loss of TRAF3 in aging B cell
69. Emmanuel Aladenika Deleterious Novel Variants are Identified with Whole Genome Sequencing of Africans with Orofacial Clefts
70. Adam Rauckhorst Transamination networks contribute to hypoxic succinate production
71. Lindsey Knake A pilot study evaluating the sole use of continuous ventilator and vital sign data to predict extubation success in neonates
72. Subhash Gupta Carbonic anhydrase 4 inhibition attenuates synaptic rearrangements evoked by oxycodone withdrawal in nucleus accumbens and drug seeking behavior
73. Peter Lehman Exploring the role of Early-Life Gut Microbiota on Immune Responses in Experimental Autoimmune Encephalomyelitis
74. Sudeep Ghimire Blautia, a gut bacteria enriched in multiple sclerosis patients, exacerbates disease in a mouse model of multiple sclerosis through induction of pro-inflammatory environment: studies using Pseudo-Germ-Free mice
75. Rachel Fitzjerrells Machine learning approach identifies dysbiotic oral communities in multiple sclerosis
76. Stephanie Peterson Isoflavone metabolite-mediated estrogen receptor signaling in CD8 T-cells may ameliorate disease in a mouse model of Multiple Sclerosis
77. Ti-Ara Turner Investigating disease susceptibility in the absence of IL-17A and IFN γ in a humanized mouse model of CNS demyelinating disease
78. Cinthia Hudachek The circulating microRNA signature in human visceral leishmaniasis
79. Alex Pauls Psychotropic Medication Use and Polypharmacy Among Children and Adolescents Initiating Intensive Behavioral Therapy for Severe Challenging Behavior
80. Qiaolin Hu Cell type differences feature a novel regulatory mechanism of human cytomegalovirus late promoter transcription
81. Nathan Mohar SMAD7 variants as genetic modifiers and therapeutic targets in LMNA-associated muscular dystrophy
82. Jacilara Alexandrino Conceicao Transcriptomes of Neutrophils from Individuals with Symptomatic or Asymptomatic Leishmania braziliensis Infection.
83. Connor Wilhelm B cell-mediated antigen presentation is required to induce functional pathogenicity of CD4 T cells in a proteolipid protein mouse model of multiple sclerosis
84. Allison Rux Multiple Sclerosis and Optic Neuritis: Effect of a Phytoestrogen Diet on Visual Impairments
85. Srijia Manchkanti Estrogen Therapy Associated with Greater Risk of Cardiovascular Kidney Metabolic Syndrome and Thrombosis in Cisgender Women but Spares Transgender Women A Global Retrospective Study
86. Lydia Yang Improvements in Documentation and Billing of Ophthalmology Diagnostic Testing

87.	Nicole Johnson	Providers' Role in Building Patient Buy-In for Treating Chronic Pain and PTSD: Qualitative Findings from Rural Veterans' Perspectives on their Interactions with Providers
88.	Brittany Todd	Microglial specific type I Interferon signaling mediates antigen presentation and neuronal loss following traumatic brain injury
89.	Erin Balkenende	Tracking Implementation Strategies in Real-World Settings: VA Office of Rural Health Enterprise-Wide Initiative Portfolio_2
90.	Emily Adelizzi	ARHGAP29 in ectoderm-derived cells is required for development of the palate
91.	Lalit Gautam	Notch inhibition influences the activity of Multicilin in regulating cilia assembly and function in human airway epithelial cells
92.	Kevin Bollinger	Novel cell wall crosslinking enzymes in <i>Clostridioides difficile</i> produce essential 3-3 crosslinks
93.	Nanle Gusen	Identifying spiritual distress and spiritual support resources among multiple trauma patients with impaired mobility
94.	Yu Sun	iPSC models of pancreatic development in the ferret
95.	Rachel Crawford	Mitochondrial energetics- and redox-related mechanisms underlying toxicity of monoamine oxidase in cardiomyocytes
96.	Benjamin Griffin	Blood Pressure, Readmission, and Mortality Among Patients Hospitalized With Acute Kidney Injury
97.	Camilla Hippee	Measles virus co-opts epithelial-to-mesenchymal transition and live cell extrusion to exit human airway epithelia
98.	Tyler Atagozli	Preserving Graft-Versus-Tumor Reactivity by Constitutively Active Stat6 Protein after Bone Marrow Transplantation
99.	Natalie Jarvis	Dietary effects on the course of visceral leishmaniasis in a mouse model
100.	Daniel Dagle	Predictive Modeling Using Continuous Vital Sign Monitoring Can Identify a Hemodynamically Significant Patent Ductus Arteriosus in Preterm Neonates
101.	Marshal Jahnke	Acid-Sensing Ion Channels Contribute to Alcohol Tolerance
102.	Emory McManimon	Cell-Intrinsic STAT6 Signaling Is Essential for T Cell-Stimulated Immune Regulatory Cytokine Production After Helminth Infection
103.	Kyleakin Helm-Kwasny	Upregulation of fatty acid synthesis genes in the liver caused by exposure to the persistent environmental toxicant, PCB52
104.	Andrea Strayer	Neighborhood Socioeconomic Disadvantage is Associated with Mortality in Older Veterans Following Spine Surgery
105.	Zili Luo	Sustained Serpina3n upregulation following traumatic brain injury
106.	Juan Rodriguez	Regulation of IDE-mediated hepatic insulin clearance by Nitrosative stress
107.	Rebecca Taugher-Hebl	ASIC1A regulates conditioned flight behavior
108.	Tony Pomales	A qualitative study of staff perceived need for and barriers to adopting a telehospitalist-led intervention to improve inpatient management of alcohol withdrawal syndrome at a rural VA hospital
109.	Ayushi Mittal	Unravelling the role of Unc119b in the context of Type II Diabetes
110.	Amy Zeller	Physical Function Correlates Better than Mental Health for Provider- and Patient-Reported Outcomes in Patients with Soft Tissue Sarcoma
111.	Carlyn Haas	Attitudes and self-efficacy regarding breastfeeding among women with multiple sclerosis: a cross-sectional survey
112.	Angela Smith	Exploring the Role of Descending Dopamine Pain Modulation in the Transition to Chronic Pain
113.	Erik Zorrilla	Cannabinoids and Migraine
114.	Brianna Wright	Care-team needs assessment for telehealth video adoption in two divisions with the Department of Medicine (DOM) at UIHC
115.	Tate Neff	The Role of Micropeptide BNLN in Cystic Fibrosis Related Diabetes
116.	Mohit Upadhye	CD8+ T Cell-Mediated Modulation of Dendritic Cells Prevents Experimental Autoimmune Encephalomyelitis
117.	Trevor Butler	Leaving the Lamina Terminalis: Investigating Thirst Circuitry Downstream of the MnPO
118.	Emma Thayer	Predominantly unilateral laryngomalacia in infants with unilateral vocal fold paralysis
119.	Ben Calvert	Differential regulation of immune functions by highly effective CFTR modulators in THP-1 derived macrophages

120.	Emily Hagan	Effects of neonatal gonadal hormones on Autism Relevant Phenotypes
121.	Jacob Schroeder	Immunoembolization for Ocular Melanoma with Hepatic Metastasis
122.	Emily Liu	T3D spheroid modeling of lymphangioliomyomatosis
123.	Kiarash Salari	SETDB1 promotes tumorigenesis in endometrial cancer through suppressing anti-tumor immune response and increasing proliferation
124.	Andrew Kain	BLOCK OF GLUD1R BY NASPM IS MODULATED BY α 1-AR ACTIVITY
125.	Joshua Carrizales	Deep Learning-based Artifact Correction in Lung 4DCT
126.	Amelia Hurley-Novatny	Matrix-bound Nanovesicles in the treatment of post-traumatic osteoarthritis
127.	Pravada Quiñones-Labernik	Investigating post transcriptional regulation through nonsense-mediated mRNA decay
128.	Shubha Murthy	IGFBP3 regulates airway basal cell stemness and airway regeneration
129.	Kimberly Schroeder	Optimization of Photon-counting CT Protocols for Lungs
130.	Patricia Groves	Nurse judgments of credibility, importance, and likelihood of reporting inpatients' safety concerns: A factorial survey experiment
131.	Brianne Zbylicki	Investigating Glycolipid Synthesis in Clostridioides difficile
132.	Brandon Schickling	Betamethasone Prevents Preeclamptic Phenotypes By Upregulating Regulator Of G Protein Signaling 2
133.	Maddison Lensing	Expansion of regulatory T Cells restrains pathogenic CD8 T Cells in a murine model of Alopecia Areata
134.	Brandon Schickling	The NADPH Oxidase 4 Contributes to Heart Failure with Preserved Ejection Fraction
135.	Katsuhiro Murakami	Muscle-derived FGF21 negatively regulates bone homeostasis in DMD via promoting bone marrow adiposity
136.	Silvana Velasquez Marin	Evaluation of the therapeutic effects of matrix-bound nanovesicles in a Duchenne muscular dystrophy mouse model
137.	Kevin Knoernschild	Developing an Improved Lung Cancer Screening Method Using Lung Nodule and Peri-Nodular Radiomics
138.	Donna Santillan	Developing Infrastructure to Facilitate Women's Health Research
139.	Natany da Costa Ferreira Oberfrank	Uncovering Patients' Motives for Heart Failure Symptom Self-Management: Content Validation of a Novel Questionnaire
140.	Colin Clark	Cardiac Sodium Current Composition and Remodeling in Murine Ventricular Myocytes
141.	Miranda Schene	Assessing the roles of aromatic amino acids in a human cardiac potassium channel
142.	Emily Dappen	Cortical Processing of Speech During Delirium
143.	Willian Mercer	Glutamatergic projections from the Basolateral Amygdala (BLA) to the Nucleus Accumbens (NAc) are known to be critical in reward seeking behaviors and valence assignments in rodents
144.	Priyankakailas Newase	Pseudotyping lentiviral vectors with Orthomyxoviridae envelopes to overcome barriers of gene delivery in airway epithelial cells
145.	Natany da Costa Ferreira Oberfrank	Motivation for cardiovascular disease self-management: A systematic review of instruments' psychometric properties
146.	Qian Dong	Cholera toxin induced intestinal fluid secretion requires CFTR adenylate kinase activity
147.	Seyed Soheil Hosseini	Automatic Assessment of Pulmonary Arterial- to Lung Size Mismatch from Contrast-Enhanced Dual-Energy CT Scans of Smokers with COPD
148.	Ahmad Al Saneh	Characterization and Therapeutic Restoration of Sodium Channel Models for Autism Spectrum Disorders
149.	Angela Shanahan	The Relationship Between Perceptions/Beliefs, Motivation, and Fall Risk Self-Management: An Integrative Review
150.	Erik Quiroz	RB transcriptional corepressor-like 2 depletion increases self-renewal and sustains differentiation capacity in primary human airway epithelial cells
151.	John Barsotti	Department of Internal Medicine faculty perspective regarding Diversity, Equity, Inclusion and Belonging issues: Results of a departmental survey
152.	Lisa Weimar	Does Patient-reported Health Status Influence Older Adults' Perceptions of Elderspeak as Respectful or Patronizing?
153.	Cristina Dix	Developing a murine hair follicle organ culture model to study hair follicle immune privilege

154.	Mohammad Heidarian	Exhausted CD8+ T cells undergo lasting numerical and functional loss, and altered differentiation trajectory following whole-body irradiation
155.	Betty Mallen	Age Friendly Systems: Implementing the 4M's in Rural Iowa
156.	Tao Xu	Clinical Associations between Peptide Receptor Radionuclide Therapy with Renal and Hematological Toxicities and Survival in Patients with Neuroendocrine Tumors: An Analysis from Two U.S. Medical Centers
157.	Arya Zandvakili	Time-to-Treatment of Hepatitis C Among Patients with Substance-Use Disorders: A Comparison of Direct Treatment in Addiction Medicine Clinic Versus Referral to Hepatology Clinic
158.	Logan Dawson	Mechanisms Coupling Mechanotransduction and Metabolism
159.	Arman Hlas	The Acidity of Normal Saline Irrigation Impairs Chondrocyte Health by Promoting Oxidative Stress
160.	Brenna Powers	Identifying Candidate Drugs to Treat Rare Types of Muscular Dystrophy
161.	Arman Hlas	Incision Closure Following Direct Anterior Hip Arthroplasty: Is Stapling or Suturing Superior?
162.	Xiangbing Meng	Identifying the molecular mechanisms underlying progesterone receptor downregulation in endometrial cancer
163.	Reza Amouzandeh	3D-Printed Silk Fibroin Tissue Scaffolds Manipulated by Salt Ions
164.	Jeydith Gutierrez	Treatment patterns for Alcohol Withdrawal Syndrome in Veterans admitted to Veteran's Health Administration Hospitals: A Chart Review
165.	Elizabeth Barroso	The Role of GSNOR in Bone Marrow Mesenchymal Stem Cell Differentiation
166.	Anjali Sharathkumar	Romilostim for treating children with severe aplastic anemia and myelodysplastic syndrome
167.	Sahebgowda Sidramagowda Patil	Role of Lysosomal Enzyme GILT on Maintaining Bone Marrow Adipose Metabolic Homeostasis in Obesity
168.	Akansha Jain	Mitochondrial uncoupling proteins protect human airway epithelial ciliated cells from oxidative damage
168.	Paul Holdefer	The University of Iowa Addiction and Recovery Collaborative's North and South Bridge Projects
170.	Michael Rector	Mechanisms of small airway clearance: Avalanches, washing machines, and toothpaste!
171.	Melissa Swee	Enhancing Nephrology Care Access: Development and Implementation of a Teleneurology Dashboard Through Human-Centered Design
172.	Kevin Gubner	Neuroanatomical Effect of Factor VIII deficiency
173.	Brieanna Hilkin	Rapid Reversal of Mucociliary Transport Defects in G551D Neonatal Pigs
174.	Muhammad Elsadany	Linguistic Proxies for IQ: Unveiling the Power of Language in Cognitive Assessment
175.	Shravan Kumar Uppulapu	CFTR is essential for endothelium-dependent vasorelaxation
176.	Wesam Ismail	A New Electronic Health Record-Derived Medication List Table Improves Capture of Medication History Compared with Standard PCORnet® Data
177.	Jose Zapata	Livestock-Associated Staphylococcus aureus in Cystic Fibrosis Respiratory Cultures
178.	Arman Hlas	The Predictors of Osteoarthritis Among U.S. Adults- National Health and Nutrition Examination Survey, 2005-2018
179.	Colin Kenny	In MITF-low melanoma, the MITF paralog TFE3 promotes a mesenchymal expression profile and migratory behavior
180.	Ruangang Pan	Post Acute Sequelae of COVID-19 (PASC) involves several organs, but its basis is poorly understood
181.	Emma Simpson-Wade	Role of DNA Methylation in Maternal Mental Health
182.	Jimena Urbano	Puzzling Stability: V-ATPase Localization Unaffected by pH Shifts in Ethmoid Epithelium
183.	Isaias Herring	Elucidating Cerebellar Abnormalities in 16p11.2 Microduplication Mice
184.	Brianna Bembenek	iPSC-derived cerebral organoids as a neurological model of pediatric DPD deficiency
185.	Paige Wiebke	Developing Novel Animal Models of SNRNP200-associated Retinitis Pigmentosa