



38th Annual MD-PhD National Student Conference
July 7-9, 2023 | Copper Mountain, Colorado

Poster Session II

Saturday, July 8th, 2023 | 4:00-5:30 PM | Kokopelli Trail & Jack's Banquet

1. Aishwarya Iyer

University of Maryland School of Medicine

Investigating the Molecular Pathogenesis of a Novel MYBPC1 Duplication Mutation Linked to Myopathy with Tremor

2. Thomas Scott

University of Virginia

TRPS1 modulates estrogen receptor activity in luminal breast cancer cells

3. Arnav Rana

State University of New York Upstate Medical University

Cardiac Benefit in a Mouse Model of Mitochondrial Originating Cell Stress

4. Matthew Cheung

University of Alabama at Birmingham

Spatiotemporal immune atlas of the first clinical-grade, gene-edited pig-to-human kidney xenotransplant

5. Shreya Bellampalli

Mayo Clinic

Mechanisms of osmosensing in GI enteroendocrine cells

6. Emily Isenstein

University of Rochester Medical Center

Using EEG and Virtual Reality to Study Active and Passive Touch in Autism

7. Justin Couetil

Indiana University School of Medicine

Diagnostic Evidence Gauge of Spatial Transcriptomics (DEGAS-ST): Using transfer learning to map clinical data to spatial transcriptomics in prostate cancer



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8. Robert Rosen

Rutgers Robert Wood Johnson Medical School

The Macrophage-Endothelial Interface Regulates CAR T-cell Toxicities In Vitro

9. Alison Livada

University of Rochester

Lung megakaryocytes are tissue resident, arise independent of HSCs, and contribute to recovery in low platelet states.

10. Gelare Ghajar-Rahimi

University of Alabama at Birmingham

Acute kidney injury results in sustained, long-term alterations of kidney lymphatics

11. Rose Marie Akiki

Medical University of South Carolina

Essential role for a novel long-non-coding enhancer RNA (eRNA) and associated R-loops in activity-dependent development of maladaptive depressive- and addiction-related behaviors

12. Douglas Fritz

University of Colorado

One size fits all doesn't fit: the "best" ways to statistically model data in spatial transcriptomics

13. Wolfgang Beckabir

University of North Carolina-Chapel Hill

Entinostat and neoantigen vaccination reduce bladder cancer resistance to immune checkpoint blockade

14. Yueqi Ren

University of California, Irvine

Improving clinical efficiency in screening for cognitive impairment due to Alzheimer's

15. Yu Par Aung

Virginia Commonwealth University

MCTR3 Dampens Inflammatory Responses to Cigarette Smoke and Poly(I:C) in Small Airway Epithelial Cells by Differential Regulation of microRNAs



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16. Jeremy Chang

Tri-Institutional MD-PhD Program in New York City

Smc5/6's multifaceted DNA binding capacities stabilize branched DNA structures

17. Carley Miller

University of Colorado Anschutz

Stress causes cell-type, synapse, and sex specific changes in ventral subiculum microcircuitry and output to the bed nucleus of the stria terminalis

18. Matthew Eason

University of Maryland School of Medicine

Overexpression of the Obscurin Pleckstrin Homology Domain in Triple Negative and HER2 Positive Breast Cancer Cells Reduces Migration, Invasion, and Chemoresistance to Doxorubicin

19. Madeline Alizadeh

University of Maryland School of Medicine

Right-sided Colon Involvement is a Predictor of Extra-Intestinal Manifestations of Inflammatory Bowel Disease in Patients with Both Crohn's Disease and Ulcerative Colitis

20. Mohamed Khalil

Medical College of Wisconsin

Interleukin-7 Receptor (IL7R) and CD3E are necessary components in the development of NKG2CHigh memory NK cells during HCMV infections

21. P. Cody He

University of Chicago

Exon architecture and exon junction complexes control m6A methylation and gene expression

22. Shaker Dukkipati

University of Nebraska Medical Center

Spinal cord H-reflex post-activation depression is linked with hand motor control in adults with cerebral palsy



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23. Erin Wildermuth

University of Maryland School of Medicine

Preclinical evaluation of an antisense oligonucleotide gene therapy for Huntington's disease using single-cell genomics

24. Benjamin Fixman

University of Southern California

The Effect of APOBEC3A-Mediated RNA Editing on Human Papillomavirus Infectivity

25. Erica Nebet

Renaissance School of Medicine at Stony Brook University

Characterization of disease-associated variants in the NMDA receptor M3 segment

26. Christopher Monti

Medical College of Wisconsin

Computational modeling of virus-source dependent replication variability in HCMV-infected ARPE19 cells

27. Wesley Huang

University of Michigan

Fibroblasts sensitizes intestinal epithelial cells to ferroptosis in inflammatory bowel disease (IBD)

28. Matthew Sipple

University of Rochester School of Medicine and Dentistry

Isolating the role of myotonia in myotonic dystrophy type 1 myopathy.

29. Natalie Bennett

Vanderbilt University

Gli2 as a Potential Mediator of Tumor-Immune Crosstalk in Bone Metastatic Breast Cancer

30. Maya Lozinski

University of Chicago

Market Size and Trade in Medical Services



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31. Natalya Motyka

Tulane University School of Medicine
Emergence of the IL-33/IL-33R signaling axis during ETEC pathogenesis

32. Nicholas Brennan

State University of New York Upstate Medical University
The role of perturbed mitochondrial protein import in progressive muscle wasting.

33. Brianna Ramirez

University of Texas Southwestern Medical Center
Investigating a novel role for the cerebellar domain, the paraflocculus, in ASD-relevant behaviors

34. Congzhou Sha

Penn State College of Medicine
Differentiable rotamer sampling with molecular force fields

35. Raquel Ortega

University of Colorado
Investigating the role of PARP inhibitors on MMEJ

36. Evan Tracy

University of Louisville
A Case of Hereditary Hemorrhagic Telangiectasia Type 1 Complicated by Recurrent Deep-seated MSSA Infections

37. Shreya Desikan

SUNY Downstate Health Sciences University
A MACS protocol for purification of untouched germinal center B cells from unimmunized or germinal center-induced mice

38. Narges Pourmandi

University of Michigan
Defining the metabolic regulation of erythropoiesis



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39. Catherine Beamish

University of Rochester

Arc1, a regulator of synaptic plasticity, rescues latent effects of MeHg on neuromuscular development in *Drosophila*

40. Jack Prochnau

South Texas Medical Scientist Training Program

Investigating the Novel Role of DDR2 in Pancreatic Ductal Adenocarcinoma

41. Adrienne Kambouris

University of Maryland School of Medicine

Combination of Burn Wound Injury and *Pseudomonas* Infection Elicits Unique Gene Expression that Enhances Bacterial Pathogenicity

42. Amy van Ee

Johns Hopkins University School of Medicine

Retinoic acid enhances Poly I:C effects on TLR3 activation via CD14 in regeneration

43. Hannah Batchelor

Yale School of Medicine

Plasticity of cortical networks during visual associative learning

44. Abigail Atkinson

Johns Hopkins School of Medicine

Androgen Receptor Mediated Regulation of Human Endogenous Retrovirus K in the Brain

45. Austin Todd

University of Texas Health San Antonio

Novel animal models of cell-restricted hACE2 expression to study SARS-CoV-2 induced pathology

46. Emily Przysinda

University of Rochester

Social brain connectivity differences in schizophrenia during naturalistic video viewing



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47. Alexander Smith

University of Illinois at Urbana-Champaign

Atlas Neurosurgical Navigation System: A New Kinematic Tool for Accurate Neurotrauma Navigation

48. Stephanie Busch

Zucker School of Medicine at Hofstra/Northwell

Menstrual effluent as a non-invasive source of uterine natural killer cells

49. Karishma Shah

University of Utah

Pain Embodiment Measures in Chronic Pain Patients are Associated with Increased Risk for Aberrant Opioid-Related Behavior

50. Ankit Dahal

University of Rochester

The molecular mechanism of PMN-MDSC differentiation in the TME of Pancreatic Cancer Ductal Adenocarcinoma (PDAC)

51. Rasa Valiauga

Loyola Stritch School of Medicine

The Impact of Diet on Neuroinflammation

52. Yi Zhou

Virginia Commonwealth University

Associations Between Changes in Brain Structure and the Development of Suicide Behaviors in the Adolescent Brain Cognitive Development Study[®].

53. Arnaldo Franco Torres

University of Miami Miller School of Medicine

Metastatic pancreatic cancers hyperacetylate chromatin to reprogram metabolism independently of transcription

54. Philip Barrison

University of Michigan

Advancing Socially Responsible Automation in Healthcare: A Framework for Learning Health Systems



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55. Laurel Schappell

Stony Brook University

Characterization of Physiological and Inflammatory Changes in the Post-Stroke Lung

56. Jenna Weber

University of Utah

Paternal age effect mutations as selfish drivers of germline stem cell clonality

57. Denay Richards

Princeton University

Investigating the Role of E-Cadherin in Melanocyte Morphology and Migration