

Poster Session List

Alphabetically by Student

Name	Poster #	Mentor and Topic
Akuma, Daniel	<u>17A</u>	Mentor: Dr. Igor Brodsky <i>Structural and functional determinants of caspase-11 inflammasome assembly in innate immune defense</i>
Bandyopadhyay, Shovik	<u>12A</u>	Mentor: Dr. Kai Tan <i>Single-Cell Transcriptomics and Multiplexed Imaging Resolves the Spatial and Cellular Heterogeneity of the Human Bone Marrow Microenvironment</i>
Boe, Ryan	<u>13A</u>	Mentor: Dr. Arjun Raj <i>Systematic characterization and manipulation of the trade-off between proliferation and invasion in melanoma</i>
Bornstein, Marc	<u>14A</u>	Mentor: Dr. Zoltan Arany <i>Quantifying the Metabolic Response to Acute Cold Exposure in Mice</i>
Ceron, Rachel	<u>19C</u>	Mentors: Drs. Robert Heuckeroth & Roberto Dominguez <i>A solution to the long-standing problem of actin expression and purification</i>
Chaluvadi, Sai	<u>20C</u>	Mentor: Dr. F. Chris Bennett <i>Creating an in vitro macrophage model for globoid cell leukodystrophy to study globoid cell formation and function</i>
Chen, Alex	<u>1A</u>	Mentor: Dr. Adriana Petryna <i>Temporal Tolerance: The Un/Building of COVID-19 Laboratory Testing Infrastructures</i>
Chen, Christina	<u>5A</u>	Mentor: Dr. Russell (Taki) Shinohara <i>LaxKAT: a more powerful method to test for association and localize signal in high-dimensional data</i>
Chen, Saisai	<u>11B</u>	Mentor: Dr. Lewis Chodosh <i>PAQR8 Promotes Breast Cancer Recurrence and Confers Resistance to Multiple Therapies</i>

Chini, Julia	<u>24A</u>	Mentor: Dr. David Hill <i>Hepatic CD9 regulates adipose tissue inflammation and metabolic dysfunction during obesity</i>
Coffey, Nate	<u>12B</u>	Mentors: Drs. Celeste Simon & Zoltan Arany <i>Increasing branched-chain amino acid metabolism reduces growth of clear cell renal cell carcinoma</i>
Cohn, Ian	<u>18A</u>	Mentors: Drs. Christopher Hunter & Boris Striepen <i>Distinct roles for cDC1s and cDC2s in CD4+ T cell responses against the intracellular parasite <i>Cryptosporidium</i></i>
Connolly, Daniel	<u>21C</u>	Mentor: Dr. Zhaolan (Joe) Zhou <i>Interplay between DNA methylation and Polycomb silencing in mammalian brain development</i>
Cox, Tim	<u>26B</u>	Mentors: Drs. Virginia Lee & Christoph Thaiss <i>The Aged Microbiome Drives Cognitive Decline via Vagal Inhibition</i>
Creekmore, Ben	<u>3A</u>	Mentors: Drs. Edward B. Lee & Yi-Wei Chang <i>Small Molecule Activation of Valosin-containing protein (VCP)</i>
Dai, David	<u>27B</u>	Mentor: Dr. Edward B. Lee <i>Single nucleus transcriptome analysis of human reactive astrocytes</i>
Danan, Charles	<u>8C</u>	Mentor: Dr. Kate Hamilton <i>N6-Methyladenosine (m6A) regulates the response to hypoxic stress in the intestinal epithelium</i>
Deschaine, John	<u>25A</u>	Mentor: Dr. Michael Silverman <i>Are commensal-induced Tregs protective in a gnotobiotic model of type 1 diabetes?</i>
Deshpande, Rajiv	<u>6A</u>	Mentor: Dr. Felix Wehrli <i>Quantification of bilateral renal oxygen consumption: a preliminary study</i>
Dou, Dan	<u>28B</u>	Mentor: Dr. Erika Holzbaur <i>Distinct pathogenic mutations in LRRK2 disrupt axonal transport of autophagosomes</i>

Erlitzki, Noa	<u>4A</u>	Mentor: Dr. Rahul Kohli <i>Controllable epigenome editing in CAR T cells</i>
Espinoza, Diego	<u>21B</u>	Mentor: Dr. Amit Bar-Or <i>Proteogenomic immune signatures delineate the landscape of pediatric acquired demyelinating syndromes</i>
Franklin, Brian	<u>9C</u>	Mentor: Dr. Jennifer E. Phillips-Cremins <i>Structural and functional neural connectome maps in hippocampus development</i>
Gardner, Zach	<u>10C</u>	Mentor: Dr. Rajan Jain <i>Investigating the role of BRD4 in regulating cell-state specific chromatin architecture</i>
Goldspiel, Brian	<u>19A</u>	Mentor: Dr. Will Bailis <i>Unraveling metabolic determinants of innate immune function in Maple Syrup Urine Disease</i>
Green, Jamal	<u>22B</u>	Mentor: Dr. Michael Silverman <i>Do early life commensal microbes prevent type 1 diabetes?</i>
Hollander, Erin	<u>9A</u>	Mentor: Dr. Ben Stanger <i>Loss of the MGAT5 glycosyltransferase sensitizes pancreatic tumor cells to immune clearance</i>
Hu, Feng	<u>20A</u>	Mentor: Dr. Russell T. Shinohara <i>Voxel-wise intermodal coupling analysis of two or more modalities using local covariance decomposition</i>
Hunter, Emerson	<u>16C</u>	Mentor: Dr. Yi Xing <i>ESPRESSO-TEA: A long-read RNA sequencing workflow to study locus-specific expression of transposable elements</i>
Kahn, Ben	<u>10A</u>	Mentor: Dr. Ben Stanger <i>Route-specific immune surveillance in Pancreatic Adenocarcinoma metastasis</i>
Kixmoeller, Katie	<u>1B</u>	Mentor: Dr. Ben Black <i>Plasma Focused Ion Beam (FIB) Milling to Reveal Biological Structures in situ</i>
Kolla, Likhitha	<u>21A</u>	Mentor: Dr. Jinbo Chen <i>Time of clinic appointment and advance care planning discussions in oncology</i>

Komar, Chad	<u>17C</u>	Mentors: Drs. Gerd Blobel & Junwei Shi <i>Domain-Focused, Whole-Genome Screen to Identify Fetal Hemoglobin Regulators in Human Erythroid Cells</i>
Krauss, Kate	<u>18C</u>	Mentor: Dr. Laurence Eisenlohr <i>The role of the Type III Secretion System in presentation of Salmonella enterica epitopes on MHCII</i>
Kuprasertkul, Nina	<u>15A</u>	Mentors: Drs. Brian C. Capell & Kathryn E. Wellen <i>Investigating ferroptosis in epidermal differentiation and tumorigenesis</i>
Lam, Jessica	<u>18B</u>	Mentor: Dr. Gerd Blobel <i>Exploiting cell cycle dynamics to interrogate YY1's role in spatiotemporal chromatin organization</i>
Lee, Casey	<u>26A</u>	Mentor: Drs. Christoph T. Ellebrecht and Aimee S. Payne <i>Fate induction in chimeric antigen receptor T cells through asymmetric cell division</i>
Li, Jessica	<u>16A</u>	Mentor: Dr. Arjun Raj <i>Characterizing non-genetic mechanisms of adaptive resistance in metastatic melanoma</i>
Liebergall, Sophie	<u>28A</u>	Mentor: Dr. Ethan Goldberg <i>Ndnf-IN dysfunction in a mouse model of Dravet Syndrome</i>
Lin, Andrew	<u>3B</u>	Mentor: Dr. David Issadore <i>High-throughput and ultra-sensitive extracellular vesicle isolation via electroformed inverse-opal nanomaterials</i>
Litichevskiy, Lev	<u>19B</u>	Mentors: Drs. Mingyao Li & Christoph Thaiss <i>Interactions between aging, dietary restriction, and the gut microbiome</i>
Liu, Joyce	<u>2B</u>	Mentor: Dr. Kathryn Wellen <i>From CoA to CoQ: Acetyl-CoA Sensing and the Mevalonate Pathway</i>
Lobel, Graham	<u>7B</u>	Mentors: Drs. Malay Haldar & Celeste Simon <i>Glutamine metabolism regulates dendritic cell activity systemically and in the soft tissue sarcoma microenvironment</i>

Lovell, Claudia	<u>13B</u>	Mentor: Dr. Montserrat Anguera <i>Disrupted X chromosome inactivation (XCI) maintenance in B lymphocytes predisposes female mice to lupus-like disease</i>
Lubin, Emily	<u>14B</u>	Mentor: Dr. Elizabeth Bhoj <i>De Novo Mutations in Replication-Independent Histone Genes Elude Diagnosis by Exome/Genome Sequencing</i>
Lucas, Alfredo	<u>4B</u>	Mentor: Dr. Kathryn Davis <i>Resting State fMRI of Bilateral Temporal Lobe Epilepsy</i>
Luo, Audrey	<u>29A</u>	Mentor: Dr. Theodore Satterthwaite <i>Refinement of Functional Connectivity in Development Aligns with the Sensorimotor to Association Axis</i>
Martinez, Dayne	<u>25B</u>	Mentor: Dr. Zhaolan (Joe) Zhou <i>Uncovering seizure etiology in a model of CDKL5 deficiency disorder with single-nucleus transcriptomic profiling</i>
Martins, Kelly	<u>10B</u>	Mentor: Dr. James Wilson <i>Large-scale in vivo Comparison of Recombinant and Wild-Type AAV Integrations in Macaques and Humans</i>
McCright, Sam	<u>27A</u>	Mentor: Dr. David Hill <i>Immunometabolic reprogramming of pulmonary macrophages in obesity</i>
Ng, Raymond	<u>8B</u>	Mentor: Dr. Sydney Shaffer <i>Targeting YAP signaling to overcome MAPK/MEK inhibitor resistance in melanoma</i>
Otter, Clayton	<u>15B</u>	Mentor: Dr. Susan Weiss <i>Infection of primary nasal epithelial cells differentiates SARS-CoV-2, MERS-CoV, and HCoV-NL63</i>
Palanki, Rohan	<u>5B</u>	Mentors: Drs. Michael J. Mitchell & William H. Peranteau <i>Translational ionizable lipid nanoparticle base editing platform for treatment of congenital brain disease</i>

Parchure, Shreya	<u>22C</u>	Mentor: Dr. Casey Halpern <i>Entorhinal Amygdala Alpha Coherence as Biomarker of Anxiety for Closed-loop Deep Brain Stimulation: Results of First-in-human Invasive Electrophysiology</i>
Pather, Sarshan	<u>11A</u>	Mentor: Dr. Ophir Shalem <i>Optical pooled CRISPR screens in human iPSC-derived neurons</i>
Rafizadeh, Diane	<u>15C</u>	Mentor: Dr. David Chenoweth <i>Preparation and Application of Linked and Cyclic Collagen Mimetic Peptides</i>
Serrano, Juan	<u>1C</u>	Mentor: Dr. Rahul M. Kohli <i>Dumbbell Degradable: Structure-guided design of oligonucleotide-based PROTACs targeting the genomic mutator APOBEC3A</i>
Sharma, Prateek	<u>5C</u>	Mentors: Drs. Christoph A. Thaiss & Kathryn E. Wellen <i>Investigating the Role of ACS2 in Dietary and Metabolic Regulation of Colorectal Cancer and Normal Colon Physiology</i>
Shea, Emily	<u>6C</u>	Mentor: Dr. Lewis Chodosh <i>The Role of PNPLA2 in Breast Cancer Dormancy and Recurrence</i>
Shen, Kaitlyn	<u>11C</u>	Mentor: Dr. Rajan Jain <i>Pathogenic laminopathy mutations target specific lamina-associated regions in cardiac myocytes potentially via altered mechanosensing</i>
Shepley-McTaggart, Ariel	<u>16B</u>	Mentor: Dr. Ronald N. Harty <i>Host Regulation of Ebola Virus Egress and Spread: Role of Cytoskeletal Filamin Proteins</i>
Sieff, Ben	<u>2A</u>	Mentor: Dr. Adriana Petryna <i>Leveraging clinical material: an ethnography of buprenorphine-based treatment in greater Pittsburgh</i>
Skelly, Ashwin	<u>23B</u>	Mentors: Drs. Beatrice Hahn & Amelia Escolano <i>Predictors of Nonseroconversion after SARS-CoV-2 Infection</i>

Soto Albrecht, Yentli	<u>17B</u>	Mentor: Dr. Douglas C. Wallace <i>Non-pathogenic variation in mitochondrial DNA modulates murine SARS-CoV-2 pathogenesis</i>
Spychalski, Griffin	<u>8A</u>	Mentor: Dr. David Issadore <i>Extracellular vesicle liquid biopsy to improve breast cancer screening accuracy</i>
Steinbock, R. Teddy	<u>12C</u>	Mentor: Dr. Matthew Weitzman <i>Human Adenovirus infection as a model to study virus-induced, cytoplasmic condensates</i>
Sullivan, Matthew	<u>2C</u>	Mentor: Dr. E. John Wherry <i>Identifying domain-specific features of exhaustion-associated TOX activity in CD8 T cells</i>
Tamburro, Maggie	<u>6B</u>	Mentor: Dr. Louis J Soslowsky <i>Defining Dose-Dependent Impacts of Exercise on Rat Achilles Tendon Fatigue Function</i>
Tapescu, Iulia	<u>3C</u>	Mentor: Dr. Sara Cherry <i>The RNA helicase DDX39A binds to Chikungunya RNA to control viral infection</i>
Teeple, Stephanie	<u>22A</u>	Mentor: Dr. Scott Halpern <i>Racism and EHR data: examining missingness as a potential driver of inequities in predictive performance of a clinical decision support tool</i>
Thomas, Stacy	<u>24B</u>	Mentor: Dr. Gregory L. Beatty <i>Liver macrophage subsets differentially regulate metastasis in pancreatic cancer</i>
Thompson, Beth	<u>7A</u>	Mentor: Dr. Walter Witschey <i>Feasibility of machine learning for cardiovascular function analysis in patients with repaired tetralogy of Fallot</i>
Wei, Monica	<u>13C</u>	Mentor: Dr. Elizabeth Grice <i>Mining the Pig Skin Microbiome for Antimicrobial Products</i>
Xu, Jason	<u>20B</u>	Mentor: Dr. Kai Tan <i>Progenitor Populations in Treatment Resistant T-Lineage ALL</i>

Xu, Karen	<u>4C</u>	Mentors: Drs. Robert L. Mauck & Jason A. Burdick <i>Injectable and Degradable Granular Materials for Meniscus Repair</i>
Yang, Kevin	<u>23A</u>	Mentors: Drs. Yoseph Barash & Peter S. Choi <i>LSV-Seq: A Novel Targeted Sequencing Method to Measure Alternative Splicing Across Human Tissues</i>
ZeZulin, Alex	<u>7C</u>	Mentor: Dr. Nancy Speck <i>RUNX1 Attenuates Toll-like Receptor and Type I Interferon Signaling in Neutrophils</i>
Zhang, Jenna	<u>14C</u>	Mentors: Drs. Igor Brodsky & Sunny Shin <i>Yersinia Type III-Secreted Effectors Subvert Caspase-4-dependent Inflammasome Activation in Intestinal Epithelial Cells</i>
Zhang, Kevin	<u>9B</u>	Mentor: Dr. Joshua Dunaief <i>The Impact of Iron on Lysosomal Function in the Retinal Pigment Epithelium</i>