



POSTER PRESENTATIONS

BY POSTER BOARD NUMBER

BB= Basic Biosciences AB= Applied Biosciences EN= Engineering PE= Policy & Ethics
PS= Physical Sciences ES= Earth Sciences SS= Social Sciences HU=Humanities

#	Name	Category	Topic
1	Leighann Black	AB	Dopamine Regulates Cortical Glutamate Homeostasis Through Astrocytes
2	Christina Flansburg	AB	Characterization Of The Zic1-Expressing Premigratory Neural Crest Domain
3	Nicolette Brown	AB	Effects of Carbohydrate Functionalized Dendrimers on Galectin-3 Induced Cancer Cell Aggregation
4	Shawn Johnson	AB	Comparison of PML Bodies and Telomere Status Between T-ALL Cells Having Either Increased Telomerase Activation or ALT Mechanisms
5	Jocelyn Gipson	AB	Establishment of a Xenograft Mouse Model to Explore Enhanced Permeability Retention (EPR) in Tumors
6	John Campbell	AB	Identification of Cytokines that Stimulate Lung Cancer Cell Migration and Metastasis
7	Brandon McClary	AB	Testing AP-1 Inhibitor Compounds with Potential for use as Therapeutic Tumor Prevention Agents
8	Rose Bamfo	AB	Production of Biologically Active, Recombinant hTSSK1 and hTSSK2, the Candidate Targets for Male Contraceptive Drug Development
9	Olivia Martin	AB	Rapid qPCR Identifiacion of Enteric Bacteria in Clinical Studies
10	Korine Duval	AB	Relative Importance of Internal Prediction and Sensory Feedback when the Brain Estimates Hand Position
11	Elisia Clark	AB	Classification of Human Brain Activity During Navigation Using Multi-Voxel Pattern Analysis
12	Jasmine Azure	AB	Gerbal Model of Transient Cerebral Ischemia: Effects of Occlusion Intervals on Behavior
13	Lindsey Myers	AB	Mitochondrial Dysfunction in Skeletal Muscle Induced by High Fat Diet through Permeability Transition Pore Formation
14	Dannielle Foster	AB	The Role of Senescence in Immortalized Cells Which Express an Oncogenic Ras Gene
15	Mackenzie Martin	AB	The Effects of Serine Palmitoy Transferase Inhibitors (SPT) on Lipid Raft Sphingolipid Ceramides and Insulin Signaling
16	Eva Hoops	AB	Microbial Source Tracking on The Little Big Horn River
17	Cianna Edquilane	AB	Molecular and Cellular Mechanisms Regulating Wound Healing
18	Christine Daniels	AB	Crosstalk between the BRCA2 and APC/Beta-catenin Pathways in Mammary Stem Cells and Breast Cancer
19	Rafael González	AB	Reduced Model of Action Potentials of Embryonic Stem Cell-Derived Cardiac Cells
20	Kelechi Ndukwe	AB	MAG and Myelin Induce Schwann Cell Death
21	Raul Martinez	AB	Acute Changes in Expression of Signaling Proteins Following Early-life Seizures
22	Abigail De La Pena	AB	Does Overproduction of Red Blood Cells Lead to Decreased Oxygen in the Brain Due to Stalled Flow in Capillaries?
23	Janice Nieves	AB	Bcrp1 and Proliferation of cSP Cells
24	Nadyan Vargas	AB	Race and Ethnic Variation in Skin Toxicity in Breast Cancer Patients Receiving Radiation Treatment
25	Jessica Duran	AB	Identification of Variant NUT Fusion Partner Genes in NUT Midline Carcinoma
26	James Salazar	AB	Computational Docking Studies of Antibody-Antigen Complexes
27	Morgan Brophy	AB	Impact of a Cortical Microvascular Hemorrhage on Neural Health and Astrocyte Activation in Nearby Tissue
28	Ghansham Ramkhellawan	AB	Investigating Cellular Mechanical Properties in Relation to Lineage Potential for Stem Cell Therapy



29	Debra Ragland	AB	The Effect of Single Amino Acid Mutations on HIV-I Susceptibility to High Active Antiretroviral Therapy
30	Janae Hunter	AB	Ultrastructural Analysis of Mitochondria: Phenotypic Implications for Parkinson's, Barth Syndrome and Charcot-Marie-Tooth Disease
31	Nekeshia McInnis	AB	Effect of Parental Relationship in Childhood on Adulthood Emotional Health
32	Aleeza Abbasi	AB	Identification of Novel Serological Biomarkers for Autoimmune Liver Diseases
33	Danielle Toupo	AB	Engineering Antibodies Using A Bacterial Inner Membrane Display
34	Elliott Martinez	AB	Polymeric Gene Delivery
35	Valerie Latimore	AB	The Effects of Genetic Variation on Choline Metabolism and Suggested Daily Intake
36	Renee Cotton	AB	Effects of Pyruvate Kinase Disruption on Tumor Growth in <i>C.elegans</i> and Its Relevance to Chemotherapy
37	Kyle Davis	AB	Synthesis of Gold Nanoparticles
38	Hiram Rodriguez	AB	Purification of the Transducible Transcription Factor TAT-PAX4 and Determination of its Biological Activity
39	Kendrick Henderson	AB	The Effect of Helicobacter Pylori on Raf Kinase Inhibitor Protein in Gastric Cancer Cells
40	Joseph Tillotson	AB	Effects of Radiation-Induced DNA Damage in Peripheral Lymphocytes of Breast Cancer Patients
41	Jarom Chung	AB	Symmetry of Division in Glioblastoma Stem Cells
42	Joelle Mbatchou	AB	Using Small Molecules in the Rho Pathway with FRET
43	Milinda Thompson	AB	Correlation of Pulmonary Endothelial Barrier Function Modulation with Adherens Junction Protein Association and SHP2 Activity
44	Mildred López-Piñero	AB	Quorum Sensing Dynamics in <i>Vibrio harveyi</i>
45	Jasmaine Williams	AB	Role of MK-1775, a Wee1 Inhibitor, in Potentiation to Chemotherapeutics
46	Harold Phillips	BB	Norepinephrine Depleted Mice Exhibit Repetitive Behavior Correlated with Orbitalfrontal-Striatal-Thalamocortical Pathway Dysfunction
47	Sherman Coleman	BB	Synthesis and Evaluation of 1-Deoxyglucose Esters as Organogelators
48	Phillip Kang	BB	Microevolutionary Principles of Cell Cytoskeleton Organization: Comparative Study of the Mitotic Spindle of <i>C. elegans</i>
49	Brandon Murray	BB	Distribution of Electrical Synapses in the TRN
50	Danielle Kinsey	BB	Molecular Characterization Of The Microbial Populations In Biofilms From Polyvinyl Chloride and Copper Plumbing Material In Reactors Simulating Premise Plumbing
51	Allison Gomez	BB	Characterization of Aberrant Leukomegenic Notch 1 Transcripts in T cell Leukemia
52	Virginia Li	BB	Analysis of the Cytokines Released by Phagocytes After the Uptake of Apoptotic Cells
53	Daniel Salahuddin	BB	Characterization of Murine Apolipoprotein-B48 Antibodies: Correlation of Protein Peptide Titers to Native Apolipoprotein Titers
54	Michelle Munyikwa	BB	Recruitment of the Oncoprotein v-ErbA to Aggresomes
55	Ashley Scott	BB	Regulation of Pancreatic Beta-Cell Mass by Amino Acids and Glucose in Zebrafish
56	Brittany Katz	BB	Measuring Fatty Acid Uptake In Primary Enterocytes
57	Charles Eke	BB	Bungarotoxin, Reporter to Studying GLUT4 Trafficking
58	Casey Doney	BB	Purification and Characterization of <i>Arthrobacter Globiformis</i> Amine Oxidase
59	Michael Kinsey	BB	Characterization of Lipid Production from Yellowstone National Park Green Algae Isolates in Response to Differing Environmental Conditions
60	Ashiya Buckels	BB	The Effect of <i>Irx1</i> and <i>Irx3</i> on Rat Aortic Smooth Muscle Cells
61	Ashley Spann	BB	Exploration of PTEN-Deficient Cell Sensitization to PARP Inhibitors via RNAi Screening
62	Xochina El Hilali	BB	Transcriptional Profiling of Lipid Nanoparticles to Uncover Potential Toxicities
63	Rama Yakubu	BB	Intravital Imaging. Evaluations of siRNA Delivery Platforms in Liver



64	James Chavre	BB	Quantification of Differential Urinary Proteins as Potential Biomarkers of Renal Development in Healthy Infants at Birth and at Seven Months
65	Mayrel Pérez	BB	A Modified Resident-intruder Assay for Determination of Aggressiveness in Mice
66	Brandon Nemieboka	BB	Development of Mechanism-Based Probe of Sirtuins
67	Rayna Narvaez	BB	Aspects of Fertility in Siberian Hamsters with Disrupted Circadian Rhythms
68	Steve Morgan	BB	Epigenetic Mechanism of CD4 Regulation in T-Lymphocytes
69	Carmen Taveras	BB	Rab-mediated Vesicle Trafficking during Epithelial Polarization
70	Olutobi Ajala	BB	Phenylketonuria: An Amino Acid Metabolic Disorder
71	Elizabeth Millings	BB	Investigating the Mechanism and Kinetics of 1,4-dihydroxy-2-naphthoyl-CoA Synthase (MenB) in Mycobacterium tuberculosis
72	Bilguujin Dorjsuren	BB	Identifying the EET Signaling Pathway in Regulating Haematopoietic Stem Cell Self-Renewal in Zebrafish
73	Kimeya Ghaderi	BB	Characterization of Histone Modification Throughout <i>C. elegans</i> Embryogenesis
74	Ronald Grider	BB	Characterization of Herpes Processivity Factors by X-Ray Crystallography
75	Emel Kasgarli	BB	Analysis of ZTF-8 Function in DNA Damage Repair and Its Interaction Partners in <i>C. elegans</i>
76	Grace Nauman	BB	Transcription Activation in <i>S. Cerevisiae</i>
77	Kelsey Taylor	BB	Retrograde Mitochondrial Motility in Neurons
78	Limary Garcia Gonzalez	BB	Characterization of the Ability of CRAMs and Oxysterols to Interact with OSBP Mutants and ORPs
79	Brandyce Coes	BB	Development of Tools to Study Bacterial Cell Wall Uptake for the Prevention of Inflammation Related to Asthma
80	Aaron Louie	BB	Mechanism of Cyclic di-GMP Repression of Motility in <i>Pseudomonas aeruginosa</i>
81	Holly Payne	BB	Assessment of Acetylcholine and GABA Cells after Methamphetamine-induced Cell Death in the Mouse Striatum
82	Ryan Santos	BB	Inhibition of STAT3 in Skeletal Muscle in (a Mouse Model of) Cancer Cachexia
83	Melissa Alvarado	BB	Characterization of microRNA-10b in Human Glioblastoma
84	Yi Cao	BB	The Role of Pheromone in Biofilm Formation in <i>Candida albicans</i>
85	Frances Morales	BB	Study on the Role of Polalpha-primase at Telomeres in Human Cells
86	Shellese Cannonier	BB	A Partial Defect in the Checkpoint Protein Hus1 Impairs Tumor Development in a Two-Step Skin Carcinogenesis Model
87	Armando Lopez Mercado	BB	Prosurvival Signaling of Hepatocyte Growth Factor in the Murine Airspace
88	Andres Gonzalez	BB	The Effects of Beta-Glucan Pretreatment on the LPS-Induced Cytokine Production in vitro
89	Jazmine Robertson	BB	Functional Characterization of Histone Binding Proteins
90	Douglas Chapski	BB	Cellular Response to Glutamine Metabolism Inhibition
91	Ulysses Toche	BB	The Role of FSP1-marked Fibroblast Cells in the Metastasis of 4T1 Cancer Cells
92	Brendalyn Quiah	BB	Possible Role Of Ceramide Kinase In Intracellular Membrane Trafficking
93	Richard Alexander	BB	Analysis of Factors involved in Transcription Initiation
94	Amy Baker	BB	Using <i>Drosophila melanogaster</i> as a Model for Imaging Axonal Growth in vivo: Investigating the Role of Microtubule Associated Proteins on Axon Guidance in Whole Embryos
95	Raul Caso	BB	Investigation of Kaposi's Sarcoma Herpesvirus C-Terminal LANA Binding Partners
96	Pamela De La Cruz	BB	Characterization of Single Stranded DNA Binding by Bacteriophage lambda Replication Initiator
97	Elizabeth Henderson	BB	Substrate Recognition of Histone H2B by DUBm
98	Fred Abban	BB	The Effects of Running on Experience on the Activation of New Neurons and Interneurons to Stress in the Dentae gyrus



99	Cesar Cardenas, Jr.	BB	Retinoid Modulation of BMP2 Signaling in Mesenchymal Stem Cells
100	Marisa Levy	BB	Alcohol: A Compensatory Mechanism for Stress and the Role of the Prefrontal Cortex
101	Lisa Coleman	BB	Characterization of Potential Targets of the mRNA Binding Protein FMRP
102	Filomene Morrison	BB	Effects of Sexual Experience on Neurogenesis in the Aging Brain
103	Olivia Nwankwo	BB	Investigation of Protein Acetylation using Semi-Synthesis
104	Sanchez Jarrett	BB	Probing The Inner Membrane: Analysis of In-vitro Essential Mycobacterial Proteins.
105	Lindsay Wilson	BB	Energetic Contributions to Multidrug Recognition
106	Holly Arnold	BB	Disulfide Bond Formation and Blood Coagulation in <i>E. coli</i>
107	Maria Correa	BB	Assessing Specificity and Physiologic Effects of Novel and Known Sirtuin Activating Compounds
108	Jordan Kennedy	EN	Rheological Characterization of Thermally Reversible Gels
109	Brittany Rhodes	EN	Use of TiO ₂ Nanotube Arrays in Dye-Sensitized Solar Cells
110	Adelita Russette	EN	Shape Memory Alloys: Processing, Characterization and Applications
111	Samantha Espinosa	EN	Carbon Materials from Chromonic Liquid Crystals and their Applications to Battery Electrodes
112	Joshua Muñoz	EN	Determining and Controlling the Cutting Mechanism of Single-Layer Graphene Sheets via Sonication
113	Ashley Alvarado	ES	Organic Protection Of Cowpeas Postharvest against <i>Callosobruchus Maculatus</i> using Shea Butter
114	Destiny Coleman	ES	Viral Hemorrhagic Septicemia in Fish: Monitoring Efforts in Lower Great Lakes of New York State
115	Alexis Brown	ES	Characterization of <i>Staphylococcus aureus</i> from Intense Marine Water and Sand Sampling
116	Djifa Kothor	HU	Ewé Consciousness Among Ghanaians and Togolese Migrants in North America
117	MaKendra Umstead	PS	Optimization of Hot Stage Microscopy and XRPD Methods for the Physicochemical Characterization of Drug Candidates
118	Michael McKenzie	PS	A Reductive Rearrangement of Hydroxy- and Aminocyclopropyl Imides
119	Robyn Burgin	PS	The chemistry and Analysis for FRAP (Fluorescence Recovery after Photobleaching)
120	Jesse Gallegos	PS	The Fringes, Centroids, and Traction of Cells
121	Candice Sherwood	PS	Structure-Property Relationship in HFA-Containing Polyamide Thin Film Composite Membranes
122	Meredith Tallbull	PS	Iron-Sulfate Material Synthesis, Characterization
123	Leopold Green	PS	Lanthanide Luminescence Synthesizing Yb ³⁺ /Ln ³⁺ Co-doped LaF ₃ Nano-crystals for Up-conversion Fluorescence
124	Itisha Jefferson	PS	The Potential Environmental Impact of Arsanilate and Arsacatin
125	Alexandra Herndon	PS	Going Green: Exploratory Synthesis of Novel Palladium Complexes Towards the Epoxidation of Olefins
126	Ashley Balentine	PS	Developing Novel Kinase Inhibitors to Target Oncogenic Kinases
127	Gabrielle Winston-McPherson	PS	Synthesis of Nantenine Derivatives as Potential 5-HT _{2A} Antagonists
128	Wallace Derricotte	PS	Effect of Translational Energy on the Sticking Probability of Methane on an Iridium Surface
129	Shamara Collins	PS	Nuclear Magnetic Resonance Studies of Fuel Cell Electrolyte Membranes
130	Danielle Hill	SS	Psychosocial Correlates of Adolescent Smoking Initiation Among a Statewide Sample of Middle and High School Students
131	Avis Atkins	SS	Longitudinal Effects of Family Functioning and Peer Delinquency on Adolescent Males Delinquency
132	Nancy Truong	SS	Longitudinal Effect of Family Type and Popularity on Adolescent Male Delinquency
133	Julia Mulligan	SS	Questioning "Findings": HIV/AIDS Mass Media Intervention Campaigns



134	Hien Nguyen	SS	Sex Differences in PKMZ Activity in the Rodent Hippocampus after Spatial Training in the Radial 8-arm Task
135	Philisha Santio	SS	Enhancing Breastfeeding: The Creation of Educational Materials for BlackFeet/Cree Mothers
136	Steve Arrieta	SS	In Their Own Words: AP Students Characterize their Role Models
137	Haydee Cruz	SS	A Comparison of Teacher Self-Perceptions and Observed Classroom Instruction
138	Rachel Nolan	SS	Embodiment in Social Categorization
139	Jenae Richardson	SS	Using Mindfulness Meditation to Minimize Choking under Pressure on an Arithmetic Task
140	Farzana Saleem	SS	The Relation Between SES and Children's Early Academic Skills
141	Bradley Carter	SS	Parental Influence on Mathematics Interest
142	Kaitlin Heffron	SS	Academic Year and Gender Differences on Adolescent Math Interest
143	Benjamin Brumley	SS	Behavioral Regulation and Children's Early Academic Skills
144	Irene Mbah	SS	Hemispheric Effects on Change Detection
145	Ilana Bergelson	SS	Competition for Neural Representation with Visual Objects
146	Natassia Rodriguez	SS	Made it to America, Now What? An Analysis of Why Educational Achievement Differs among Latino Subgroups in the U.S.
147	Angela Dixon	SS	Multiculturalism and the Impact of School Climate and Engagement on African Americans
148	Christin Gates	SS	Evaluating the Effects of False Incarceration Post Exoneration
149	Ana Sanchez-Rivera	SS	Exploring Implicit Measures of Racial Phenotypicity Bias
150	Carlyn Scott	SS	Temperamental and Neurophysiological Predictors of Anxious Behavior in Children
151	Eunice Mendoza	SS	Latinos' Generational Status and Self-Efficacy Mediated by Language Use in Adolescents
152	Matthew Ramirez	SS	Longitudinal Examination of the Neural Correlates Underlying Self-Regulation in the Face of a Reward
153	Hannah Barrett	SS	Comparing Racial and Ethnic Stereotypes of Women
154	Adrienne C. Bird	AB	The Correlation of Turbidity and Escherichia Coli on the Little Big Horn River
155	Brooke Stevenson	ES	Radon on the Apsaalooke (Crow) Reservation



STUDENT POSTER PRESENTATIONS

BY NAME

Fred Abban **98** **9:45 – 10:45 AM**

Presentation Title The Effects of Running on Experience on the Activation of New Neurons and Interneurons to Stress in the Dentae gyrus

Research Mentor Elizabeth Gould

Research Institution Princeton University

Home Institution Cornell University

Co-Authors Elizabeth Gould and Tim Schoenfeld, Princeton University

Aleeza Abbasi **32** **9:45 – 10:45 AM**

Presentation Title Identification of Novel Serological Biomarkers for Autoimmune Liver Diseases

Research Mentor Xuhang Li

Research Institution Johns Hopkins University

Home Institution University of Maryland, Baltimore County

Co-Authors Xuhang Li, Johns Hopkins University

Olutobi Ajala **70** **9:45 – 10:45 AM**

Presentation Title Phenylketonuria: An Amino Acid Metabolic Disorder

Research Mentor Stephanie Villarreal

Research Institution UNCF Merck Science Initiative

Home Institution College of Saint Elizabeth

Co-Authors Amal Mansour, University of Medicine and Dentistry of New Jersey; Janet Berthel, College of St. Elizabeth

Richard Alexander **93** **8:45 – 9:45 AM**

Presentation Title Analysis of Factors involved in Transcription Initiation

Research Mentor Steve Buratowski

Research Institution Harvard University, Division of Medical Sciences

Home Institution University of Colorado at Boulder

Co-Authors Taesoo Kim and Stephen Buratowski, Harvard University Div. of Medical Sciences

Ashley Alvarado **113** **8:45 – 9:45 AM**

Presentation Title Organic Protection Of Cowpeas Postharvest against Callosobruchus Maculatus using Shea Butter

Research Mentor Florence Dunkel

Research Institution Montana State University -Bozeman

Home Institution Fort Belknap College

Co-Authors Florence Dunkel and Keirba Coulibaly, Montana State University

Melissa Alvarado **83** **8:45 – 9:45 AM**

Presentation Title Characterization of microRNA-10b in Human Glioblastoma

Research Mentor Roger Abounader

Research Institution University of Virginia School of Medicine

Home Institution UPR-Mayaguez

Co-Authors Roger Abounader and Fadila Guessous, University of Virginia School of Medicine

Holly Arnold **106** **9:45 – 10:45 AM**

Presentation Title Disulfide Bond Formation and Blood Coagulation in E. coli

Research Mentor Jonathan Beckwith

Research Institution Harvard University, Division of Medical Sciences

Home Institution University of Colorado at Boulder

Co-Authors Jessica Blazyk, Dana Boyd and Jon Beckwith, Harvard University Div. of Medical Sciences

Steve Arrieta **136** **9:45 – 10:45 AM**

Presentation Title In Their Own Words: AP Students Characterize their Role Models

Research Mentor Carolyn Callahan

Research Institution University of Virginia School of Education

Home Institution Montclair State University

Co-Authors Carolyn Callahan, University of Virginia; Haydee Cruz, Arizona State University



Avis Atkins **131** **8:45 – 9:45 AM**
Presentation Title Longitudinal Effects of Family Functioning and Peer Delinquency on Adolescent Males Delinquency
Research Mentor Patrick Tolan
Research Institution University of Virginia School of Education
Home Institution CSU Long Beach
Co-Authors Patrick Tolan, Angela Henneberger and Myles Durkee, University of Virginia

Jasmine Azure **12** **9:45 – 10:45 AM**
Presentation Title Gerbal Model of Transient Cerebral Ischemia: Effects of Occlusion Intervals on Behavior
Research Mentor Mike Babcock
Research Institution Montana State University -Bozeman
Home Institution Fort Peck Community College
Co-Authors Alex M. Babcock, Cameron Robinson and John Old Elk, Montana State University

Amy Baker **94** **9:45 – 10:45 AM**
Presentation Title Using Drosophila melanogaster as a Model for Imaging Axonal Growth in vivo: Investigating the Role of Microtubule Associated Proteins on Axon Guidance in Whole Embryos
Research Mentor David Van Vactor
Research Institution Harvard University, Division of Medical Sciences
Home Institution Tufts University Medford
Co-Authors David Van Vactor and Jennifer Long Baughman, Harvard University Div. of Medical Sciences

Ashley Balentine **126** **9:45 – 10:45 AM**
Presentation Title Developing Novel Kinase Inhibitors to Target Oncogenic Kinases
Research Mentor Nathanael Gray
Research Institution Harvard University, Division of Medical Sciences
Home Institution Hampton University
Co-Authors Xianming Deng and Nathanael Gray, Dana Farber Cancer Institute

Rose Bamfo **8** **9:45 – 10:45 AM**
Presentation Title Production of Biologically Active, Recombinant hTSSK1 and hTSSK2, the Candidate Targets for Male Contraceptive Drug Development
Research Mentor John Herr
Research Institution University of Virginia School of Medicine
Home Institution Harvard University
Co-Authors Jagathpala Shetty and John Herr, University of Virginia School of Medicine

Hannah Barrett **153** **8:45 – 9:45 AM**
Presentation Title Comparing Racial and Ethnic Stereotypes of Women
Research Mentor Keith Maddox
Research Institution Tufts University Medford
Home Institution UMass Amherst
Co-Authors Karina Villareal Medved, Ana Ivelisse Sanchez-Rivera and Kristin N. Dukes, Tufts University

Ilana Bergelson **145** **8:45 – 9:45 AM**
Presentation Title Competition for Neural Representation with Visual Objects
Research Mentor George Alvarez
Research Institution Harvard University
Home Institution University of Chicago
Co-Authors George Alvarez and Michael Cohen, Harvard University Arts and Sciences

Adrenne C. Bird **154** **9:45 – 10:45 AM**
Presentation Title The Correlation of Turbidity and Escherichia Coli on the Little Big Horn River
Research Mentor Neva Tall Bear
Research Institution Little Big Horn College
Home Institution Little Big Horn College
Co-Authors Sara L. Plaggemeyer, Little Big Horn College

Leighann Black **1** **8:45 – 9:45 AM**
Presentation Title Dopamine Regulates Cortical Glutamate Homeostasis Through Astrocytes
Research Mentor Ariel Deutch
Research Institution Vanderbilt University
Home Institution Claflin University
Co-Authors Ariel Deutch and Peter Vollbrecht, Vanderbilt University



Morgan Brophy 27 8:45 – 9:45 AM
Presentation Title Impact of a Cortical Microvascular Hemorrhage on Neural Health and Astrocyte Activation in Nearby Tissue
Research Mentor Chris Schaffer
Research Institution Cornell University
Home Institution Stevens Institute of Technology
Co-Authors Nathan Rosidi and Chris Schaffer, Cornell University

Alexis Brown 115 8:45 – 9:45 AM
Presentation Title Characterization of Staphylococcus aureus from Intense Marine Water and Sand Sampling
Research Mentor Weiyong Gu
Research Institution University of Miami
Home Institution University of Maryland, Baltimore County
Co-Authors Weiyong Gu, Helena Solo-Gabriel and Lisa Plano, University of Miami

Nicolette Brown 3 8:45 – 9:45 AM
Presentation Title Effects of Carbohydrate Functionalized Dendrimers on Galectin-3 Induced Cancer Cell Aggregation
Research Mentor Mary Cloninger
Research Institution Montana State University -Bozeman
Home Institution Montana State University -Bozeman
Co-Authors Mary Cloninger, Michelle Aries and Candace Goodman, Montana State University

Benjamin Brumley 143 8:45 – 9:45 AM
Presentation Title Behavioral Regulation and Children's Early Academic Skills
Research Mentor Amanda Wiliford
Research Institution University of Virginia School of Education
Home Institution University of North Carolina Chapel Hill
Co-Authors Karyn Hartz, Amanda Williford and Jason Downer, University of Virginia

Ashiya Buckels 60 9:45 – 10:45 AM
Presentation Title The Effect of Irx1 and Irx3 on Rat Aortic Smooth Muscle Cells
Research Institution UNCF Merck Science Initiative
Home Institution Washington University in St. Louis
Co-Authors Mark Brice and Leonard Anderson, Morehouse School of Medicine

Robyn Burgin 119 8:45 – 9:45 AM
Presentation Title The chemistry and Analysis for FRAP (Fluorescence Recovery after Photobleaching)
Research Mentor Adam Hammond
Research Institution University of Chicago
Home Institution Chicago State University
Co-Authors Adam Hammond and Kenneth Barnes, University of Chicago

John Campbell 6 9:45 – 10:45 AM
Presentation Title Identification of Cytokines that Stimulate Lung Cancer Cell Migration and Metastasis
Research Mentor Carla Kim
Research Institution Harvard University, Division of Medical Sciences
Home Institution North Carolina State University
Co-Authors Carla B. Kim and Kerstin W. Sinkevicius, Harvard University Div. of Medical Sciences

Shellese Cannonier 86 9:45 – 10:45 AM
Presentation Title A Partial Defect in the Checkpoint Protein Hus1 Impairs Tumor Development in a Two-Step Skin Carcinogenesis Model
Research Mentor Robert Weiss
Research Institution Cornell University
Home Institution University of the Virgin Islands
Co-Authors Robert Weiss, Cornell University

Yi Cao 84 9:45 – 10:45 AM
Presentation Title The Role of Pheromone in Biofilm Formation in Candida albicans
Research Mentor Richard Bennett
Research Institution Brown University
Home Institution Providence College
Co-Authors Richard Bennett and Kevin Alby, Brown University

Cesar Cardenas, Jr. 99 8:45 – 9:45 AM
Presentation Title Retinoid Modulation of BMP2 Signaling in Mesenchymal Stem Cells
Research Mentor Jorge Plutzky
Research Institution Harvard University, Division of Medical Sciences
Home Institution Texas A&M International University
Co-Authors Shriram Nallamshetty, Florian Kiefer and Jorge Plutzky, Brigham and Women's Hospital



Bradley Carter **141** **8:45 – 9:45 AM**
Presentation Title Parental Influence on Mathematics Interest
Research Mentor Mary Deacon
Research Institution University of Virginia School of Education
Home Institution James Madison University
Co-Authors Mary Deacon, University of Virginia

Raul Caso **95** **8:45 – 9:45 AM**
Presentation Title Investigation of Kaposi's Sarcoma Herpesvirus C-Terminal LANA Binding Partners
Research Mentor Kenneth Kaye
Research Institution Harvard University, Division of Medical Sciences
Home Institution University of Miami
Co-Authors Chantal Beauchemin and Kenneth Kaye, Harvard University Div. of Medical Sciences

Douglas Chapski **90** **9:45 – 10:45 AM**
Presentation Title Cellular Response to Glutamine Metabolism Inhibition
Research Mentor John Blenis
Research Institution Harvard University, Division of Medical Sciences
Home Institution Tulane University
Co-Authors Alfredo Csibi and John Blenis, Harvard University Div. of Medical Sciences

James Chavre **64** **9:45 – 10:45 AM**
Presentation Title Quantification of Differential Urinary Proteins as Potential Biomarkers of Renal Development in Healthy Infants at Birth and at Seven Months
Research Mentor Dennis Templeton
Research Institution University of Virginia School of Education
Home Institution Columbia University
Co-Authors Dennis Templeton and Jennifer Charlton, University of Virginia School of Medicine

Jarom Chung **41** **8:45 – 9:45 AM**
Presentation Title Symmetry of Division in Glioblastoma Stem Cells
Research Mentor Rosalind Segal
Research Institution Harvard University, Division of Medical Sciences
Home Institution Brigham Young University
Co-Authors Rosalind Segal, Mariella Gruber-Olipitz and Sukriti K. Dabral, Harvard University Div. of Medical Sciences

Elisia Clark **11** **8:45 – 9:45 AM**
Presentation Title Classification of Human Brain Activity During Navigation Using Multi-Voxel Pattern Analysis
Research Mentor Randy Buckner
Research Institution Harvard University
Home Institution University of Maryland, Baltimore County
Co-Authors Randy Buckner, Fenna Krienen and Angela Castellanos, Harvard University Arts and Sciences

Brandyce Coes **79** **8:45 – 9:45 AM**
Presentation Title Development of Tools to Study Bacterial Cell Wall Uptake for the Prevention of Inflammation Related to Asthma
Research Mentor Catherine Grimes
Research Institution Harvard University
Home Institution Claflin University
Co-Authors Catherine Grimes and Erin O'Shea, Harvard University Arts and Sciences

Destiny Coleman **114** **9:45 – 10:45 AM**
Presentation Title Viral Hemorrhagic Septicemia in Fish: Monitoring Efforts in Lower Great Lakes of New York State
Research Mentor Paul Bowser
Research Institution Cornell University
Home Institution University of Maryland, College Park
Co-Authors Paul R. Bowser and Emily R. Cornwell, Cornell University

Lisa Coleman **101** **8:45 – 9:45 AM**
Presentation Title Characterization of Potential Targets of the mRNA Binding Protein FMRP
Research Mentor Jason Dichtenberg
Research Institution Hunter College
Home Institution Otterbein College
Co-Authors Charlotte D'Hulst, Marcus Ng and Jason B. Dichtenberg, Hunter College

Sherman Coleman **47** **8:45 – 9:45 AM**
Presentation Title Synthesis and Evaluation of 1-Deoxyglucose Esters as Organogelators
Research Mentor Judy Gorski
Research Institution UNCF Merck Science Initiative
Home Institution Dillard University
Co-Authors Sherwin Cheuk, Guijin Wang and Hao Yang, University of New Orleans



Shamara Collins **129** **8:45 – 9:45 AM**
 Nuclear Magnetic Resonance Studies of Fuel Cell
 Electrolyte Membranes
Research Mentor Steve Greenbaum
Research Institution Hunter College
Home Institution Morgan State University
Co-Authors Steve Greenbaum and Jaime Farrington,
 Hunter College

Maria Correa **107** **8:45 – 9:45 AM**
Presentation Title Assessing Specificity and Physiologic
 Effects of Novel and Known Sirtuin Activating
 Compounds
Research Mentor David Sinclair
Research Institution Harvard University, Division of
 Medical Sciences
Home Institution UPR-Rio Piedras
Co-Authors Nathan Price, Angela Hafner and David A.
 Sinclair, Harvard University Div. of Medical Sciences

Renee Cotton **36** **9:45 – 10:45 AM**
Presentation Title Effects of Pyruvate Kinase Disruption
 on Tumor Growth in *C.elegans* and Its Relevance to
 Chemotherapy
Research Mentor Jill Bargonetti
Research Institution Hunter College
Home Institution University of Chicago
Co-Authors Ryan Doonan and Jill Bargonetti, Hunter
 College

Haydee Cruz **137** **8:45 – 9:45 AM**
Presentation Title A Comparison of Teacher Self-
 Perceptions and Observed Classroom Instruction
Research Mentor Carolyn Callahan
Research Institution University of Virginia School of
 Education
Home Institution Arizona State University
Co-Authors Carolyn Callahan, University of Virginia;
 Steve Arrieta, Montclair State University

Christine Daniels **18** **9:45 – 10:45 AM**
Presentation Title Crosstalk between the BRCA2 and
 APC/Beta-catenin Pathways in Mammary Stem Cells and
 Breast Cancer
Research Mentor Kathleen Goss
Research Institution University of Chicago
Home Institution Emory University
Co-Authors Kathleen Goss and Jenifer Prosperi,
 University of Chicago; Qingshen Gao, Northshore
 University

Kyle Davis **37** **8:45 – 9:45 AM**
 Synthesis of Gold Nanoparticles
Research Mentor Xingde Li
Research Institution Johns Hopkins University
Home Institution North Carolina State University
Co-Authors Xingde Li and Yong Ping Chen, Johns
 Hopkins University

Pamela De La Cruz **96** **9:45 – 10:45 AM**
Presentation Title Characterization of Single Stranded
 DNA Binding by Bacteriophage lambda Replication
 Initiator
Research Mentor David Jeruzalmi
Research Institution Harvard University
Home Institution UPR-Rio Piedras
Co-Authors David Jeruzalmi and Danaya Pakotiprapha,
 Harvard University Arts and Sciences

Abigail De La Pena **22** **9:45 – 10:45 AM**
Presentation Title Does Overproduction of Red Blood
 Cells Lead to Decreased Oxygen in the Brain Due to
 Stalled Flow in Capillaries?
Research Mentor Chris Schaffer
Research Institution Cornell University
Home Institution University of Florida
Co-Authors Claire Paduano, Puifi Santisakultarm and
 Chris Schaffer, Cornell University

Wallace Derricotte **128** **9:45 – 10:45 AM**
Presentation Title Effect of Translational Energy on the
 Sticking Probability of Methane on an Iridium Surface
Research Mentor Arthur Utz
Research Institution Tufts University Medford
Home Institution Morehouse College
Co-Authors Arthur Utz, Deno Del Sesto and Eric
 Dombrowski, Tufts University

Angela Dixon **147** **8:45 – 9:45 AM**
Presentation Title Multiculturalism and the Impact of
 School Climate and Engagement on African Americans
Research Mentor Angel Harris
Research Institution Princeton University
Home Institution University of North Carolina Chapel Hill
Co-Authors Angel Harris, Princeton University



Casey Doney 58 9:45 – 10:45 AM
Presentation Title Purification and Characterization of
Arthrobacter Globiformis Amine Oxidase
Research Mentor Doreen Brown
Research Institution Montana State University -Bozeman
Home Institution Fort Belknap College
Co-Authors Doreen Brown, Montana State University

Bilguujin Dorjsuren 72 9:45 – 10:45 AM
Presentation Title Identifying the EET Signaling Pathway
in Regulating Haematopoietic Stem Cell Self-Renewal in
Zebrafish
Research Mentor Leonard Zon
Research Institution Harvard University, Division of
Medical Sciences
Home Institution University of Maryland, Baltimore
County
Co-Authors Leonard I. Zon and Pulin Li, Harvard
University Div. of Medical Sciences

Jessica Duran 25 8:45 – 9:45 AM
Presentation Title Identification of Variant NUT Fusion
Partner Genes in NUT Midline Carcinoma
Research Mentor Christopher French
Research Institution Harvard University, Division of
Medical Sciences
Home Institution Rollins College-Winter Park
Co-Authors Christopher French, Harvard University Div.
of Medical Sciences; Brian Schwartz and Mariana Stoleru,
Brigham and Women's Hospital

Korine Duval 10 9:45 – 10:45 AM
Presentation Title Relative Importance of Internal
Prediction and Sensory Feedback when the Brain
Estimates Hand Position
Research Mentor Reza Shadmehr
Research Institution Johns Hopkins University
Home Institution University of Maryland, Baltimore
County
Co-Authors Reza Shadmehr and Adrian Haith, Johns
Hopkins University

Cianna Edquilane 17 8:45 – 9:45 AM
Presentation Title Molecular and Cellular Mechanisms
Regulating Wound Healing
Research Mentor Ira Herman
Research Institution Tufts University
Home Institution Chaminade University of Honolulu
Co-Authors Ira Herman and Jeffry Deckenback, Tufts
University School of Graduate Biomedical Sciences

Charles Eke 57 8:45 – 9:45 AM
Presentation Title Bungarotoxin, Reporter to Studying
GLUT4 Trafficking
Research Mentor Timothy McGraw
Research Institution Weill Cornell Graduate School
Home Institution Delaware State University
Co-Authors Timothy E. McGraw, David Iaea and Sameer
Mohammad, Weill Cornell Graduate School

Xochina El Hilali 62 9:45 – 10:45 AM
Presentation Title Transcriptional Profiling of Lipid
Nanoparticles Uncover Potential Toxicities
Research Mentor I-Ming Wang
Research Institution UNCF Merck Science Initiative
Home Institution Carnegie Mellon University
Co-Authors I-Ming Wang and Elena Nikonova, UNCF-
Merck Science Initiative

Samantha Espinosa 111 8:45 – 9:45 AM
Presentation Title Carbon Materials from Chromonic
Liquid Crystals and their Applications to Battery
Electrodes
Research Mentor Robert Hurt
Research Institution Brown University
Home Institution College of Saint Elizabeth
Co-Authors Fei Guo and Robert Hurt, Brown University

Christina Flansburg 2 9:45 – 10:45 AM
Presentation Title Characterization Of The Zic1-
Expressing Premigratory Neural Crest Domain
Research Mentor Christa Merzdorf
Research Institution Montana State University -Bozeman
Home Institution Fort Belknap College
Co-Authors Christa Merzdorf, Montana State University

Dannielle Foster 14 9:45 – 10:45 AM
Presentation Title The Role of Senescence in
Immortalized Cells Which Express an Oncogenic Ras Gene
Research Mentor Peter Bitterman
Research Institution UNCF Merck Science Initiative
Home Institution Xavier University of Louisiana
Co-Authors Peter Bitterman and Jose Gomez-Garcia,
University of Minnesota School of Medicine



Jesse Gallegos 120 9:45 – 10:45 AM
Presentation Title The Fringes, Centroids, and Traction of Cells
Research Mentor Janet Blume
Research Institution Brown University
Home Institution University of Southern California
Co-Authors Christian Franck and Janet Blume, Brown University

Limary Garcia Gonzalez 78 9:45 – 10:45 AM
Presentation Title Characterization of the Ability of CRAMs and Oxysterols to Interact with OSBP Mutants and ORPs
Research Mentor Matthew Shair
Research Institution Harvard University
Home Institution UPR-Rio Piedras
Co-Authors Matthew Shair, Harvard University Arts and Sciences

Christin Gates 148 9:45 – 10:45 AM
Presentation Title Evaluating the Effects of False Incarceration Post Exoneration
Research Mentor Ronald Sullivan
Research Institution Harvard University
Home Institution University of Mississippi
Co-Authors Ronald S. Sullivan Jr. and Dehlia Umunna, Harvard University Arts and Sciences

Kimeya Ghaderi 73 8:45 – 9:45 AM
Presentation Title Characterization of Histone Modification Throughout *C. elegans* Embryogenesis
Research Mentor Susan Mango
Research Institution Harvard University
Home Institution University of Maryland, Baltimore County
Co-Authors Susan E. Mango and Megan Senchuk, Harvard University Arts and Sciences

Jocelyn Gipson 5 8:45 – 9:45 AM
Presentation Title Establishment of a Xenograft Mouse Model to Explore Enhanced Permeability Retention (EPR) in Tumors
Research Mentor Joseph Davide
Research Institution UNCF Merck Science Initiative
Home Institution University of Alabama-Birmingham
Co-Authors Andrea Matter and Joseph Davide, UNCF-Merck Science Initiative

Allison Gomez 51 8:45 – 9:45 AM
Presentation Title Characterization of Aberrant Leukomegenic Notch 1 Transcripts in T cell Leukemia
Research Mentor Jon Aster
Research Institution Harvard University, Division of Medical Sciences
Home Institution UC San Diego
Co-Authors Jon Aster and Todd Ashworth, Harvard University Div. of Medical Sciences

Andres Gonzalez 88 9:45 – 10:45 AM
Presentation Title The Effects of Beta-Glucan Pretreatment on the LPS-Induced Cytokine Production in vitro
Research Mentor Jonathan Reichner
Research Institution Brown University
Home Institution Miami Dade College
Co-Authors Jonathan S. Reichner, Courtni T. Newsome and Estefany Flores, Brown University

Rafael González 19 8:45 – 9:45 AM
Presentation Title Reduced Model of Action Potentials of Embryonic Stem Cell-Derived Cardiac Cells
Research Mentor Leslie Tung
Research Institution Johns Hopkins University
Home Institution UPR-Mayaguez
Co-Authors Leslie Tung, Johns Hopkins University

Leopold Green 123 8:45 – 9:45 AM
Presentation Title Lanthanide Luminescence Synthesizing Yb³⁺/Ln³⁺ Co-doped LaF₃⁺ Nano-crystals for Up-conversion Fluorescence
Research Mentor Lijun Wang
Research Institution UNCF Merck Science Initiative
Home Institution Hampton University
Co-Authors Kesete Ghebreyessus and Uwe Hommerich, Hampton University

Ronald Grider 74 9:45 – 10:45 AM
Presentation Title Characterization of Herpes Processivity Factors by X-Ray Crystallography
Research Mentor James Hogle
Research Institution Harvard University, Division of Medical Sciences
Home Institution Illinois State University
Co-Authors James Hogle and Molly Coseno, Harvard University Div. of Medical Sciences



Kaitlin Heffron **142** **9:45 – 10:45 AM**
Presentation Title Academic Year and Gender Differences on Adolescent Math Interest
Research Mentor Marie Shoffner
Research Institution University of Virginia School of Education
Home Institution University of Virginia
Co-Authors Marie Shoffner, University of Virginia

Elizabeth Henderson **97** **8:45 – 9:45 AM**
Presentation Title Substrate Recognition of Histone H2B by DUBm
Research Mentor Cynthia Wolberger
Research Institution Johns Hopkins University
Home Institution Hunter College
Co-Authors Cynthia Wolberger and Chris Berndsen, Johns Hopkins University

Kendrick Henderson **39** **8:45 – 9:45 AM**
Presentation Title The Effect of Helicobacter Pylori on Raf Kinase Inhibitor Protein in Gastric Cancer Cells
Research Mentor Devasis Chatterjee
Research Institution Brown University
Home Institution Claflin University
Co-Authors Erica Moen, Sicheng Wen and Devasis Chatterjee, Brown University

Alexandra Herndon **125** **8:45 – 9:45 AM**
Presentation Title Going Green: Exploratory Synthesis of Novel Palladium Complexes Towards the Epoxidation of Olefins
Research Mentor Shuzhi Dong
Research Institution UNCF Merck Science Initiative
Home Institution University of Washington
Co-Authors Karen Goldberg and Greg Fulmer, University of Washington

Danielle Hill **130** **9:45 – 10:45 AM**
Presentation Title Psychosocial Correlates of Adolescent Smoking Initiation Among a Statewide Sample of Middle and High School Students
Research Mentor Carlo DiClemente
Research Institution University of Maryland, Baltimore County
Home Institution Spelman College
Co-Authors Carlo DiClemente and Janine Delahanty, University of Maryland, Baltimore County

Eva Hoops **16** **9:45 AM**
Presentation Title Microbial Source Tracking on The Little Big Horn River
Research Mentor Neva Tall Bear
Research Institution Little Big Horn College
Home Institution Little Big Horn College
Co-Authors Sara L. Plaggemeyer, Little Big Horn College

Janae Hunter **30** **9:45 – 10:45 AM**
Presentation Title Ultrastructural Analysis of Mitochondria: Phenotypic Implications for Parkinson's, Barth Syndrome and Charcot-Marie-Tooth Disease
Research Mentor Valdeci Da Cunha
Research Institution UNCF Merck Science Initiative
Home Institution Oakwood College
Co-Authors J. Michael McCaffery, Hsiuchen Chen and Carla Koehler, Oakwood University

Sanchez Jarrett **104** **9:45 – 10:45 AM**
Presentation Title Probing The Inner Membrane: Analysis of In-vitro Essential Mycobacterial Proteins.
Research Mentor Alissa Myrick
Research Institution Harvard University, Division of Medical Sciences
Home Institution Brooklyn College CUNY
Co-Authors Alissa Myrick, Shoko Minami and Eric Rubin, Harvard University Div. of Medical Sciences

Itisha Jefferson **124** **9:45 – 10:45 AM**
Presentation Title The Potential Environmental Impact of Arsanilate and Arsacetin
Research Mentor Vladimir Simov
Research Institution UNCF Merck Science Initiative
Home Institution Spelman College
Co-Authors Gladys S. Bayse, Paige E. Cooper and Deidre K. Robinson, Spelman College

Shawn Johnson **4** **9:45 – 10:45 AM**
Presentation Title Comparison of PML Bodies and Telomere Status Between T-ALL Cells Having Either Increased Telomerase Activation or ALT Mechanisms
Research Mentor Ronald DePinho
Research Institution Harvard University, Division of Medical Sciences
Home Institution Oregon State University
Co-Authors Ronald Depinho and Jian Hu, Harvard University Div. of Medical Sciences



Phillip Kang **48** **9:45 – 10:45 AM**
Presentation Title Microevolutionary Principles of Cell Cytoskeleton Organization: Comparative Study of the Mitotic Spindle of *C. elegans*
Research Mentor Daniel Needleman
Research Institution Harvard University
Home Institution University of Maryland, Baltimore County
Co-Authors Daniel Needleman and Reza Farhadifar, Harvard University Arts and Sciences

Emel Kasgarli **75** **8:45 – 9:45 AM**
Presentation Title Analysis of ZTF-8 Function in DNA Damage Repair and Its Interaction Partners in *C. elegans*
Research Mentor Monica Colaiacovo
Research Institution Harvard University, Division of Medical Sciences
Home Institution UCLA
Co-Authors Monica Colaiacovo and Hyun-Min Kim, Harvard University Div. of Medical Sciences

Brittany Katz **56** **9:45 – 10:45 AM**
Presentation Title Measuring Fatty Acid Uptake In Primary Enterocytes
Research Mentor Andrea Peier
Research Institution UNCF Merck Science Initiative
Home Institution Dillard University
Co-Authors Andrea Peier, Karni Schlessinger and Kunal Desai, UNCF-Merck Science Initiative

Jordan Kennedy **108** **9:45 – 10:45 AM**
Presentation Title Rheological Characterization of Thermally Reversible Gels
Research Mentor Jennifer Brown
Research Institution Montana State University -Bozeman
Home Institution Montana State University -Bozeman
Co-Authors Jennifer Brown and Sarah Codd, Montana State University

Danielle Kinsey **50** **9:45 – 10:45 AM**
Presentation Title Molecular Characterization Of The Microbial Populations In Biofilms From Polyvinyl Chloride and Copper Plumbing Material In Reactors Simulating Premise Plumbing
Research Mentor Gem Encarnacion
Research Institution Montana State University -Bozeman
Home Institution Fort Belknap College
Co-Authors Gem Encarnacion, Montana State University

Michael Kinsey **59** **8:45 – 9:45 AM**
Presentation Title Characterization of Lipid Production from Yellowstone National Park Green Algae Isolates in Response to Differing Environmental Conditions
Research Mentor Jacob Valenzuela
Research Institution Montana State University -Bozeman
Home Institution Fort Belknap College
Co-Authors Jacob Valenzuela, Montana State University

Djifa Kothor **116** **9:45 – 10:45 AM**
Presentation Title Ewé Consciousness Among Ghanaians and Togolese Migrants in North America
Research Mentor Nenaji Jackson
Research Institution Howard University
Home Institution St. Lawrence University
Co-Authors Nenaji Jackson, Howard University

Valerie Latimore **35** **8:45 – 9:45 AM**
The Effects of Genetic Variation on Choline Metabolism and Suggested Daily Intake
Research Mentor Marie Caudill
Research Institution Cornell University
Home Institution Scripps College
Co-Authors Marie Caudill, Cornell University

Marisa Levy **100** **9:45 – 10:45 AM**
Presentation Title Alcohol: A Compensatory Mechanism for Stress and the Role of the Prefrontal Cortex
Research Mentor Victoria Luine
Research Institution Hunter College
Home Institution SUNY Binghamton
Co-Authors Victoria Luine and Juan Gomez, Hunter College; Maya Frankfurt, CUNY Sophie Davis School of Medicine

Virginia Li **52** **9:45 – 10:45 AM**
Presentation Title Analysis of the Cytokines Released by Phagocytes After the Uptake of Apoptotic Cells
Research Mentor Xiao Jing Ma
Research Institution Weill Cornell Graduate School
Home Institution Brooklyn College CUNY
Co-Authors Xiao Jing Ma and Ha Jeong Kim, Weill Cornell Graduate School

Armando Lopez Mercado **87** **8:45 – 9:45 AM**
Presentation Title Prosurvival Signaling of Hepatocyte Growth Factor in the Murine Airspace
Research Mentor Enid Neptune
Research Institution Johns Hopkins University
Home Institution UPR-Rio Piedras
Co-Authors Enid Neptune, Kaori Misono and Shana Metzger, Johns Hopkins University



Mildred López-Piñeiro 44 9:45 – 10:45 AM

Presentation Title Quorum Sensing Dynamics in *Vibrio harveyi*

Research Mentor Howard Stone

Research Institution Princeton University

Home Institution UPR-Rio Piedras

Co-Authors Howard Stone and Jiandi Wan, Princeton University

Aaron Louie 80 9:45 – 10:45 AM

Presentation Title Mechanism of Cyclic di-GMP Repression of Motility in *Pseudomonas aeruginosa*

Research Mentor Stephen Lory

Research Institution Harvard University, Division of Medical Sciences

Home Institution UC San Diego

Co-Authors Stephen Lory, Harvard University Div. of Medical Sciences

Mackenzie Martin 15 8:45 – 9:45 AM

Presentation Title The Effects of Serine Palmitoyl Transferase Inhibitors (SPT) on Lipid Raft Sphingolipid Ceramides and Insulin Signaling

Research Mentor Joseph T. Brozinick

Research Institution Eli Lilly and Company

Home Institution Morehouse College

Co-Authors Joseph T. Brozinick, Eric Hawkins, and Mark Wade, Eli Lilly and Company

Olivia Martin 9 8:45 – 9:45 AM

Presentation Title Rapid qPCR Identification of Enteric Bacteria in Clinical Studies

Research Mentor Noel Goddard

Research Institution Hunter College

Home Institution University of Maryland, Eastern Shore

Co-Authors Noel Goddard, Hunter College

Elliott Martinez 34 9:45 – 10:45 AM

Presentation Title Polymeric Gene Delivery

Research Mentor Jordan Green

Research Institution Johns Hopkins University

Home Institution Saint Edward's University

Co-Authors Jordan Green, Johns Hopkins University

Raul Martinez 21 8:45 – 9:45 AM

Presentation Title Acute Changes in Expression of Signaling Proteins Following Early-life Seizures

Research Mentor Frances Jensen

Research Institution Harvard University, Division of Medical Sciences

Home Institution Stonehill College

Co-Authors Jocelyn Lippman Bell and Frances Jensen, Harvard University Div. of Medical Sciences

Irene Mbah 144 9:45 – 10:45 AM

Presentation Title Hemispheric Effects on Change Detection

Research Mentor George Alvarez

Research Institution Harvard University

Home Institution Rice University

Co-Authors George Alvarez and Daryl Foungnie, Harvard University Arts and Sciences

Joelle Mbatchou 42 9:45 – 10:45 AM

Presentation Title Using Small Molecules in the Rho Pathway with FRET

Research Mentor Ulrike Eggert

Research Institution Harvard University, Division of Medical Sciences

Home Institution DePaul University

Co-Authors Ulrike Eggert and Adam Castareno, Harvard University Div. of Medical Sciences

Brandon McClary 7 8:45 – 9:45 AM

Presentation Title Testing AP-1 Inhibitor Compounds with Potential for use as Therapeutic Tumor Prevention Agents

Research Mentor Rene Bartz

Research Institution UNCF Merck Science Initiative

Home Institution University of Maryland, Baltimore County

Co-Authors Nancy Colburn and Moon-IL Kang, NIH/NCI

Nekeshia McInnis 31 8:45 – 9:45 AM

Presentation Title Effect of Parental Relationship in Childhood on Adulthood Emotional Health

Research Mentor Thomas LaVeist

Research Institution Johns Hopkins University

Home Institution University of Florida

Co-Authors Ruth Fesahazion, Roland Thorpe and Thomas LaVeist, Johns Hopkins University



Michael McKenzie 118 9:45 – 10:45 AM
Presentation Title A Reductive Rearrangement of Hydroxy- and Aminocyclopropyl Imides
Research Mentor Joey Methot
Research Institution UNCF Merck Science Initiative
Home Institution University of Wisconsin Madison
Co-Authors Joey Methot and Theresa A. Duncan, UNCF-Merck Science Initiative

Eunice Mendoza 151 8:45 – 9:45 AM
Presentation Title Latinos' Generational Status and Self-Efficacy Mediated by Language Use in Adolescents
Research Mentor Cynthia Coll
Research Institution Brown University
Home Institution Rochester Institute of Technology
Co-Authors Cynthia García Coll and Flannery Patton, Brown University

Elizabeth Millings 71 8:45 – 9:45 AM
Presentation Title Investigating the Mechanism and Kinetics of 1,4-dihydroxy-2-naphthoyl-CoA Synthase (MenB) in Mycobacterium tuberculosis
Research Mentor Robert Tynebor
Research Institution UNCF Merck Science Initiative
Home Institution SUNY Stony Brook
Co-Authors Peter Tonge and Nina Liu, State University of New York at Stony Brook

Frances Morales 85 8:45 – 9:45 AM
Presentation Title Study on the Role of Polalpha-primase at Telomeres in Human Cells
Research Mentor Diego Loayza
Research Institution Hunter College
Home Institution UPR-Humacao
Co-Authors Diego Loayza and Raffaella Diotti, Hunter College

Steve Morgan 68 9:45 – 10:45 AM
Presentation Title Epigenetic Mechanism of CD4 Regulation in T-Lymphocytes
Research Mentor Nathaniel Elsen
Research Institution UNCF Merck Science Initiative
Home Institution Xavier University of Louisiana
Co-Authors Mimi Wan, Tian Chi and Barbara Hirschman, Yale University

Filomene Morrison 102 9:45 – 10:45 AM
Presentation Title Effects of Sexual Experience on Neurogenesis in the Aging Brain
Research Mentor Elizabeth Gould
Research Institution Princeton University
Home Institution UC Berkeley
Co-Authors Elizabeth Gould and Erica Glasper, Princeton University

Julia Mulligan 133 8:45 – 9:45 AM
Presentation Title Questioning "Findings": HIV/AIDS Mass Media Intervention Campaigns
Research Mentor Terence McDonnell
Research Institution Vanderbilt University
Home Institution Beloit College
Co-Authors Terence McDonnell, Vanderbilt University

Joshua Muñoz 112 9:45 – 10:45 AM
Presentation Title Determining and Controlling the Cutting Mechanism of Single-Layer Graphene Sheets via Sonication
Research Mentor Kyung-Suk Kim
Research Institution Brown University
Home Institution UC San Diego
Co-Authors Huck Beng Chew and Kyung-Suk Kim, Brown University

Michelle Munyikwa 54 9:45 – 10:45 AM
Presentation Title Recruitment of the Oncoprotein v-ErbA to Aggresomes
Research Mentor Lizabeth Allison
Research Institution UNCF Merck Science Initiative
Home Institution College of William & Mary
Co-Authors Lizabeth Allison, College of William and Mary; Crystal Connor and Alicia Simmons, Hampton University

Brandon Murray 49 8:45 – 9:45 AM
Presentation Title Distribution of Electrical Synapses in the TRN
Research Mentor Barry Connors
Research Institution Brown University
Home Institution Morehouse College
Co-Authors Timothy Zolnik, Brown University



Lindsey Myers **13** **8:45 – 9:45 AM**
Presentation Title Mitochondrial Dysfunction in Skeletal Muscle Induced by High Fat Diet through Permeability Transition Pore Formation
Research Mentor Zhen Yan
Research Institution University of Virginia School of Medicine
Home Institution University of Florida
Co-Authors Zhen Yan and Yasir Akhtar, University of Virginia School of Medicine

Rayna Narvaez **67** **8:45 – 9:45 AM**
Presentation Title Aspects of Fertility in Siberian Hamsters with Disrupted Circadian Rhythms
Research Mentor Brian Prendergast
Research Institution University of Chicago
Home Institution Augustana College
Co-Authors Brian Prendergast, University of Chicago

Grace Nauman **76** **9:45 – 10:45 AM**
Presentation Title Transcription Activation in *S. Cerevisiae*
Research Mentor Fred Winston
Research Institution Harvard University, Division of Medical Sciences
Home Institution Dartmouth College
Co-Authors Fred Winston, Harvard University Div. of Medical Sciences

Kelechi Ndukwe **20** **9:45 – 10:45 AM**
Presentation Title MAG and Myelin Induce Schwann Cell Death
Research Mentor Marie Filbin
Research Institution Hunter College
Home Institution Lehman College, CUNY
Co-Authors Marie Filbin and Nagarathnamma Chaudhry, Hunter College

Brandon Nemieboka **66** **9:45 – 10:45 AM**
Presentation Title Development of Mechanism-Based Probe of Sirtuins
Research Mentor Anthony Sauve
Research Institution Weill Cornell Graduate School
Home Institution University of Maryland, Baltimore County
Co-Authors Anthony Sauve and Jessica Falco, Weill Cornell Graduate School

Hien Nguyen **134** **9:45 – 10:45 AM**
Presentation Title Sex Differences in PKMZ Activity in the Rodent Hippocampus after Spatial Training in the Radial 8-arm Task
Research Mentor Peter Serrano
Research Institution Hunter College
Home Institution Baylor University
Co-Authors Peter Serrano and Veronica Sebastian, Hunter College

Janice Nieves **23** **8:45 – 9:45 AM**
Presentation Title Bcrp1 and Proliferation of cSP Cells
Research Mentor Ronglih Liao
Research Institution Harvard University, Division of Medical Sciences
Home Institution UPR-Cayey
Co-Authors Kostianna Sereti and Ronglih Liao, Harvard University Div. of Medical Sciences

Rachel Nolan **138** **9:45 – 10:45 AM**
Presentation Title Embodiment in Social Categorization
Research Mentor Nalini Ambady
Research Institution Tufts University Medford
Home Institution Vanderbilt University
Co-Authors Nalini Ambady and Michael Slepian, Tufts University

Olivia Nwankwo **103** **8:45 – 9:45 AM**
Presentation Title Investigation of Protein Acetylation using Semi-Synthesis
Research Mentor Phil Cole
Research Institution Johns Hopkins University
Home Institution University of Maryland, Baltimore County
Co-Authors Phil Cole and Kannan Karukurichi, Johns Hopkins University

Holly Payne **81** **8:45 – 9:45 AM**
Presentation Title Assessment of Acetylcholine and GABA Cells after Methamphetamine-induced Cell Death in the Mouse Striatum
Research Mentor Jesus Angulp
Research Institution Hunter College
Home Institution University of Missouri-Columbia
Co-Authors Ingrid Tulloch and Jesus Angulo, Hunter College



Mayrel Pérez 65 8:45 – 9:45 AM
Presentation Title A Modified Resident-intruder Assay for Determination of Aggressiveness in Mice
Research Mentor Catherine Dulac
Research Institution Harvard University
Home Institution Interamerican University of Puerto Rico
Co-Authors Catherine Dulac and Joseph Bergan, Harvard University Arts and Sciences

Harold Phillips 46 9:45 – 10:45 AM
Presentation Title Norepinephrine Depleted Mice Exhibit Repetitive Behavior Correlated with Orbitofrontal-Striatal-Thalamocortical Pathway Dysfunction
Research Mentor Donnie Eddins
Research Institution UNCF Merck Science Initiative
Home Institution Yale University
Co-Authors Kafui Dzirasa and Miguel A. L. Nicolelis, Duke University

Brendalyn Quiah 92 9:45 – 10:45 AM
Presentation Title Possible Role Of Ceramide Kinase In Intracellular Membrane Trafficking
Research Mentor William Brown
Research Institution Cornell University
Home Institution Neumann Univesity
Co-Authors William Brown, Danielle Kalkofen and Kevin Dinh Ha, Cornell University

Debra Ragland 29 8:45 – 9:45 AM
Presentation Title The Effect of Single Amino Acid Mutations on HIV-I Susceptibility to High Active Antiretroviral Therapy
Research Mentor Robert Siliciano
Research Institution Johns Hopkins University
Home Institution North Carolina A&T State University
Co-Authors Maame Sampah and Robert Siliciano, Johns Hopkins University

Matthew Ramirez 152 9:45 – 10:45 AM
Presentation Title Longitudinal Examination of the Neural Correlates Underlying Self-Regulation in the Face of a Reward
Research Mentor BJ Casey
Research Institution Weill Cornell Graduate School
Home Institution Yale University
Co-Authors B.J. Casey, Matthew Malter Cohen and Nicholas Franklin, Weill Cornell Graduate School

Ghansham Ramkhellawan 28 9:45 – 10:45 AM
Presentation Title Investigating Cellular Mechanical Properties in Relation to Lineage Potential for Stem Cell Therapy
Research Mentor Eric Darling
Research Institution Brown University
Home Institution University of Miami
Co-Authors Eric Darling and Vera Fonseca, Brown University

Brittany Rhodes 109 8:45 – 9:45 AM
Presentation Title Use of TiO₂ Nanotube Arrays in Dye-Sensitized Solar Cells
Research Mentor Steven Bernasek
Research Institution Princeton University
Home Institution Spelman College
Co-Authors Joshua Wnuk and Steven Bernasek, Princeton University

Jenae Richardson 139 8:45 – 9:45 AM
Presentation Title Using Mindfulness Meditation to Minimize Choking under Pressure on an Arithmetic Task
Research Mentor Sian Beilock
Research Institution University of Chicago
Home Institution Syracuse University
Co-Authors Sian Beilock and J. Jay Todd, University of Chicago

Jazmine Robertson 89 8:45 – 9:45 AM
Presentation Title Functional Characterization of Histone Binding Proteins
Research Mentor Sean Taverna
Research Institution Johns Hopkins University
Home Institution Norfolk State University
Co-Authors Ana Raman and Sean Taverna, Johns Hopkins University

Hiram Rodriguez 38 9:45 – 10:45 AM
Presentation Title Purification of the Transducible Transcription Factor TAT-PAX4 and Determination of its Biological Activity
Research Mentor Juan Dominguez-Bendala
Research Institution University of Miami
Home Institution UPR-Mayaguez
Co-Authors Juan Dominguez-Bendala and Sirlene Cechin, University of Miami



Natassia Rodriguez **146** **9:45 – 10:45 A**
Presentation Title Made it to America, Now What?: An Analysis of Why Educational Achievement Differs among Latino Subgroups in the U.S.
Research Mentor Angel Harris
Research Institution Princeton University
Home Institution University of North Carolina Chapel Hill
Co-Authors Angel Harris, Princeton University

Adelita Russette **110** **9:45 – 10:45 AM**
Presentation Title Shape Memory Alloys: Processing, Characterization and Applications
Research Mentor David Miller
Research Institution Montana State University -Bozeman
Home Institution Stone Child College
Co-Authors David Miller, Montana State University

Daniel Salahuddin **53** **8:45 – 9:45 AM**
Presentation Title Characterization of Murine Apolipoprotein-B48 Antibodies: Correlation of Protein Peptide Titers to Native Apolipoprotein Titers
Research Mentor Lyndon Mitnaul
Research Institution UNCF Merck Science Initiative
Home Institution Saint Leo University
Co-Authors Lyndon Mitnaul and Ying Chen, UNCF-Merck Science Initiative

James Salazar **26** **9:45 – 10:45 AM**
Presentation Title Computational Docking Studies of Antibody-Antigen Complexes
Research Mentor George Church
Research Institution Harvard University, Division of Medical Sciences
Home Institution University of Texas at Austin
Co-Authors George Church, Srivatsan Raman and Uri Laserson, Harvard University Div. of Medical Sciences

Farzana Saleem **140** **9:45 – 10:45 AM**
Presentation Title The Relation Between SES and Children's Early Academic Skills
Research Mentor Amanda Williford
Research Institution University of Virginia School of Education
Home Institution Georgia State University
Co-Authors Karyn Hartz, Amanda Wiliford, and Jason Downer, University of Virginia

Ana Sanchez-Rivera **149** **8:45 – 9:45 AM**
Presentation Title Exploring Implicit Measures of Racial Phenotypicity Bias
Research Mentor Keith Maddox
Research Institution Tufts University Medford
Home Institution UPR-Rio Piedras
Co-Authors Hannah Dolberg Barrett, Karina Villareal Medved and Thomas C. Mann, Tufts University

Philisha Santio **135** **8:45 – 9:45 AM**
Presentation Title Enhancing Breastfeeding: The Creation of Educational Materials for BlackFeet/Cree Mothers
Research Mentor Jessi Smith
Research Institution Montana State University -Bozeman
Home Institution Stone Child College
Co-Authors Maria Russell and Jessi L. Smith, Montana State University

Ryan Santos **82** **9:45 – 10:45 AM**
Presentation Title Inhibition of STAT3 in Skeletal Muscle in (a Mouse Model of) Cancer Cachexia
Research Mentor Teresa Zimmers
Research Institution University of Miami
Home Institution Chaminade University of Honolulu
Co-Authors Teresa A. Zimmers and Andrea Bonetto, University of Miami

Ashley Scott **55** **8:45 – 9:45 AM**
Presentation Title Regulation of Pancreatic Beta-Cell Mass by Amino Acids and Glucose in Zebrafish
Research Mentor Wenbiao Chen
Research Institution Vanderbilt University
Home Institution Claflin University
Co-Authors Lisette Maddison and Wenbiao Chen, Vanderbilt University

Carlyn Scott **150** **9:45 – 10:45 AM**
Presentation Title Temperamental and Neurophysiological Predictors of Anxious Behavior in Children
Research Mentor Tracy Dennis
Research Institution Hunter College
Home Institution Hunter College
Co-Authors Tracy Dennis, Hunter College



Candice Sherwood 121 8:45 – 9:45 AM
Presentation Title Structure-Property Relationship in HFA-Containing Polyamide Thin Film Composite Membranes
Research Mentor Zhuqing Liu
Research Institution UNCF Merck Science Initiative
Home Institution Georgia Institute of Technology
Co-Authors Young-Hye Na and Ratnam Sooriyakumaran, IBM Almaden Research Center

Ashley Spann 61 8:45 – 9:45 AM
Presentation Title Exploration of PTEN-Deficient Cell Sensitization to PARP Inhibitors via RNAi Screening
Research Mentor Michele Cleary
Research Institution UNCF Merck Science Initiative
Home Institution Samford University
Co-Authors Matthew Tudor and Michele Cleary, UNCF-Merck Science Initiative

Brooke Stevenson 155 8:45 – 9:45 AM
Presentation Title Radon on the Apsaalooke (Crow) Reservation
Research Mentor Nev Tall Bear
Research Institution Little Big Horn College
Home Institution Little Big Horn College
Co-Authors Neva Tall Bear, Little Big Horn College

Meredith Tallbull 122 9:45 – 10:45 AM
Presentation Title Iron-Sulfate Material Synthesis, Characterization
Research Mentor Robert Szilagyi
Research Institution Montana State University -Bozeman
Home Institution Chief Dull Knife College
Co-Authors Robert Szilagyi and Brad Towey, Montana State University

Carmen Taveras 69 8:45 – 9:45 AM
Presentation Title Rab-mediated Vesicle Trafficking during Epithelial Polarization
Research Mentor Geri E. Kreitzer
Research Institution Weill Cornell Graduate School
Home Institution Hunter College
Co-Authors Will Smith and Geri E. Kreitzer, Weill Cornell Graduate School

Kelsey Taylor 77 8:45 – 9:45 AM
Presentation Title Retrograde Mitochondrial Motility in Neurons
Research Mentor Thomas Schwarz
Research Institution Harvard University, Division of Medical Sciences
Home Institution Connecticut College
Co-Authors Thomas Schwarz and Michelle Cronin, Harvard University Div. of Medical Sciences

Milinda Thompson 43 8:45 – 9:45 AM
Presentation Title Correlation of Pulmonary Endothelial Barrier Function Modulation with Adherens Junction Protein Association and SHP2 Activity
Research Mentor Elizabeth Harrington
Research Institution Brown University
Home Institution CSU Long Beach
Co-Authors Elizabeth Harrington and Katie Grinnell, Brown University

Joseph Tillotson 40 9:45 – 10:45 AM
Presentation Title Effects of Radiation-Induced DNA Damage in Peripheral Lymphocytes of Breast Cancer Patients
Research Mentor Jennifer Hu
Research Institution University of Miami
Home Institution Chaminade University of Honolulu
Co-Authors Jennifer Hu, Venetta Thomas and Glenn Allen, University of Miami

Ulysses Toche 91 8:45 – 9:45 AM
Presentation Title The Role of FSP1-marked Fibroblast Cells in the Metastasis of 4T1 Cancer Cells
Research Mentor Raghuram Kalluri
Research Institution Harvard University, Division of Medical Sciences
Home Institution Morehouse College
Co-Authors Joy Tse and Raghuram Kalluri, Harvard University Div. of Medical Sciences

Danielle Toupo 33 8:45 – 9:45 AM
Presentation Title Engineering Antibodies Using A Bacterial Inner Membrane Display
Research Mentor Matthew DeLisa
Research Institution Cornell University
Home Institution University of Delaware
Co-Authors Amy J. Karlsson and Matthew P. DeLisa, Cornell University



Nancy Truong **132** **9:45 – 10:45 AM**
Presentation Title Longitudinal Effect of Family Type and Popularity on Adolescent Male Delinquency
Research Mentor Patrick Tolan
Research Institution University of Virginia School of Education
Home Institution Kenyon College
Co-Authors Patrick Tolan, Angela Henneberger and Myles Durkee, University of Virginia

MaKendra Umstead **117** **8:45 – 9:45 AM**
Presentation Title Optimization of Hot Stage Microscopy and XRPD Methods for the Physicochemical Characterization of Drug Candidates
Research Mentor Pierre Daublain
Research Institution UNCF Merck Science Initiative
Home Institution North Carolina Central University
Co-Authors Pierre Daublain and Caroline McGregor, Merck Research Laboratories Boston

Nadyan Vargas **24** **9:45 – 10:45 AM**
Presentation Title Race and Ethnic Variation in Skin Toxicity in Breast Cancer Patients Receiving Radiation Treatment
Research Mentor Jean Wright
Research Institution University of Miami
Home Institution UPR-Mayaguez
Co-Authors Jean Wright, University of Miami

Jasmaine Williams **45** **8:45 – 9:45 AM**
Presentation Title Role of MK-1775, a Wee1 Inhibitor, in Potentiation to Chemotherapeutics
Research Mentor Stuart Shumway
Research Institution UNCF Merck Science Initiative
Home Institution University of Georgia
Co-Authors Stuart Shumway, UNCF-Merck Science Initiative

Lindsay Wilson **105** **8:45 – 9:45 AM**
Presentation Title Energetic Contributions to Multidrug Recognition
Research Mentor Herschel Wade
Research Institution Johns Hopkins University
Home Institution University of Maryland, Baltimore County
Co-Authors Sharrol Bachas, Drew Gunio and Herschel Wade, Johns Hopkins University

Gabrielle Winston-McPherson **127** **8:45 – 9:45 AM**
Presentation Title Synthesis of Nantenine Derivatives as Potential 5-HT_{2A} Antagonists
Research Mentor Wayne Harding
Research Institution Hunter College
Home Institution University of Arizona
Co-Authors Wayne Harding and Sandeep Chaudhary, Hunter College

Rama Yakubu **63** **8:45 – 9:45 AM**
Presentation Title Intravital Imaging, Evaluations of siRNA Delivery Platforms in Liver
Research Mentor Bruce Ng
Research Institution UNCF Merck Science Initiative
Home Institution Clarkson University
Co-Authors Bruce Ng, Kathleen Haskell and Joe Davide, UNCF-Merck Science Initiative