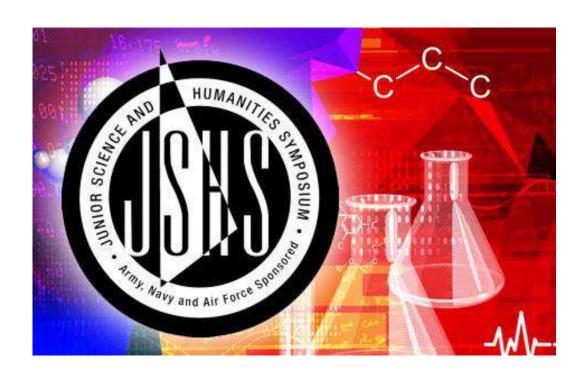
17th Annual Westchester - Rockland Junior Science and Humanities Symposium



WR-JSHS

Saturday, February 9, 2019 John Jay High School, Cross River, New York 8:00 AM - 4:00 PM

WR - JSHS Program Overview

8:00 AM - 4:00 PM

8:00 AM - 8:30 AM	School and Teacher Registration Judge Registration	Lobby Room C-113
0.20 454 0.45 454		
8:30 AM - 8:45 AM	Students - Welcome & Instructions	Auditorium
	Moderator Meeting	Room C-108
	Speaker Session Judges Orientation	Room C-113
8:50 AM – 9:10 AM	Poster Session Judges Orientation	Auditorium
9:00 AM - 1:00 PM	Speaker Sessions (17 concurrent sessions)	Rooms
	Behavior I	A- 201
	Behavior II	A- 202
	Behavior III	A- 203
	Biochemistry	A- 204
	Bioinformatics	A- 205
	Biology	A- 206
	Cell & Microbiology I	A- 207
	Cell & Microbiology II	A- 208
	Chemistry / Engineering	L- 201
	Computer Science / Math	L- 203
	Environmental Biology	L- 206
	Environmental Science	L- 208
	Medical Sciences I	Q-102
	Medical Sciences II	Q-104
	Medical Sciences III	B-103
	Medical Sciences IV	B-104
	Physical Science	B-107
9:15 AM - 12:45 PM	Competitive Poster Sessions	
	Cafeteria Session	Cafeteria
	Library Session	Library
12:30 PM - 2:00 PM	Lunch for Judges	Bridge Hallway
1:15 PM - 2:30 PM	Display Posters	Library
3:00 PM - 4:00 PM	Awards Ceremony (Time Approximate)	Auditorium

Speaker Sessions Schedule

Group 1

Speaker 1	9:00 - 9:17
Speaker 2	9:18 - 9:35
Speaker 3	9:36 - 9:53
Speaker 4	9:54 - 10:11

Break 10:12 - 10:20

Group 2

Speaker 5	10:20 - 10:37
Speaker 6	10:38 - 10:55
Speaker 7	10:56 - 11:13
Speaker 8	11:14 - 11: 31

Break 11:32 - 11:40

Group 3

Speaker 9	11:40 - 11:57
Speaker 10	11:58 - 12:15
Speaker 11	12:16 - 12:33
Speaker 12	12:34 - 12:51

Students Dismissed

Judge Deliberation Immediately Following the Last Speaker

Speaker Session Guidelines

- Students will be allowed to speak uninterrupted for 12 minutes
- 5 minute question and answer session immediately following the conclusion of the student presentation
- No new slides can be presented during Q & A
- There will be no questions from the audience or moderators
- Only student and teacher observers are allowed in the speaker rooms
- Audience members may switch rooms during the break times.
- Please keep the hallways quiet to not interfere with the student presenters.

Behavior I Room: A201

Moderator: Steven Beltecas

Caroline Allan

The effect of positive and negative emotion on memory in the context of the 2016 US presidential election

Florencia DeArmas

Predicting Rates of Disfluencies in Narrative Dialect for Spanish-English Bilinguals and Hispanic English Language Learning Adolescents

Elizabeth Grose

The Effects of the Three Good Things in Life Exercise on Happiness, Empathy, and Wellbeing in Adolescent and Adult Populations

Zachary Kelly-Spadafino

The Ethics of Sharing Cosmetic Surgery on Social Media

Break (8 minutes)

Nicholas Lynch-Pinzon

Support for populist candidates in 2016 presidential election and democratic primary predicted by reduced social capital and deaths of despair

Maya Millstein

Evaluating the Accuracy of the Millstein Women's Sleep Scale as an Identification Tool for Sleep Apnea in Both Women and Men

Raghav Nathan

The Role of Referential Integration and Referential Ambiguity in Repeated Name Processing During Natural Reading

Dylan Ortiz

Elucidating The Link Between Instagram Use and Body Dissatisfaction Among Adolescents and Preadolescents: A Correlational Study

Break (8 minutes)

Faith Sansone

The Reliability of Eyewitness Testimonies

Julianna Schalkwyk

A Social Robot for Modeling Children's Word Pronunciation

Lourdes Valencia

The Effect of Mindfulness Meditation on Academic Performance

Juan Velez

Correlation between Sleep Duration and Attention in Students and Teachers

Behavior II Room: A202

Moderator: Stephanie Peborde Burke

Joseph Atherall

Evaluating the Correlation Between Concussion Education and Reporting Rates in High School Athletes

Abigail Bennitt

The role of cocaine use and trait anger in predicting attentional performance

Casandra Chen

The Cut Off Scores for Screeners Used in the Combined Mental Healthcare Tool in Lowand Middle-Income Settings

Stephan Donato

Suffering in Silence: The Hidden Effects of Caregiving on Stress, Employment, and Health

Break (8 minutes)

Nina Foster

Using a Mixed-Methods Approach to Demonstrate the Value of Yoga for Improving Adolescent Sleep Quality

Molly Hirsch

The Zika Virus and Pregnancy

Alexa Krugel

High School Health Students' Attitudes Toward Mental Illness: A Comparative Analysis of Demographics and Attitudes Toward Depression

Katherine LoBue

Assessing the Effect of Mobility on Sexually Transmitted Infection Risk in Haiti

Break (8 minutes)

Isabel Long

Social Adversity as a Risk Factor for Psychopathy, Anxiety, and Aggression

Beverly Placide

Emotional and interpersonal predictors of posttraumatic distress in college students

Kristina Radulovic

The Relationship between Music Listening and Social Anxiety Levels in College Students

John Sukumar

Hyperfocusing in Adolescents with Attention-deficit/Hyperactivity Disorder (ADHD)
Through the Use of a Time-Constrained Task

Behavior III Room: A203 Moderator: Erum Hadi
Emily Calloway <i>Blood-Injection-Injury Phobia in Adults with Autism Spectrum Disorder and Intellectual Disabilities</i>
Kellen Cooks <i>The Analysis of Graffiti Disapproval Across Demographical and Geographic Boundaries in NYC</i>
Anna-Sophia Eberhardt The use of immersive virtual reality for relief of chronic neuropathic pain following spinal cord injury: optimizing pain evaluation tools
Faith Fitzmaurice Exploring Levels of Workplace Burden in Nurses
Break (8 minutes)
Nam Kim The Role of Gamma-Waves Induction Through Binaural Beats in Inattentional Blindness
Caitlin Wong Assessing the Plasticity of Pain Through the Lens of People with Limb Loss

Biochemistry

Moderator: Michele Zielinkski

Lisa Brady

Genetic mutations associated with autism spectrum disorders cause social deficits in mice

Room: A204

James Chen

Elucidating the effect of chemical and drug exposures on mitochondrial dna copy number

Roopa Duvvi

Inhibition of sEH Promotes Sirtuin 3-Dependent Increase of NO Bioavailability in High Fructose Fed Young Rats

Robert Emmett

The effects of IL-22 on mouse small intestine crypts in vivo in the context of treatment with corticosteroids

Break (8 minutes)

Magdalene Ford

Engineered Atsttrin Protein Stabilizes Dysregulated Macrophage Polarization, Subsequent Osseous and Cartilaginous Tissue Remodeling in Ankylosing

Ali James

Regulation of sister chromatid cohesion by a novel factor in embryonic stem cells

Anjali Nandakumar

Exploiting Molecule X to Increase Tumor Immunogenicity and Uncover Novel Therapeutic Targets

Brent Perlman

Human photosynthesis: Functional chloroplast sequestration in human mesenchymal stem cells

Break (8 minutes)

Vishnu Polkampally

Utilizing Glassy Matrices to Test a Controversial Mechanism for N2O3 Production Within the Red Blood Cell

Liora Reiken

The Effects of Leaky Ryanodine Receptors in Mouse Models of Muscular Dystrophy

Raina Thomas

Microbial Warfare: Characterization of a Hyperactive CRISPR-Cas Immune System

Keven Victoria

The Novel Use of a Histone Lysine-to-Methionine Mutant, H3K9M, to Elucidate a Causal Link Between Epigenetics and Neuropsychiatric Disease

Bioinformatics Moderator: Nadia Parikka	Room: A205
Pranav Burugula <i>Developing a Novel Hybrid Deep Learning Algorithm for Continu</i>	ous Seizure Prediction
Ananya Gurumurthy The Identification of Functional Proteins, and Breast Cancer Muta Histopathological Images through the Utilization of a Convolution	
Alan Chang In silico single-cell transcriptomic characterization of tumor micro by novel tumorigenesis driver identified from CRISPR screen	nenvironment remodeled
Jolie McDonnell Using Artificial Intelligence to Analyze fMRI Differences in Schizop Converters	ohrenic Prodromal
Break (8 minutes)	
Janani Rajadurai <i>A Pharmacophore Modeling Approach to Examining Mu Opioid F</i> <i>Management Therapeutics</i>	Receptor Ligands for Pain
Diane Zhang Differences in Transcriptional Regulation of Atrial versus Ventricus	lar Cardiomyocytes

Biology Room: A206

Moderator: Donna Light

Natalia Benejam

Determining Shark Social Structure Based on Observational and Statistical Analysis

Riti Bhandarkar

Niche and phylogenetics of the green-and-black fruiteater (Pipreola riefferii)

Hannah Cohen

Using Ocean Current Modeling to Study Juvenile Loggerhead Sea Turtle Movements Off Southern California

Break (8 minutes)

Anabelle Johnston

Comparison of Overwintering Ixodes Scapularis Oviposition Patterns and Larval Activity

Alex Kim-Koutsis

An Analysis of Tardigrades in New York State: New Records of Tardigrade Biodiversity

Julia Kischkat

An Analysis of the Behavioral, Historical, and Biogeographical Aspects of the Paracheirodon innesi and Paracheirondon axelrodi

Kathryn Koo

Summer Haul Out Behavior of a Unique Freshwater Population of Harbor Seals (Phoca vitulina) in Iliamna Lake, Alaska

Break (8 minutes)

Livia Marchese

The Division of Labor Between Parents and Altruistic Helpers During the Nestling Phase of the Grey-Capped Social Weaver

Mikaela Marcotullio

Visually Quantifying the Disease Progression of White-Nose Syndrome in Myotis lucifugus of Rosendale, New York

Eva May

A Taxonomic Reassessment of Lower Siwalik Fossil Ape Populations

Dylan Spedaliere

Characterization of Optimal Abiotic and Biotic Factors for the Optimization of Eurycea bislineata Populations

Cellular and Molecular Biology I

Moderator: Diana Evangelista

Caitlin Brown

Molecular Pathway Analysis of Temperature-Shifted Drosophila Models of PTPN11 Mutations

Anna-Samsara Daefler

Mesoderm Formation and Nodal Signaling in Zebrafish Embryos and Blastoderm Explants

Room: A207

Francesca Di Cristofano

The Executioner Protein: Targeting BAX to Induce Apoptosis in Anaplastic Thyroid Cancer Cells

Jiarui Hu

The Effect of Brd9 Overexpression on Foxp3 in Regulatory T Cells

Break (8 minutes)

Arman Kakkar

Anticancer Potential of Cucurbitacin B in Oral Cancer Cells via Inhibition of Mortalin

Isabella Pansini

Myosin II Regulates Planar Cell Polarization of the Zebrafish Lateral Line

Heather Sherr

The correlation of palmitate to metabolic memory via reactive oxygen species in hyperglycemic neonatal rat ventricular myocytes

Nina Silverstein

Understanding the role of SOX2 in the dormant cell state

Break (8 minutes)

Madeleine Sleeman

The Role of Src Homology Phosphatase 2 (SHP-2) in Autophagy and implications in T Cell function

Anya Van Hoogstraten

The Physical Characterization of the Interaction Between a Cell Repair and Cell Death Protein

Max Widmann

Expressing the Rat Na+/H+ Exchanger (NHE11) in an NHE-Deficient Cultured Cell Line

Alyssa Wong

Examining the Role of a Putative Coinhibitory Receptor in CD8-Mediated Cytotoxicity

Cellular and Molecular Biology II

Moderator: Melissa Shandroff

Nicholas Cedeno

Degradation of the extracellular matrix by invadosomes

Amy He

Assessing the evolution of a ligand/receptor pair - Activin and ACVR1- in the BMP/TGF Beta Family

Room: A208

Angie Jang

Investigating the Role of Cell Cycle State During Convergent Extension in D. Rerio

Anna Kunz

Developing an ELISA to Prevent Transfusion- Transmitted Babesiosis

Break (8 minutes)

Andrew Lopreiato

DapF Regulation of Rpph in E. coli Connects Metabolism to Gene Expression, Affecting Cellular Function, Stress Response, and Antibiotic Resistance

Emma Luccino

Elucidating the role of microbiota and the immune system: The role of intestinal macrophages in T-cell responses to commensal bacteria

Cheryl Luo

Into The Role of XAF1 During Innate Immune Response

Ava Menachery

PI3K regulation of macropinocytosis in breast cancer

Break (8 minutes)

Drew Sandler

A tissue's timeline: analysis of cell passaging efficacy in a Scleroderma model

Molly Siegel

The effect of curcumin and EGCG on NFKB activity in spinal cord injury inflammation

Rashana Weerasinghe

Exploring the Variations in Size of Nucleoli in the Cell Types of Caenorhabditis Elegans with Differing Ages and Health

Thomas Wiesenberg

The role of NFATc1 in the activation of the resistin promoter

Chemistry / Engineering

Moderator: Jeff Wuebber

Massimiliano De Sa

Factors Dictating the Efficiency of Internal Combustion Engines: Evaluating Current and Advanced Combustion Modes

Room: L201

Sarah Ellenbogen

The Development of a Remote-Controlled Device for Power Factor Correction in a Commercial Setting

Aaron Forman

Using cross-linking agents to enhance the mechanical properties of cellulose nanofilms

Jacob Fridakis

A Social Network Influenced Implementation to Detect, Prevent, and Avoid Power Outages

Break (8 minutes)

Zachar Kankewycz

Geometric Optimization of Synthetic Spider Silk Structures

Sara Hezi

Creating a Device to Measure Relative Flexibility of Prosthetic Feet

Lucy Jiao

Strain analysis of Al on a variety of semiconductors for clean superconductorsemiconductor interfaces

Juliet Liao

The Effect of Calcium Nitrate on the Self-Healing Properties of Concrete

Break (8 minutes)

Grace Moon

Developing an AC Hall Technique to Measure Hall Mobility of Semiconductor Devices with High Resistivity

Niah Sanz

Using an Autonomous Swarm Robot Team to Locate Survivors in a Dangerous Area

Jordan Schwartz

Utilizing a LIDAR dependent optical flow algorithm to calculate the relative position of a drone, and an image tracking algorithm to identify the relative position of a person with respect to that drone

Melissa Stok

Printing the Path: Studying a Gelatin-Alginate Composite Hydrogel for Translation of 3D Bioprinting Research

Computer Science / Math

Moderator: Susan Moore

Matias Goldfeld

Student Scheduling Through a Combination of Iterative and Genetic Algorithms

Theodore Grossberndt

A Novel Approach to Behavioral-Linguistic Trait Derivation Using Factor Analysis

Kevin Li

Ensuring Epsilon-Differential Privacy Through Deep Learning and Support Vector Regression

Eli Lichtblau

Detection of Contextualized Sarcastic Sentiment with an Evolutionary Long Short-term Memory Neural Network

Break (8 minutes)

Room: L203

Rishikesh Madabhushi

ASL Fingerspelling Recognition Using Convolutional Neural Nets

Elliot Ocheltree

Improving the Hydrodynamics of Shapes Through the Novel Combination of Computational Fluid Dynamics and Erosion

Agustin Otero

Neural Artistic Style Transfer for MIDI Music

Alejandra Perea Rojas

Engineering a Web-based Interface to Predict the Unknown Physical Properties of Solar-like Stars

Break (8 minutes)

Jothi Ramaswamy

A Machine Learning Approach to Classifying Brain Cell Types based on Functional Correlations in the V1 Cortext

Elliot Riesman-Tremonte

Estimating Relative Extrema of an Important Class of Polynomials and Applications to Price-Earnings Ratios

Nathaniel Roth

Detection and Segmentation of Mutant Yeast Cells

Charlotte Sendek

Analytic Coding to Detect Gait Asymmetry in Multiple Sclerosis using a Commercial Game Controller in the Home Environment

Environmental Biology

Moderator: Lawrence McIntyre

Raquel Addona

Cultivation of Algae Utilizing Different Energy Wavelengths

Julia Balch

Distinctions Between Russian and Italian Breeds of Apis mellifera as Seen in Northeastern Beekeeping

Room: L206

Wylie Feaster

Evaluating the Impacts of Various Estuarine Conditions on the Growth of Crassostrea virginica

William Hasapis

Testing the effect of wavelength on Scenedesmus algae growth

Break (8 minutes)

Kendall Hoffman

Determining the effects of local land use using GIS on the presence of invasive plant species after urban forest reforestation efforts of MillionTreesNYC

Oscar Hutarra

The Effects of Plastic Pollution on Dissolved Oxygen Levels and Macroinvertebrate Biodiversity in the Bronx River

Ethan Jacobs

The application of environmental DNA (eDNA) to analyze the presence of river otters and other mammals in the Northeast as a procedure of distribution mapping

Emma Jones

Differential Decomposition of a Single Diptera Species (Sarcophagidae) versus a Community of Diptera Species (Calliphoridae)

Break (8 minutes)

Rachel Joseph

Optimization of Thermal Hydrolysis for Increased Biogas Generation in Waste Water Treatment

Cerina Karr

Plant Physiological Response to Climate Change

Owen Routhier

Effect of Garlic Mustard (Alliaria petiolata) Removal on the Ectomycorrhizal Fungi in a Restored Woodland

Ruqiyah Syed

Providing Clean Water to Developing Countries Using Solar Disinfection of Enterococci Bacteria: The Critical Role of Oxygen

Environmental Sciences

Moderator: Stephanie Greenwald

Danielle Bucci

Quantification and Chemical Analysis of Leachate from BPA-free Baby Bottles After Exposure to Microwave Stress

Room: L208

Anna Cahn

Thermo-Protective Properties of Aloe vera

Leila Frietag

Applications of Remote Sensing to Analyze Deforestation in Indonesia's Rainforests

Romina Gamarra

Analyzing the Feasibility of Plastic Waste Fuel on a Conventional Gas Turbine Engine

Break (8 minutes)

Nicholas Holman

The Impact of Population Density on Microplastic Pollution Near Hudson River Shorelines

Amanda Huang

Dual function materials for recycling CO₂: A comparison on bulk and dispersed CeO₂, La₂O₃, and CaO

Aayushi Jha

Pairing of nanofillers and matrix crystallization to strengthen poly(lactic acid)

Harrison Liu

Inconel and Its Applications in Waste to Energy Facilities

Break (8 minutes)

Miranda Margulis-Ohnuma

Extensive wildfires driven by high pCO2 in the Late Triassic

Brian Pfeffer

A profitable method for capturing and storing global CO₂ Emissions

Timothy Woodard

Continous Oil-Water Separation Through the Utlization of Chemically Modified Cotton Fabric

Spencer Zack

The Refinement of the Design of a Jean Pain Mound for Heat Recovery from Composting

Medical Science I

Moderator: Wendell Hala

Isabell Ilan

A novel method for quantifying lymphatic function in acquired lymphedema mouse models by detection of PEGylated dye concentrations in the blood

Room: Q102

Devin Juros

Sexual Dimorphism in the Drosophila Model of Cancer Cachexia

Elyse Kanner

Development of bispecific T-cell-engaging antibody for immunotherapy of ICAM-1-positive thyroid cancer

Tejas Karwa

Characterization of Metabolic Stress Response on Murine Melanoma Cells after Therapeutic Ultrasound

Break (8 minutes)

Jamie Kramer

NMDA Receptor Subtype Regulation of Ischemic-Induced Neuronal Death

Renner Kwittken

Priming the tumor microenvironment with cyclophosphamide to enhance nanoparticle delivery: An imaging study

Anya Mody

Effect of Sodium Phenylbutyrate-related Compounds on a C. elegans Model of Amyloid Beta Toxicity

Abigail Owen

Impact of contralateral hearing on quality of life and speech outcomes after cochlear implantation in single-sided deafness patients

Break (8 minutes)

Kalsoom Rashid

The Effect of Caffeine on the Behavior and Dopaminergic Neurons in Drosophila Models Developing Parkinson's Disease

Ila Rosen

In the bull's-eye: Borrelia burgdorferi generates differential expression in the skin microbiome of Lyme Disease patients

Helen Tejada

Exploring the role of the endocrine pancreas in the metabolic dysregulation of lipodystrophy

Jerry Wu

Novel Bioinspired Surface Patterning of Fixed Porcine Pericardium and Effects on Endothelialization

Medical Sciences II

Moderator: William Maelia

Saketh Anand

Electrical Activity Modulates Cardiac Function

Abigail Bayer-Mertens Human

Multiple Approaches to Palliative Treatments of Chronic Pelvic Pain

Joshua Freedman

Image-guided surgery with fibroblast activation protein-targeted nanoclusters composed of indocyanine green-coated superparamagnetics

Room: Q104

Joshua Gottschall

Identifying Environmental Triggers Associated With Crohn's Disease

Break (8 minutes)

Kellie Kottmann

Using C-fos Immunohistochemistry to Assess the Multiple NMDA Injection Rodent Model that More Accurately Mimics Infantile Spasms

Sunji Mainsah

Impediments to Treating Malaria Vectors Effectively

Catherine McClay

The Effect of Gene Therapy in Treating and Preventing Pulmonary Hypertension associated with Lung Fibrosis

Julia Piccirillo-Stosser

Effective Shutdown of Immunotoxic Gliadin Fragments in Common Bread Wheat 'Butte 86' to Minimize Systemic Immune Activation in Celiac Disease Sera

Break (8 minutes)

Zobaida Roza

Does ACE Alu Play a Role in High School Athletes Physical Performances

Rebecca Rubinstein

Comparison of Dietary Intake Among Obese and Normal Weight Urban Minority Children with Asthma

Giovanni Santucci

sensory integration in adolescents with or without multiple concussions

Shrila Shah

Improving Lung Cancer Treatment Planning and Delivery using an Artificially Intelligent Real-time Quantification of Lung Lobe Structures from CT

Medical Sciences III

Moderator: Melissa Carnahan

Samantha Abbruzzese

The role of transcription factors and brain-derived neurotrophic factor in the development of Huntington's disease medium spiny neurons

Room: B103

Supriya Baskaran

The Effect of Cannabidiol and Lithium on the Memory of Drosophila Melanogaster

Rachel Chernoff

Characterizing microglia proliferation after ischemic preconditioning

Samantha Feldbaum

Identifying downstream targets of miR-34b/c which promote neuronal death in the hippocampal CA1 region

Break (8 minutes)

Jenny Liu

Deriving human somatosensory neurons for CIPN modeling and treatment discovery

Madeleine Lopane

Examining the Impact of Paired Brain and Spinal Cord Stimulation on Crossed Axons Above the Lesion in Cervical Spinal Cord Injuries.

Hannah Monack

Quantitative and Semi-Quantitative Measurements of PART Pathology in the Medial Temporal Lobe and Their Significance in Genetic Studies

Buu-Hac Nguyen

Single-Domain Antibody-Mediated Modulation of Neurotransmitter Transport

Break (8 minutes)

Ryan Onatzevitch

Investigation of Human Neurons in Schizophrenia

Sabrina Piccirillo-Stosser

Investigating the Neuroprotective Role of gcy-32, nhx-5, and FK506 in a CL2006 Caenorhabditis elegans Model for Alzheimer's disease

Patrick Saint Ange

Pathways Affected by the Brd2 Gene in the Development of Juvenile Myoclonic Epilepsy

Leora Segal

Validation of the Rat Model of Infantile Spasms Through the Analysis of EEG in Repeated Spasms

Medical Sciences IV

Moderator: Guido Garbarino

Isha Puri

A Scalable and Freely Accessible Machine Learning Based Application for the Early Detection of Dyslexia

Room: B104

Sarah Bock

Effect of Prenatal Maternal Cortisol on Child Cognition at Two Years

Anisha Chandy

Investigating the Effect of Proliferation Pathway Inhibitors on MB-MDA-231 Cerebral Metastasis

Ananya Chatterjee

Therapeutic Effects of Retinoids in Ferroptotic Cell Death Models of Hemorrhagic Stroke

Break (8 minutes)

Jed Katzenstein

Characterizing Changes in Microtubule Dynamics with Fidgetin-Like 2 Knockdown

Hailey Kissner

Examining Morphological Associations Among Neural Structure and Reading Ability in Young Children

Adina Mistry

Novel methods to investigate Protein Disulfide Isomerase: analyzing the effects of LOC14

Emma Montgomery

Improved Base Editors and a Novel Sensor Assay Advance Gene Editing Technology

Break (8 minutes)

Elizabeth Morton

Prevalence of Depression and Sleep Apnea in Patients at Risk for SUDEP

Akaash Saraf

Nrf2 Activation in Astrocytes Provides Neuroprotection in the in vitro Model of Hemorrhagic Stroke

Jonah Schwam

CRISPR/Cas9-mediated gene knock-in for elucidating the role of muscle stem cell correction in regenerating muscle in Duchenne muscular dystrophy

Andrew Van Camp

A Potential Therapeutic Approach to Non-Alcoholic Fatty Liver Disease (NAFLD): Harnessing Trib1 Regulation of Hepatic Fat

Physical Sciences

Moderator:

Mahira Ahmad

Analysis of Particle Interaction Within Pulsar Magnetospheres

Christopher Bauco

An Analysis of 250,000 Years of Paleoclimate in the Subpolar North Atlantic Using Foraminifera, d180, and Ice Rafted Debris Proxies

William Branca

Predicting the Occurrence of Solar Flares

Brian Dockery

Analysis of CsPbBr3 Surface Reflectivity in Regards to Photoluminescence and Elemental Composition

Break (8 minutes)

Room: B107

Chirag Kumar

A Computational Approach to Correcting Satellite Sea Surface Temperature Measurements

Arjay Mirchandani

Efficiency of the Forward Swept Wing Configuration with Comparison to Contemporary Designs

Alexandra Rivera

A Step in Understanding Glacial Flow: Exploring the effects of entrained insoluble debris on mechanical properties of polycrystalline ice

Lea Spatz

Characteristics of Active Galactic Nuclei in SDSS galaxies

Break (8 minutes)

Anne Stein

Frictional and Geomechanical Properties of Tournemire and Opalinus Shale to Predict Seismic Activity

Susanna Weber

Is there anybody out there? Gamma ray bursts and the Fermi paradox

Diane Yang

Varying Aspect Ratios of Self-Sustaining Piezoelectric Energy Harvesters

Moses Zhang

Constructing an alogorithmic process to detrend systematic errors within the Eclipsing Binary Dataset of NASA's Kepler Spacecraft

Competitive Poster - Cafeteria Session

Competitive Poster - Cafeteria Session			
Poster ID	Name	Category	
101	Abers, Samuel	Animal & Plant Science 1	
147	Abreu, Gabriela	Behavior 3	
162	Ajay, Ashley	Biology 1	
117	Amico, Ellen	Behavior 1	
219	Amir, Joshua	Medicine and Health 1	
220	Annam, Yashaswini	Medicine and Health 1	
114	Bayrakdarian, Sylvia	Animal & Plant Science 1	
208	Bangs, Annabelle	Environmental Science 1	
237	Bates, Griffin	Physical Science 1	
196	Behbehani, Iman	Cellular Biology 2	
118	Bell, Ryan & Didonato, Yekaterina	Behavior 1	
184	Benson, Noah	Cellular Biology 1	
209	Benson, Alex	Environmental Science 1	
132	Berenbaum, Josh	Behavior 2	
221	Berkenblit, Jamie	Medicine and Health 1	
163	Bernstein, Samantha	Biology 1	
238	Bloom, Nathaniel	Physical Science 1	
210	Boyle, Joseph	Environmental Science 1	
239	Brahmbhatt, Isha	Physical Science 1	
228	Cabrera, Keyla	Medicine and Health 2	
211	Caceras, Emanuel & Tang, Jonathan	Environmental Science 1	
240	Calabrese, Peter	Physical Science 1	
241	Cantori, Joseph	Physical Science 1	
164	Cardenas, Ariana	Biology 1	
165	Case, Aidan	Biology 1	
166	Casey, Matthew & Chen, Baldwin	Biology 1	
229	Catalano, Will	Medicine and Health 2	
148	Cecere, Katelyn & Serra, Catherine	Behavior 3	
133	Ceja, Jasmin	Behavior 2	
149	Ceron, Pilar	Behavior 3	
174	Ceske, John	Biology 2	
185	Chace, Amina	Cellular Biology 1	
222	Chafitz, Jordan	Medicine and Health 1	
250	Cohen, Aaron	Physical Science 2	
249	Cohen, Alex	Physical Science 2	
119	Cohen, Camryn	Behavior 1	
120	Colella-Albino, Alessandra	Behavior 1	
150	Collana, Melanie	Behavior 3	
134	Cox, Micaela	Behavior 2	
111	Crainer, William	Animal & Plant Science 1	
251	Creighton, Erik	Physical Science 2	
197	Curet, Nicholas & Onofre, Jatziri	Cellular Biology 2	
131	Care, incholas & Onone, Jatzin	Celialai biology 2	

Competitive Poster - Cafeteria Session

Poster ID	Name	Category
102	Curran, Theo	Animal & Plant Science 1
230	Dadina, Shirin	Medicine and Health 2
151	Dhallu, Gurveen	Behavior 3
223	Dron, Jaclyn	Medicine and Health 1
152	Du, Kyla	Behavior 3
186	Ecker, Jonny	Cellular Biology 1
187	Egelberg, Jake	Cellular Biology 1
188	Fante, Massimo	Cellular Biology 1
167	Feldman, Nicole	Biology 1
153	Ferragu, Constance	Behavior 3
103	Fischer, Sean	Animal & Plant Science 1
121	Gaetano, Matthew	Behavior 1
122	Gagliardi, Leonardo	Behavior 1
175	Garduno Romero, Ivan	Biology 2
212	Giannopoulos, Nicholaos	Environmental Science 1
123	Gold, Gillian	Behavior 1
106	Goldstein, Caroline	Animal & Plant Science 1
176	Goncalves, Bryan	Biology 2
189	Grullon, Federico	Cellular Biology 1
154	Gunn, Mia	Behavior 3
252	Halevi, Gil	Physical Science 2
242	Harris, Benjamin	Physical Science 1
198	Hassan, Hammad	Cellular Biology 2
124	Hayes, Kendall	Behavior 1
253	Healy, Aidan	Physical Science 2
243	Herh, Ryan	Physical Science 1
177	Hernandez, Guadalupe & Perez, Tyra	Biology 2
135	Hernandez, Javier	Behavior 2
199	Hoffman, Alexandra	Cellular Biology 2
155	Horrigan, Katelin	Behavior 3
125	Hossfeld, Finn	Behavior 1
213	Ippoliti, Matthew & Schmid, Caroline	Environmental Science 1
190	Iraj, Larissa	Cellular Biology 1
126	Jacobs, Hailey	Behavior 1
127	Jacoby, Danielle	Behavior 1
254	Jansky, Dylan	Physical Science 2
169	Jelinek, Sophie	Biology 1
244	Johnston, Deborah	Physical Science 1
224	Karozichian, Elysse	Medicine and Health 1

Competitive Poster - Cafeteria Session

Poster ID	Name	Category
214	Katz, Anara	Environmental Science 1
231	Kauber, Catherine	Medicine and Health 2
136	Kelly-Yuoh, Maura	Behavior 2
191	Kiriakou, Georgia	Cellular Biology 1
200	Kola, Lissa	Cellular Biology 2
255	Konrad, Emma	Physical Science 2
215	Krishna, Varun	Environmental Science 1
192	Ku, Yingshyan	Cellular Biology 1
193	Lam, Juen-Fai	Cellular Biology 1
137	Lev, Katie	Behavior 2
128	Li, Chris	Behavior 1
256	Li, Matthew	Physical Science 2
257	Lin, Michelle	Physical Science 2
201	Liu, Raymond	Cellular Biology 2
258	Liu, George	Physical Science 2
202	Loja, Bridget	Cellular Biology 2
156	Lynch, Ryan	Behavior 3
178	MacDonald, Jacalyn	Biology 2
138	Maglione, Domenick	Behavior 2
225	Makhijani, Amrita	Medicine and Health 1
170	Martin, Claire	Biology 1
139	Mckay, Liam	Behavior 2
109	McSweeney, Sara	Animal & Plant Science 1
179	Mestrich, Abigail	Biology 2
171	Miriyagalla, Amaavi	Biology 1
259	Modi, Kapil	Physical Science 2
180	Mone, Sydney	Biology 2
181	Mundadan, Jacqueline	Biology 2
182	Nair, Gayathri	Biology 2
203	Nichols, Mary	Cellular Biology 2
157	O'Brien, Jacqueline	Behavior 3
204	O'Donnell, Henry	Cellular Biology 2
158	O'Hanlon, Nikolas	Behavior 3
129	Orientale, Julia	Behavior 1
104	Paux, Tucker	Animal & Plant Science 1
245	Perez, Pietro	Physical Science 1
140		Behavior 2
	Pfeffer, Jenna	
110	Philip, Harsha	Animal & Plant Science 1

Competitive Poster – Cafeteria Session

Project ID	Name	Category
232	Pithadia, Miraj	Medicine and Health 2
205	Poblete, Kaitlene	Cellular Biology 2
141	Policarpio, Caitlin	Behavior 2
108	Reed, Caroline	Animal & Plant Science 1
216	Rhode, Lucia	Environmental Science 1
130	Rice, William	Behavior 1
142	Robb, Josephine	Behavior 2
172	Roberts, Caroline	Biology 1
115	Roberts, Katherine	Animal & Plant Science 1
194	Rosado, Jade	Cellular Biology 1
260	Saha, Josh	Physical Science 2
246	Schlamkowitz, Jack	Physical Science 1
143	Schwabe, Andrew	Behavior 2
261	Shaw, Tyler	Physical Science 2
144	Shornick, Rachel	Behavior 2
195	Siegle, Hayley	Cellular Biology 1
206	Slavin, Sophia	Cellular Biology 2
159	Soloway, Hannah	Behavior 3
105	Speakman, Madison	Animal & Plant Science 1
160	Stokes, Jillian	Behavior 3
233	Strzeletski, Gabriella	Medicine and Health 2
247	Subramanian, Vikesh	Physical Science 1
262	Subramanian, Nikita	Physical Science 2
248	Sun, Yingjue	Physical Science 1
107	Taveras, Kiara	Animal & Plant Science 1
234	Thomas, Sinai / Portillo, Michelle/ Arroyave, Leah/ Anjali, John / Sinai, Stefania	Medicine and Health 2
235	Tomescu, Elena	Medicine and Health 2
116	Tomescu, Lara	Animal & Plant Science 1
146	Torres, Gabriella	Behavior 2
217	Turner, Eli	Environmental Science 1
173	Valentino, Justine	Biology 1
236	Verma, Tej	Medicine and Health 2
131	Wang, Isabella	Behavior 1
226	Weinstein, Tyler	Medicine and Health 1
183	Xu, Xinyi	Biology 2
227	Yu, Loren	Medicine and Health 1
218	Zajac, Catherine	Environmental Science 1
207	Zhang, Fanny	Cellular Biology 2
161	Zia, Mishal	Behavior 3

Competitive Poster – Library Session

Project ID	Name	Category
332	Alma, Dganit	Behavior 5
386	Alvarez, Olivia	Cellular Biology 3
381	Araki, Takaharu	Cellular Biology 3
429	Baker, Jackson	Medicine and Health 3
306	Barbelet, Thea	Animal & Plant Science 2
461	Bassett, Benjamin	Physical Science 4
394	Bhalla, Ravi	Cellular Biology 4
382	Bhaskara, Ani	Cellular Biology 3
349	Bird, Erik	Behavior 6
318	Bishop, Olivia	Behavior 4
307	Blair, Henry	Animal & Plant Science 2
351	Boguraev, Alexander (Sasha)	Biology 3
301	Boylan, Makenzie	Animal & Plant Science 2
403	Bradley, Colleen & Musial, Nicole	Cellular Biology 4
311	Brown, Chelsea	Animal & Plant Science 2
339	Calabrese, Theresa	Behavior 6
453		
333	Canaldi, Clairo	Physical Science 3 Behavior 5
391	Capaldi, Claire	
	Cheng, Holly	Cellular Biology 3 Animal & Plant Science 2
312	Cohen, Lee	
411	Cook, William	Environmental Science 2
364	Coronel, Jennifer	Biology 4
415	Cukaj, Ethan	Environmental Science 2
353	Curtis, Liam	Biology 3
454	Dayal, Rohan	Physical Science 4
304	Dayan, David & Healy, Christian	Animal & Plant Science 2
317	Denn, Joseph	Behavior 4
373	Dias, Hope	Biology 4
390	Dolgins, Eliza	Cellular Biology 3
352	Donolli, Madison	Biology 3
441	Dronzek, Kenny	Medicine and Health 4
436	Dwyer, Gabrielle	Medicine and Health 4
455	Eichenberger, Nicolas	Physical Science 4
375	Eichenberger, Zachary	Biology 4
437	Enamorado, Shania	Medicine and Health 4
315	Eng, Olivia	Animal & Plant Science 2
460	Ernst, James	Physical Science 4
387	Feingold, Samantha	Cellular Biology 3
447	Ferval-Shioya, Nobuhide	Physical Science 3
438	Foley, Aidan	Medicine and Health 4
444	Fried, Jonah	Physical Science 3
439	Friscia, Nicholas	Medicine and Health 4

Competitive Poster - Library Session

Poster ID	Name	Category
410	Gell, Bryce	Environmental Science 2
417	Gialleonardo, Devin	Medicine and Health 3
319	Glelaj, Adrian	Behavior 4
395	Goldansky, Diana	Cellular Biology 4
396	Gonai, Haruki	Cellular Biology 4
322	Gouran, Molly	Behavior 4
402	Graham, Sun	Cellular Biology 4
397	Grossmark, Tomas	Cellular Biology 4
450	Gschneidner, Paul	Physical Science 3
423	Gu, Alan	Medicine and Health 3
405	Guiliano, Stefanie	Environmental Science 2
383	Guo, Sophia	Cellular Biology 3
324	Guo, Sheng & McMillan, Andrew	Behavior 4
341	Hackmyer, Aliza	Behavior 6
430	Haigis, Liana	Medicine and Health 3
348	Hannah, Colin & Weir, Brian	Behavior 6
440	Heese, Emily	Medicine and Health 4
366	Heisenberg, Charlotte	Biology 4
302	Heisenberg, Natasha	Animal & Plant Science 2
355	Horowitz, Annie	Biology 3
328	Huang, Angela	Behavior 5
445	Huang, Nathan	Physical Science 3
431	Ilieva, Elitsa	Medicine and Health 4
426	Jacobs, Zoe	Medicine and Health 3
433	Jimerson, Shawn	Medicine and Health 4
418	Kang, Joongoo	Medicine and Health 3
314	Kaplan, Elizabeth	Animal & Plant Science 2
442	Karintholil, Priya	Medicine and Health 4
367	Kazibwe, Marie	Biology 4
424	Kishore, Divya	Medicine and Health 3
365	Klein, Mikayla	Biology 4
452	Kugelmas, Sarah	Physical Science 3
462	Laredo, Lily	Physical Science 4
435	Lazin, Anna	Medicine and Health 4
368	Lee, Min Young	Biology 4
427	Lee, Elizabeth	Medicine and Health 3
376	Lerner, Charlotte	Biology 4
428	Levin, Bailey	Medicine and Health 3
316	Levitt, Caleb	Animal & Plant Science 2
309	Lopez Herrera, Kimberlyn	Animal & Plant Science 2
310	Luna, Luis	Animal & Plant Science 2
342	Lusthaus, Robert	Behavior 6

Competitive Poster - Library Session

Poster ID	Name	Category
413	Machado, Daniel	Environmental Science 2
345	Maignan, Arielle & Martinez, Chabeli	Behavior 6
384	Malik, Nikhil	Cellular Biology 3
344	Mariuzza, Kayla	Behavior 6
327	Markowitz, David	Behavior 4
374	Masterson, Robin	Biology 4
408	McCormack, Emma	Environmental Science 2
323	Mckoy, Kimberly	Behavior 4
419	Mellis, Bradley	Medicine and Health 3
308	Mendez, Inez & Sipos, Erika	Animal & Plant Science 2
420	Mohammadi, Mina	Medicine and Health 3
401	Morales, Milagros	Cellular Biology 4
358	Morea, Anthony	Biology 3
325	Mortati, Elizabeth	Behavior 4
378	Murphy, Rosalie	Biology 4
380	Myint, Enzali	Cellular Biology 3
334	Nabi, Jocelyn	Behavior 5
313	Nadel, Sophie	Animal & Plant Science 2
404	Naughton, Liam	Cellular Biology 4
409	Noia, Alexandra	Environmental Science 2
340	Oppenheim, Casey	Behavior 6
320	Orlando, Jed	Behavior 4
359	Orzech, Christopher	Biology 3
303	Paletta, Mickey	Animal & Plant Science 2
329	Panja, Hiya	Behavior 5
406	Parmet, Sara	Environmental Science 2
446	Pence, Beatrice	Physical Science 3
443	Pennella, Nicole	Medicine and Health 4
392	Platkin, Sarah	Cellular Biology 3
451	Poletti, James	Physical Science 3
335	Psailla, Kendall	Behavior 5
363	Puglisi, Jennifer	Biology 3
459	Raguso, Roman	Physical Science 4
361	Rajadurai, Pooja	Biology 3
369	Ramlakhan, Kaitlyn	Biology 4
448	Rayner, Oliver	Physical Science 3
371	Reilly, James	Biology 4
372	Riseman, Maxwell	Biology 4
449	Ritzcovan, Evan	Physical Science 3
398	Robinson, Morgan	Cellular Biology 4

Competitive Poster - Library Session

Poster ID	Name	Category
336	Rogoff, Caitlin	Behavior 5
337	Rosen, Sydney	Behavior 5
321	Rosenberg, Grayson	Behavior 4
377	Saca, Samantha	Biology 4
434	Sales, Sarai	Medicine and Health 4
330	Sandell, Jordan	Behavior 5
350	Sandhu, Amar	Biology 3
346	Satpute, Sayli	Behavior 6
432	Schade, Samantha	Medicine and Health 4
356	Schiffman, Benjamin	Biology 3
338	Schutta, Madeline	Behavior 5
421	Scioscia, Sebastien	Medicine and Health 3
385	Sidhwani, Dhruv	Cellular Biology 3
416	Siemers, Sarah	Environmental Science 2
370	Sills, Raphaela	Biology 4
388	Simkhai, Kyla	Cellular Biology 3
326	Singh, Aditi	Behavior 4
305	Spinozzi, Catrina	Animal & Plant Science 2
393	Stobin, Isabel	Cellular Biology 4
357	Stoll, Willem	Biology 3
331	Strattner, Elizabeth	Behavior 5
360	Summers, Faith	Biology 3
379	Sunil, Aditi	Biology 4
343	Szeszko, Jake	Behavior 6
347	Tabanjeh, Omar	Behavior 6
458	Tagayun, Adrianna	Physical Science 4
389	Tareque, Prema	Cellular Biology 3
414	Torres-Rossi, Luke	Environmental Science 2
399	Toudic, Lisa	Cellular Biology 4
400	Troy, Abigail	Cellular Biology 4
425	Tunick, Robby	Medicine and Health 3
412	Ward, Jesse	Environmental Science 2
422	Williams, Paul	Medicine and Health 3
354	Xiang, Alec	Biology 3
407	Zapata, Daniel	Environmental Science 2
456	Zhang, Anna	Physical Science 4
362	Zhang, Kenny	Biology 3
457	Zhao, Aron	Physical Science 4

Display Poster Session - Library

1:15 PM - 2:30 PM

Name	Poster	Name	Poster
Abu, Jessica	501	Murrell, Isaac	520
Audi, Matthew	502	Nguyen, Lily	521
Ceballos, Mayelin	503	Pope, Jillian	522
Du, Kyla/ Peter, Rebecca/ Rodriguez, Crystal	504	Prassor, Summer	523
Duver, Sophia	505	Racanelli, Sophia	524
Echavarria, Brian	506	Rao, Eric	525
Einstein, Ella	507	Rogers, Shannon	526
Giardina, Ryan	508	Scopino, Luke	527
Gold, Harley	509	Sheikh, Misbah	528
Habbas, Aya	510	Shelley, Cameron	529
Hewett, Erinn	511	Sigillo, Alexis	530
Howard, Augustus	512	Stancescu, Andre	531
John, Anjaili	513	Surphlis, Asya	532
Kao, Daniel	514	Villaviciencio, Marina	533
Keller, Tyler	515	Volpe, Lance	534
Klein, Jordan	516	Voutsinas-Klose, Celeste	535
Lynch, Aidan	517	Weber, Lily	536
Mathew, Timothy	518	White, Luke	537
Mesquita, Bryan	519	Yazdi, Brandon	538

Thank you to the senior research students that volunteered to judge the Display poster category. Your help and enthusiasm is greatly appreciated.

Special Thanks - Cafeteria Poster Session Judges

Mrs. Kristen Andersen

Ms. Sophia Andrews

Mrs. Poonam Arora

Mrs. Erin Asaro

Mr. Vincent Bell

Mr. Samir Biswas

Mr. Michael Bragg

Ms. Carmen Burga-Yonkler

Dr. Linda Burke

Mr. Dan Carleton

Mr. Min Chen

Mr. Hai-Ping Cheng

Mrs. Sharon Chikota

Mr. William Coetzee

Dr. Guy Cohen

Dr. Sean Curtis

Mr. George Dichiara

Mr. Alexandre Eichenberger

Mr David Erenberg

Dr. Zahi Fayad

Dr. Elena Filipova

Dr. Steve Fridakis

Ms. Christina Gagliardi

Mrs. Stephanie Geiger

Mrs. Denise Goodliffe

Mr. Christian Gorycki

Mrs. Mickey Green

Dr. David Gschneidner

Mr. Ajeet Gupta

Dr. Susanne Hauger

Mr. Madhu Huggahalli

Ms. Susan Imhof

Dr. Kishore Iyer

Mrs. Gina Kim

Mr. Paul Kissner

Ms. Suzanne LaPadula

Mr. Alex Lengers

Dr. Pauline Liao

Dr. Calvin Lin

Mr. Lucian Lipinsky

Dr. Swami Mahalingam

Mrs. Michele Merlini

Ms. Krista Munger

Mrs. Miriam Murphy

Mrs. Gail Murphy

Mr. Mark Nowak

Ms. Michelle Obenauer

Ms. Jill Ochacher

Mrs. Vibha Palekar

Dr. Maria Pence

Mrs. Jodi Riordan

Mr. Ralph Rodriguez

Dr. Daniela Rosu

Ms. Lori Salerno

Dr. Sunil Saxena

Ms. Stephanie Schilling

Dr. John Scott

Mrs. Laureen Smith-Arena

Ms. Miranda Stein

Dr. Priya Sundararajan

Mr. Suren Talla

Mr. Alejandro Victoria

Mr. Chris Ward

Mrs. Geraldine Winterroth

Mr. Hao Yu

Mr. Andrew Zdzieblo

Mr. Qintao Zhang

Special Thanks - Library Poster Session Judges

Mr. John Bayer-Mertens Human

Ms. Sarah Blunt

Mrs. Krishna Brahmbhatt

Mr. Paul Cao

Mr. Luke Carbonaro

Mr. David Chason

Mr. James Cottingham

Ms. Erica Curran

Dr. Simon Daefler

Mrs. Millicent Della Posta

Mr. Chris DeMattia

Mr. Adam Egelberg

Ms. Kelly Ennis

Mrs. Laura Estersohn

Mrs. Esther Feldbaum

Dr. Samuel Fineman

Dr. Tom Fischer

Mr. Steve Fridakis

Dr. Zegiang Guan

Mr. James Gulick

Mr. Govind Gupta

Ms. Katherine Hannon

Ms. Valerie Holmes

Mr. Adam Illowsky

Mr. Michael Inglis

Ms. Lynn Jablowsky

Ms. Erin Johansen

Dr. Jane Kim

Mr. Sage Kim

Dr. Kristine Kingsley-Mulder

Ms. Raya Kiriakou

Mr. Jim Laukaitis

Ms. Donna Light

Ms Janet Longo-Abinanti

Dr. Martha Matteo

Dr. Caroline Matthew

Ms. Maureen Nimphius

Mrs. Annmarie O'Brien

Mr. Mike Orientale

Mr. Angelo Piccirillo

Ms. Nicole Pisano

Mr. Dylan Prendergast

Ms. Janet Pulcini

Dr. Helen Remotti

Mrs. Glenda Rivera

Dr. Martin Rosenzweig

Dr. Dean Saghafi

Mrs. Megan Salomone

Mr. Michael Schweitzer

Dr. Thalia Segal

Mr. Tim Selg

Dr. Padma Shridhar

Mr. Dhaval Shukla

Dr. Laksh Sridhar

Dr. Padma Sridhar

Mr. Duane Stilwell

Dr. Michelle Sugantino

Dr. Willy Tan

Mr. Bill Twardy

Ms. Elizabeth Xu

Dr. Andrew Ying