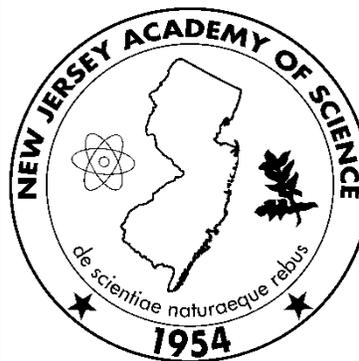


**59th Annual Meeting of the New Jersey Academy of Sciences
Junior Academy Program**

Local Coordinator: Dr. Eric Iannacone, President NJAS

Local Meeting Host: Raritan Valley Community College

Session	Room	Moderator
Microbiology	H 118	Roberta Bartorsky
Engineering/Physics	H 120	Mitra Shojani-Feizbadi
Math	H 123	Shivani Patel
Cell & Molecular Biology	H 110	TBA
Biochemistry	H 116	Rebecca Lyddon
Health & Medicine I	S 243	Laura Lorentzen
Health & Medicine II	S 244	Diane Ratner
Environment & Ecology I	S 016	Alex Soranno
Environment & Ecology II	S 245	Dena Restaino
Psychology & Behavior	S 018	TBA
H = Hunterdon, S = Somerset		



**59th Annual Meeting of the New Jersey Academy of Sciences
Junior Academy Program**

Microbiology

Room: Hunterdon 118 Moderator: Roberta Bartorsky

Time	Presenters	Title
9:45	Erica Cai	ANTIBACTERIAL EFFECT OF PROPOLIS
9:55	Tiffany Zhao	INVESTIGATING LOW-COST METHODS OF CARBON DIOXIDE GENERATION FOR TEMPORARY CULTURE OF HELA CELLS
10:05	Eric Liu, Rohan Kodialam	THE EFFECT OF TERMAMYL AMYLASE ON THE ADHERENCE AND GROWTH OF <i>S.epidermidis</i> BIOFILMS ON TITANIUM
10:15	Ashley Winters	THE COMBINED EFFECTS OF PIPERLONGUMINE, VITAMIN C, AND VITAMIN D ON LIFESPAN IN A <i>Caenorhabditis elegans</i> MODEL AFTER HEAT SHOCK
10:25	Brian D'Agostino, Kelsey Murray, Amanda Siriram	THE EFFECTS OF $CaCl_2$, KCL, NaCl, AND DH_2O ON CELL COMPETENCE IN THE TRANSFORMATION OF <i>Escherichia coli</i> MM294
BREAK		
10:35	Julia Flores	EVALUATION OF AGAROSE GEL ELECTROPHORESIS AS A MOLECULAR TYPING METHOD FOR THE IDENTIFICATION OF <i>S. epidermidis</i> , A MODEL ORGANISM FOR MRSA
10:45		

Engineering/Physics

Room: Hunterdon 120 Moderator: Mitra Shojani-Feizbadi

Time	Presenters	Title
9:45	Rahul Rangwani	THE EFFECT OF SOCCER CLEAT WEIGHT ON KICK DISTANCE
9:55	Vivian Qiang	COMPARISON OF THE WATER RESISTANCES OF DIFFERENT SWIMSUIT FABRICS
10:05	Tien-Sheng Wang	COMPARISON OF PLACEMENT OF RIM SENSORS
10:15	Samantha Soliman	INTUITIVE BANDAGES: A NOVEL INFECTIONS DETECTION METHOD USING NANO HEAT SENSORS
10:25	Soohee Lee	SUPERCAPACITORS
BREAK		
10:35	Nicholas Ciulla	EFFECTS OF A CONVEX LENS AND MIRRORS ON GENERATION OF SOLAR POWER
10:45	Eugene Lim	SYNTHESIS OF MICROFLUIDIC CHANNELS FOR USE IN BIOMEDICAL
10:55	Eugene Kim	ABNORMAL FUNCTIONAL CONNECTIVITY IN THE BRAIN AS CRITERION FOR LOCALIZATION IN CRYPTOGENIC CASES OF FOCAL EPILEPSY
11:05		

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Math

Room: Hunterdon 123 Moderator: Shivani Patel

Time	Presenters	Title
9:45	Hill Chang	AN ANALYSIS OF FACTORS INFLUENCING THE EFFECT OF SOCIAL MEDIA ON LASTING FAME GROWTH
9:55	Eric Chang	A STRATEGY FOR INVESTIGATING THE CORRELATION BETWEEN NUMBER OF TWEETS MENTIONING AN ELECTRONIC PRODUCT AND ITS REAL WORLD SALES
10:05	Kunal Singh	ANALYZING SOCIAL MEDIA CONTENT FROM CANCER PATIENTS
10:15	Iris Rukshin	ON THE PROGNOSTIC VALUE OF THE NEUTROPHIL TO LYMPHOCYTE RATIO FOR THE INCIDENCE OF ACUTE CARDIOVASCULAR EVENTS IN STROKE PATIENTS
10:25	Ananya Joshi	DETERMINING AN OPTIMAL AMINO ACID SEQUENCE AS A FIBRILLOGENESIS INHIBITOR OF A β <i>IN SILICO</i>
BREAK		
10:35	Jesse Doppelt	AN EVALUATION OF STATISTIC BASED PREDICTIONS IMPLEMENTED INTO FANTASY FOOTBALL
10:45	Newton Xie, Matt Koutsoutis	PREDICTING SHORT TERM FLUCTUATIONS IN STOCK PRICES DURING EVENTS
10:55		

Cell & Molecular Biology

Room: Hunterdon 110 Moderator: TBA

Time	Presenters	Title
9:45	Liz Kuhlman	GENOME PROJECT OF PLASMID AND STRESS RESPONSE OF PLASMID IN CYANOBACTERIA <i>Synechococcus</i> IU 625
9:55	Diljeet Kaur	THE ROLE OF DICER IN HYPER-METHYLATION
10:05	Marshall Guo	THE EFFECT OF NICOTINAMIDE ON β -AMYLOID AND TAU PROTEIN LEVELS
10:15	Grace Kwon	THE ROLES OF STAT5 AND MCL-1 IN THE PROLIFERATION OF K562 CELLS
10:25	Emily Trimm	ALZHEIMER'S AND AMD: THE IRON CONNECTION
BREAK		
10:35	Ryan Lee	THE EFFECTS OF A COMBINATION TREATMENT, BASED ON THE INGREDIENTS OF KIMCHI, ON GASTRIC CANCER CELLS
10:45	Andrea Thomas	ROLE OF C-MYC AND MAD1 IN YAPI-DOWNREGULATED HaCaT AND MDA-MB-231
10:55	Kiran Bhutada	BACK TO THE ROOTS: CURCUMIN INDUCED CHEMOSENSITIZATION OF OVARIAN CANCER CELLS
11:05	Caroline Kratka	CONTRACTION AND EXPANSION OF THE MOUSE BLASTOCYST IN VITRO
11:15		

**59th Annual Meeting of the New Jersey Academy of Sciences
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Biochemistry

Room: Hunterdon 116 Moderator: Rebecca Lyddon

Time	Presenters	Title
9:45	Isabella Martin	THE EFFECT OF HEAT SHOCK PROTEINS ON THE CHEMOTHERAPY-INDUCED NEURODEGENERATION OF ASTROCYTES
9:55	Erik Wu	THE SYNTHESIS OF OLEIC ACID CORE SILICA NANOPARTICLES FOR THE SAFE DELIVERY OF ENZYMES
10:05	Justin Yu	MANAGING INFLAMMATION IN CHRONIC LYMPHOCYTIC LEUKEMIA TREATMENT
10:15	Rachel Kaufman	THE UV ABSORPTION OF CHLOROPHYLL COMPARED TO OXYBENZONE, HOMOSALATE, AVOBENZONE AND OCTOCRYLENE
10:25	Adi Melamed	THE ROLE OF ALPHA-SYNUCLEIN ON APOPTOSIS AND OXIDATIVE DNA DAMAGE IN A ROTENONE-INDUCED <i>IN VITRO</i> MODEL OF PARKINSON'S DISEASE
BREAK		
10:35	Arun Kalyanaraman	BIOPHYSICAL MODELS OF PROTEIN EVOLUTION
10:45	Zechariah Brown, Jennifer Zelnick	EXPRESSION AND PURIFICATION OF DHFR MUTANTS
10:55		

Health & Medicine I

Room: Somerset 243 Moderator: Laura Lorentzen

Time	Presenters	Title
9:45	Sara Zhou	EXTENDING LIFETIME OF COAGULATION FACTOR USING VON-WILLEBRAND FACTOR FRAGMENTS
9:55	Eric Kim	LINKING DIABETES TO ALZHEIMER'S DISEASE IN NEUROBLASTOMA CELLS VIA TGF β 1
10:05	Hee-Sung Kim	NOVEL GHRELIN-ACTIVATED MECHANISM IN THE INTESTINES: SOLUTION TO TYPE-2 DIABETES
10:15	Serena Tharakan, Jenna DiRito	NANOPARTICLE-MEDIATED GENE DELIVERY VIA BALLOON ANGIOPLASTY TO SUPPRESS INTIMAL HYPERPLASIA
10:25	Nitza Granados	MONASCIN'S AFFECTS ON AMYLOID BETA PEPTIDE LEVELS BY UP-REGULATION OF PPAR γ AND INSULIN DEGRADING ENZYMES IN SH-SY5Y CELLS.
BREAK		
10:35	Vivian Xu	DOUBLE-TEAMING PARKINSON'S DISEASE WITH RESVERATROL AND COQ10
10:45	Thomas Ferrante	A NOVEL TARGET FOR REDUCING THE ADVERSE EFFECTS OF CHEMOTHERAPY: THE GONADOTROPIN RELEASING HORMONE RECEPTOR
10:55	Bianca Pereira	INHIBITING EEF2K-MEDIATED AUTOPHAGY AND ITS EFFECT ON PANC-1 CELL PROLIFERATION
11:05	Minnie Jeong	INCREASING THE EFFICACY OF GEFITINIB THROUGH β 1 INTEGRIN DOWN-REGULATION IN MDA-MB-231

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**Health & Medicine II
Room: Somerset 244 Moderator: Diane Ratner**

Time	Presenters	Title
9:45	Rachel Gleyzer	KRAS AS A NOVEL TARGET IN GLIOBLASTOMA MULTIFORME TREATMENT
9:55	Yashaar Hafizka	EFFECTS OF BETA-LAPACHONE ON INTERACTIONS BETWEEN NATURAL KILLER CELLS AND BDCM CELLS.
10:05	Rachael Han	EFFECT OF BERBERINE ON A375 MELANOMA CELLS
10:15	Shin Hye Kim	THE ROLE OF EXOSOME MEDIATED CROSSTALK IN THE INFLAMMATORY RESPONSE OF ASTROCYTES
10:25	Joyce Zhou	INHIBITION OF METASTASIS AND INVASIVENESS IN A2058 MELANOMA CELLS BY MIR-145
BREAK		
10:35	Arushi Ramani	ASSESSMENT OF CURCUMIN CYTOTOXICITY AND ITS THERAPEUTIC POTENTIAL IN BREAST CANCER
10:45	Nicole J. Kim	FIBROBLAST GROWTH FACTOR-2 AND SYNDECAN-1 AS POTENTIAL BIOMARKERS OF CIRCULATING CD15+/CD30+ CELLS IN POOR OUTCOME HODGKIN LYMPHOMA PATIENTS
10:55	Julie Patel	THE EFFECT OF DOXORUBICIN-LOADED-CURCUMIN-STABILIZED GOLD- NANOPARTICLES ON BREAST CANCER CELLS
11:05	Himani Patel	THE MECHANISMS OF METFORMIN IN MDA-MB-231 TRIPLE NEGATIVE BREAST CANCER
11:15		

**Environment & Ecology I
Room: Somerset 016 Moderator: Alex Soranno**

Time	Presenters	Title
9:45	Elizabeth Brooks	CARCINOGENIC EFFECTS OF CHEMICALS FOUND IN HYDRAULIC FRACTURING FLUID ON SELENASTRUM CAPRICORNUTUM
9:55	Joseph Maggiore	THE USE OF <i>SARGASSUM SP.</i> AS A BIOSORBENT
10:05	Vladyslav Nazarchuk	ANALYSIS OF NITRATE POLLUTION IN MANALAPAN BROOKS
10:15	Samuel Coakley	THE CHANGES IN THE SEDIMENT GRADIENT OVER TIME OF MONMOUTH COUNTY BEACHES POST-HURRICANE SANDY
10:25	Marianna Fleming	THE RELATIONSHIP BETWEEN THE CHANGES IN SAND VOLUMES AND THE BIODIVERSITY INDICES ON VARIOUS BEACHES IN MONMOUTH COUNTY, NJ POST HURRICANE SANDY
BREAK		
10:35	Ryan Badum	THE RELATIONSHIP BETWEEN HURRICANE SANDY AND POPULATIONS OF <i>Carex kobomugi</i> AT THE SANDY HOOK UNIT OF THE GATEWAY NATIONAL RECREATION AREA
10:45	Grace McIlvain	SIZE, ABUNDANCE, BIODIVERSITY AND DISTRIBUTION OF ICHTHYOPLANKTON FOUND IN BARNEGAT BAY, NEW JERSEY FROM MAY 2012 TO OCTOBER 2013
10:55		

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**Environment & Ecology II
Room: Somerset 245 Moderator: Dena Restaino**

Time	Presenters	Title
9:45	Tracy Wan	THE EFFECTS OF TITANIUM DIOXIDE NANOTUBES ON THE PHOTODEGRADATIONS OF METHYL ORANGE
9:55	William Lin	THE EFFECT OF REFRACTED LIGHT ON ALGAE GROWTH
10:05	Rajaamatangi Pillai	THE EFFECT OF SOIL AMENDED WITH GREEN TEA LEAVES ON THE PRODUCTION OF SPINACH PLANTS
10:15	Nivetha Karthikeyan	THE EFFECT OF MARIGOLD NATURAL PESTICIDES ON CONTROLLING A NEMATODE POPULATION
10:25	Anuja Walke	INDUCTION OF PLANT DEFENSE USING 2, 6 DICHLOROISONICOTINIC ACID ON <i>Curtobacterium flaccumfaciens</i> in MUNG BEANS
BREAK		
10:35	Yewoon Choi	THE REMOVAL OF COPPER (II) IONS IN WATEWATERS USING BIOADSORBENTS
10:45	David Yang	ENCAPSULATION OF PEPPERMINT TEA LEAVES IN ALGINATE BEADS FOR THE REMOVAL OF COPPER (II) IONS FROM CONTAMINATED WATER
10:55	Alon Millet	CELLULOSE BINDING DOMAINS: NOVEL IMPLICATIONS IN AGRICULTURE AND BIOFUEL PRODUCTION

**Psychology & Behavior
Room: Somerset 018 Moderator: TBA**

Time	Presenters	Title
9:45	Gillian Covillo	AUDITORY STIMULI IMPACT ON TEENAGE GIRL'S DREAM COGNITION IN REM SLEEP STAGE
9:55	Matthew Kumar	THE EFFECT OF POSITIVE REINFORCEMENT ON THE ACADEMIC PERFORMANCE OF ADOLESCENT MALES AND FEMALES
10:05	Tiffany Chen	THE EFFECT OF COLOR-TINTED ENVIRONMENTS ON GOLDFISH ACTIVITY
10:15	Tiffany Yuen	COMPARISON OF DIFFERENT PERSONALITY TYPES: INTROVERTS AND EXTROVERTS WITH NUMBER OF FRIEND NODES ON FACEBOOK
10:25	Priscilla Wong	ASTIGMATISM ON THE ABILITY TO VIEW MAGIC EYE 3D ILLUSIONS
BREAK		
10:35	Connor O'Leary	OLFACTORY ASPECTS OF PATHOGENIC RESPONSE AND AVOIDANCE IN <i>C.elegans</i>
10:45	Ariana Bhatia	THE CORRELATION BETWEEN UNEMPLOYMENT RATE FLUCTUATION AND STRESS-RELATED MEDICAL DISORDERS
10:55		