APRIL 20TH, 2014 • LERNER HALL • 1PM – 3PM

PROGRAM OF EVENTS

12:45PM - CHECK-IN

1:00PM – OPENING REMARKS
Ritish Patnaik
CUSJ Events Vice President

1:10PM - POSTER SESSION I
Matthew Trendowski
Naureen Ghani
Kristof Toth
Ajay Kashi
Yiran Chen
Hyo Jung Shin
Edwin Garcia & John Buoncora
Brian Um
Yueli Chen
Yueting Chen
Prithviraj M. Rajebhosale

2:00PM – INTERMISSION

2:10PM – POSTER SESSION II
Moses Stephen
Weiwu Li
Andrew Perez & Landen Kwan
Sandy Enriquez
Ugur Sezer & Derek Bruzewicz
Daysi Proano
Miriam Peralta
Junghoon Kim
Christine Wang
Eun Jung Shin & Jihyun Lee
Ester Shin

3:00PM – CLOSING REMARKS
Zahra Bhaiwala & Cristina Sorrento
CUSJ Undergraduate Editor-in-Chief & CEO

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POSTER SESSION I

The Promise of Sonodynamic Therapy: Using Ultrasonic Irradiation and Chemotherapeutic Agents as a Treatment Modality
Matthew Trendowski1, Thomas P. Fonda1
1Department of Biology, Syracuse University, Syracuse, NY

Classification of Neocortical Neurons using Unsupervised Learning Methods
Naureen Ghani1, Rafael Yuste2
1Department of Biomedical Engineering, Columbia University, New York, NY; 2Department of Biological Sciences, Kavli Institute for Brain Science, Columbia University, New York, NY

Oxidation Induced Giant Unilamellar Vesicle Formation during Electroformation
Kristol Toth1, Shalene Sankhagotra1, Noah Malmstadt2
1The Cooper Union for the Advancement of Science and Art, New York, NY; 2Mork Family Department of Chemical Engineering and Materials Science, University of Southern California, Los Angeles, CA

Characterization of Microwave Plasma in Chemical Vapor Deposition
Ajay Kashii1,2, Kevin Chen1,3
1Experimental Research and Design Program, Watchung Hills Regional High School, Warren NJ; 2Department of Physics and Astronomy, Rutgers University, Piscataway NJ; 3Johns Hopkins University, Baltimore MD

Optimizing AZO characteristics by changing deposition parameters
Yiran Chen1, Amin Emrani2, Charles R. Westgate3
1Chemistry Department, Queensborough Community College, Bayside, NY; 2NY Center for Autonomous Solar Power (CASP), State University of New York at Binghamton, Binghamton, NY

New York City’s Waste Water and Sewage Treatment by the Environmental Protection Agency
Hyo Jung Shin1, Moses Stephen1, Eun Jung Shin1, German Patino1, Jorge Villacis2, Faye Jacques3, Panayiotis Meleties3, Paris D. Svoronos3
1Department of Chemistry, Queensborough Community College, Bayside, NY; 2NYC-DEP, Wastewater Treatment Plant, Wards Island New York, NY; 3Office of Academic Affairs, York College, Jamaica, NY

Mobile Autonomous Robot based on a Raspberry Pi Board
Edwin Garcia1, John Buoncora1
1Department of Engineering Technology, Queensborough Community College, Bayside, NY

The Use of the QuEChERS Approach in the Extraction of Pesticides from Imported Fresh Fruits and Vegetables
Brian Um1, Dr. Keeshan Williams2, Michael Iorshi2, Paris D. Svoronos1
1Chemistry Department, Queensborough Community College, Bayside, NY; 2Food and Drug Administration, Jamaica, NY

Synthesis and Characterization of Li$_x$La$_y$Zr$_{2-x}$Ta$_{O_{12}}$ (0≤x≤1) Lithium Ion Conductors
Yue Li1, Nicole Yu1, Heera Choe1, Steve Greenbaum2, Paul Sideris1
1Department of Chemistry, CUNY Queensborough Community College, Bayside, NY; 2Department of Physics and Astronomy, CUNY Hunter College, New York, NY

Slp1 is a key component controlling early cardiogenesis in Drosophila
Yueling Chen1, Kyle Toles1, Paris Svoronos2, Yasuno Iwasaki2, J. Peter Gergen1
1Department of Biochemistry and Cell Biology & Center for Developmental Genetics, Stony Brook University, Stony Brook, NY; 2Chemistry Department, Queensborough Community College, Bayside, NY

“Neuregulating” Transcription: Effects of Neuregulin 1 Type III Back-Signaling on the Expression of α7 Nicotinic Acetylcholine Receptors (α7nAChR)
P M Rajebhosale1, L W Role2,3,4, D A Talmage5,6
1Undergraduate Program in Pharmacology, Stony Brook University, Stony Brook, NY; 2Center for Nervous System Disorders Research, Stony Brook University, Stony Brook, NY; 3Department of Neurobiology & Behavior, Stony Brook University, Stony Brook, NY; 4Neurosciences Institute, Stony Brook University, Stony Brook, NY; 5Department of Pharmacology, Stony Brook University, Stony Brook, NY

POSTER SESSION II

Porous Microspheres of Poly(o-toluidine): Understanding Sphere Formation and Improving Dispersibility
Moses Stephen1, David M. Sarno1
1Department of Chemistry, Queensborough Community College, Bayside, NY

Screening the Saccharomyces cerevisiae genomic library for genes involved in copper induced cell death.
Weiwu Li1, Nitid Gadara2
1Department of Biology, Queensborough Community College, Bayside, NY

Hydrogen Fuel Cell Catalyst
Andrew R Perez1, Landen Kwan1, Kee Park1
1Department of Engineering Technology, Queensborough Community College, Bayside, NY

The Determination of Gallic Acid present in Juice and Tea Beverages using High Performance Liquid Chromatography
Sandy Enriquez1, Soraya Svoronos2, Pedro Irigoyen3, Paris Svoronos3
1Department of Chemistry, Queensborough Community College, Bayside, NY; 2Department of Chemistry, Queensborough Community College, Queens, NY; 3Office of Academic Affairs, York College, Jamaica, NY

Chemical Aging of Soot Nanoparticles Changes Their Morphology and Interaction with Light
Ugur Sezer1, Xiangyong Wu2, Derek A. Bruzewicz2
1Department of Chemistry, Queensborough Community College, Bayside, NY

Controlling the Industrial Heavy Metal Pollutants’ Discharge into New York City’s Wastewater through the Industrial Pretreatment Program (IPP) of the NYC Department of Environmental Protection (NYC-DEP)
Daysi Prano1, Miryam Peralta1, Paris Svoronos1, Faye Jacques3, Jorge Villacis2, Carol Troy2, Panayiotis Meleties3
1Department of Chemistry, Queensborough Community College, Bayside, NY; 2NYC-DEP, Wastewater Treatment Plant, Wards Island New York, NY; 3Office of Academic Affairs, York College, Jamaica, NY

Microspectrophotometric Determination of the Total Amount of Antioxidants in Juice Beverages by the Folin Ciocalteau Method
Miryam Peralta1, Daysi Prano1, Sandy Enriquez1, Paris Svoronos1, Pedro Irigoyen1, Soraya Svoronos1
1Department of Chemistry, Queensborough Community College, Bayside, NY

Dampening of Back-Propagating Action Potentials in Dendritic Spines Quantified via Voltage Imaging
Junghoon Kim1, Masayuki Sakamoto2, Yeonsook Shin2, Rafael Yuste3
1Columbia College, Columbia University, New York, NY; 2Department of Biological Sciences, Columbia University, New York, NY; 3HHMI, Department of Biological Sciences, Kavli Institute for Brain Science, Columbia University New York, NY

Effects of fasudil on glioma cells
Christine Wang1, Benjamin Amendola2, Thanassis Dovas3, Peter Canoll3
1Columbia College, Columbia University, New York, NY; 2Department of Neurosurgery, Columbia University, New York, NY; 3Department of Cell Biology and Pathology, Columbia University, New York, NY

Temperature Dependence of Refractive Index of Water and Alcohol Compounds Determined by a Laser Pointer: Simple and Cost Effective System
Eun Jung Shin1, Jihyun Lee1, Jun H. Shin1
1Department of Chemistry, Queensborough Community College, Bayside, NY

The Refractive Index of Solid Ionic Compound Measured by the Zoom-In Method and the Extension Method
Esther J. Shin1, Ruth Kim2, Jun H. Shin1
1Roslyn High School, Roslyn Heights, NY; 2Department of Chemistry, University of California at Berkeley, Berkeley, CA; 3Department of Chemistry, Queensborough Community College, Bayside, NY

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