

SEMI ANNUAL



**THE HONORS AND  
UNDERGRADUATE  
RESEARCH SCHOLARS  
POSTER PRESENTATION**

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**WEDNESDAY, DECEMBER 6, 2017**

11:00 AM – 4:00 PM

ATRIUM GROUND & FIRST FLOORS

**THURSDAY, DECEMBER 7, 2017**

10:00 AM – 3:00 PM

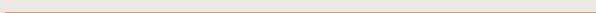
ATRIUM GROUND & FIRST FLOORS

**AWARDS CEREMONY**

BEGINS AT 12:30PM

ATRIUM AMPHITHEATER

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REGULAR COURSE**

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**SPECIAL PROJECTS**

# AWARDS CEREMONY

DECEMBER 7, 2017 – 12:55 PM  
ATRIUM AMPHITHEATER

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## GREETINGS

**Russell K. Hotzler**

President

**Bonne August**

Provost and Vice President  
for Academic Affairs

**Pamela Brown**

Associate Provost

## RECOGNITION OF UNDERGRADUATE RESEARCHERS

**Honors Scholars**

Janet Liou-Mark

**CUNY Research Scholars**

Hamidreza Norouzi

**Emerging Scholars**

Hamidreza Norouzi

**LSAMP Scholars**

Andrew Wills

**Grant-Funded Projects**

Laura Yuen-Lau

**Special Projects**

Laura Yuen-Lau

## BEST POSTER AWARDS

**Reneta Lansiquot**



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Honors Scholars Orientation  
September 7, 2017

# HONORS IN A REGULAR COURSE

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## **Study of the Interaction of Glycosylated Protein with Serum Albumin Proteins**

Serifat Adebola

Prof. Mai Zahran

BIO 3356: Molecular Modeling in Biology

## **Electronic Health Records and Their Effect on Public Safety**

Victor Adedara

Prof. Nicholas Stefanopoulos

MED 4229: Healthcare Databases

## **Running Times: Comparing Steps and Memory Usage of Sorting Algorithms**

Ivaylo Aleksiev

Prof. Jonathan Natov

MAT 2440: Data Structure and Algorithms

## **Effects of Airflow Through Main Entrance Door Ways on the Indoor Thermal Environment in Two Buildings**

Jelani Barro

Prof. Daeho Kang

ENVC 2340: Air Conditioning Systems Design

## **How Does Child Abuse Affects Children?**

Aseel Bazrouk

Prof. David Steinman

PSY 2301: Child Psychology

## **An Application of Machine Learning Algorithms to Cancer Data**

Mukadder Cinar

Prof. Johann Thiel

MAT 3770: Mathematical Modeling I

## **Transformation of the Lighting Console**

Iris Douka

Prof. Sara Watson

ENT 1250: Lighting Technology



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New York City Department of Environmental Protection  
Newtown Creek Treatment Plant Tour  
September 28, 2017

## **Clinical Nursing Practice and Oral-Systemic Health**

Bora Durrsi  
Prof. Aida Egues  
NUR 4010: Community Health

## **Web Speech API: An Interesting Conversation with Your Browser**

Reem Flifel  
Prof. Marcos Pinto  
CST 3519: XML Data Representation

## **Protein Folding Using a Reduced Alphabet**

Qui Huang  
Prof. Mai Zahran  
BIO 3356: Molecular Modeling in Biology

## **Solving Birthday Problem with Different Variations and Approaches**

Kwok Ching Hui  
Prof. Holly Carley  
MAT 2572: Probability and  
Mathematical Statistics I

## **Cloud Computing**

Mahdia Jebin  
Prof. Janusz Kusyk  
CST 2307: Networking Fundamentals

## **Clinical Nursing Practice and Oral-Systemic Health**

Amy Tsz Kwok  
Prof. Aida Egues  
NUR 4010: Community Health

## **Hardware Implementation of an Assistive Technology Mobile Robot**

Joycephine Li

Prof. Farrukh Zia

EMT 2320: Advanced Mechanisms

## **Sustainable Textiles Through Innovative Technologies**

Eliel Morales

Prof. Denise Sutton

BUF 1101: Introduction to the Fashion Industry

## **IoT Connected Wearable Technology**

Estrella Moreira

Prof. Farrukh Zia

CET 4711: Computer Controlled System Design I

## **Developing a Learning Management System for Higher Education in Afghanistan**

Christopher Navarret

Prof. Reneta Lansiquot

ENG 3780: Planning and Testing User Documents

## **The Current Use of Telemedicine to Improve Access to Care**

Juancarlos Ospino

Prof. Heidi J. Boisvert

ENT 4499: Culmination Project

## **Research the Microcomputer Control of Stepper Motors**

Areebur Rahman

Prof. Edward Morton

EMT 2320: Advanced Mechanisms



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Cultivating Fine Dining Etiquette  
Prof. Karen Goodlad  
October 18, 2017

**A Comparison of Service Delivery for  
Developmental Disabilities:  
Moldova vs. United States**

Jawad Rashid  
Prof. Justine Pawlukewicz  
IS 9010: Independent Study

**Climate Change Refugees:  
Power, Politics and Society**

Alexandra Sarria  
Prof. Diana Mincyte  
SOC 3302ID: Environmental Sociology

**Conjugate Gradient Method Analysis**

Farjana Shati  
Prof. Ezra Halleck  
MAT 2630: Numerical Methods Math Core

**IoT Enabled Wearable Technology**

Rumana Hassin Syed  
Prof. Farrukh Zia  
CET 4711: Computer Controlled System Design I

# CUNY RESEARCH SCHOLARS

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## **A Patient-Centric Electronic Medical Records (EMR) System**

Eudelia Alderete  
Prof. Marcos Pinto

## **A Study of Wireless Sensor Network for Smart Building**

Elana Anavian  
Prof. Xin-Zhou Wei

## **Exploring the Gender Effects of a Mathematics Preparatory Workshop on Student Learning**

Guichang Chen  
Prof. Janet Liou-Mark

## **Measurement of Airflows Through Entrance Doors**

Lev Chesnov  
Prof. Daeho Kang

## **Using AI in Developing Web Sites and Applications**

Courtney Choy  
Prof. Marcos Pinto



## **Measurement of Airflows Through Entrance Doors**

Demba Diop  
Prof. Daeho Kang

## **Internet of Things (IoT): Into the Jetsons Era**

Lynese Edwards  
Prof. Marcos Pinto

## **A Study of Wireless Sensor Network for Smart Building**

Astrid Frank  
Prof. Xin-Zhou Wei

## **Computerized Homework Education SyStem (C.H.E.S.S.)**

Harpreet Gaur  
Prof. Viviana Acquaviva

## **Navigation System for a Mobil Robot**

Jannat Hoque  
Prof. Ohbong Kwon

## **Study and Analysis of Communicable and Non-Communicable Diseases**

Kwokching Hui  
Prof. Urmi Gosh-Dastidar

## **Solar and Rain Canopies for a Greener Planet**

Afolabi Ibitoye  
Prof. Alexander Aptekar

## **Algorithms and Architecture: The Impact of Emerging Digital Media on Design**

Faith Kakshak  
Prof. Anne Leonhardt  
Profs. Anne Leonhardt & Satyanand Singh

## **Drug Delivery Tests for the PDMS Based Scaffolds**

Raidan Kassem  
Prof. Ozlem Yasar

## **Fluoride in Dental Products: Over the Counter Versus Prescription**

Zhengdao Li  
Prof. Anty Lam

## **Hardware Implementation of an Assisted Technology Mobile Robot**

Joycephine Li  
Prof. Farrukh Zia

**Continuous Tunable Terahertz Wave Generation  
Via a Novel CW Optical Beat Laser Source**

Richard Lin  
Prof. Muhammad Ali Ummy

**Developing Lab Exercises Using a  
Super Mechatronics Trainer**

Wen Jie Long  
Prof. Muhammad Ali Ummy

**Software Implementation of an  
Assistive Technology Mobile Robot**

Jannatul Mahdi  
Prof. Farrukh Zia

**A Mobile Chatbot for Learning**

Waseem Mohammed  
Prof. Marcos Pinto

**Structural Composites for  
High-Temperature Applications**

Tin Oo  
Prof. Akm Rahman

**Scaffold Fabrication for Cell Viability Analysis**

Brian Parra  
Prof. Ozlem Yasar

**Design and Fabrication of  
UV Light Holder for Photolithography**

Quadel Phillips  
Prof. Ozlem Yasar

**Assessment of Learning Strategies for  
Computer Programming Pedagogy**

Shaun Pollard  
Prof. Douglas Moody

**Design and Manufacturing a  
4 Degree of Freedom Robot Arm**

Brittney Roberts  
Prof. Angran Xiao

**Developing Lab Exercises Using a  
Super Mechatronics Trainer**

Farid Rodriguez  
Prof. Muhammad Ali Ummy

**Web Application: Choosing a Major**

Scipio Sargeant  
Prof. Marcos Pinto

## **Design and Fabrication of UV Light Holder for Photolithography**

Navjot Singh  
Prof. Ozlem Yasar

## **The Connection Between Environmental Toxicology And Water Quality on Poor Communities**

Jean-Hus Theodore  
Prof. Aida Euges

## **Environmental Policy and the Law**

Cheryl Thomas  
Prof. Masato Nakamura

## **Forward Acting Grate: Data Analysis for Municipal Solid Waste Mixing**

Brian Yellis  
Prof. Masato Nakamura

## **Fiber Reinforced Concrete Bowling Ball – Design and Fabrication**

Yuping Zhang  
Prof. Navid Allahverdi

## **Solar and Rain Catching Canopies for a Greener New York**

Elena Zimareva  
Prof. Alexander Aptekar



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New York Transit Museum  
November 10, 2017

# EMERGING SCHOLARS

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## **Ramsey Numbers**

Baikuntha Acharya  
Prof. Satyanand Singh

## **The Role of Sirtuins in T. Thermophila**

Emmanuel Adebola  
Prof. Ralph Alcendor

## **Scroll Triggered Animations: A Walk through the Computer Systems Department**

Ivaylo Aleksiev  
Prof. Marcos Pinto

## **Chatbot: A Virtual Assistant**

Ouri Alkada  
Prof. Marcos Pinto

## **Study of the Interactions between Newly Synthesized Opioid Analgesics with Mu, Delta and Kappa GPCR Opioid Receptors**

Abdullah Allaoa  
Prof. Mai Zahran

## **Solar and Rain Catching Canopies for a Greener New York**

Evan Banks  
Prof. Alexander Aptekar

## **Measurement of Airflows Through Entrance Doors**

Jelani Barro  
Prof. Daeho Kang

## **Ticked Off at City Tech**

William Bennett  
Prof. Jeremy Seto

## **Zika Virus Regulations in the State of California**

Christian Bermeo  
Prof. Noemi Rodriguez

## **Chronicling the Achievements and Activities of Honors Scholars at City Tech**

Savannah Blodgett  
Prof. Reneta Lansiquot

## **Combustion Chamber**

Giovanni Campos  
Prof. Masato Nakamura

## **Interactions of Multi-Target Compounds with BACE1**

David Carvajal  
Prof. Mai Zahran

## **Design and Manufacturing of a CNC Router**

Jesus Castellanos  
Prof. Angran Xiao

## **Noise Filtering in Big Data**

Jan Way Chen  
Prof. Ashwin Satyanarayana

## **An Application of Machine Learning Algorithms to Track Cancer Data**

Mukadder Cinar  
Prof. Johann Thiel

## **Solar and Rain Catching Canopies for a Greener New York**

Langston Clarck  
Prof. Alexander Aptekar

## **Forward Acting Grate Construction and Research Environmental and Energy Simulation Laboratory**

Justin Colon  
Prof. Masato Nakamura

## **Analysis and Visualization of Historical Biological Phenomena**

Billy Corporan  
Prof. Jeremy Seto

## **Measurement of Airflows Through Entrance Doors**

Haoxiang Cui  
Prof. Daeho Kang

## **Chronicling the Achievements and Activities of Honors Scholars at City Tech**

Cherishe Cumma  
Prof. Reneta Lansiquot



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Advancing Library Research Techniques  
Profs. Anne Leonard and Monica Berger  
October 12, 2017

### **Designing Smart Web Pages Using AngularJS**

Kimberly De La Santa  
Prof. Marcos Pinto

### **To Compare Human Calpains in Tetrahymena Thermophila Using MSA**

Princessa Dominique  
Prof. Ralph Alcendor

### **Clinical Nursing Practice and Oral-Systemic Health**

Bora Durrsi  
Prof. Aida Egues

### **Topology and Optimization in Design and Fabrication**

Marco Dwyer  
Profs. Anne Leonhardt & Satyanand Singh

### **A Web Application for Search of Near-Me Graduate Schools**

Stefan Falciglia  
Prof. Marcos Pinto

### **Web Speech API: An Interesting Conversation with Your Browser**

Reem Flifel  
Prof. Marcos Pinto

### **Antioxidant Properties of Caffeine by the DPPH and the AAPH Assays**

Miguel Gomez  
Prof. Alberto Martinez

### **Pairs Trading Simulation**

Adam Gronowski  
Prof. Boyan Kostadinov

### **Investigation of Degradation Rates for Poly (Ethylene Glycol) Diacrylate (PEGDA) for Engineered Scaffolds**

Kerolos Hanna  
Prof. Ozlem Yasar

### **Design and Manufacturing of an Electrical Go-Kart**

Ridwanul Hoque  
Prof. Angran Xiao

### **Control System Design for a Bipedal Robot**

Warren Oscar Hunter  
Prof. Yu Wang

### **Modular Multirotor Aerial System**

Ladaban Jane Lynnel  
Prof. Xiaohai Li

### **Sensing the Environment with Internet of Things**

Ayesha Javed  
Prof. Farrukh Zia

### **Clinical Nursing Practice and Oral-Systemic Health**

Amy Tsz Kwok  
Prof. Aida Egues

### **The Genetics of Breast Cancer in Minority Non-Hispanic Black Women**

Lisa Lee  
Prof. Aida Egues

### **Study of the Consensus Sequence of Class C GPCR's Family**

Ashleigh Leger  
Prof. Mai Zahran

### **Design and Manufacturing of an Electrical Go-Kart**

Alexis Luna  
Prof. Angran Xiao

### **Energy Performance of Architectural Retrofit**

Gabriela Martinez  
Prof. Jihun Kim

## **An Analysis of Factors Affecting Emotional Regulation and Vagal Tone in an Expressive Writing Paradigm**

Kevin Mei  
Prof. Jean Hillstrom

## **Mobile App: Sending SMS/Email to Students for Emergency Situations**

George Nwankwo  
Prof. Marcos Pinto

## **The Optimization of Solar Energy: Measuring Natural Energy in Real-Time with Environmental Sensor Data**

Wes Oler  
Prof. Alexander Aptekar

## **To Examine the Effect of Resveratrol on Tetrahymena Thermophila**

Shazeda Omar  
Prof. Ralph Alcendor

## **Killing Them with Kindness: The Congregation of the Order of Our Lady of the Apostles and British/French Colonial Rivalries in the Egyptian Delta at the End of the 19th Century**

Wolf Pamphile  
Prof. Stephanie Boyle

## **Computerized Homework Education SyStem (C.H.E.S.S.)**

Hashir Qureshi  
Prof. Viviana Acquaviva



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Designing a Research Poster Presentation  
Prof. Jean Hillstrom  
November 2, 2017

**A Comparison of Service Delivery for  
Developmental Disabilities:  
Moldova vs United States**

Jawad Rashid  
Prof. Justine Pawlukewicz

**Computer Based Control of  
Energy Efficient LED Light Bulbs**

Syeda Nazia Rahman  
Prof. Farrukh Zia

**Roboquin Speech Synthesis and  
Speech Recognition**

Samiha Riham  
Prof. Farrukh Zia

**Topology and Optimization in  
Design and Fabrication**

Heraldi Sadmojo  
Profs. Anne Leonhardt & Satyanand Singh

**Scaffold Fabrication for Cell Viability Analysis**

William Santiago  
Prof. Ozlem Yasar

**Design and Manufacturing of an Electrical Go-Kart**

Alisha Sevilla  
Prof. Angran Xiao

**Conjugate Gradient Method Analysis**

Farjana Shati  
Prof. Ezra Halleck

**The Optical Absorption in Double Layers of  
Novel Two-Dimensional Nanomaterials Due to  
Excitonic Transitions**

Gurkaran Singh  
Prof. Oleg Berman

**Sense of Environment with Internet of Things**

Arooba Sohail  
Prof. Farrukh Zia

**Roboquin Speech Synthesis and  
Speech Recognition**

Jennifer Solomon  
Prof. Farrukh Zia

## **To Examine the Effect of Resveratrol on Tetrahymena Thermophila**

Bashrat Sultana  
Prof. Ralph Alcendor

## **IoT Enabled Wearable Technology**

Rumana Hassin Syed  
Prof. Farrukh Zia

## **Numbers Symbolism: Comparison of the Use of Numbers in the Book of Revelation and The Pythagorean School**

Jaroslav Sykora  
Prof. Nadia Kennedy

## **3D Nutrient Delivery Network Fabrication for the Engineered Tissues**

Joyce Tam  
Prof. Ozlem Yasar

## **Interpersonal Violence in Nursing: The Gender Connection**

Thomas Tracy  
Prof. Aida Euges

## **Development of Interactive Flow Cytometry Analysis Interface**

Nina Tretiakova  
Prof. Jeremy Seto

## **Decryption Using Markov Chain Monte Carlo**

Jeffrey Tumminia  
Prof. Boyan Kostadinov





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Research Mixer  
September 14, 2017

### **Systems Biology Modeling of Survival and Differentiation Pathways**

Jessica Valentin  
Prof. Jeremy Seto

### **A “Real” Peek in the Future of the Web Browsers: WebVR**

Martin Witkowski  
Prof. Marcos Pinto

### **Synthesis of Angucycline**

Xiaolan Wu  
Prof. Tony E. Nicolas

### **Energy Performance of Architectural Retrofit**

Yuying Xian  
Prof. Jihun Kim

### **Redesign a Hackberry Bionic Hand**

Jiamian Zhao  
Prof. Gaffar Gailani

### **Ramsey Numbers**

Mei Zhu  
Prof. Satyanand Singh

### **Trend in the Residential Energy Consumption Survey**

Xuebin Zou  
Prof. Johann Thiel

# GRANT-FUNDED PROJECTS

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**NATIONAL SCIENCE FOUNDATION:  
LOUIS STOKES ALLIANCE FOR  
MINORITY PARTICIPATION (LSAMP) IN STEM**

Program Coordinator: Mr. Andrew Wills

**Cytokine Influence on Neurodevelopment**

Serifat Adebola  
Prof. Jeremy Seto

**Characterizing A Novel Ionophoric Polyphenol  
Compound**

Victor Adedara  
Prof. Ralph Alcendor

**Network Limbs Sensor**

Gabriel Martinez  
Prof. Yu Wang

**Characterizing A Novel Ionophoric Polyphenol  
Compound**

Kabiru Omolaja  
Prof. Ralph Alcendor

**Characterizing a Calpain Family Member Using  
Computational Tools and Cell and Molecular  
Techniques**

Masood Usman  
Prof. Ralph Alcendor

**Design and Fabricate Low Cost RC Car**

Gamal Mansour  
Prof. Andy Zhang



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The National Science Foundation  
Research Experiences for  
Undergraduate Scholars  
2017-2018

**NATIONAL SCIENCE FOUNDATION:  
RESEARCH EXPERIENCES FOR UNDERGRADUATES IN  
SATELLITE AND GROUND-BASED REMOTE SENSING AT  
NOAA-CREST: EXPANDED OPPORTUNITIES**

(NSF REU Grant # AGS-1560050)

Profs. Reginald Blake, Janet Liou-Mark,  
and Ms. Laura Yuen-Lau

**Assessment of Optical Properties Variation and  
Discrimination of Aerosol and Cloud with a Multiple-  
Wavelength Elastic-Raman Lidar in New York City**

Anjeza Arapi

**New York Hydro-Meteorological Testbed (NY-uHMT):  
Data Processing and Visualization**

Amarou Bah

**Assessment of Lake Water Quality and Quantity  
Using Satellite Remote Sensing**

Kameron Daniel

**Using Multiple Metrics to Analyze Trends and  
Sensitivity of Climate Variability in New York City**

Jiehao Huang

**Assessing Spatiotemporal Variability in  
NO<sub>2</sub> and O<sub>3</sub> Along the Korean Peninsula Using  
Remote Sensing and Ground-Based Observations**

Chi Yan Li

**Global Food Security Parameters Studies Using  
Satellite Remote Sensing**

Timothy Medina

**Mean Streets:  
An Analysis on Street Level Pollution in NYC**

Granville Parker

**Using 311 Data as a Proxy for Weather Impacts**

Xuebin Zou

**NATIONAL SCIENCE FOUNDATION:  
GP-EXTRA: RECRUITING AND RETAINING  
NON-GEOSCIENCE MINORITY STEM MAJORS FOR  
THE GEOSCIENCE WORKFORCE**

(NSF IUSE GEO Grant #1540721)

Profs. Reginald Blake, Janet Liou-Mark,  
Hamidreza Norouzi, Viviana Vladutescu,  
and Ms. Laura Yuen-Lau

**PHYS 1002ID-D606:  
An Introduction to the Physics of Natural Disasters**

**Prof. Reginald Blake**

**Shaking Things Up Concerning Earthquakes**

Juan C. Alba, Richard Gonzalez,  
Edisson Ortiz, Arman Sarowar,  
Manpreet Singh, Qihua Zheng

**Anthropogenic Climate Change:  
A Hot Topic with Cold Attitudes -  
A Case Study of Syria**

Winston Aitken, Rabea Begum,  
Jiehao Huang, Wen-Yong Huang,  
Steven Jean-Baptiste, Stephen Valite,  
Jonathan Yee

**Taking a Dip into Floodings**

Gabriel Martinez, Mike Osipov,  
Nathan Persaud, David Perez Ramos,  
Krystal Valdez

**Volcanoes: Mountains of DOOM**

Luis Chacha, Arturo Madrigal,  
Daniel Pineda, Karen Schay,  
Matthew Tackett

**Keeping an Eye on Hurricanes**

Miftaah Pirzada, Hanzalah Rehman,  
Danielle Telemaque, Justin Wong,  
Xue Bin Zou



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Presentation Skills  
Professional Development Center  
October 5, 2017

**PHYS 1002I-D608:  
An Introduction to the Physics of Natural Disasters**

**Prof. Reginald Blake**

**Shake and Quake**

Viki Bailey, Sergio Carrillo,  
Abdoulaye Drabo, Mohammad Khalid,  
Angel Orellana, Zhao Wang Yu

**Climate Change Impacts on Agriculture**

Yocelyne Partillo, Stanley Wong,  
Kelvin Yeboah

**Floods: Nature's Hydro Fury**

Frantzy Dor, Shameeka Reed, Frandy Rubio,  
Frank Trapani

**Hell Rising through Nevado del Ruiz**

Jeff Carrion, Maria de Leon, Dillen Pantua,  
Christian Rosario, Niurka Vakera

**Houston, We Have a Problem!!**

Iran Baltazar, Nixander De Leon,  
David Larriveaud, Kerim Sermit

**NATIONAL INSTITUTE OF HEALTH:  
BRIDGES TO THE BACCALAUREATE PROGRAM**

Associate Provost Pamela Brown, Profs. Liana Tsenova, Nathan Astrof, Pa Her, Jean Hillstrom, Janet Liou-Mark, Diana Samaroo, Armando Solis, Tatiana Voza, and Ms. Lori Younge

**Effect of Raw Garlic and Aged Garlic on HEK293 Cells**

Fatimah Ahmed  
Prof. Ralph Alcendor

**Effect of Calcium on Tetrahymena Thermophile**

Laiba N. Choudhary  
Prof. Ralph Alcendor

**Effect of Glucose on Tetrahymena thermophile**

Sumaiyah Mahfooz  
Prof. Ralph Alcendor

**Qualitative Analyses of Women's Experiences and Responses to Microaggression in Graduate School and Early Career Settings**

Audrey Powell, Daisy Salas  
Prof. Amanda Almond

**Depression and Anxiety in Cirrhosis**

Jalisa Watt  
Prof. Katherine Barboza

**Molecular Characterization of Mesophotic Black Corals (Antipatharians) from The Flower Garden Banks National Marine Sanctuary (NW Gulf of Mexico)**

Nadia Alomari  
Prof. Mercer Brugler

**Qualitative Analysis of Expressive Writing on Traumatic Events**

Maryam Maryam  
Prof. Pa Her

**The Effects of Expressive Writing on Cardiac Impedance over Time**

Jordan Jean Pierre, Christopher Persaud  
Prof. Jean Hillstrom

**Antioxidant and Anti-amyloidogenic Properties of Caffeine**

Sinji Shibutani  
Prof. Alberto Martinez



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Developing and Delivering Effective Presentations  
Prof. Jean Hillstrom  
October 26, 2017

### **The Extraction and Comparison of Pigments from Natural Products**

Malyka Valentine  
Prof. Diana Samaroo

### **Determination of the Species and Sex of Bird Visitors to the Canarsie Pier and Prospect Park in New York City Using DNA Extracted from Molted Feathers**

Terisha Persaud, Randy Valcourt  
Prof. Olufemi Sodeinde

### **U.S. DEPARTMENT OF EDUCATION: MINORITY SCIENCE AND ENGINEERING IMPROVEMENT PROGRAM (MSEIP): STRATEGIC CHANGES TO INCREASE AND SUSTAIN THE PARTICIPATION OF WOMEN AND UNDERREPRESENTED MINORITY STUDENTS IN COMPUTER SCIENCE**

(DOE MSEIP Grant #P120A150063)  
Associate Provost Pamela Brown,  
Profs. Sandie Han, Boyan Kostadinov,  
Janet Liou-Mark, Johann Thiel,  
and Ms. Suhua Zeng

### **Exploring the Gender Effects of a Mathematics Preparatory Workshop on Student Learning**

Guichang Chen  
Prof. Janet Liou-Mark

### **An Application of Machine Learning Algorithms to Cancer Data**

Mukadder Cinar  
Prof. Johann Thiel

# SPECIAL PROJECTS

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## **Water Resources Management of Fairview Lake in Tafton, PA**

Denis Belioglo, Bishnauth Bissoon,  
Margarita Bizhan, Daniel Castellanos,  
Kameron Daniel, Vasyl Dobronravov,  
Joniel Edwards, Dorwin Emanuel,  
Danny Estrada, Ebenezer Idowu,  
Sikander Iqbal, Garry Jeune, Soo Hee Kim,  
Jiarong Li, Azzall Monasser, Jaime Mosquera,  
Shawn Nevers, Shaquille Ramcharan,  
Leonardo Ramos, Muhammad Shabir,  
Max Solache, Brenthal Thomas, Abel Urgiles,  
Oleh Zabolotnyi, and Jhonny Zheng

### **ABSTRACT:**

Students analyze and design water resources public works projects for a community located in Tafton, PA. Students analyze the watershed, develop a computer model of the waterway, and design a water and wastewater treatment plant for the community.

**Prof. Gerarda M. Shields, PhD, PE**  
Department of Construction Management and  
Civil Engineering Technology



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Writing Abstracts for Research Projects  
Prof. Marianna Bonanome and George Guida  
September 28, 2017

## **Emerging Culinaricians - Transforming Perspectives, Expertise and Creativity Through Competition**

Vanessa Chen, Clotilda Hamilton,  
Michelle Pantaleon, Andrew Rodriguez,  
Terrence Sutton, Maurilio Tendilla,  
Charles Tripoli, Kristen Tsui, and Jerry Zhao

### **ABSTRACT:**

Professional culinary competition is the process by which chefs demonstrate their expertise and creativity. Students – aspiring chefs – model this process through competition. They transform their culinary knowledge by creating signature dishes for exhibition and critique by certified judges.

**Prof. Robert Walljasper, CCE, CEC, ACE**  
Department of Hospitality Management

# NOTES



A series of 20 horizontal lines for writing notes, arranged in a vertical column.





**THE 27TH SEMI-ANNUAL  
HONORS AND EMERGING SCHOLARS  
POSTER PRESENTATION**

To all the dedicated professors for  
mentoring students. A heartfelt thank you  
for making this event a successful one.



**SPECIAL THANKS TO**

Dean Kevin Hom  
Dean David Smith  
Dean Justin Vazquez-Poritz  
Prof. Julia Jordan  
Ms. Laura Yuen-Lau  
Mr. Andrew Wills  
Mr. David Turkiew  
Mr. George Lowe  
Mr. Lubosh Stepanek  
Ms. Shawn Beatty  
Ms. Clara Johnson



**A SPECIAL THANK YOU  
TO THE DEDICATED POSTER JUDGES**

Navid Allahverdi  
Dionne Bennett  
Monica Berger  
Mercer Brugler  
Evgenia Giannopoulou  
Brad Isaacson  
Alberto Martinez  
Ariane Masuda  
Douglas Moody  
Diana Samaroo  
Ashwin Satyanarayana  
Jeremy Seto  
Gerarda M. Shields  
Satyanand Singh  
Olufemi Sodeinde  
Anne Marie Sowder  
Andrew Wills  
Derek Wilson  
Mai Zahran



**A SPECIAL RECOGNITION AND APPRECIATION TO  
MS. ERIN MAYOYO FOR DESIGNING THE PROGRAM**

