### SEMI ANNUAL



### THE HONORS AND UNDERGRADUATE RESEARCH SCHOLARS POSTER PRESENTATION

#### WEDNESDAY, MAY 2, 2018

- 0 -

11:00 AM - 4:00 PM ATRIUM GROUND & FIRST FLOORS

#### THURSDAY, MAY 3, 2018

10:00 AM - 3:00 PM ATRIUM GROUND & FIRST FLOORS

#### AWARDS CEREMONY

12:30PM ATRIUM AMPHITHEATER

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## AWARDS CEREMONY

MAY 3, 2018 - 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**



Honors Scholars Program Orientation February 8, 2018

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# HONORS IN A REGULAR COURSE

- 0 -

## Differential Effect of High Fat Diet (HFD) in Male and Female Mice

Ilhom Bakiyev Prof. Sanjoy Chakraborty BIO 3526: Pathophysiology

#### Measurement of Airflow Through Entrance Doors

Jelani Barro Prof. Catherine Cullen FMGT 4720: Building Systems II

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

Jelani Barro Prof. Lukasz Sztaberek ENVC 2401: Renewable and Hybrid Energy Systems

#### Working with Many Strong Personalities

Jermy Budhram Prof. Hans Tokke SOC 1104: Race and Ethnic Relations

Are there Gender Differences in Attitude Towards Mathematics in an Intermediate Algebra/ Trigonometry Class?

Turjo Chowdhury Prof. Janet Liou-Mark MEDU 2901: Peer Leader Training in Mathematics

#### Using Big Data Analysis to Investigate Where It Pays to Attend College

Mukadder Cinar Prof. Boyan Kostadinov MAT 4672: Computational Statistics

#### Voice Controlled Robotic Mannequin

Tasha Deoroop Prof. Farrukh Zia CET 4811: Computer Controlled Systems Design II

#### Molecular Docking of Multitargeted-Directed Ligand Compounds on Human Serum Albumin

Miguel Gomez Prof. Mai Zahran BIO 3356: Molecular Modeling in Biology

#### Earthquake Building Resistance

Besnik Hasa Prof. Carlos Santana CMCE 2416: Elements of Structural Design-Concrete

## Comparison of Air-Content Measurement by Volumetric Method for Different Aggregates

Kyaw Htun Prof. Navid Allahverdi CMCE 4401: Special Topics in Construction Engineering

#### Predicting Stock Prices Using Stock Options

Jieaho Huang Prof. Caner Koca MAT4788: Financial Risk Modeling

#### Predicting Stock Prices Using Stock Options

Julio Salazar Ibarra Prof. Caner Koca MAT 4788: Financial Risk Modeling



Department of Environmental Protection March 9, 2018 The Impact of Racism is a Social Determinant of Health, Impacting the Birth Outcomes and Preterm Births of African American Women in the U.S.

Kimberly Jones Prof. Amanda Almond PSY 3405ID: Health Psychology

#### Improving Hand Hygiene to Prevent Nosocomial Infections

Jenelle Joseph Prof. Diana Samaroo CHEM 2223: Organic Chemistry

#### The Moving Collage

Tian Leng Prof. Ryoya Terao ENT 3290: Digital Video Camera

### Developments, Techniques and Applications of Concrete

Gabriela Martinez Prof. Charles Jenkins ARCH 4740: Detailing and Construction Technology for Existing Buildings

#### The Future Accounting Graduate

Radia Mehjabin Prof. Rachel Raskin ACC 1201: Principles of Accounting II

#### Interactive Roboquin 4811

Estrella Moreira Prof. Farrukh Zia CET 4811: Computer Controlled Systems Design II

#### Challenging the 'Mainstream Opinion': The Impact of Fossil Fuel Imports and Exports Toward U.S. Environmental Policy

Wes Oler Prof. Ashwin Satyanarayana CST 4704: Business Intelligence, Data Warehousing and Data Mining

Are there Gender Differences in Attitude Towards Mathematics in an Intermediate Algebra/ Trigonometry Class?

Evelin Perez-Flores Prof. Janet Liou-Mark MEDU 2901: Peer Leader Training in Mathematics



Cultivating Fine Dining Etiquette March 13, 2018

#### Using (Trig) Functions to Create Characters

Shaun Pollard Prof. Mi Ok Lime MAT 1275: College Algebra and Trigonometry

#### The Future Accounting Graduate

Nacala Reid Prof. Rachel Raskin ACC 1201: Principles of Accounting II

#### **Computer Applications of Calculus**

Andre Rodroguez Prof. Nan Li MAT 1575: Calculus II

#### **Internet Security**

Musheer Saba Prof. Hernando Blanco CST 1215: Operating System Fundamentals

#### Bamboo as a Sustainable Water Treatment Technology

Elena Sandratskyy Prof. Ivan Guzman CMCE 2456: Soil Mechanics and Laboratory

Recurrence Relations and Computational Complexity

> Mian Shabbir Prof. Satyanand Singh MAT 2440: Data Structures and Algorithms

#### **RoboQueen Blynked**

Rumana Hassin Syed Prof. Farrukh Zia CET 4811: Computer Controlled Systems Design II

Are there Gender Differences in Attitude Towards Mathematics in an Intermediate Algebra/ Trigonometry Class?

Shawn Telesford Prof. Janet Liou-Mark MEDU 2901: Peer Leader Training in Mathematics

#### Recurrence Relations and Computational Complexity

Anh Trieu Prof. Satyanand Singh MAT 2440: Data Structures and Algorithms

#### **Breast Cancer**

Qian Wang Prof. Jeffrey Smith RAD 2428: Clinical Education IV

#### **Chinese Philosophy**

Cecily Wu Prof. Ken Yip PHIL 2121: Chinese Philosophy

#### Developments, Techniques and Applications of Concrete

Yuying Xian Prof. Charles Jenkins ARCH 4740: Detailing and Construction Technologies for Existing Buildings

#### Predicting Stock Prices Using Stock Options

Xuebin Zou Prof. Caner Koca MAT 4788: Financial Risk Modeling



City Tech students placed 4th in SCUDEM 2018 Differential Equations and Math Modeling Competition at Columbia University April 21, 2018

# CUNY RESEARCH SCHOLARS

- 0 -

A Patient-Centric Electronic Medical Records (EMR) System

> Eudelia Alderete Prof. Marcos Pinto

#### Multi-Material Scaffold Printing

Ann Charles Prof. Ozlem Yasar

#### Measurement of Airflows Through Entrance Doors

Lev Chesnov Prof. Daeho Kang

#### Using AI to Develop Web Application

Courtney Choy Prof. Marcos Pinto

#### Measurement of Airflows Through Entrance Doors

Demba Diop Prof. Daeho Kang

#### Internet of Things (IoT): Raspberry PI

Lynese Edwards Prof. Marcos Pinto

#### A Public Data Visualization Scheme for Smart Building

Astrid Frank Prof. Xin-Zhou Wei

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

Harpreet Gaur Prof. Viviana Acquaviva

## Hardware Implementation of an Assistive Technology Mobile Robot

Jannat Hoque Prof. Ohbong Kwon

### Study of HIV Transmission and Comparisons of Various Disease Scenarios

Kwokching Hui Prof. Urmi Ghosh-Dastidar

#### Solar and Rain Catching Canopies

Afolabi Ibitoye Prof. Alexander Aptekar

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

Faith Kakshak Prof. Anne Leonhardt

Implementation of an Assistive Technology Mobile Robot

> Joycephine Li Prof. Farrukh Zia

The Correlation Between Periodontal Disease and Kidney Disease

Zhengdao Li Prof. Anty Lam

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

Implementation of an Assistive Technology Mobile Robot

> Jannatul Mahdi Prof. Farrukh Zia

#### A Mobile Chatbot for Learning

Waseem Mohammed Prof. Marcos Pinto

### Advanced Composites for Structural and Biomedical Applications

Tin Oo Prof. Akm Samsur Rahman

#### Scaffold Fabrication for Cell Viability Analysis

Brian Parra Prof. Ozlem Yasar

## Design and Manufacturing a Robot Arm with 4 Degrees of Freedom

Brittny Roberts Prof. Angran Xiao

Developing Lab Exercises Using a Super Mechatronics Trainer

> Farid Rodriguez Prof. Muhammad Ali Ummy

Advanced Composites for Structural and Biomedical Applications

Raul Rosario Prof. Akm Samsur Rahman

#### Web Application: Choosing a Major

Scipio Sargeant Prof. Marcos Pinto

Mechanical Characterizations of Nano-Particles Doped PDMS

> Navjot Singh Prof. Ozlem Yasar

#### Water, Race and Class

Jean-Hus Theodore Prof. Aida Egues

Environmental Policy and Poor Families: Melting Snow, Rising Sea Levels, and Gentrification

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 & Fabrication

> Yuping Zhang Prof. Navid Allahverdi

#### Solar and Rain Catching Canopies

Elena Zimareva Prof. Alexander Aptekar



BEYA Conference in Washington, D.C. February 10, 2018

# EMERGING SCHOLARS

Development of Kinetic Model of Epoxy Resin from Isothermal Differential Scanning Calorimetry Data

- 0 -

Serifat Adebola Profs. Diana Samaroo and Urmi Ghosh-Dastidar

Piaget's and Vygotsky's Ideas of Children's Self-Talk Revisited

> Nashrin Akter Prof. Randolph Schutz

A Case Study of CAD/CAM Using a Custom Made CNC Router

> Rafaela Alba Prof. Angran Xiao

Differential Effect of High Fat Diet (HFD) in Male and Female Mice

Wisam Ali Prof. Sanjoy Chakraborty

Predicting Breast Cancer Type (Benign or Malignant)

Ouri Alkada Prof. Marcos Pinto

Study of the Interactions between Newly Synthesized Opioid Analgesics and Mu and Delta and Kappa Membrane Proteins

Abdullah Allaoa Prof. Mai Zahran

Open Source Computer Hardware and Software Implementation of Assistive Technologies

Rabia Arif Prof. Farrukh Zia

Differential Effect of High Fat Diet (HFD) in Male and Female Mice

Ilhom Bakiyev Prof. Sanjoy Chakraborty

#### The Urban Oasis

Evan Banks Prof. Alexander Aptekar

#### Mechanical Properties of Lightweight Concrete

Juan Barraza Prof. Navid Allahverdi

#### Measurement of Airflow Through Entrance Doors

Jelani Barro Prof. Daeho Kang

Development of Kinetic Model of Epoxy Resin from Isothermal Differential Scanning Calorimetry Data

Rabea Begum Prof. Diana Samaroo

Microbiome Analysis of Ticks' Guts

William Bennett Prof. Jeremy Seto

Chronicling the Achievements and Activities of Honors Scholars at City Tech

Savannah Blodgett Prof. Reneta Lansiquot

Photocatalytic Activity of Porphyrins and Polyoxometalate Compounds

Eduardo Bravo Prof. Ivana Jovanovic

### Differential Effect of High Fat Diet (HFD) in Male and Female Mice

Travis Caraballo Prof. Sanjoy Chakraborty

Introduction to Progressive Web Application (PWA)

Ruobing Chen Prof. Marcos Pinto

Controller Development for Miniature Unmanned Aerial Vehicles (UAVs)

Leonardo Chiang Prof. Xiaohai Li

Using Big Data Analysis to Investigate Where it Pays to Attend College

> Mukadder Cinar Prof. Boyan Kostadinov



Advancing Library Research Techniques March 15, 2018

Molecular Docking of an Iso-Bacteriochlorin Compound on the Surface of Two Proteins, Bovine and Human Serum Albumin

Dayana Cobos Prof. Diana Samaroo

#### **Combustion Chamber Research and Construction**

Justin Colon Prof. Masato Nakamura

#### **Fabric Casting**

Catherine Correa Prof. Alexander Aptekar

#### Analysis of the Effect of Infiltration Through Entrance Doors

Haoxiang Cui Prof. Daeho Kang

#### Designing Smart Applications Using Augmented Reality (AR)

Kimberly De La Santa Prof. Marcos Pinto

#### Voice Controlled Door Lock

Tasha Deoroop Prof. Farrukh Zia

#### Optimization and Topology in Design and Fabrication — From the Math-world to Architecture

Marco Dwyer Profs. Anne Leonhardt and Satyanand Singh

#### Dress and Identity: Any Inclusion of Many

Eleazer Espinosa Jr Prof. Alyssa Adomaitis

#### Using Augmented Reality in Engineering Education

Juan Estrella Prof. Benito Mendoza

#### **Comparative Study of Various Qubits**

Juliano Everett Prof. Oleg Berman

#### Drug Screening from a Library of Thousands of Compounds to Inhibit the Function of BACE1

Marcia Fontenelle Prof. Mai Zahran

#### Raspberry Pi RFID Attendance System

Kayla Ford Prof. Marcos Pinto

#### A Tool to Filter Noisy Data Using Ensemble Model Averaging

David Friedman Prof. Ashwin Satyanarayana

#### Exploring Work Flows from 3ds Max to Unity

Jean Pierre Gomez Prof. Esteban Beita

#### Interaction of Ionophoric Polyphenols with Human Serum Albumin (HSA)

Miguel Gomez Prof. Alberto Martinez

#### **Modeling Potential BACE1 Inhibitors**

Johnny Guevara Profs. Mai Zahran and Alberto Martinez

#### Mechanical Characterization of Nano-particles Doped PDMS

Kerolos Hanna Prof. Ozlem Yasar

#### Virtue at the Coffee House: Poetry and Community in America

Tevin Harris Prof. George Guida Chronicling the Achievements and Activities of Honors Scholars at City Tech

Aaron Hollingsworth-Harris Prof. Reneta Lansiquot

Comparison of Air-content Measurement by Volumetric Method and Pressure Method for Different Aggregates in Freshly Mix Concrete

Kyaw Htun Prof. Navid Allahverdi

Influence of Amino Acid Alphabet Reduction on Protein Structure

Qui Huang Prof. Mai Zahran

#### **Comparative Study of Various Qubits**

Zechariah Ilmot Prof. Oleg Berman

Barriers and Transportation Challenges to Healthcare Access in New Mexico

Zonia Iqbal Prof. Katherine Gregory

Physical Modeling of a Forward Acting Grate Combustion Chamber

Muzahidul Islam Prof. Masato Nakamura

#### Home Automation IoT Device

Ayesha Javed Prof. Farrukh Zia

#### Real Estate Development in Brooklyn Heights Before and After the Brooklyn Bridge

Ann Jean Profs. Monica Berger and Alexander Aptekar

#### Dr. Semmelweis and the Discovery of Handwashing

Shmuel Kamensky Prof. Boyan Kostadinov

#### Sorting Algorithms Visualized

Hashim Kayani Prof. Brad Isaacson

#### Optimization and Topology from Mathworld to Kangaroo Exploration for Architecture

Davit Khomasuridze Prof. Anne Leonhardt

#### Wearable Vision System for Scene Understanding

Jane Lynnel Ladaban Prof. Xiaohai Li

Circular Dichroism Profiles of Bovine and Human Serum Albumin and Calf-Thymus DNA

Dianna Landi Prof. Diana Samaroo

A Study of Cultural Competence and Implicit Bias amongst Healthcare Students

Mary Lee Prof. Zoya Vinokur

A Study of Cultural Competence and Implicit Bias amongst Healthcare Students

Vivian Liang Prof. Zoya Vinokur

Remote Control Car Jun Ming Liang Prof. Zhou Zhang

### Exploring the Essence of Contemporary Desserts to Reimagine and Create a Modern Dessert

Amy Lin Prof. Robert Walljasper

#### Low Cost Drone for Medical Applications

Christian Lopez Prof. Andy Lopez



Designing a Research Poster Presentation April 12, 2018

### Predicting Breast Cancer Type (Benign or Malignant)

Sadia Mahzabin Prof. Marcos Pinto

#### **Development of Ceramic Matrix Composites**

Calwayne Malcom Prof. Akm Samsur Rahman

#### Mapping Brooklyn Civic Center

Gabriela Martinez Prof. Ting Chin

The Adoption of Vernacular Techniques by New York City to Decrease the Use of Mechanical Heating and Cooling

Mathyln Mckie Prof. Jihun Kim

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

Kevin Mei Prof. Jean Hillstrom

#### Probabilistic Models for Populations Dynamics

Claire Mirocha Prof. Mariya Bessonov

#### IoT Enabled Wearable Technology

Estrella Moreira Prof. Farrukh Zia

#### Servo Network Based Heteromorphism Robot

Gene Nadela Prof. Xiaohai Li

Chronicling the Achievements and Activities of Honors Scholars at City Tech

Christopher Navarette Prof. Renteta Lansiquot

#### C.H.E.S.S.

George Nwankwo Prof. Viviana Acquaviva

#### Low Cost Drone for Medical Applications

Olajide Odesanya Prof. Andy Zhang Killing Them Soflty 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

#### The Most Frequent Words in "Moby Dick"

Hashir Qureshi Prof. Boyan Kostadinov

#### Design of IoT Enabled Computer Controlled System

Syeda Nazia Rahman Prof. Farrukh Zia

Intersecting Spheres and the Global Positioning System GPS

> Evelyn Richardson Prof. Anne Leonhardt

#### City Tech Talk and Roll Bot

Samiha Riham Prof. Farrukh Zia

#### **Computer Applications of Calculus**

Andre Rodriguez Prof. Nan Li

#### Crane Design Based on the Internet of Things

Jonathan Rodriguez Prof. Zhou Zhang

#### A Tool to Filter Noisy Data Using Ensemble Model Averaging

Nadia Rodriguez Prof. Ashwin Satyanarayana



Peer Leadership Program Spring 2018

#### Recurrence Relations and Computational Complexity

Mian Shabbir Prof. Satyanand Singh

#### A Network Analysis of Game of Thrones

Harmandeep Singh Prof. Boyan Kostadinov

#### Home Automation IoT Device-Hardware Implementation

Arooba Sohail Prof. Farrukh Zia

#### Controlling a Car with Al Voice Recognition

Jennifer Solomon Prof. Farrukh Zia

#### **RoboQueen Blynked**

Rumana Hassin Syed Prof. Farrukh Zia

#### A Study of Cultural Competence and Implicit Bias among Healthcare Students

Paulina Szymanska Prof. Zoya Vinokur

Recurrence Relations and Computational Complexity

> Anh Trieu Prof. Satyanand Singh

Enhancing Learning about Electrical Circuits Components Using Augmented Reality Apps

Suleyman Turac Prof. Benito Mendoza

An Augmented Reality App to Aid Learning about Ohm's Law

Wellington Verduga Prof. Benito Mendoza

#### Synthesis of the Tetracyclic Framework of the Oxygenated Angucyclines

Xiaolan Wu Prof. Tony Nicolas

#### Mapping Brooklyn Civic Center

Yuying Xian Profs. Ting Chin and Jason Montgomery



Research Mixer February 22, 2018

#### A Study of Cultural Competence and Implicit Bias Amongst Healthcare Students

Tiffany Yip Prof. Zoya Vinokur

#### Design and Manufacturing of a Polar 3D Printer

Jiamian Zhao Prof. Angran Xiao

## GRANT-FUNDED PROJECTS

0

#### 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

#### 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 and Janet Liou-Mark, 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

The New York Urban 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 NO2 and O3 Along the Korean Peninsula Using Remote Sensing And Ground-Based Observations

Chi Yan Li

Normalized Difference Vegetation Index Satellite Information and Deforestation Influence on Global Food Security

**Timothy Medina** 

Mean Streets: An Analysis on Street Level Pollution in New York City

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, Ms. Laura Yuen-Lau

## Analysis of the World's Dying Lakes Land Surface Temperature Change

Rabea Begum Prof. Hamidreza Norouzi

Analysis of Urban Surface Energy Balance Parameters Using a Combination of Flux Towers and Infrared Cameras

Sergio Carrillo Prof. Reginald Blake

#### **Traffic Cam Detection with Darknet**

Abdoulaye Drabo Prof. Derek Wilson



Developing and Delivering Effective Research Presentations March 29, 2018 Analysis of the World's Dying Lakes Land Surface Temperature Change

Gabriel Martinez Prof. Hamidreza Norouzi

Analysis of the World's Dying Lakes Land Surface Temperature Change

Gerald Pasco Prof. Hamidreza Norouzi

Energy from Waste Can Help Curb Greenhouse Gas Emissions

> Arman Sarowar Prof. Masato Nakamura

Analysis of Urban Surface Energy Balance Parameters Using a Combination of Flux Towers and Infrared Cameras

Danielle Telemaque Prof. Reginald Blake

#### Energy from Waste Can Help Curb Greenhouse Gas Emissions

Lok Ting Wong Prof. Masato Nakamura

#### **Traffic Cam Detection with Darknet**

Kelvin Papa Yeboah Prof. Derek Wilson

Analysis of Urban Surface Energy Balance Parameters Using a Combination of Flux Towers and Infrared Cameras

Jonathan Yee Prof. Reginald Blake

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

Prof. Reginald Blake

#### Volcanoes: Understanding the Destruction

Sergey Akilov, Candice Deo, Kristy Kim, Zhengdao Daniel Li, Wasif Prottoy, Silvana Vargas

Hurricanes: Beauty from Sky and Disaster on Land

Angel Delgado, Mohammed Forkan, Angel Husain, Zinaida Patrusheva, Kai Fong Sin

#### Volcanoes: The Inferno Beneath Us

Justin Brock, Romario Cupidore, Huang Huang, Benny Lui, Jorge Rivas

#### The Heart of Climate Change: Diseases

Eduardo Bravo, Christian Gover, Tahir Mahmood, Md Moniruzzaman, Mohammad Umair

#### Are NYC Subways Becoming NYC Floodways?

Jonathan Alicea, Sean Burkett, Destinee Guerra, Jonathan Pena

When Earth Quakes, What's at Stake? Earthquake Preparation and Response in Developed vs Developing Nations

Laurie Ceballos, Litian Liu, Yudheer Manandhar, Lokting Wong

#### How Earthquakes Affect the Way We Build Around the World

Ayman Abdulla, Aayush Madaan, Chia Hao Hsu, Jonathan Saldana, Henry Schiavone

#### In the Wake of a Storm

Jerry Camilien, BiQing Liu, Dominick Napoli, Edison Sanchez, Mohammed Uddin

#### Climate Change: Re-educate & Save Planet Earth

Jason Benjamin, Marko Cibic, Emir Cokelija, Jiaxin Huang, Emmanuel Quaicoe

#### Let the Water Flow

Khalil Anderson, Christopher Barros, Abraham Tam, Makini Valentine, Danny Zhou

#### NATIONAL INSTITUTES 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, Ms. Cherishe Cumma

Effect of Raw Garlic and Aged Garlic on HEK293 Cells

Fatimah Ahmed Prof. Ralph Alcendor

Using Morphology and DNA to Elucidate New Species of Distichopathes (Cnidaria: Anthozoa: Hexacorallia: Antipatharia) from the Flower Garden Banks National Marine Sanctuary (NW Gulf of Mexico)

Nadia Alomari Prof. Mercer Brugler

Effect of Calcium Tetrahymena Thermophila

Laiba N. Choudhary Prof. Ralph Alcendor

The Effects of Emotion Regulation Styles on Narrative Content in an Expressive Writing Paradigm

Jordan Jean Pierre Prof. Jean Hillstrom

Effect of Glucose on Tetrahymena Thermophila

Sumaiyah Mahfooz Prof. Ralph Alcendor

The Effects of Emotion Regulation Styles on Narrative Content in an Expressive Writing Paradigm

Christopher Persaud Prof. Jean Hillstrom

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

Audrey Powell Prof. Amanda Almond

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

Daisy Salas Prof. Amanda Almond

#### Interaction of Ionophoric Polyphenols with Human Serum Albumin (HSA)

Sinji Shibutani Prof. Alberto Martinez

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

Randy Valcourt Prof. Olufemi Sodeinde

Circular Dichroism Profiles of Bovine and Human Serum Albumin and Calf-Thymus DNA

Malyka Valentine Prof. Diana Samaroo

## **SPECIAL** PROJECTS

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#### HMGT: Culinary/Pastry Future Innovators

Prof. Robert Walljasper, CEC, CCE, CHE

Engaging Tomorrow's Leaders for the Hospitality Industry through Development and **Exhibition of Creative Works** 

Michelle Chen, Marie Francois-Joseph, Amy Lin, Gabriela Mota, Maurilio Tendilla, Charles Tripoli, Kristen Tsui

#### **ABSTRACT:**

Active student participation in professional culinary pastry competition has the potential to increase students' confidence, earn them industry recognition while expanding their network, and enhance their academic studies. Mentoring is the essential component that engages students in connecting theories, techniques and concepts beyond the classroom. Through a guided process of experiential, reflective, and goal-oriented activities, students join in a dynamic, team effort. They compete in culinary pastry competitions sanctioned by The American Culinary Federation (ACF) - national professional organization of certified chefs. And their creative work is judged in publicforums by these Industry professionals who provide feedback for continuous improvement.



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Culinary Pastry Innovators, ACF Competition Spring 2018

#### CST 1100: Introduction to Computer Systems

CST 1101: Computer Programming and **Problem-Solving** 

Profs. Andrea Allard and Tamrah Cunningham

#### **ABSTRACT:**

Through a video game development group project and a developer's blog discussing the process of problem solving used to create the game, this course will present students with an overall inner inspection of both the world of computing and game development. Student teams will use Python 3.6 (python.org), a free python interpreter tool, to design a 30-minute, choice-based text adventure game which will later be presented to the class via a playtest session. The course aims to teach students to work productively within a team, provide the foundation for other courses within the Computer Systems Technology department, and enhance the critical thinking skills necessary in an increasingly complex and technological world.

#### Planet X

Christina Gomez, Yoonju Hwang, Catherine Mendoza, Miaodan Xu

#### THEM

Kayla Brown, Isaac De Los Santos, Arvin Fernandez, Brian Santiago

#### It Follows Parody

Jesse Cazarez, Brian Lopez, Belinda Oppong, Xue Wu

#### Caribbean Money

Atemah Extavour, Evgeni Kurneev, Rayane Lyoubi, Wu Xu

#### The Greatest Heist

Enrique Bonilla and Adrian Echeverria

#### CMCE 2454: The Applied Hydraulics

Prof. Robin Sanchez

#### **ABSTRACT:**

The Applied Hydraulics course highlights the principles of water supply and sewerage collection and treatment, with an emphasis on NYC's water supply and wastewater treatment systems. For this class project, groups were asked to research and address the essential question: How can New York City's water infrastructure be improved?

#### NYC's Aging Water System & How It Can Be More Effective

Gustavo Barroso, Hadrien Jacobe de Naurois, Vincent Meli, Dapinderjit Singh

#### **Gowanus Canal Remediation Plan**

Evan Banks, Besnik Hasa, Elena Sandratskyy

#### NYC: Smart Use of Water in Daily Life

Ronaldo Carhuaricra, Shonquan Jones, Henry Moreno Alvarez, Elena Zimareva

#### The Control of Urban Stormwater Runoff in Brooklyn Through the Use of Green Infrastructure

Shubra Akter, Rares Ciocan, Saleh Kassim, Leslie Morris

#### Draining the Swamp:

Restoring Water Quality in the Gowanus Canal

Mohsin Ali, Joniel Edwards, Anastasia Klyuchnikova, Yonathan Rosario Mena

#### Managing NYC Stormwater Overflow Affecting Combined Sewer Systems

Kayla Alexander, Marcin Dominik, Jameel Khan, Karla Pena

#### The Reduction of

#### Unwanted Chemical Waste in Drinking Water

Harisahmed Brown, Yun Jiang, Stevens Merilan, Yuping Zhang

## NOTES

- 0 -

#### THE 28TH 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.

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#### SPECIAL THANKS TO

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

#### 0

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

Navid Allahverdi Monica Berger Mercer Brugler **Ting Chin** Aida Eques Jean Hillstrom Daeho Kang Nan Li Alberto Martinez Jason Montgomery Diana Samaroo Ashwin Satyanarayana Jeremy Seto Satyanand Singh Robert Walljasper Andrew Wills Mai Zahran Zhou (Joe) Zhang

#### 0

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

NEW YORK CITY COLLEGE OF TECHNOLOGY