

The

22nd

Semi-Annual
Poster Presentation

HONORS &
EMERGING SCHOLARS
POSTER PRESENTATION

Wednesday, May 6, 2015

11:00AM - 4:00PM

Atrium Ground & First Floors

Thursday, May 7, 2015

10:00AM - 3:00PM

Awards Ceremony at 12:30PM

Atrium Amphitheater

Contents

Honors In A
Regular Course
6

Research Scholars
12

Emerging Scholars
14

Special Projects
30



Awards Ceremony

May 7, 2015
Atrium Amphitheater
12:30 PM

Greetings

Russell K. Hotzler
President

Bonne August
Provost and Vice President for Academic Affairs

Pamela Brown
Associate Provost

Honors Scholars Recognition

Janet Liou-Mark
Director of the Honors Scholars Program

Laura Yuen-Lau
Coordinator of the Honors Scholars Program



Research and Emerging Scholars Recognition

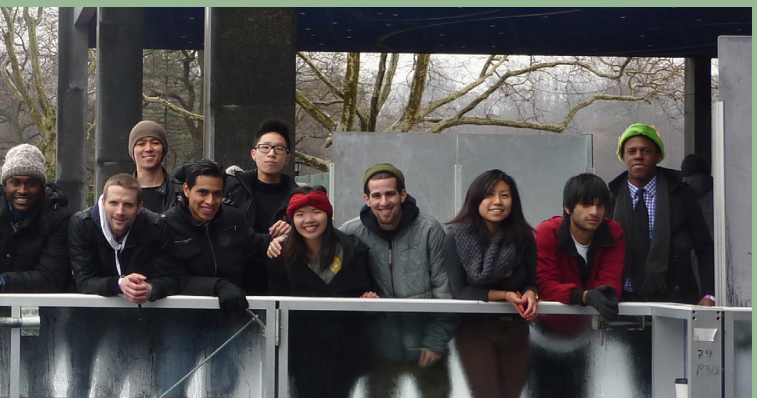
Justin Vazquez-Poritz

Director of Undergraduate Research

Best Poster Awards

Reneta D. Lansiquot

Assistant Director of the Honors Scholars Program



Ice Skating at Prospect Park
December 23, 2014



Honors In A Regular Course

Developing WebGL Applications

Hibba Abbas
Prof. Elizabeth Milonas

CST 4704: Business Intelligence,
Data Warehousing & Data Mining

Punching Shear in Flat Slabs

Amanda Abrew
Prof. Mark Hendel

CMCE 2415: Structural Design: Concrete

Estimating Risk Costs in Construction

Amanda Abrew
Prof. Alex C. Ladias

CMCE 2412: Construction Estimating

Studies on the Effect of OPIDN

Victor Adedara
Prof. Niloufar Haque

BIO 1101: Biology I

The Relationship between Breast Augmentation and Breast Cancer: A Literature Review

Nazia Ahmad
Prof. Lillian Amann

RAD 2426: Imaging Modalities

Teaching Evolution: A Students' Perspective

Abdullah Allaoa
Prof. Mercer R. Brugler

BIO 1201: Biology II

CST Department Mobile Application

Md Arefin
Prof. Marcos Pinto

CST 3519: XML Data Representation



Examining Attitudes towards Mathematics in Foundational Courses with Peer-Led Workshops

Amarou Bah

Prof. Janet Liou-Mark

MEDU 2901: Peer Leader Training in Mathematics

White Paper: Feasibility of Solar Power in Energy Production – Where the Industry is Today

Aparicio Castano

Prof. Abdul M. Awal

EET 1122: Circuit Analysis I

The Biodiversity of Prospect Park - Microbiology Aspects

Bryan Cespedes

Prof. Liana Tsenova

BIO 3302: Microbiology I

Lost in Translation Digital Book

Dauly Cuello

Prof. Derek Stroup

COMD 1200: Graphic Design Principles II

The Pollution in the Hudson River's Waterways

Jessica Daher

Prof. Sean MacDonald

ECON 2505: Environmental Economics

Exploration of Precalculus Students' Mathematical Identity and Formative Mathematical Experiences

Saloua Daouki

Prof. Nadia Kennedy

MEDU 3020: Methods of Teaching
Secondary School Mathematics

A Literature Review of Case Studies in Computer Education

Richard Felix

Prof. Reneta D. Lansiquot

ENG 1773: Weird Science: Interpreting and Redefining Humanity



Comparative Study of Data Security Protocols for the Internet of Things

Farjana Ferdousy
Prof. Yu Wang

CET 4805: Component and Subsystem Design II

Teaching Evolution: A Students' Perspective

Abdul Haq
Prof. Tatiana Voza

BIO 1201L: Biology II Lab

Developing WebGL Applications

Annique Henriques
Prof. Elizabeth Milonas

CST 4704: Business Intelligence,
Data Warehousing & Data Mining

Teaching Evolution: A Students' Perspective

Tyniqua Hinton
Prof. Mercer R. Brugler

BIO 1201: Biology II

Prevalence of Antibiotic Resistant to Bacteria in Food from Retail Establishments

Manuela Hoyos
Prof. Davida Smyth

BIO 3302L: Microbiology I Lab

5-Fluorouracil, Ifosfamide, and Topotecan: Three Organic Compounds Used in Cancer Treatment

Manuela Hoyos
Prof. Diana Samaroo

CHEM 2223: Organic Chemistry I

Paradigm Shifts Apropos to Voluntary Active Euthanasia

Gerard Jitechian
Prof. Nicholas Chambers

PHIL 2203: Health Care Ethics

The Future is CAD/CAM

Sydney Johnson
Prof. Renata Budny

RESD 1212: Fixed Prosthodontics II



Superfluidity on the Nanoscale

Volodymyr Komendyak
Profs. Oleg Berman and Ilya Grigorenko
PHYS 1434: General Physics II: Algebra Based

Dental Prostheses: Can It Be Avoided?

Julie Landa
Prof. Renata Budny
RESD 1212: Fixed Prosthodontics II

Zirconia Versus Lithium Disilicate

Kamylla Lopes
Prof. Renata Budny
RESD 1212: Fixed Prosthodontics II

Gender Differences in Mathematics Attitudes and Achievement in College Courses with a Peer-Led Workshop Component

Andrew Maloney
Prof. Janet Liou-Mark
MEDU 2901: Peer Leader Training in Mathematics

Electron-hole Superfluidity and Phase Transitions in Two Coaxial Nanotubes

William McGuire
Profs. Oleg Berman and Ilya Grigorenko
PHYS 1434: General Physics II: Algebra Based

Superfund Sites

Samiul Mozumder
Prof. Soydan Alihan Polat
ESCI 1110: Environmental Science I

Teaching Evolution: A Students' Perspective

Tsabiyyh Mustafa
Prof. Mercer R. Brugler
BIO 1201: Biology II

The Relationship between Breast Augmentation and Breast Cancer: A Literature Review

Taj Nahar
Prof. Lillian Amann
RAD 2426: Imaging Modalities



Radiologic Technology Students' Perception of the Use of a Video for Demonstration of Positioning of the Shoulder

Niki Patel

Prof. Jennett M. Ingrassia

RAD 2427L: Seminar Lecture Lab

Exploration of Precalculus Students' Beliefs about Mathematical and Attitudes towards Mathematics

Rushdha Rafeek

Prof. Nadia Kennedy

MEDU 3020: Methods of Teaching
Secondary School Mathematics

A Literature Review of Case Studies in Computer Education

Mariah Rajah

Prof. Reneta D. Lansiquot

ENG 1773: Weird Science:
Interpreting and Redefining Humanity

DURA Solar Decathlon 2015

Alondra Ramos

Prof. Alexander Aptekar

ARCH 4830: Construction Technologies: Special Topics

The Relationship between Breast Augmentation and Breast Cancer: A Literature Review

Mariama Sall

Prof. Lillian Amann

RAD 2426: Imaging Modalities

A Model of Gas Exchange in the Lung

Silma Samayeen

Prof. Ariane Masuda

MAT 1375: Precalculus

Gender Differences in Mathematics Attitudes and Achievement in College Courses with a Peer-Led Workshop Component

Farjana Shati

Prof. Janet Liou-Mark

MEDU 290I: Peer Leader Training in Mathematics



The Biodiversity of Prospect Park - Microbiology Aspects

Eni Sejdini
Prof. Liana Tsenova

BIO 3302: Microbiology I

Radiologic Technology Students' Perception of the Use of a Video for Demonstration of Positioning of the Shoulder

Alicia Symister
Prof. Jennett M. Ingrassia

RAD 2427L: Seminar Lecture Lab

Immunization: A Look into Unvaccinated Children

Avion Thomas
Prof. Erin Mckinney-Prupis

HUS 4803: Resource Development in Human Services

Optimization of the Spectrum of an FM Signal

Ina Tsikhanava
Prof. Zory Marantz

TCET 2102: Analog and Digital Telephony

Comparative Study of Data Security Protocols for the Internet of Things

Eric Tung
Prof. Yu Wang

CET 4805: Component and Subsystem Design II

Sexual Harassment in the Workplace

Lillian Vazquez
Prof. Horace Hutchinson

HMGT 350I: Hospitality Work Force Management
in a Global Marketplace

A Model of Gas Exchange in the Lung

Ling Yang
Prof. Ariane Masuda

MAT 1375: Precalculus



Research Scholars

Design Analysis of Solid Waste Mixing in a Combustion Chamber

Christopher Amoroso
Prof. Masato R. Nakamura

Energy Use vs. Indoor Air Quality in High-Performance and Sustainable Buildings

Joseph Cotter
Prof. Lukasz Sztaberek

Interactive Mechanical Toy Crane

Hartford Hage
Profs. Angran Xiao and Andy S. Zhang

Mobile Diagnostic Expert System

Mamun Hasan
Prof. Marcos S. Pinto

Computational Design of Nano Devices for Optical and Quantum Computing

Andy J. He
Prof. German Kolmakov

Positive Reframing and Vagal Tone: A Variation on the Expressive Writing Paradigm

Keishawna Jones
Prof. Jean Hillstrom

Stochastic Simulation of a Combustion Chamber in a Waste-to-Energy (WTE) Power Plant

Ye Htet Lynn
Prof. Masato R. Nakamura

Using Infograms for Online Educational Videos

Andrew Maloney
Prof. Vasily Kolchenko

Stress Analysis for Stability of Structures Subjected to Human Loading

Rachid Moumni
Prof. Gaffar Gailani



The Role of Metal Ions in A β ₁₋₄₀ Aggregation and Reactive Oxygen Species Formation in the Course of Alzheimer's Disease

Magdalena Podgorny
Prof. Alberto Martinez

Crash-Free Spherical Aerial Vehicle

Tenzing Rabgyal
Prof. Xiaohai Li

Interactive Mechanical Toy Crane

Deborah Sitton-Garvin
Profs. Angran Xiao and Andy S. Zhang

Investigation of the Lindenmayer Systems for Internal Architecture Design of Tissue Scaffolds

Joyce Tam
Prof. Ozlem Yasar

Development of a Portable Low Cost Chemical/Dust Detection Unit

Semone Thomas
Profs. Angran Xiao and Andy S. Zhang

Heliospheric Neutral Current Sheet Sector Structure Border Crossing by the Earth and the Seismicity of the Earth

George Vanishvili
Prof. Masato R. Nakamura



Writing Abstracts for Research Projects

Profs. Rebecca Devers and Marianna Bonanome & WAC Fellows
February 26, 2015



Emerging Scholars

Developing WebGL Applications

Hibba Abbas
Prof. Marcos Pinto

Annotating THERM_01194830

Sajjad Abedian
Prof. Ralph Alcendor

Public Housing Envelope Restoration

Amanda Hayley Abrew
Prof. Sean O'Brien

Embedded Security in V2V & V2I Communication using WIFI and Sensors

Muhammed Abubakar
Prof. XinZhou Wei

Molecular Phylogeny and Biogeography of the Rattlesnakes (Crotalus and Sistrurus)

Serifat Adebola
Prof. Christopher Blair



Advancing Library Research Techniques

Prof. Anne Leonard

March 12, 2015





Responsible Conduct of Research Training
Prof. Janet Liou-Mark
March 5, 2015

Studies on the Effect of OPIDN

Victor O. Adedara
Prof. Niloufar Haque

Numerical Analysis of Waste-to-Energy Combustion Chambers

Joshua Afrifa
Prof. Masato R. Nakamura

D & H Canal & Wurtsboro Town Masterplan

Tasnuva Ahmed
Prof. Paul King

Mosquitos and Materials: Building Construction in Developing Regions

Tasnuva Ahmed
Prof. Sanjive Vaidya



CST Department Mobile Application

Md Arefin
Prof. Marcos Pinto

XML Data Transfer in Android Application (cont.)

Khachatur Arutyunayn
Prof. Marcos Pinto

Case Studies of Site Analysis in NYC

Alyssa Ayow
Profs. Jill Bouratoglou and Lia Dikigoropoulou

Characterization of Staphylococci from Built Environment

Rimsha Azhar
Prof. Davida Smyth

Repository of Epigenomic Signatures for Autoimmune Rheumatic Diseases

Abzal Bacchus
Prof. Evgenia Giannopoulou

Cloning and Expression of Human Taste Receptors

William Bennett
Prof. Jeremy Seto

Developing Web Pages with Bootstrap

Shameem Bhuiya
Prof. Marcos Pinto

Valuation of Internet Companies

Jovany Bravo
Prof. Patrick O'Halloran

Benefits of Expressive Writing: Improvements in Vagal Tone over Time

Taylor Brown
Profs. Pa Her and Jean Hillstrom

Effect of Garlic on THERM_01194830 and THERM_00295170

Leslie Brown
Prof. Ralph Alcendor

Biodiversity in Prospect Park

Bryan Cespedes
Prof. Liana Tsenova



Solar Decathlon

Mujun Chen
Prof. Alexander Aptekar

Numerical Analysis of Waste-to-Energy Combustion Chambers

Tiffany Chong
Prof. Masato R. Nakamura

Can Antimicrobials Select for Resistance

George Cobos
Prof. Davida Smyth

Outsourcing of Non-Educational Services

Blanca Cortes
Prof. Patrick O'Halloran

D & H Roebling Canal

Zahava Cortez
Prof. Paul King

Case Studies of Site Analysis in NYC

Breno Bondarenko Costa
Prof. Jill Bouratoglou and Lia Dikigoropoulou

D & H Canal & Wurtsboro Town Masterplan

Breno Bondarenko Costa
Prof. Paul King

Developing a Protein Interaction Network from Mouse Forebrain Samples Following Infection by Toxoplasma Gondii

Emmanuel Coulanges
Prof. Jeremy Seto

Chronicling the Achievements & Activities of Honors Scholars at City Tech

Zianne Cuff
Prof. Reneta D. Lansiquot

Elements and Fundamentals of Optical Fiber Communication

Eddie Dang
Prof. Lufeng Leng

An Exploration of Precalculus Students' Previous Mathematical Experiences and Current Attitudes towards Mathematics

Saloua Daouki
Prof. Nadia S. Kennedy



Molecular Characterization of Deep-Sea “Anemones” from the Arctic

Craig Dawes
Prof. Mercer R. Brugler

DURA Solar Decathlon 2015

Stephen December
Prof. Alexander Aptekar

Polyethylene (glycol) Diacrylate (PEGDA) and Polydimethylsiloxane (PDMS) Characterization for Tissue Engineering Applications

Andres Delgado
Prof. Ozlem Yasar

Crash-Free Spherical Aerial Vehicle

Jean C. Delgado-Caceres
Prof. Xiaohai Li

DURA Solar Decathlon 2015

Andrade Desiree
Prof. Alexander Aptekar

Study and Analysis of Waterborne Pathogen Transmission

Thierno Diallo
Prof. Urmi Ghosh-Dastidar

DURA Solar Decathlon 2015

Hadiza Djibring
Prof. Alexander Aptekar

Radios or Sensors - Which is the Best for Semi-/Non-Autonomous Traffic?

Guershon Dorismond
Prof. Zory Marantz

Lindenmayer System-Based Design of Engineered Tissues

Kevin Duong
Prof. Ozlem Yasar

D & H Roebling Canal & Wurtsboro Town Masterplan

David Encarnacion
Prof. Paul King



Data Security in Embedded Computing Devices

Johnson Esenowo
Prof. Xinzhou Wei

Sensor and Actuator Data Communication across the Internet of Things

Nicole Fauntleroy
Prof. Farrukh Zia

Gender Differences in Mathematics Attitudes and Achievement in College Courses with a Peer-Led Workshop Component

Marina Felamon
Profs. A.E. Dreyfuss and Janet Liou-Mark

Comparative Study of Data Security Protocols for the Internet of Things

Farjana Ferdousy
Prof. Farrukh Zia

Using the Next Generation Sequencing Technology to Elucidate the Microorganism Diversity in Different Water Sites in Brooklyn

Fabiola Fontaine
Prof. Davida Smyth

Biodiversity in Prospect Park

Edrouine Gabriel
Prof. Diana Samaroo

Precedent Studies

Edisson Garcia
Profs. Jill Bouratoglou and Lia Dikigoropoulou

iPractice Challenge: A Mobile App for Practicing Computer Programming

Adrian Garcia-Guzman
Prof. Benito Mendoza

DURA Solar Decathlon 2015

Dominique Graci
Prof. Alexander Aptekar

Diet with Higher Fat Calories and its Effect on Male and Female Mice

Devy Gurung
Prof. Sanjoy Chakraborty



Cloud Security Analysis

Preeti Gurung
Prof. Xiangdong Li

DURA Solar Decathlon 2015

Kemoy Henry
Prof. Alexander Aptekar

Implementation of a Prototype Environmental Sensor Network

Israel Nava Hernandez
Prof. Farrukh Zia

D & H Canal & Wurtsboro Town Masterplan

Jonathan Hernandez
Prof. Paul King

11 Broadway, Past and Present

Aaron Hollander
Prof. Joseph Humann

Characterization of Staphylococci from Built Environment

Manuela Hoyos
Prof. Davida Smyth

Effect of Sequence Change in the Structure of Lignin

Veronica Elizabeth Hurtado
Prof. Mai Zahran

Study and Analysis of Waterborne Pathogen Transmission

Olivia Hylton
Prof. Urmi Ghosh-Dastidar

Engaging Autism Spectrum Disorders (ASD) Students in Engineering

Areeba Iqbal
Prof. Melanie Villatoro

Annotating THERM_00295170

Samuel Isaac
Prof. Ralph Alcendor

Examining Attitudes towards Mathematics in Foundational Courses with Peer-Led Workshops

Rezwon Islam
Prof. A.E. Dreyfuss and Janet Liou-Mark



Fourier's Gift

Rezwon Islam
Prof. Satyanand Singh

DURA Solar Decathlon 2015

Jennifer Jimenez
Prof. Alexander Aptekar

Quantitative PCR Analysis of Expression Changes in Differentiating PC12 Cells

Daenna Joseph
Prof. Jeremy Seto

Implementation of a Sensor Network as a Cyber Physical Sub-System

Farhin Kapadia
Prof. Farrukh Zia

D & H Canal & Wurtsboro Town Masterplan

Baljinder Kaur
Prof. Paul King

Modeling Biochemical Reactions at the Molecular Level

Elizabeth Kolmus
Prof. Mai Zahran

Superfluidity on the Nanoscale

Volodymyr Komendyak
Profs. Oleg Berman and Ilya Grigorenko

Channel Characterization of PEGDA Based Engineered Tissue Scaffolds

Dmitry Koval
Prof. Ozlem Yasar

Improving Java Virtual Machine Memory Utilization

Egor Kozitski
Prof. Raffi Khatchadourian

Microbiology of the Built Environment

Manhin Lam
Prof. Davida Smyth

Modular Quadcopter for Distributed Coordination

Victor Liang
Prof. Xiaohai Li



Diet with Higher Fat Calories and its Effect on Male and Female Mice

Nicole Madrazo
Prof. Sanjoy Chakraborty

Motivation in Microbiology: How Can Peer Led Team Learning Help with Student Motivation

Faizan Khalid Malik
Prof. Davida Smyth

Gender Differences in Mathematics Attitudes and Achievement in College Courses with a Peer-Led Workshop Component

Andrew Maloney
Profs. A.E. Dreyfuss and Janet Liou-Mark

DURA Solar Decathlon 2015

Chantal Manning
Prof. Alexander Aptekar

Evaluation of Novel Nuclear Introns within the Deep-Sea Black Coral *Stauropathes Arctica* (Cnidaria: Anthozoa: Hexacorallia: Antipatharia)

Robert Marino
Prof. Mercer R. Brugler

Study of Protein Complex by Molecular Dynamics Simulations

Christopher Mason
Prof. Mai Zahran

How Would a Laboratory Component Affect the Success of PLTL Workshops

Roger Brian Mason
Prof. Melanie Villatoro

A Bootstrap-Based Repository for Epigenetic Signature of Autoimmune Diseases

Janatul Mawa
Prof. Evgenia Giannopoulou

Difficult Vocabulary and Peer Led Team Learning Workshops

Janatul Mawa
Prof. Davida Smyth



Chronicling the Achievements & Activities of Honors Scholars at City Tech

Mandy Mei
Prof. Reneta D. Lansiquot

Justice in Medical Ethics and Philosophy

Rose Vasthy Michel
Prof. D. Robert MacDougall

iPractice Challenge: A Mobile App for Practicing Computer Programming

Viralkumar Mistry
Prof. Benito Mendoza

Case Studies in Site Analysis NYC

Francisco Morales-Villa
Prof. Jill Bouratoglou and Lia Dikigoropoulou

Themes in Emerging Literature

Samiul H. Mozumder
Prof. Katie Albany

Creating a Persistent Storage in Mobile Devices

Khadijah Okoh
Prof. Marcos Pinto

In Search of the Ultimate Building Blocks

Adam Ounis
Prof. Andrea Ferrogli

Radiologic Technology Students' Perception of the Use of a Video for Demonstration of Positioning of the Shoulder

Niki Patel
Prof. Jennett Ingrassia

Fractional Derivatives

Yen Pham
Prof. Satyanand Singh

Gender Differences in Mathematics Attitudes and Achievement in College Courses with a Peer-Led Workshop Component

Rushdha Rafeek
Prof. A.E. Dreyfuss and Janet Liou-Mark



An Exploration of Precalculus Students' Beliefs about Mathematics and Understandings of What it Means "to be good at math"

Rushdha Rafeek
Prof. Nadia S. Kennedy

DURA Solar Decathlon 2015

Farhana Rahman
Prof. Alexander Aptekar

Nonequilibrium Bose Condensation of Dipolaritons

Hasanuzzaman Rahman
Prof. German Kolmakov

Chronicling the Achievements & Activities of Honors Scholars at City Tech

Mariah Rajah
Prof. Reneta D. Lansiquot

DURA Solar Decathlon 2015

Alondra Ramos
Prof. Alexander Aptekar

DURA Solar Decathlon 2015

Redon Rexha
Prof. Alexander Aptekar

Case Studies in Site Analysis NYC

Margarita Salas
Profs. Jill Bouratoglou and Lia Dikigoropoulou

A Model of Gas Exchange in the Lung

Silma Samayeen
Prof. Ariane Masuda

Developing Mobile Web Applications

Elvis Rafael Sanchez JR
Prof. Marcos Pinto

Fruit Juices as Anti-Microbials

Fauziya Sani
Prof. Laina Karthikeyan

Getting to Grips with LaTeX

Ricky Santana
Prof. Samar ElHitti



Numerical Analysis of Waste-to-Energy Combustion Chambers

Luca Scarano
Prof. Masato R. Nakamura

Biodiversity in Prospect Park

Eni Sejdini
Prof. Liana Tsenova

Bose-Einstein Condensation of Microcavity Polaritons in the Trap

Sulav Sharma
Prof. Oleg Berman

Gender Differences in Mathematics Attitudes and Achievement in College Courses with a Peer-Led Workshop Component

Farjana Shati
Prof. A.E. Dreyfuss and Janet Liou-Mark

Case Studies in Site Analysis NYC

Fatima Shatku
Prof. Jill Bouratoglou and Lia Dikigoropoulou

DNA Methylation on Patients with Lupus

Dhavin Singh
Prof. Evgenia Giannopoulou

Chronicling the Achievements & Activities of Honors Scholars at City Tech

Jodieann Stephenson
Prof. Reneta D. Lansiquot

Defining the Diameter of Micropiles to Increase Structural Capacity

Sharmin Sultana
Prof. Melanie Villatoro

Radiologic Technology Students' Perception of the Use of a Video for Demonstration of Positioning of the Shoulder

Alicia Symister
Prof. Jennett Ingrassia



Investigation of Scaffold Fabrication Techniques: Tissue Engineering for Reducing Medical Waste and the Environmental Impacts

Joyce Tam
Prof. Ozlem Yasar

Chronicling the Achievements & Activities of Honors Scholars at City Tech

Jane Michelle Tan
Prof. Reneta D. Lansiquot

Channel Characterization of PEGDA Based Engineered Tissue Scaffolds

Harold P. Tandjung
Prof. Ozlem Yasar

DURA Solar Decathlon 2015

Aura Tejada
Prof. Alexander Aptekar

Lindenmayer System-Based Design of Engineered Tissues

Lydie Toussaint
Prof. Ozlem Yasar

Effect of Garlic on THERM_01194830 and THERM_00295170

Jeff Toussaint
Prof. Ralph Alcendor

Microbiology of the Built Environment

Wing Pan Kenny Tsang
Prof. Davida Smyth

Optimization of the Spectrum of an FM Signal

Ina Tsikhanava
Prof. Djafar K. Mynbaev

Methods for Creating APIs for Mobile Web Applications

Eric Tung
Prof. Benito Mendoza

Public Housing Envelope Restoration

Claudia Tupayachi
Prof. Sean O'Brien



Visualization Methods of Personal Genomics

Anwar Uddin
Prof. Evgenia Giannopoulou

DURA Solar Decathlon 2015

Nwarambilli H. Ugbode
Prof. Alexander Aptekar

Numerical Analysis of Waste-to-Energy Combustion Chambers

Usaama Abdullah Van
Prof. Masato R. Nakamura

Sexual Harassment in the Workplace

Lillian Vazquez
Prof. Horace Hutchinson

Gender Differences in Mathematics Attitudes and Achievement in College Courses with a Peer-Led Workshop Component

Irania Vazquez
Profs. A.E. Dreyfuss and Janet Liou-Mark

A Model of Gas Exchange in the Lung

Ling Yang
Prof. Ariane Masuda

Gender Differences in Mathematics Attitudes and Achievement in College Courses with a Peer-Led Workshop Component

Feifei Ye
Profs. A.E. Dreyfuss and Janet Liou-Mark

Prospect Park Biodiversity Project

Erica Yeboah
Profs. Urmi Ghosh-Dastidar, Sandie Han,
Diana Samaroo and Liana Tsenova

Prospect Park Biodiversity Project

Mallessa Yeboah
Profs. Urmi Ghosh-Dastidar, Sandie Han,
Diana Samaroo and Liana Tsenova

The Benefits of Organic Foods versus GMO Foods

Sidra Zafar
Prof. Sean MacDonald



Emerging Scholars

Supported by the Black Male Initiative Program

Getting to Grips with LaTeX

Joe Nathan Abellard
Prof. Samar ElHitti

Effect of Garlic on TTHERM_01194830 and TTHERM_00295170

Oluwatobi Ajayi
Prof. Ralph Alcendor

Examining Attitudes towards Mathematics in Foundational Courses with Peer-Led Workshops

Amarou Bah
Prof. A.E. Dreyfuss and Janet Liou-Mark

Effect of Sequence Change in the Structure of Lignin

Brittiny Dhital
Prof. Mai Zahran

Multiple Polylogarithms at Weight 4

Shannon Evans
Prof. Andrea Ferroglia



Designing a Research Poster Presentation

Mr. Marvin Bennet
April 16, 2015

Chronicling the Achievements & Activities of Honors Scholars at City Tech

Florencia E. Garcia
Prof. Reneta D. Lansiquot

Copper Binding Properties of Chelating Polyphenols

Rebecca McCurdy
Prof. Alberto Martinez

OP Induced Neurotoxicity

David Owoeye
Prof. Niloufar Haque

Chronicling the Achievements & Activities of Honors Scholars at City Tech

Walter Rada
Prof. Reneta D. Lansiquot

Gender Differences in Mathematics Attitudes and Achievement in College Courses with a Peer-Led Workshop Component

Jeremy Sanchez
Profs. A.E. Dreyfuss and Janet Liou-Mark

Gender Differences in Mathematics Attitudes and Achievement in College Courses with a Peer-Led Workshop Component

Ricky Santana
Profs. A.E. Dreyfuss and Janet Liou-Mark

Examining Attitudes towards Mathematics in Foundational Courses with Peer-Led Workshops

Marieme Toure
Profs. A.E. Dreyfuss and Janet Liou-Mark

Special Projects

A Graph Theoretic Approach to Puzzle Solving

Abstract: In this study, we examine the puzzle "Instant Insanity" which consists of four cubes with each of their six faces colored red, blue, green, and yellow. The aim of the puzzle is to stack these cubes in a column so that each side (front, back, left, and right) of the stack shows each of the four colors. We will illustrate how to figure out a possible solution by graph theoretic means. We will also show by coding in Maple, Java script and Visual basic how to solve this three dimensional puzzle.

http://en.wikipedia.org/wiki/Instant_Insanity

Sherry Ali, Eric Aung, Atif Baig, Phillip Bharath, Brian Bones, Hongliang Chen, Ingrid Espinoza, Marco Estrada, Anton Fedorov, Richard Feliz, Jibriel Hasan, Keelan Jones, So Ra Lee, Jin Lin, Leonel Lopez, Luka Machavariani, Gary Mei, Wilgene Mejias, Daniel Otero, Christopher Pan, Sunil Patel, Swastika Shrestha, Zainul Somrow, and Anthony Yorrick

Prof. Satyanand Singh

MAT 2540: Discrete Mathematics II

How can GIS be used to distinguish and compare recreational usage between specified Brooklyn & Queens districts in a decade?

Joe Kenny Lamothe, Juan Maturana, Bob Mendez, and Freddy Palaguachi

Prof. Hamidreza Norouzi

Lab Assistant: Andrea Garrido

CMCE 4422: Introduction to Geographic Information Systems (GIS)

Best Places to Live in NYC! - A Method Using GIS

Elizabeth Brown, Salvatore DeCarlo, and Alicia Elia-Lewis

Prof. Hamidreza Norouzi

Lab Assistant: Andrea Garrido

CMCE 4422: Introduction to Geographic Information Systems (GIS)

Prediction of Avalanche Extent in Himalaya Mountains Using GIS

MD Abir, Marvin Garcia, Jeffrey Gomez, and Phong Tran

Prof. Hamidreza Norouzi

Lab Assistant: Andrea Garrido

CMCE 4422: Introduction to Geographic Information Systems (GIS)

Green Vs. Non-green Buildings, How do they make difference?

Lateef Belfor, Taminder Singh, and Waqar Tahir

Prof. Hamidreza Norouzi

Lab Assistant: Andrea Garrido

CMCE 4422: Introduction to Geographic Information Systems (GIS)





A Living Laboratory: Revitalizing General Education for a 21st-Century College of Technology

Grant # P03IS100159

Student Community Team: Blogging on the OpenLab

Jeanluc Antoine, Amoni Brown,
Shawn Brumell, Jessica Deng, Konyca Francis,
Amanda Marmol, Mandy Mei, and Brianna Vasquez

Mentors: Scott Henkle, Jill Belli, and Jody R. Rosen

NEST Noyce Explorers, Scholars, Teachers Fostering the Creation of Exceptional Mathematics and Technology Teachers in New York City

Grant #I340007

Noyce: Effective K-12 STEM Education Workforce

Lusine Gasparyan
Prof. Fangyang Shen



Honors Scholars Program Orientation
February 5, 2015





NSF Louis Stokes Alliance for Minority Participation (LSAMP) in STEM

Program Coordinator: Mr. Marvin Bennett

LaTeX, A Document Preparation System

Joe Nathan Abellard
Prof. Samar ElHitii

Detection of Terahertz Signals using Fiber Based Multiple Sagnac Interferometers Coupled with a Variable Stress Dependent Polarizing Material

Muhammed Abubakar
Prof. Xin-Zhou Wei

Radios or Sensors – Which is the Best for Semi/Non-Autonomous Traffic?

Amadou Bah
Prof. Zory Marantz

Enterprise Web Application on Amazon Web Services

Ibrahima Barry
Prof. Ossama Elhadary

Tumor-Stromal Cross Talk in Breast Cancer

Jean Delgado-Caceres
Prof. Xiaohai Li

Graph Theory and Brain Connectivity

Thierno Diallo
Prof. Urmi Ghosh-Dastidar

AirCasting/Air Monitor Device

Fatime Elfatimi
Prof. Andy Zhang

Aerosol-Cloud Interaction Using Ground Based Optical Remote Sensing Instruments

Rudy Escobar
Prof. Viviana Vladutescu

Data Security in Embedded Computing Devices and RFID

Johnson Esenewo
Prof. Xinzhou Wei

Using Next Generation Sequencing Technology to Elucidate the Microorganism Diversity in Water Sites in Brooklyn

Fabiola Fontaine
Prof. Davida Smyth



DURA Decathlon

Roger Mason
Prof. Aptekar Alexander

Using CAD in Custom Design Medical Devices

Rachid Mourni
Prof. Gaffar Gailani

Evaluation of Novel Nuclear Introns within the Deep-Sea Black Coral *Stauropathes Arctica* (Cnidaria: Anthozoa: Hexacorallia: Antipatharia)

Lysna Paul
Prof. Mercer Brugler

The Star Chromatic Index of Complete Graphs

Marieme Toure
Prof. Simon Smith

Studying the Interaction between Chlorins in the Presence of BSA and HAS in Solution

Andrew Wills
Prof. Diana Samaroo



The Statue of Liberty and Ellis Island
April 3, 2015



Research Experiences for Undergraduates in Satellite and Ground-based Remote Sensing at NOAA-CREST 2

NSF REU Grant # AGS-1062934

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

Holistic Investigation of Water Pollution in the Harlem River

Augustine Amisah

Seasonal Impact on Boundary Layer Heights in a Heterogeneous Landscape

Md Arefin

Identification of Phreatophytic Ecosystems Depending on Groundwater in Texas Based on NVDI Data

Keisha Baxter

Multi Instrument Classification of Atmospheric Boundary Layer Stability

Raymond Bishir



National Museum of the American Indian
March 13, 2015



New York Transit Museum
February 17, 2015

**Detection of Land Cover Change
and Drought Trend Using Brightness
Temperature and Microwave Emission**

Yanna Chen

**Spatial Variability of Ambient Ozone
Concentrations during Three Heat Waves in the
Northeast Mega Region of the United States**

Brittany Dhital

**Flood Prediction Based on Multidimensional
Analysis of Precipitation and Inundation in the
Mekong River Delta**

Andrew Fitzgerald

**Evaluate the Performance of Different Water
Classification Algorithms to Determine Clear Sky
Water Pixels in VIIRS Satellite Images**

Indrajit Gurung

Comparison of Two Different Types of Ceilometers

Francois Mertil

Comparison of Ground-based Soil Moisture Measurements with Satellite Data

Nyan Oo

Characterizing Arctic Land Surfaces Using a Forward Looking Infrared (FLIR) Camera

Berenice Oseguera

Creating Water Body Maps for the Pacaya Samiria, the Everglades, and the US Gulf Coast using NASA UAVSAR Imaging Radar Data

Stivaly Paulino

Summertime Wind Speed Trends in Southern California

Esha Rahman

Geospatial Modelling of the Harlem River Pollution

Modou Sene

A Seasonal Investigation of Heat Fluxes in the New York City Region

Selma Skoko

Landsat Retrieved Surface Properties Effects on the Day Time Temperature Pattern in New York City

Awolou Sossa

Fusing Spatial Kriging with Satellite Estimates to Obtain a Regional Estimation of PM2.5

Daniel Vidal



NYC Fire Department C-14 Certificate of Fitness
Associate Provost Pamela Brown
March 26, 2015



The Black Male Initiative, Perkins VTEA, and CUE Funding

Profs. AE Dreyfuss, Janet Liou-Mark,
Diana Samaroo and Davida Smyth

MEDU 290I: Peer Leader Training in Mathematics

IS 90I: Independent Study

The Effects of Self-Efficacy in Mathematics Courses with Peer-Led Workshops

Amarou Bah, Rezwon Islam, and Marieme Toure

Gender Differences in Attitudes and Achievement in Intermediate Algebra, Geometry, and Trigonometry with a Peer-Led Workshop Component

Marina Felamon, Jeremy Sanchez, and FeiFei Ye

Motivation in Microbiology: How can Peer Led Team Learning Help with Student Motivation

Faizan Malik



Developing and Delivering Effective Research Poster Presentations

Prof. Jody Rosen

March 26, 2015



Gender Differences in Attitudes and Achievement in Calculus I with a Peer-Led Workshop Component

Andrew Maloney and Irania Vazquez

Difficult Vocabulary and Peer Led Team Learning Workshops

Janatul Mawa

Gender Differences in Attitudes and Achievement in Precalculus with a Peer-Led Workshop Component

Rushdha Rafeek, Ricky Santana, and Farjana Shati

What hints help motivate students in College Algebra and Geometry (MAT 1175)?

Noura Yasin



The Statue of Liberty and Ellis Island
April 3, 2015



Cultivating Fine Dining Etiquette
Prof. Karen Goodlad
March 3, 2015

Acknowledgements

To the dedicated professors for mentoring students.

A heartfelt thank you for making this event a successful one:

Dean Karl Botchway
Dean Kevin Hom
Dean David Smith
Prof. Julia Jordan
Ms. Laura Yuen-Lau
Mr. David Turkiew
Mr. George Lowe
Mr. Jeff Novak
Mr. Lubosh Stepanek
Ms. Shawn Beatty

A special thank you to the judges of the poster competition:

Ralph Alcendor
Reginald Blake
Monica Berger
Aida Egues
Gaffar Gailani
Evgenia Giannopoulou
Pa Her
Paul King
Laina Karthikeyan
Raffi Khatchadourian
Alberto Martinez
Ariane Masuda
Benito Mendoza
Masato R. Nakamura
Mark Noonan
Hamidreza Norouzi
Patrick O'Halloran
Kara Pasner
Jonas Reitz
Jody Rosen
Jeremy Seto
Diana Samaroo
Satyanand Singh
Davida Smyth
Liana Tsenova
Melanie Villatoro
Yu Wang
Mai Zahran

A special recognition and appreciation to Mr. Raciél Guzman for designing the program.