



THE

th

# SEMI-ANNUAL HONORS SCHOLARS POSTER PRESENTATION

**HONORS AND  
EMERGING SCHOLARS**  
POSTER PRESENTATION

**LEARNING COMMUNITIES**  
THEME-BASED POSTER PRESENTATION

WEDNESDAY, DECEMBER 5, 2012  
11:00 AM - 4:00 PM

THURSDAY, DECEMBER 6, 2012  
10:00 AM - 3:00 PM

KLITGORD GYM

06

**HONORS COURSES**

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**HONORS IN A REGULAR COURSE**

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**EMERGING SCHOLARS**

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**LEARNING COMMUNITIES**  
THEME-BASED PROJECTS

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**SPECIAL PROJECTS**



Philadelphia, PA  
June 2012



Emerging Scholars Orientation  
Prof. Selwyn Williams | September 20, 2012



Peer Assisted Learning Peer Leader Training  
Prof. AE Dreyfuss | August 23, 2012



Honors Scholars Orientation  
Prof. Janet Liou-Mark | September 6, 2012

# AWARDS CEREMONY

December 6, 2012 | Klitgord Gym | 12:30 PM

## GREETINGS

**DR. RUSSELL K. HOTZLER**  
President

**DR. BONNE AUGUST**  
Provost & Vice President  
Academic Affairs

**DR. PAMELA BROWN**  
Associate Provost

## HONORS SCHOLARS RECOGNITION

**BARBARA GRUMET, JD**  
Dean  
School of Professional Studies

**DR. RENETA LANSIQUOT**  
Assistant Director  
Honors Scholars Program

**MS. LAURA YUEN-LAU**  
Coordinator  
Honors Scholars Program

## EMERGING SCHOLARS RECOGNITION

**DR. SELWYN WILLIAMS**  
Director  
Undergraduate Research

## LEARNING COMMUNITIES RECOGNITION

**DR. ESTELA ROJAS**  
Director  
Learning Communities

## BEST POSTER AWARDS

**DR. KARL BOTCHWAY**  
Interim Dean  
School of Arts and Sciences

# HONORS COURSES

## **MAT 1475: CALCULUS I HONORS**

Prof. Alexander Rozenblyum

## **NEWTON'S METHOD OF SOLVING EQUATIONS AND FRACTALS**

Azeem Chatha, Phillip Diaz, Toar Sadia

**Abstract:** Some examples of using of Newton's method of solving equations will be presented. These examples will be visualized with self-similar patterns called fractals.

## **INVERSE HYPERBOLIC FUNCTIONS**

Sayeeda Manzoor, Nusrat Nobi, Andrew Okoro, Sezan Saimon

**Abstract:** Some properties of inverse hyperbolic functions will be derived. Application to special theory of relativity will be shown.

## **Chebyshev Polynomials**

Amean Abdelfattah, Brian Mendoza, Rachel Rackal

**Abstract:** Some properties of Chebyshev polynomials will be derived. Application in approximation theory will be shown.

## **Least Square Method**

Bhopal Amarsingh, Daniel Bethancourt,  
Ricardo Dixon, Errick Massian

**Abstract:** Formulas for Least Square method will be derived. Application to some problems of statistics will be shown.

## **Economic Shape of a Can**

Nicholas Brosnan, Corey Johnson

**Abstract:** A number of optimization problems will be developed.

## **WEIERSTRASS THEOREM**

Dany Silatcha Woussah

**Abstract:** Weierstrass Theorem on approximation of continuous functions with polynomials will be discussed. Some examples will be presented.

## **LAW 4900: SENIOR LEGAL SEMINAR HONORS**

Prof. Mary Sue Donsky

Luis Arnaud – “Carthage” Trial (Joseph Smith murder trial)  
Dina Barakat – John Brown Trial  
Donna Cyrus – Massie Trials  
Susan Decker – Charlie Manson Trial  
David Laus – Earp (OK Corral) Trial  
Michael Morgan – Sam Sheppard Trials  
Cherry Parris – Thaw (White murder) Trials  
Roselyn Rosa – Patty Hearst Trial  
Estelle Sims – Al Capone Trial  
Tresann Walford – Falwell V. Flynt Trial  
Kimmy Zhong – Lizzie Borden Trial

**Abstract:** Each student will research one of the most famous trials in American history. They will research primary and secondary authority in order to prepare papers and posters about their trials. They will use the peer review process to raise questions about each other's trials. Each student will make an oral presentation about their trial.

## **LAW 4704: LEGAL TECHNOLOGY HONORS**

Prof. Marissa J. Moran

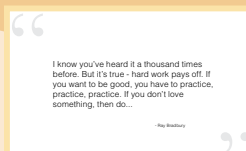
Anthony Alexander, Danielle Berman, Paul Campbell, Susana Ortiz, Alfredo Perez, Elvis Perez, Roselyn Rosa, Arthur Voranav

## **THE ATTRACTION POWER OF TWO OPPOSITE FORCES: RAY BRADBURY, INNOVATIVE WRITER STEVE JOBS, INNOVATIVE TEKKIE**

**Abstract:** The Legal Technology students will explore the impact and influence of two powerful icons of our time and their divergent viewpoints concerning technology.

## **ART, TECHNOLOGY, AND LAW - THE “HOPE” POSTER CASE**

**Abstract:** The Legal Technology students will explore and present on the topics of copyright law, art, and technology as they review the case of Shepard Fairey and his use of an Associated Press (AP) photo of Barack Obama. Fairey sought a court declaration that he did not violate AP's copyright when he used an AP photo. He contended that he borrowed someone else's creation for art's sake. The AP then countersued saying the un-credited, uncompensated use of the AP picture did in fact violate copyright laws. This case was settled last year.



# HONORS IN A REGULAR COURSE

## **IPV4 TO IPV6 MIGRATION STRATEGIES**

Shamsan Ahmed  
Prof. Ossama Elhadary  
CST 2307: Networking Fundamentals

## **DEVELOPING MOBILE APPLICATIONS WITH DATABASE CONNECTIVITY**

Mohamed Ali  
Prof. Marcos Pinto  
CST 3619: Web Services Architecture

## **FABRICATION CONSIDERATIONS IN MAXILLOFACIAL AND ANAPLASTOLOGY RESTORATIONS**

Crystal Allen  
Prof. Avis Smith  
RESD 1111L: Complete Dentures I

## **LEARNING CULTURE THROUGH THE USE OF OPENLAB**

Lizeth Baudin  
Prof. Elaine Leinung  
NUR 3010: Physical Assessment

## **FACADES AND ADAPTIVE COMPONENTS**

Marlon Cox  
Prof. Alexander Aptekar  
ARCH 2430: Building Technology IV

## **DO IT YOURSELF (DIY) DESIGN**

Oscar Diaz  
Prof. Libby Clarke  
ADV 1227: Typographic Design I

## **HYDRAULIC FRACTURING: WHAT IS IT? WHAT ARE THE POTENTIAL HEALTH RISKS? WHAT CAN WE DO ABOUT IT?**

Francine Eisner  
Prof. Kevin McGirr and Prof. Margaret Rafferty  
NUR 4110: Urban Health

## **ARE CURRENT HOSPITAL PROCEDURES TO PREVENT MRSA ENOUGH?**

Lauren Gillingham  
Prof. Emina Becirovic  
BIO 3220: Microbiology

## **PRIVATE AND MOBILE MEDICAL MONITORING SYSTEM**

Netanel Halili  
Prof. Eric Sabbah  
CST 4713: Web Application Development in Java

## **FACADES AND ADAPTIVE COMPONENTS**

Dane Isaac  
Prof. Alexander Aptekar  
ARCH 2430: Building Technology IV

## **SUPERFLUIDITY OF DIPOLAR MAGNETOEXCITONS IN SEMICONDUCTOR COUPLED QUANTUM WELLS IN A HIGH MAGNETIC FIELD**

Viktor Ivankevych  
Prof. Oleg Berman and Prof. German Kolmakov  
PHYS 1442: Physics 2.3

## **DEVELOPING ONTOLOGIES USING XML DOCUMENTS**

Milica Jevtic  
Prof. Marcos Pinto  
CST 3519: XML Data Representation

## **NEW INEXPENSIVE FEATURE RICH MICROCONTROLLER SYSTEMS**

Paul Julien  
Prof. Edward Morton  
EMT 2320: Advanced Mechanisms II

## **INTERACTION OF DIPOLAR EXCITONS IN BOSE-EINSTEIN CONDENSATE**

Rajvinder Kaur  
Prof. Oleg Berman and Prof. German Kolmakov  
PHYS 1442: Physics 2.3

## **EXPLORING THE PROPAGATION OF POLARITON CONDENSATE**

Anna Kuang  
Prof. Boris Gelman  
PHYS 1433: Physics 1.2

## **HURRICANE SANDY: A BUSINESS OPPORTUNITY**

Brittany Lallkissoo  
Prof. Anthony Selvadurai  
MKT 1214: Advertising

**CORONARY ARTERY DISEASE: YOUR LIFE IS AT RISK!!!!**

Danique McFarlane

Prof. Niloufar Haque and Prof. Nasreen Haque

BIO 2312L: Human Anatomy and Physiology II

**THE NOTION OF JUSTICE IN PLATO'S REPUBLIC**

Marissa Ramnath

Prof. Laureen Park

PHIL 2101: Introduction to Philosophy

**ADVERTISING CAMPAIGN – EL WATUSI**

Mandy Mei

Prof. Ira Robbins

ADV 2300: Communication Design I

**THE 10 YEAR LEGACY: THE PROPERTY DISCLOSURE ACT**

Tamir Smart

Prof. Jeannette Espinoza

LAW 1202: Real Estate Law

**JESSICA HISCHE'S TYPOGRAPHIC WORK**

Mandy Mei

Prof. Niyati Mehta

ADV 1227: Typographic Design I

**PRIVATE AND MOBILE MEDICAL MONITORING SYSTEM**

Hok Sing Tong

Prof. Eric Sabbah

CST 4713: Web Application Development in Java

**THE ROLE OF OXIDATIVE STRESS AND REACTIVE OXYGEN SPECIES (ROS) IN THE PROGRESSION OF ALZHEIMER'S DISEASE**

Md Mofidul Hossain Rezwan Mia

Prof. Suresh Tewani

CHEM 3312: Analytical Chemistry I

**TRANSITION IN CARE**

Jamaai Young

Prof. Patricia Cholewka

NUR 3110: Leadership in the Management of Client Care

**ADVERSE POSSESSION “DEFINITION OF HOSTILITY”**

Albert Morris Jr.

Prof. Jeannette Espinoza

LAW 1202: Real Estate Law

**ENERGY ANALYSIS FOR TRANSPORTATION IN NEW YORK CITY**

Herman Pardon Jr.

Prof. Masato Nakamura

IND 2313: Industrial Design I

**WEST NILE VIRUS: IS IT A THREAT?**

Alma Plaku

Prof. Liana Tsenova

BIO 3302L: Microbiology

**BLACK AND WHITE IN COLOR: MINORITIES IN COMIC BOOKS AND THEIR FILM ADAPTATIONS**

Dominick Prince

Prof. Rebecca Devers

ENG 3402: Topics in Literature: Graphic Novel

**THE DRAY EFFECTS IN THE COUPLED QUANTUM WELLS EMBEDDED IN A MICROCAVITY**

Rachel Rackal

Prof. Boris Gelman

PHYS 1433: Physics 1.2

# EMERGING SCHOLARS

## NONLINEAR EFFECTS IN EXCITONIC SYSTEM

Amean Abdelfattah  
Prof. Oleg Berman and Prof. German Kolmakov

## AMPLIFYING THE AWARENESS OF THE GEOSCIENCES AMONG UNDERREPRESENTED MINORITIES IN STEM

Mursheda Ahmed  
Prof. Reginald Blake and Prof. Janet Liou-Mark

## IPV4 TO IPV6 MIGRATION STRATEGIES

Shamsan Ahmed  
Prof. Ossama Elhadary

## DEVELOPING MOBILE APPLICATIONS WITH DATABASE CONNECTIVITY

Mohamed Ali  
Prof. Marcos Pinto

## THE MATHEMATICS OF MEDICAL IMAGING

Frank Aline  
Prof. Boyan Kostadinov

## QUANTUM TECHNIQUES IN CRYPTOGRAPHY

Frank Aline  
Prof. Delaram Kahrobaei

## DIETARY LINKS TO ALZHEIMER'S DISEASE

Yaotian An  
Prof. Laina Karthikeyan

## MOLECULAR BASIS OF DYSTONIA

Yaotian An  
Prof. Laina Karthikeyan

## THE 18S RIBOSOMAL GENE SEQUENCE OF ZONOCERUS VARIEGATES

Yaotian An  
Prof. Olufemi Sodeinde

## EMOTIONAL STRESS, MEANING-MAKING, AND WELL-BEING

Pascal Babmatee  
Prof. Jean Kubeck and Prof. Pa Her

## EFFECT OF ZINGIBER OFFICINALE, ALLIUM SATIVUM, AND ALLIUM CEPA

Toni Batiste  
Prof. Ralph Alcendor

## RELATIONAL AGGRESSION

Lizeth Baudin  
Prof. Aida Eques

## DENTAL CARIES EXPERIENCE OF CLIENTS VISITING THE NYC COLLEGE OF TECHNOLOGY DENTAL HYGIENE CLINIC

Mayra Beltrame  
Prof. Anty Lam

## RELATIONAL AGGRESSION

Samantha Blair  
Prof. Aida Eques

## QUANTUM TECHNIQUES IN CRYPTOGRAPHY

Amelise Bonhomme  
Prof. Delaram Kahrobaei

## DESIGNING FOR DISASTER: HIGH DENSITY RESPONSE

Marsha Ann Cadougan  
Prof. Illya Azaroff

## DEVELOPING ONTOLOGIES USING XML DOCUMENTS

Jaime Cajamarco  
Prof. Marcos Pinto

## LAW, PRIVACY, & TECHNOLOGY

Fanny G. Chico  
Prof. Marissa Moran

## WASTE HEAT UTILIZATION: SHAPE MEMORY ALLOY (SMA) ENGINE

Eduardo Cristi  
Prof. Masato Nakamura

## QUANTITATIVE ANALYSIS OF RECYCLING PROCESS

Zulma Cruz  
Prof. Masato Nakamura

## CHRONICLING THE ACHIEVEMENTS AND ACTIVITIES OF HONORS SCHOLARS AT CITY TECH

Tamrah Cunningham  
Prof. Reneta Lansiquot

## WHY DO THERAPIES ULTIMATELY FAIL IN MULTIPLE SCLEROSIS: AN AUTOIMMUNE DEMYELINATING DISEASE OF THE CNS?

Sebastien Dalencourt  
Prof. Andleeb Zameer

**CHRONICLING THE ACHIEVEMENTS AND ACTIVITIES OF  
HONORS SCHOLARS AT CITY TECH**

Oscar Diaz  
Prof. Reneta Lansiquot

**DESIGNING FOR DISASTER: HIGH DENSITY RESPONSE**

Vladyslav Dunda  
Prof. Illya Azaroff

**BOTTLE MASONRY UNIT: A STUDY OF RECLAIMED MATERIAL**

Daniel Egan  
Prof. Paul King

**SUPERFLUIDITY OF MAGNETOPOLARITONS IN A MICROCAVITY  
IN A HIGH MAGNETIC FIELD**

Ricardo Ferro  
Prof. Oleg Berman and Prof. German Kolmakov

**SUPERFLUIDITY OF EXCITON POLARITONS IN A MICROCAVITY**

Ahmed Fraz  
Prof. Oleg Berman and Prof. German Kolmakov

**BIOLOGICAL APPLICATIONS OF PORPHYRINOIDS**

Roger Galeono  
Prof. Diana Samaroo

**DEVELOPING MOBILE APPLICATIONS WITH  
DATABASE CONNECTIVITY**

Elaine Greene  
Prof. Marcos Pinto

**PRIVATE AND MOBILE MEDICAL MONITORING SYSTEM**

Netanel Halil  
Prof. Eric Sabbah

**THE STUDY OF HOSPITAL RE-ADMISSIONS:  
A CASE STUDY APPROACH**

Nadera Halley  
Prof. Patricia Cholewka

**DESIGNING FOR DISASTER: HIGH DENSITY RESPONSE**

Edmund Huang  
Prof. Illya Azaroff

**BIOLOGICAL APPLICATIONS OF PORPHYRINOIDS**

Salima Huseynova  
Prof. Diana Samaroo

**SPONTANEOUS SYMMETRY BREAKING AND THE HIGGS BOSON**

Salima Huseynova  
Prof. Andrea Ferrogli

**SUPERFLUIDITY OF DIPOLAR EXCITONS IN  
SEMICONDUCTOR COUPLED QUANTUM WELLS**

Ervin Ibragimov  
Prof. Oleg Berman and Prof. German Kolmakov

**THE ENERGY OF GRAPHS IN MATH, PHYSICS AND CHEMISTRY**

Adam Ibrahim  
Prof. Andrew Douglas

**SUPERFLUIDITY OF DIPOLAR MAGNETOEXCITONS IN  
SEMICONDUCTOR COUPLED QUANTUM WELLS IN A  
HIGH MAGNETIC FIELD**

Viktor Ivankevych  
Prof. Oleg Berman and Prof. German Kolmakov

**DEVELOPING ONTOLOGIES USING XML DOCUMENTS**

Milica Jevtic  
Prof. Marcos Pinto

**AN ANALYSIS OF DOMESTIC VIOLENCE AMONG  
URBAN WOMEN OF COLOR**

Natalie Jones  
Prof. Christine Thorpe

**CHRONICLING THE ACHIEVEMENTS AND ACTIVITIES OF  
HONORS SCHOLARS AT CITY TECH**

Ruchoma Kaganoff  
Prof. Reneta Lansiquot

**INTERACTION OF DIPOLAR EXCITONS IN  
BOSE-EINSTEIN CONDENSATE**

Rajinder Kaur  
Prof. Oleg Berman and Prof. German Kolmakov

**CHEMICAL EQUILIBRIUM CALCULATIONS USING  
MICROSOFT EXCEL**

Ramnish Kaur  
Prof. Suresh Tewani

**WHY DO THERAPIES ULTIMATELY FAIL IN MULTIPLE  
SCLEROSIS: AN AUTOIMMUNE DEMYELINATING DISEASE OF  
THE CNS?**

Ramnish Kaur  
Prof. Andleeb Zameer

**SOCIAL NETWORK AND ITS ROLE IN CONFLICTS AND  
THEIR RESOLUTION**

George Kobakhidze  
Prof. Lisa Pope Fischer

**DEVELOPING MOBILE APPLICATIONS WITH  
DATABASE CONNECTIVITY**

Willis Kong  
Prof. Marcos Pinto

**QUANTIFICATION OF FLUORIDE ION CONCENTRATIONS IN  
COMMERCIALY AVAILABLE TEA**

Mariya Kostova  
Prof. Jay Deiner



**PROPAGATION OF A POLARITON CONDENSATE UNDER THE ACTION OF AN EXTERNAL FORCE**

Anna Kuang  
Prof. Oleg Berman and Prof. German Kolmakov

**ISSUES IN FORENSIC PSYCHOLOGICAL EVALUATIONS IN FAMILY COURT MATTERS**

Amit Kumar  
Prof. Mark Rand

**INVESTIGATION ON VARIOUS LOSS MECHANISMS IN A S-BAND OPTICAL AMPLIFIER**

Andrew Liu  
Prof. Lufeng Leng

**AMPLIFYING THE AWARENESS OF THE GEOSCIENCES AMONG UNDERREPRESENTED MINORITIES IN STEM**

Connie Lu  
Prof. Janet Liou-Mark and Prof. Reginald Blake

**COOL ROOFS, COOLER CITIES: REDUCING ENERGY CONSUMPTION AND THE HEAT ISLAND EFFECT IN URBAN SETTINGS THROUGH ROOF DESIGN**

Albino Marsetti  
Prof. Masato Nakamura

**SPONTANEOUS SYMMETRY BREAKING AND THE HIGGS BOSON**

John Martinez  
Prof. Andrea Ferrogli

**THE DYNAMICS OF A BOSE-EINSTEIN CONDENSATE OF MICROCAVITY POLARITONS IN AN OPEN GEOMETRY**

Gelaney Matthew  
Prof. Oleg Berman and Prof. German Kolmakov

**THE MATHEMATICS OF MEDICAL IMAGING**

Juan Mejia  
Prof. Boyan Kostadinov

**THE ROLE OF OXIDATIVE STRESS AND REACTIVE OXYGEN SPECIES (ROS) IN THE PROGRESSION OF ALZHEIMER'S DISEASE**

MD Modiful H. R. Mia  
Prof. Alberto Martinez and Prof. Suresh Tewani

**DIETARY LINKS TO ALZHEIMER'S DISEASE**

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Prof. Laina Karthikeyan

**MOLECULAR BASIS OF DYSTONIA**

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Prof. Delaram Kahrobaei

**CHRONICLING THE ACHIEVEMENTS AND ACTIVITIES OF HONORS SCHOLARS AT CITY TECH**

Venezia Moorer  
Prof. Reneta Lansiquot

**CHRONICLING THE ACHIEVEMENTS AND ACTIVITIES OF HONORS SCHOLARS AT CITY TECH**

Andrea Morin  
Prof. Reneta Lansiquot

**WEST NILE VIRUS: IS IT A THREAT?**

Pablo Mota  
Prof. Liana Tsenova

**THE BOSE-EINSTEIN CONDENSATION OF MICROCAVITY POLARITONS IN A TRAP**

Mohammed Nawaz  
Prof. Oleg Berman and Prof. German Kolmakov

**CHLORINS: STRUCTURE, FUNCTION AND APPLICATIONS**

Wurood Nomon  
Prof. Diana Samaroo

**RELATIONAL AGGRESSION**

Oluyinka Oluwashola  
Prof. Aida Egues

**LIQUID MATERIALS WITH RECYCLED CONTENT**

Patricia Paredes  
Prof. Alexander Aptekar

**CHLORINS: STRUCTURE, FUNCTION AND APPLICATIONS**

Evelyn Perez  
Prof. Diana Samaroo

**WEST NILE VIRUS: IS IT A THREAT?**

Alma Plaku  
Prof. Jonathan Natov and Prof. Liana Tsenova

**ADMISSIONS CRITERIA FOR RADIOLOGIC TECHNOLOGY PROGRAMS**

John Polcari

Prof. Jennett Ingrassia and Prof. Anthony Devito

**EFFECTS OF FIELD INDEPENDENCE/DEPENDENCE AND ATTENTION RESTORATION IN VIRTUAL ENVIRONMENTS ON COGNITIVE PERFORMANCE**

Steven Pretel

Prof. Howard Sisco

**THE DRAG EFFECTS IN THE COUPLED QUANTUM WELLS EMBEDDED IN A MICROCAVITY**

Rachel Rackal

Prof. Oleg Berman and Prof. German Kolmakov

**CHRONICLING THE ACHIEVEMENTS AND ACTIVITIES OF HONORS SCHOLARS AT CITY TECH**

Walter Rada

Prof. Reneta Lansiquot

**THE NOTION OF JUSTICE IN PLATO'S REPUBLIC**

Marissa Ramnath

Prof. Laureen Park

**THE LINK BETWEEN ORAL & SYSTEMIC HEALTH**

Joanne Saint-Vil

Prof. Aida Egues

**TRANSITION IN CARE**

Joanne Saint-Vil

Prof. Patricia Cholewka

**EFFECT OF ZINGIBER OFFICINALE, ALLIUM SATIVUM, AND ALLIUM CEPA ON TETRAHYMENA THERMOPHILIA**

Peggy Saint-Vil

Prof. Ralph Alcendor

**THE EXCITONIC BOSE-EINSTEIN CONDENSATION IN A TRAP**

Genny Sanchez

Prof. Oleg Berman and Prof. German Kolmakov

**EFFICACY OF SMALL MOLECULES METAL IONOPHORES IN THE TREATMENT OF ALZHEIMER'S DISEASE**

Ismaila Sanogo

Prof. Alberto Martinez and Prof. Suresh Tewani

**NEW COMBUSTION CHAMBER DESIGN FOR ENERGY RECOVERY**

Jason Singh

Prof. Masato Nakamura

**THE LINK BETWEEN ORAL & SYSTEMIC HEALTH**

Tracey Smith

Prof. Aida Egues

**TRANSITION IN CARE**

Tracey Smith

Prof. Patricia Cholewka

**EMOTIONAL STRESS, MEANING MAKING AND WELL-BEING**

Eleanor Strehl

Prof. Jean Kubeck and Prof. Pa Her

**SPONTANEOUS SYMMETRY BREAKING AND THE HIGGS BOSON**

Charles Thomas

Prof. Andrea Ferrogia

**PRIVATE AND MOBILE MEDICAL MONITORING SYSTEM**

Hok Sing Tong

Prof. Eric Sabbah

**TIME SERIES ANALYSIS OF E-BAY AUCTION PRICES**

Savpreet Walia

Prof. Ossama Elhadary

**HEAT TRANSFER ANALYSIS OF COMPUTER COMPONENTS FOR ELECTRONIC WASTE (E-WASTE REDUCTION)**

Lin Chia Wang

Prof. Masato Nakamura

**DESIGNING FOR DISASTER: HIGH DENSITY RESPONSE**

Takao Watanabe

Prof. Illya Azaroff

**THE LINK BETWEEN ORAL & SYSTEMIC HEALTH**

Jamaai Young

Prof. Aida Egues

**TRANSITION IN CARE**

Jamaai Young

Prof. Patricia Cholewka

**SELF-EFFICACY AND ATTITUDES TOWARDS MATHEMATICS OF UNDERGRADUATES IN TECHNICAL COLLEGES: A UNITED STATES AND TAIWAN COMPARISON**

Karmen Yu

Prof. Sandie Han and Prof. Janet Liou-Mark

**SPECIAL SUMMATIONS USING PROBABILITY AND NUMBER THEORY**

YiMing Yu

Prof. Satyanand Singh

**WEST NILE VIRUS: IS IT A THREAT?**

Yi Ming Yu

Prof. Jonathan Natov and Prof. Liana Tsenova

**SELF-EFFICACY AND ATTITUDES TOWARDS MATHEMATICS OF UNDERGRADUATES IN TECHNICAL COLLEGES: A UNITED STATES AND TAIWAN COMPARISON**

Suhua Zeng

Prof. Sandie Han and Prof. Janet Liou-Mark

# LEARNING COMMUNITIES THEME-BASED PROJECTS

## COMPOSING ABSTRACTIONS

Ravenna Bahadur, Ross Barnes, Austin Felix,  
Stefon Gordon, Stalin Lozado, Palvi Manhas,  
Angel Margarito, Manuel Margarito, Carlos Mo,  
Franklin Rojas, Stephanie Sanchez,  
Diego Vega, Valerien Yepes

Profs. Matt Gold, Sanjive Vaidya, and Shoma Lahiry  
ENG1101: English Composition I  
ARCH1110: Design Foundations I  
ARCH1191: Visual Studies

## THE NARRATIVE OF COMPUTING

Group1: Family First  
George Henriquez, Jason Jamna, Mohashin Mostafa,  
Gurpreet Singh, Jose Zapatero

Group 2: Shift  
Mayrelen Felix, Darwin Fuentes, Victor Guerrero, Devon Tucker

Group 3: Immaculacy  
Jorge Acosta, Solanlly Hernandez, Wood Legoute, Miguelina Lopez

Group 4: Reclamation  
Chaoqun Chen, Ashik Mitra, Eli Perez, Jacky Xu, Bowai Yuen

Group 5: The Last Wolf  
Maen Caka, Jose Fernandez, Mais Gurshumov,  
Chevanne Morris, Jayson Valderrama

Prof. Reneta Lansiquot and Prof. Candido Cabo  
ENG1101: English Composition  
CST1101: Problem Solving with Computer Programming

## SO...WHAT?: USING CAUSE AND EFFECT TO UNDERSTAND ELEMENTS OF MATH AND GRAMMAR

Ebunoluwa Adebajo, Brad Lee Alba, Jessica Algarin,  
Jerica Collado, Clifford Cruz, Aleksander Dabrowski,  
Anthony Garcia, Humberto Gomez, Andrew Gonzalez,  
Kamrul Hassan, Daniel Hernandez, Katelyn Insinga,  
Gerald Levendusky, Giancarlo Macias, Mohammed Mia,  
Michka Morris, Daniel Sullivan, Joshua Washington,  
Gary Yee, Kevin Yuksekol, Rayan Zebib, Jun Wei Zhong

Prof. Holly Carley and Prof. Jennifer Sears  
MAT1175: Fundamentals of Mathematics  
ENG 1101: English Composition I

## DESIGNING LANGUAGE

Enrique Aguirre, Saadiq Alli, Christopher Alvarado,  
Michell Calderon, Lisa Chattoo, Justyn Clarke,  
Yvonne Escobar, Michael Gonzalez, Clyde Harris,  
Andrew Morocho, Jessica Ortega, Darryl Reid,  
Karen Rodriguez, Errol Stewart, Anna Tam, Lok Tung Tsang

Prof. Rebecca Devers and Prof. Genevieve Hitchings  
ENG1101: English Composition I  
ADV1162: Raster & Vector Graphics

## SOCIAL ISSUES IN A MODERN ERA

Chris Florentino, Briana Laing-Felix, Stu Peter,  
Brandon St. Jean, Dionel Then

Prof. Anna Do and Prof. Jeannette Espinoza  
ENG1101: English Composition  
LAW1101: Introduction to Paralegal Studies

## MATHEMATICAL CIRCUITS

### Mathematical Circuit #1

Patrick Barton, Louis Caballero, Xavier Mercy, Andre Phanor

### Mathematical Circuit #2

Darren Gopaul, Awad Nagi, Raheem Ramsarran

### Mathematical Circuit #3

Slawomir Kania, Vidal C. Lopez, Marlon Myers

### Mathematical Circuit #4

Navid Ahsan, Enrique Hernandez, Sukhdeep Singh, Javier Verdejo

### Mathematical Circuit #5

Edwin Lorenzo, David Nimako, John Willabus

### Mathematical Circuit #6

Rubi Dhakal, Diego Lopera, Edward Manakhimov, Daniel Wu

Prof. Ariane Masuda and Prof. Farrukh Zia

**MAT1275:** College Algebra and Trigonometry

**EMT1150:** Electrical Circuits

## WHO AM I AND WHY AM I HERE?

James Brown, Danny Liang, Jared Shillingford, Kerneil Wells

Prof. Jeannine Foster-McKelvia and Prof. Randi Ross

**AFR 1321:** Black Theater

**ENG 092W:** Developmental Writing II

## KNOWLEDGE IN ACTION

### Group 1: Use of Paper

Jamila Begum, Balaj Mehta

### Group 2: Keeping Batteries Out of Landfills

Devin Bickram, Tajram Mark Bissoondial, Rashad Rahman

### Group 3: Hypertension

Dominique Callender, Christina Bloomfield,  
Nathanaelle Eugene, Darrel Smith

### Group 4: Energy Consumption

Adriana Colon, Maria Fuzailov, Viktoriya Syatkina

### Group 5: Bottles of Awareness

Erika Herrera, Gabriel Joseph, Karla-Marie Marcelle

### Group 6: Carbon Emission

Kristopher Linares, Gaelle Morin, Charlotte Streater

Prof. Sheila Miller and Prof. Jeremy Seto

**MAT1175:** Fundamentals of Mathematics

**BIO1101:** Biology I



Writing Abstracts for Research Projects  
WAC Writing Fellows | September 27, 2012



Developing and Delivering Effective Research Presentations  
Profs. Jody Rosen and Justin Davis | November 8, 2012

# SPECIAL PROJECTS

## LEARNING CULTURE THROUGH THE USE OF OPEN LAB

Samantha Blair  
Prof. Elaine Leinung

## HISTORY OF INTERIORS

Julia Bartone  
Prof. Shelley Smith

## **BROOKLYN WATERFRONT 2050**

**NSF TUES GRANT #0942720**

## A STATISTICAL MODEL FOR PRECIPITATION DATA IN BROOKLYN

Rana Ahsan, Vincent Chin, Sukhwinder Singh  
Prof. Huseyin Yuce

## A STATISTICAL MODEL FOR TEMPERATURE DATA IN BROOKLYN

Endri Domi, Jeffrey Hammer, Satish Maharaj  
Prof. Huseyin Yuce

## **MECHATRONICS TECHNOLOGY CENTER: LEARNING PRODUCT DESIGN THROUGH HANDS-ON MECHATRONICS PROJECT**

**NSF ATE GRANT #1003712**

## LOOP-O-SCOPE: ENDOSCOPIC LOOP DETECTION SYSTEM

Alex Barbaran, Joe Kim, Bijan Mokhtari,  
Aidan Murphy, Fritzpatrick Roque  
Prof. Andy S. Zhang and Prof. Farrukh Zia

## RARE LOOP FINDER: AN ENDOSCOPIC LOOP DETECTION DEVICE

Anthony Francis, Ali Harb, Maria Vanegas, Ethan Wong  
Prof. Farrukh Zia and Prof. Andy S. Zhang

## **NSF LOUIS STOKES ALLIANCE FOR MINORITY PARTICIPATION (LSAMP) PROGRAM**

Program Coordinator: Ms. Jodi-Ann Young

## DESIGN AND FABRICATION OF CUSTOM-MADE IMPLANTS

Yapah Berry  
Prof. Gaffar Gailani

## DESIGN OF LARGER PROTON EXCHANGE MEMBRANE FUEL CELLS BASED ON A SMALL FUEL CELL

Yapah Berry  
Prof. Malek Brahimi

## DESIGN ANALYSIS OF REVERSE ACTING GRATE FOR SOLID WASTE MIXING

Josel De La Cruz  
Prof. Masato Nakamura

## UTILIZING SENSORS TO IMPROVE THE AWARENESS OF A ROBOT

Anthony Francis  
Prof. Andy S. Zhang

## TRANSFORMATION RELIABILITY FOR SMALL TO LARGER PROTON EXCHANGE MEMBRANE FUEL CELLS

Sean Pratt  
Prof. Malek Brahimi

## LOAD EFFECT ON PROTON EXCHANGE MEMBRANE FUEL CELLS

Olivia Reed  
Prof. Malek Brahimi

## THE ENERGY OF GRAPHS IN MATH, PHYSICS, AND CHEMISTRY

Faith Tamisi  
Prof. Andrew Douglas and Prof. Thomas Tradler

## **RESEARCH EXPERIENCES FOR UNDERGRADUATES IN SATELLITE AND GROUND-BASED REMOTE SENSING AT NOAA-CREST 2**

**NSF REU GRANT #AGS-1062934**

Prof. Reginald Blake and Prof. Janet Liou-Mark

## CLASSIFYING LAND COVERS USING SPECTRAL SIGNATURES

Folashade Alawiye  
Dr. Kyle McDonald

## SPECTRAL ANALYSIS OF SOIL MOISTURE TIME SERIES

Amelise Bonhomme  
Dr. Nir Krakauer

## GRAPHYTE AND AURUM: LEARNING MODULES FOR REMOTE SENSING CLASSIFICATIONS

Luis Bello  
Dr. Irena Gladkova

## VALIDATION OF FLASH FLOOD GUIDANCE SYSTEM USING OBSERVED FLOOD DATA

Juan Mejia  
Dr. Tarendra Lakhankar

**NUMERICAL MODELING OF WIND DRIVEN WATER FLOW**

Rifat Hussain

Dr. Hangsong Tang

**OPEN-PATH FTIR APPLICATIONS TO AEROSOL DYNAMICS**

Sunyoung Pyo

Dr. Fred Moshary

**SPATIAL AND TEMPORAL VARIABILITY IN OCEAN COLOR (OC) IMAGERY DATA OF THE LONG ISLAND SOUND REGION**

Robert Bararwandika

Dr. Samir A. Ahmed

**SATELLITE REMOTE SENSING OF CLOUDS AND HURRICANES UPPER-TROPOSPHERIC WATER VAPOR**

Renford Alexander

Dr. Johnny Luo

**CLOUD PHYSICS AND DYNAMICS**

Sikha Basnet

Dr. William B. Rossow

**HEAT TRANSFER APPLIED TO ENVIRONMENTAL FLOWS**

Mohammed Alvi

Dr. Jorge Gonzalez

**WATER RESOURCES, WEATHER EXTREMES, SUSTAINABILITY, AND CLIMATE CHANGE EFFECTS ON WATER RESOURCES**

Milica Jevtic

Dr. Charles Vörösmarty

**VALIDATION OF FLASH FLOOD GUIDANCE SYSTEM USING OBSERVED FLOOD DATA**

Christopher Chan

Dr. Tarendra Lakhankar

**CREATING AND SUSTAINING DIVERSITY IN THE GEO-SCIENCES AMONG STUDENTS AND TEACHERS IN THE URBAN COASTAL ENVIRONMENT OF NEW YORK CITY  
NSF ODEG GRANT #1108281**

EET 3132: Remote Sensing

Prof. Viviana Vladutescu

**MODERN OPTICAL TECHNIQUES USED IN JAMES WEB SPACE TELESCOPE SEGMENT OPTICS AND SPACE INSTRUMENTS**

Phillip Coulter, Theodore Hajimichael, Raymond Ohl,

Edwin Olaya, Agossa Segla

**NON CONTACT MEASUREMENT OF LARGE FORMAT DETECTORS AND THERMAL BLANKET SURROUNDING THE FLIGHT INSTRUMENTS OF JWST**

Phillip Coulter, Theodore Hajimichael, Raymond Ohl,

Edwin Olaya, Agossa Segla

**MINITUARIZING IR SPECTROMETERS FOR STUDYING PLANETARY ATMOSPHERES**

Antonio Aguirre, Shahid Aslam, Tilak Hewagama

**NEW YORK CITY RESEARCH INITIATIVE (NYCRI) USING NEURAL NETWORK TECHNIQUES TO PREDICT SURFACE PM2.5 LEVELS FROM OPTICAL AND METEOROLOGICAL DATA**

Nkosi Alleyne, Gary Bouton, Lina Cordero

Michael Hirschberger, Christopher Widi

Prof. Barry Gross

**IMAGE COMPRESSION AND IMAGE PROCESSING**

Maurice Evans, Noam Pillischer, Alyssa Taylor

Prof. Tanvir Prince

**METROPOLITAN MENTORS NETWORK: GROWING AN URBAN STEM TALENT POOL ACROSS NEW YORK CITY  
NSF STEP GRANT #0622493****BLACK MALE INITIATIVE, AND MAA TENSOR FOUNDATION WOMEN AND MATHEMATICS GRANT****DESIGN AND FABRICATION OF CUSTOM-MADE IMPLANTS**

Muhammad Ali

Prof. Gaffar Gailani

MEDU 2901: Peer Leader Training in Mathematics

Prof. AE Dreyfuss

**HOW DOES QUESTIONING HELP STUDENTS IN A STATICS I WORKSHOP?**

Pedro Bautista

**HOW CAN STUDENTS IN A MATHEMATICS WORKSHOP BE MOTIVATED TO RAISE THEIR EXPECTATIONS OF THEIR PERFORMANCE?**

Yanna Chen

**HOW CAN THE PEER LEADER HELP STUDENTS IN A STATICS I WORKSHOP AVOID MISTAKES?**

Ricardo Dixon

**HOW CAN THE PEER LEADER DEVELOP A TEAM OF LEARNERS IN A MATHEMATICS 1175 WORKSHOP?**

Alan Jara

**HOW DOES A PEER LEADER TAKE CHARGE FOR THE BENEFIT OF A MATHEMATICS WORKSHOP GROUP?**

Ebrahim Saif

**WHAT FACTORS AID A MATHEMATICS WORKSHOP TO BE A HIGH-PERFORMING GROUP?**

Denice Santos

## HOW CAN THE PEER LEADER OVERCOME RESISTANCE AMONG STUDENTS IN A MATHEMATICS WORKSHOP?

Mei Lee Soto

## HOW CAN THE PEER LEADER SCAFFOLD STUDENTS' LEARNING IN A MATHEMATICS WORKSHOP?

Albina Yevdayeva

## ***A LIVING LABORATORY: REVITALIZING GENERAL EDUCATION FOR A 21ST-CENTURY COLLEGE OF TECHNOLOGY U.S. DEPARTMENT OF EDUCATION TITLE V GRANT***

CHEM 1201L: General Chemistry II  
Prof. Diana Samaroo

## **ANALYSIS OF INORGANIC CHEMICALS ON WATER QUALITY IN BROOKLYN: A TITLE V COLLABORATIVE PROJECT**

Anne Lutteli Belabe, Rashawn Collier, Kachiside Duru, Allan Guzman, Adrian Klusek, Abigail Laub, Tiffany Levy, Xiufang Li, Nadezhda Musayev, Nuthérine Namkaew, Daniel Ortiz, Aldijana Pelinkovic, Gabe Joseph Rotor, Tom Tatonetti, Andrew Wills, Nelson Wong



Designing Research Poster Presentations  
Ms. Jodi-Ann Young | November 15, 2012



NSF REU 2012 Scholars  
August 2012



Designing Research Poster Presentations  
Dr. Cinda Scott | November 15, 2012





Thomas Edison National Historical Park  
October 26, 2012



Advancing Library Research Techniques  
Prof. Maura Smale | October 18, 2012



Cultivating Fine Dining Etiquette  
Prof. Karen Goodlad | October 16, 2012



New York Hall of Science  
November 9, 2012



Sony Wonder Technology Lab  
September 25, 2012



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Mr. Teddy Adolphe  
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