

NEW YORK CITY COLLEGE OF TECHNOLOGY

# 2013 City Tech Faculty Research Conference

Friday, April 5th

Atrium Amphitheatre • 10:00 am - 4:00 pm

The School of Arts and Sciences Research Conference is a forum for faculty to present their research and to share scholarly work. The Research Conference aims to cover the following:

- African American Studies
- Biological Sciences
- Chemistry
- English
- Humanities
- Mathematics
- Physics
- Social Sciences
- Engineering
- Health Fields
- Professional Studies
- Law
- Human Services
- Architecture
- Advertising & Graphic Arts
- Business

There will be separate sessions for each topic.

The conference is open to all faculty, staff and students.

<https://sites.google.com/site/researchandgrants/faculty-research-conference>

CITY TECH IS IT

## Program

### **Morning session (Atrium Amphitheater)**

10:00AM Welcome by Dean **K. Botchway**, Ass. Provost **P. Brown**, Dean **B. Grumet**.

10:15AM Prof. **Anne Zissu**, *Longevity Risk, Life Expectancy, Financial Products And Molecules*

11:15AM Prof. **Benjamin Shepard**, *The Battle of Brooklyn: World City and Space of Neighborhoods*

**Lunch (12:00PM-1:00PM, Faculty Lounge, A632)**

## Afternoon sessions

### MATHEMATICS (N718)

CHAIR: C. CALINESCU

- 1:00PM **Boyan Kostadinov**, A Computer Simulation Model for the Spread of Swine Flu Pandemic
- 1:30PM **Satyanand Singh**, A Fifth Way to Skin a Definite Integral
- 2:00PM **Thomas Johnstone**, Set theory without power set--should we add the collection axiom?
- 2:30PM **Andrew Parker**, The Euler Class Group: An Algebraic Obstruction Theory for Projective Modules
- 3:00PM **Ariane Masuda**, Rational Functions with Linear Relations
- 3:30PM **Urmi Ghosh-Dastidar**, Graph Partitioning and Bio-Diversity of the Hudson River

### PHYSICS (N716)

CHAIR: G. OSSOLA

- 1:00PM **Boris Gelman**, Strong force in quantum chromodynamics with a large number of colors
- 1:30PM **Ilya Grigorenko**, Fractal nanostructures with Hilbert curve geometry as a SERS substrate
- 2:00PM **Justin Vazquez-Poritz**, String Theory and Nonrelativistic Field Theories
- 2:30PM **Oleg Berman**, Superfluidity of dipolar excitons in two-layer gapped graphene
- 3:00PM **Viviana Acquaviva**, The nature of Dark Energy
- 3:30PM **German Kolmakov**, Nonlinear dynamics of a polariton Bose-Einstein condensate

### BIOLOGY/CHEMISTRY (N700)

CHAIR: D. SMYTH

- 1:00PM **Jeremy Seto**, Reflections on a Silent Spring in an Urban Environment
- 1:30PM **Peter Spellane**, Old maps, new technologies: discovering sulfuric acid and petroleum at Newtown Creek
- 2:00PM **Vasily Kolchenko**, Viruses in the Beam of Light: Detecting the Smallest Single RNA Viral Particle by Whispering Gallery-Mode Biosensor
- 2:30PM **Alberto Martinez**, Searching for New Chemotherapies against Tropical Diseases
- 3:00PM **Diana Samaroo**, Porphyrins as Potential PDT Photosensitizers
- 3:30PM **Liana Tsenova**, A Computer Simulation Model for the Spread of Swine Flu Pandemic

### COMPUTER SYST. & TECH. (N521)

CHAIR: I. HENG

- 1:00PM **Evan Siegel**, Algorithmically Generated Test Generator Using Visual Basic for Applications
- 1:30PM **Benito Mendoza**, Emergence: A biologically inspired computing model
- 2:00PM **Iem Heng**, Using Quaternions and OpenGL to Create 3D Object Fluid Movement
- 2:30PM **Marcos Pinto**, A network of neurons to predict stock prices
- 3:30PM **Junior Tidal**, From Open Source to On Your Phone: Using Drupal to Develop the Library's Mobile Website

**ARCHITECTURE (N619)****CHAIR: I. AZAROFF**

- 1:00PM **Jason Montgomery** and **Jeffrey Burden**, The Empire State Building as a Case Study Laboratory
- 1:30PM **Jill Bouratoglou** and **Lia Dikigoropoulou**, Connecting Our Students to the Outside World: Using Online Reviewers and Student Blogs in the Classroom
- 2:00PM **Paul King**, Disaster Recovery and Resilient Design in Coney Island
- 2:30PM **Barbara Mishara**, Systems of Organization to Enhance Student Learning
- 3:00PM **Illya Azaroff**, Designing for Disaster: High Density Disaster Response
- 3:30PM **Esteban Beita**, Obscured Boundaries: from traditional to contemporary Japanese architecture

**SOCIAL SCIENCES (N606)****CHAIR: A. DELILKAN**

- 1:30PM **Fangxia Lin**, Extreme Dependence across East Asian Financial Markets: Evidence in Equity and Currency Markets
- 2:00PM **Geoff Zylstra**, Stretching Time, Collapsing Space: New Jersey Market Gardeners Use Technology to Control Production, 1838-1876
- 2:30PM **Sean MacDonald**, Evaluating the Relative Effectiveness of Loan Modification Programs in Reducing Foreclosure Rates: 2008 - 2012
- 3:00PM **Keith Muchowski**, Preserving Union: Voluntary Organizations in Civil War New York
- 3:30PM **Maura Smale**, I could study anywhere, as long as I could sit I'll study: The Scholarly Ecosystem of CUNY Students

**DENTISTRY (N522)****CHAIR: R. BUDNY**

- 1:30PM **Marilyn Cortell** and **Susan Davide**, Knowledge and Attitudes of HIV Among Senior Dental Hygiene Students
- 2:00PM **Anty Lam**, Dental Hygiene and Psychological Well-Being, Is There A Relationship?
- 2:30PM **Ashley Grill**, Lack of Consensus in Terminology Affecting Periodontal Diagnosis
- 3:00PM **Anna Matthews**, Disintegration of Function in Adolescents and Young Adults with Down Syndrome
- 3:30PM **Renata Budny**, Fellowship case study: Gnathology implementation in full mouth reconstruction

**BUSINESS (N705)****CHAIR: L. BERNARD**

- 1:30PM **Lucas Bernard**, Wage-share Dynamics: implications for growth and policy in advanced economies, world markets, and global competition
- 2:00PM **Paul Salisbury**, Targeting Greens: A Customer Acquisition Challenge
- 2:30PM **Jierong Cheng**, Comparison of Principles-Based and Rules-Based Accounting Standards on Transparency

**ENGINEERING (N519)****CHAIR: O. YASAR**

- 1:30PM **Ozlem Yasar**, Design and Fabrication of Nutrient Delivery Networks in Tissue Constructs
- 2:00PM **Masato Nakamura**, Energy and Environmental Simulation for New York City
- 2:30PM **Malek Brahimi**, A New Technique to Improve the Strength of a Two Force Member Made of Composite Material
- 3:00PM **Zory Marantz**, On the optimality of network assisted power control for a general class of sigmoid functions

**EDUCATION (N500)****CHAIR: A. MEHROTRA**

- 1:30PM **Patrick O'Halloran**, E-Learning As It Relates To Students Educators And Job Opportunities In The Hospitality Industry
- 2:00PM **Amit Mehrotra**, Assessing Hospitality Program Outcomes – A Model Using Alumni Perceptions
- 2:30PM **Mery Diaz**, Advancing Interdisciplinary Collaboration between School Social Workers and Teachers in Urban Schools
- 3:00PM **Susan Brandt**, Mentoring across Disciplines

**ENGLISH (N617)****CHAIR: R. FERDINAND**

- 1:30PM **Jill Belli**, Drafting Happiness: The Rhetoric of Resiliency in the United States Army Comprehensive Soldier Fitness Program
- 2:00PM **Laura Westengard**, VampireFantasy: Neoliberalism and the Undead in Post-9/11 Popular Culture
- 2:30PM **Renata Ferdinand**, Things I Tell My Daughter: An Auto-Ethnographic Mother-Writing
- 3:00PM **Rebecca Devers**, Cozying Up with the Cold War: Articulating a Theory of Atomic Age Domestic Space
- 3:30PM **Sean Scanlan**, Domestic Constructions and Global Ethics in Recent World Literature Novels

**NURSING & HEALTH (N517)****CHAIR: N. RODRIGUEZ**

- 1:30PM **Noemi Rodriguez**, Evaluating the impact of online instruction on lifelong learning skills
- 2:00PM **Margaret Rafferty**, Vitamin D Implications of the Institute of Medicine Report for Clinical Practice
- 2:30PM **Sondra Rivera** and **Anthony Devito**, Nursing and Radiologic Technology, The Final Interdisciplinary Collaborative
- 3:00PM **Jennett Ingrassia**, Effective Radiography Clinical Instructor Characteristics

***Organizing Committee***

***Arts and Science, Research and Grants***  
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**Alexander Rozenblyum (MATH)**

**Ann Delilkan (HU)**

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