

## 2017 – 2018 PDAC Book of Abstracts of Faculty Professional Travel

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Faculty	Name	Department
Phillip	Anzalone	Architectural Technology
Emilie	Boone	African American Studies
Kenneth	Conzelmann	Architectural Technology
Ting	Chin	Architectural Technology
Paul	King	Architectural Technology
Shelley	Smith	Architectural Technology
Christopher	Blair	Biological Sciences
Evgenia	Giannapoulou	Biological Sciences
Mai	Zahran	Biological Sciences
Alyssa Dana	Adomaitis	Business
Melanie	Villatoro	CMCE
Daniel	Wong	Communication Design
Benito	Mendoza-Garcia	Computer Engineering Technology
Yu	Wang	Computer Engineering Technology

Faculty	Name	Department
Chen	Xu	Computer Engineering Technology
Candido	Cabo	Computer Systems Technology
Ashwin	Satyanarayana	Computer Systems Technology
Douglas	Moody	Computer Systems Technology
Susan	Nilsen Kupsch	Dental Hygiene
Susan	Schroeder-Davide	Dental Hygiene
Megan	Behrent	English
Jill	Belli	English
Lubie	Grujicic-Alatriste	English
George	Guida	English
Joseph	Jeyaraj	English
Archie	Porter	English
Annette	Saddik	English
Jennifer	Sears	English

Faculty	Name	Department
Laura	Westengard	English
Heidi	Boisvert	Entertainment Technology
Susan	Brandt	Entertainment Technology
Grayson	Earle	Entertainment Technology
John	Huntington	Entertainment Technology
Ryoya	Terao	Entertainment Technology
Zory	Marantz	ETET
Djafar	Mynbaev	ETET
Muhammad	Ummy	ETET
Amit	Mehrotra	Hospitality Management
Sandra	Cheng	Humanities
David	Lee	Humanities
David	Sanchez Jimenez	Humanities
Christopher	Swift	Humanities
Marissa	Moran	Law & Paralegal Studies

Faculty	Name	Department
Nora	Almeida	Library
Wanett	Clyde	Library
Anne	Leonard	Library
Junior	Tidal	Library
Caner	Koca	Mathematics
Liou-Mark	Janet	Mathematics - Scholar on Campus
Nadia	Benakli	Mathematics
Holly	Carley	Mathematics
Laura	Ghezzi	Mathematics
Sandie	Han	Mathematics
Delaram	Kahrobaei	Mathematics
Nadia	Kennedy	Mathematics
Nan	Li	Mathematics
Janet	Liou-Mark	Mathematics
Ariane	Masuda	Mathematics

<b>Faculty</b>	<b>Name</b>	<b>Department</b>
Hans	Schoutens	Mathematics
Ozlem	Yasar	Mechanical Engineering Technology
Linda Ann	Paradiso	Nursing
Oleg	Berman	Physics
Roman	Kezerashvili	Physics
Lufeng	Leng	Physics
Evans	Lespinasse	Radiologic Technology & Medical Imaging

<b>Faculty</b>	<b>Name</b>	<b>Department</b>
Stephanie	Boyle	Social Science
Tina	Kao	Social Science
Sean	MacDonald	Social Science
Diana	Mincyte	Social Science
Unurjargal	Nyambuu	Social Science
Geoff	Zylstra	Social Science
D. Robert	MacDougall	Social Science

**Alyssa Dana Adomaitis, Ph.D.; MBA**

*Assistant Professor*

*Business Department*

**Presentation Title:** *An Examination of “Lookism” in Scholarly Literature*

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## **ABSTRACT**

Significance/usefulness of the research/scholarship: Application of relevant theory or framework and pertinent literature: “Lookism” is a term to describe appearance discrimination or “the practice of discrimination on the basis of physical appearance in the workplace” (Ghodrati, Joorabchi, & Muati, 2015, p.1). In popular literature, it has been called “beauty prejudice” (Etoff, 1999, p. 1). The notion that a pleasing appearance results in favorable outcomes (e.g., higher wages, promotions) from others is not necessarily new, as literature on physical attractiveness is rather extensive. *The Washington Post Magazine* first used the term “lookism” in 1978 (e.g., Ayto, 1999). However, the term “lookism” was first recognized as a form of discrimination by authors of the *Oxford English Dictionary* and *American Heritage Dictionary* in 2000 (Ghodrati et al.).

There can be social injustices due to physical appearance; whether physically attractive or unattractive. Rhodes (2010) discussed the cultural injustices of being unattractive in an appearance obsessed society with the potential for “looks” to influence hiring practices, career options, and amount of pay. Those who feel unattractive in an appearance laden society could suffer certain mental health issues potentially causing anxiety, anorexia, and depression. Research is needed with regards to how lookism is defined and has been examined to combat the issue. The aim of this paper is to examine scholarly literature to identify how lookism has been defined and studied.

Methods/exploration techniques: A qualitative theme and content analyses were used to assess scholarly literature on lookism. Characteristics examined included: i) year published, ii) type of publication, iii) author’s field of study, iv) context of lookism (e.g. workplace), v) definitions of lookism, vi) sample characteristics (e.g. geographic region, gender, age), and vii) instrument/s used. Scholarly articles were obtained through a search in google scholar and a university database. On google scholar only articles with “lookism” in the title were selected, and the university database scholarly works were found by searching for “lookism” in the title and abstract. The articles were analyzed by two researchers for interrater reliability (98%).

***Phillip Anzalone, AIA***  
*Assistant Professor*  
*Architectural Technology*  
*NYCCT*

***Rapidly Deployed and Assembled Tensegrity System: An Augmented Design Approach***  
*Association for Computer aided Design in Architecture ACADIA 2017 : MIT*  
*Disciplines and Disruptions*

## **ABSTRACT**

The Rapidly Deployable and Assembled Tensegrity (RDAT) project enables the efficient automated design and deployment of differential-geometry tensegrity structures through computation-driven design-to-installation workflow. RDAT employs the integration of parametric and solid-modeling methods with production by streamlining computer numerically controlled manufacturing through novel detailing and production techniques to develop an efficient manufacturing and assembly system. The RDAT project emerges from the Authors' research in academia and professional practice focusing on computationally produced full-scale performative building systems and their innovative uses in the building and construction industry.

The Rapidly Deployable and Assembled Tensegrity (RDAT) system developed from the authors' research focusing on the invention of computationally produced performative full-scale building systems and how they can have innovative uses in the building and construction industry (Anzalone 2014; Anzalone 2016). Currently, RDAT research is at a stage of full-scale production of tensegrity masts and plates with variable geometric configurations, including the necessary design, analysis and production workflow (Clarke and Anzalone 2006). The goal of the RDAT program is to enable rapid design and deployment of a wide variety of differential-geometry tensegrity structures through an augmented design process, engaging machine learning, automation and mixed-reality interfaces to produce a manufacturing and installation workflow at the scale of architectural building systems. The project incorporates the integration of parametric and solid-modeling methods to enable computer numerically controlled (CNC) manufacturing of components and efficient complex system assembly in the field.

**Megan Behrent, PhD**

*Assistant Professor*

*English*

**"We all walk that line": Labor's Decline and the new Precarity in American Workplace Dramas**

*American Studies Association Conference 2017*

*Pedagogies of Dissent*

### **ABSTRACT**

We all walk that line. Any moment any one of us could be the other. That's just the shit about life. One minute you passin' the woman on the freeway holdin' up the "will work for food" sign. Next minute, you sleepin' in your car, damn near...

-- Faye, *Skeleton Crew* by Dominique Morisseau, 2016.

This epigrammatic statement from Faye in the above quotation from *Skeleton Crew*, the third play in Dominique Morisseau's Detroit trilogy is a powerful evocation of the state of working class America after several decades of neoliberal policies which have dismantled traditional union workplaces and ushered in an era of precarity for the vast majority of working class people. As the home of the auto industry and many of the most militant union activists of the American labor movement—including the members of the revolutionary Dodge Revolutionary Union Movement (DRUM)—Detroit's fate is one of the most acute symptoms of the crisis facing working class Americans. This paper looks at recent workplace dramas that give voice to the people living this crisis and the new precarity that characterizes workplaces in the 21<sup>st</sup> century. Long before the question of the fate of the American working class exploded into the midst of the 2016 elections, contemporary American playwrights have eulogized, probed and dramatized the shift from proletariat to precariat as a result of neoliberal economic and social policies. Set in the breakroom of a Detroit auto plant facing foreclosure, *Skeleton Crew* is one of the most powerful expressions of this genre. Another vital expression of the era of neoliberal precarity is Annie Baker's 2013 *The Flick*, a workplace drama set in a movie theater in Worcester, Massachusetts—one of the last 35 millimeter film projectors in the state set to be removed in a corporate takeover. While the paper will focus on *Skeleton Crew* and *The Flick*, I will situate them among other recent dramas which share thematic concerns and elements of form to attempt a genealogy of the genre. These include: Tony Kushner's *The Intelligent Homosexual's Guide to Capitalism & Socialism with a Key to the Scriptures* (2011), an elegiac depiction of the fall of labor and the old Left at the center of a family drama in which generational, economic and political shifts combine to tell the story of a profound transformation in work and Capital that fundamentally alter social relations and personal identity; Lynn Nottage's *Sweat* (2015) set in Reading, Pennsylvania where a lockout upends workplace solidarity, giving way to racism, xenophobia and violence and Branden Jacobs-Jenkin's *Gloria* (2015) an incisive satirical exploration of workplace violence in the age of precarity and Instagram. In exploring these plays as a body of work, I argue that the genre is the literary expression of the neoliberal restructuring of work, particularly in the aftermath of the 2008 economic crisis, that raise essential questions of race, gender, sexuality, class and the value of labor in the current political moment.

**Jill Belli, PhD**

*Assistant Professor*

*English*

**City Tech's OpenLab as Digital Writing**

*Computers & Writing 2018 Conference*

*Digital Phronesis: Culture/Code/Play*

**ABSTRACT**

This presentation begins by providing an overview of City Tech's OpenLab ([openlab.citytech.cuny.edu](http://openlab.citytech.cuny.edu)), an open-source digital platform for teaching, learning, and collaborating launched in Fall 2011. In addition to serving as a successful model for a college-wide open teaching and learning platform, the OpenLab exists as a vast, diverse corpus of networked, public, multimodal writing. As one of the Co-Directors of the OpenLab, I will present a taxonomy of the myriad of composing activities on the OpenLab and offer models for mining this data to learn more about public student writing, the student experience, and digital writing pedagogy.

**Nadia Benakli**  
Professor  
Mathematics

**10<sup>th</sup> Annual Mentoring Conference**

*“A Decade of Cultivating an Inclusive Mentoring Community: Developmental Networks for Innovation, Achievement and Transformation”*

**October 23 – 27, 2017, Albuquerque, New Mexico**

**TITLE:** *Enriching New Faculty Orientation Program Through Ongoing Inquiry and Analysis*

**AUTHORS:** Benakli, N., Egues, A. L., Her, P., & Marantz, Z.

**ABSTRACT**

An unprecedented wave of new faculty joined an urban college of technology within the last decade. Six years ago, to respond to the imperative need to support the new faculty, an orientation committee of faculty from different disciplines and at different career stages was charged with planning and facilitating orientation activities aimed at achieving successful teaching, scholarship and service trajectories. The committee shared available resources and provided an overview of the key elements of a structured process of development and evaluation during the years leading to tenure. Ongoing and structured assessment of the activities informed the committee on what worked best. This paper reports on the quantitative results of the different assessments and how this data impacted the program. The orientation program supports its inclusive mentoring community specifically developed to focus on developing networks leading to faculty achievement, innovation, and transformation. Outcomes demonstrating a marked increase in the retention interest and cohesion in the new faculty cohort are just some of the rewards of the program.



**Oleg Berman, PhD**

*Associate Professor*

*Physics*

*Physics*

**Bose–Einstein condensation and superfluidity of trapped photons with coordinate-dependent mass and interactions**

*The American Physical Society (APS) March Meeting 2018 in Los Angeles, California, USA  
03/05/2018 - 03/09/2018*

*The APS March Meeting is an annual physics conference that attracts the world's experts in Condensed Matter Physics. Nearly 11,000 physicists, scientists, and students from all over the world participated in the APS annual March Meeting 2018 in Los Angeles, California to share groundbreaking research from industry, universities, and major labs.*

**ABSTRACT**

The condensate density profile of trapped two-dimensional gas of photons in an optical microcavity, filled by a dye solution, is obtained by taking into account coordinate dependence effective mass of cavity photons and photon–photon coupling parameter [1]. The profiles for the densities of the superfluid and normal phases of trapped photons in the different regions of the system at the fixed temperature are analyzed. The radial dependencies of local mean-field phase transition temperature and local Kosterlitz-Thouless transition temperature of superfluidity for trapped microcavity photons are demonstrated. The coordinate dependence of cavity photon effective mass and photon–photon coupling parameter is important for the mirrors of smaller radius with the high trapping frequency, which provides Bose-Einstein condensation and superfluidity for smaller critical number of photons at the same temperature. We discuss a possibility of an experimental study of the density profiles for the normal and superfluid components in the system under consideration.

[1] O. L. Berman, R. Ya. Kezerashvili, Yu. E. Lozovik, *J. Opt. Soc. Am. B* 34, 1649 (2017).

**Christopher Blair, PhD**

*Assistant Professor*

*Biological Sciences*

**Phylogenomics and species delimitation of rattlesnakes in the *Crotalus triseriatus* species group**

*Society of Systematic Biologists Standalone Meeting, Columbus, OH, 2018*

## **Abstract**

With the continued adoption of genome-scale data in systematics and evolutionary biology comes the challenge of adequately harnessing the information to make accurate phylogenetic inferences. Coalescent-based methods of species tree inference have become common, and concatenation has been shown in simulation to perform well, particularly when levels of incomplete lineage sorting are low. However, simulation conditions are often overly simplistic and unrealistic, leaving empiricists with uncertainty regarding analytical tools. We use a large ultraconserved element (UCE) data set (>3000 loci) from rattlesnakes of the *Crotalus triseriatus* group to delimit lineages and estimate species trees using concatenation and several coalescent-based methods. Unpartitioned and partitioned maximum likelihood and Bayesian analysis of the concatenated matrix yield a topology identical to coalescent analysis of a subset of the data in BPP. ASTRAL analysis on a subset of the more variable loci also result in a tree consistent with concatenation and BPP, whereas the SVDQUARTETS phylogeny differs at additional nodes. The size of the concatenated matrix has a strong effect on species-tree inference using SVDQUARTETS, warranting additional investigation on optimal data characteristics for this method. Species-delimitation analyses suggest up to 16 unique lineages may be present within the *C. triseriatus* group, with divergences occurring during the Miocene and Pliocene. Altogether, our results reaffirm the Mexican highlands as a biodiversity hotspot and suggest that coalescent-based species-tree inference on data subsets can provide a strongly supported species tree consistent with concatenation of all loci with a large amount of missing data.

**Heidi J. Boisvert, PhD**

*Assistant Professor*

*Emerging Media*

*Technology*

*Entertainment Technology*

**Walking Wounded: A Living Lab & Multi-Media Performance to Transform Trauma**

*16<sup>th</sup> Biennial Symposium on Arts & Technology*

*Intersections*

**ABSTRACT**

Walking Wounded is a living lab & multi-media performance transforming trauma through real-time drawing and sound generated from performers' nervous system and unique gesture vocabulary. It gives expression to unspeakable personal and collective experiences of trauma through movement, sound and imagery, and transforms the unbearable pain and toxic shame lodged in the body through somatic release using bio-adaptive play. The project seeks to restore interpersonal connection non-verbally in a safe environment, foster resilient communities and bring movement into movement building through a four-part co-design process, culminating in a local performance. Working with dancers and non-dancers who have experienced different forms of trauma, we use multi-modal movement workshops to generate the raw material for a non-linear, constantly evolving narrative, along with sonic vibration to realign damaged attunement systems amplified through sub-woofers and set to Solfeggio frequencies.

**Stephanie Boyle**

Assistant Professor

History

Department of Social Science

**Panel featured on CSPAN**<https://www.c-span.org/person/?111618>**Abstract:**

While the Middle East was an important site for the Cold War and political activism by students and workers alike, the concerns that took students and activists to the streets in 1968 were as a result of the global forces created by the Cold War, the loss against Israel in 1967 and the dissolution that followed Nasser's failure to realize a victory against Israel. In reality, global forces worked in conjunction with regional and local forces. The central question that I would like to address is what role did the global student movement have in influencing activists in Egypt in 1968? Was 1968 a watershed moment or just a continuation of resistance movements that occurred throughout Egypt's modern history. And how does that relate to the regional concerns about the war in 1967 which seems to offer a more tangible answer to student/labor activism that took place in 1968. Furthermore, how do the events of 1968 explain the shift towards political Islam as the more viable solution to the end of American imperialism in the Middle East and Arab socialist ideals which failed to realize the ultimate goal of the end of Israel. Most historians place the drift towards political Islam with the Islamic revolution in Iran and periodize political Islam as rising in the late 1970s as a result of the revolution's success. The focus on the Iranian revolution seems to be a result of America's sense of loss when Khomeini took control rather than the reality on the ground in places like Egypt and Lebanon. The focus on the Iranian revolution as the genesis of this movement ignores the cultural production in film, poetry and literature that shows that the loss to Israel signaled the shift rather than the Iranian revolution.

**Holly Carley, PhD**  
*Associate Professor*  
*Mathematics*  
*Mathematics*

**A path integral formulation for the ground state energy**  
*1133rd Meeting of the American Mathematical Society 2017*  
*Fall Southeastern Sectional Meeting*

## **ABSTRACT**

Here we consider a toy model of the much studied polaron model. The polaron is a distortion that occurs when a charged particle moves in a crystal. The toy model, describes a particle interacting with a harmonic oscillator, with a coupling parameter. When the parameter is small, use of perturbation theory will give an expression for the ground state energy. When the parameter is large, a different method must be used. We will develop a path integral formulation for the ground state energy and discuss developments concerning a hypothetical asymptotic expression for the ground state energy.

Association of Dress Historians  
New Research in Dress History

Wanett Clyde  
Clothing the Black Body in Slavery

Abstract-

After suffering the traumas of capture, enslavement and the ship's journey from their homeland, newly arrived Black people, along with struggling to understand and cope with their reduced circumstances, were often pulled in multiple directions with regard to their appearance. Stripped of garments that represented their native culture and forbidden to practice their personal grooming habits, slaves were now reliant on their owners for care. Once purchased, it was in the best interest of the master and mistress to protect their investment by providing them with the essentials. Chief among those necessities were clothing.

The question of what enslaved person wore, how they acquired the various garments, their feelings towards their attire, and their efforts to assert their personal style throughout the history of slavery will be explored through the use of runaway ads, slave owner's financial records and oral and written slave narratives. Additionally, we will examine slave owners use of enforced codes of dress to dominate and control the recently enslaved, the continued management of slave wardrobes over the centuries and the laws and regulations which sought to protect the institution of slavery by discouraging an intimate connection between owner and slave with the aim of cementing slaves' critical role in the textile industry.

PDAC Abstract, NYCCT  
November 2017

**Kenneth Conzelmann, AIA, ARA**

Assistant Professor  
Architecture  
Architectural Technology

**12<sup>th</sup> Annual North American Passive House Conference**

27-30 September 2017, Seattle, Washington

**ABSTRACT:**

This conference was my fifth Passive House event. My first was at Innsbruck, Austria in 2011, an initiation. The next was Hanover, Germany 2012 where I had the honor of presenting a poster, one of among 26 selected from over 200 submitted, contents of which were also published in the conference proceedings publication, a 700-page archival work of ideas and technologies.

Beyond the educational value of these events is the interpersonal networking which allow experts, neophytes and everyone in between to meet one another - perpetuating discourse - very simple, yet very impactful. Core considerations of the passive house include a building's site orientation, protective vegetation, super insulation and healthful ventilation. Reducing energy consumption, carbon emissions, greenhouse gases and costs, are also key motivating factors propelling this area of research and practice to the forefront as one of today's major concerns. A full migration towards renewable energy resources is inevitable: geothermal, solar and photovoltaic, wind, hydro, tidal and bio-mass. "Green" practices (e.g. reducing/recycling construction waste) and products (e.g. countertops made from recycled glass and porcelain toilets) are also supported in order to help protect our lands, waters and skies.

I look forward to sharing this most recent Passive House conference experience with students, colleagues and professional peers and will continue to infuse these ideas into the practice of architecture and construction, principles which help contribute to a more healthful and responsible built environment, one more harmonious with nature.

**Susan Davide, RDH, MS, MSED**

*Associate Professor*

*Dental Hygiene*

## **The Organization for Safety, Asepsis, and Prevention (OSAP)**

*OSAP 2018 Dental Infection Control Boot Camp*

### **ABSTRACT**

The Organization for Safety, Asepsis and Prevention (OSAP) is a community of clinicians, educators, researchers, and industry representatives who advocate for safe and infection-free delivery of oral healthcare. OSAP focuses on strategies to improve compliance with safe practices and on building a strong network of recognized infection control experts. They offer a wealth of information in addition to online and hands-on courses and workshops.

As a member of OSAP, attending the *Dental Infection Control Boot Camp* has been on the “to do list” to enrich my educational knowledge in addition to support our department in effort to remain abreast and current with infection control and asepsis related to clinical policies and procedures.

As Pre-clinic Coordinator of DEN1100, infection control (IC) and asepsis are two important topics taught in this introductory course and one that continuously changes and also part of the clinical portion of the

A goal is to provide evidence to substantiate the significance and need to maintain various different logs and checklists to ensure that policies and procedures are in compliance and records accurately written and maintained in the appropriate manner.

Attending this conference was extremely beneficial since our department is moving into a state-of-the-art clinic facility this year and all areas of infection control and safety compliance are mandatory. I took twenty-three continuing education courses that provided every aspect of dental infection control from Microbiology to Policy and Program Development.

Additionally, I was invited to be a Facilitator for a topic table at the Checklist Workshop, held on Wednesday, January 10<sup>th</sup>. The two topics I facilitated with three different groups were:

- Instrument Processing and Sterility Assurance
- Operatory Processing

As a facilitator, I prompted questions related to each topic to meet the workshop objectives. This was beneficial to all as we shared our experiences from our own dental settings, which provided many different variances depending on each setting, giving each participant an opportunity to share and provide examples and recommendations. I really enjoyed assisting in the workshop and taking all the CE courses and have important information to present to the department and work collaboratively to implement into the current policies and procedures.



**Laura Ghezzi, Ph.D.**

*Associate Professor*

*Commutative Algebra*

*Mathematics*

**Reduction Numbers and Multiplicity of the Sally Module**

*American Mathematical Society Conference, April 21-22, 2018*

*Special Session on Homological Commutative Algebra*

**ABSTRACT**

Commutative Algebra is the branch of pure mathematics that studies commutative rings. The term “ring” was introduced by Hilbert.

This talk is based on a paper with Shiro Goto, Jooyoun Hong and Wolmer Vasconcelos, published in Nagoya Mathematical Journal in 2017. The purpose of this work is to show how the reduction number of a primary ideal in a 2-dimensional Buchsbaum local ring can be bounded by the multiplicity of the Sally module and the Buchsbaum invariant of the ring. Our investigation led us to the study of several properties of the Sally module in general Noetherian rings. In ongoing work, we extend some of these properties to the Sally module of more general filtrations, with special focus on the normal filtration.

**Katherine Gregory, PhD, MS, MA**

Assistant Professor

Health Services Administration

Health and Human Services

**Bio-technology and reconstructing the self through genetic health markers**

23<sup>rd</sup> Annual Qualitative Health Research Conference 2017

Sponsored by the University of Alberta, International Institute for Qualitative Methodology

**ABSTRACT:**

New commercial technologies, like direct-to-consumer (DTC) genetic testing kits, increasingly promise personalized genetic information on demand. With access to our individual genome, the author and her informants have reaped contestable genetic knowledge that repositions concepts of ethnic/racial ancestry, “pre-illness” state, and structures of meaning assigned a “core” genetic identity. Using autoethnographic, in-depth interviews, and data scraping methodologies as well as visual analysis mapping of the process of discovery, this paper aims at understanding how the social construction of identity assigned to health markers and the body, a locus still salient in a scientific landscape in which bio-technology and big data increasingly trump all other forms of knowledge production, are understood through a feminist phenomenological lens. By examining the discriminating process of uncovering new self-narratives, errors in vital records, the author comes to a new genealogical awareness; whether the results play a preventive role in maintaining health or they are simply selectively chosen and integrated into a meta self-concept; ethical, social and health diagnostic issues are challenged and a new social construction emerges from this research.

**George Guida**

Professor

English

**Religions of the Self in Italian American Narrative**

*The Italian American Studies Association Conference 2017, Washington, DC*

Is the human self more or less than divine? Does it stand alone on a pillar of neurons or does it merely imprint itself on the bedrock of an immortal and infinite soul? This panel includes the following three presentations focused on narrative conceptions and examinations of selfhood against a background of possible faith in an infinite and eternal life force beyond individual comprehension.

Self, Soul, and Satire: Salvatore Scibona's *The End* and the Limits of Identity in Italian American Fiction--George Guida, New York City College of Technology, gguida@citytech.cuny.edu

Great novelists are both believers and satirists. Their fiction reflects a faith in a power higher than human selfhood and a corresponding willingness to satirize human aspiration. But Italian American novels tend to focus on that aspiration embodied in the progress of selfhood as their characters' ultimate goal. This tendency militates against the greatness of Italian American novels. In its daring presentation of selfhood, Salvatore Scibona's novel *The End* breaks new and important ground in Italian American fiction.

Women's Selfhood in Maria Messina's Fiction--Marie D'Amico, Independent Scholar, mariedamico515@gmail.com

Confined at home, discouraged from reading, writing, or having any interest outside those that served the family, Sicilian women in the early 20th century were not expected to have a sense of self. Selfhood was incompatible with women's major task, devotion to God in heaven and to God's earthly simulacrum, the family. In Maria Messina's stories, set in provincial Sicily of the early 20th century, Messina writes feelingly and sensitively of these women whose lives were constricted by an unalterable set of beliefs that dictated their continued servitude. Messina could have been one of these women. Yet she was able to subvert that fate and forge an identity as a writer precisely because she successfully depicted the lives of these women who would never be able to create an authentic self and would remain forever oppressed by their society's most fundamental beliefs.

**Dr. Lubie Gurjicic-Alatryste**

Professor of English and Applied Linguistics

English Department

Conference: AILA 2017 (International Association for Applied Linguistics, World Congress 2017)

Conference Strand: Language in Professions

Title: Discourse studies and professional practice

*Abstract*

Linguists like to think of themselves as people who study language. Applied linguists focus on language in use in real life, too. However, in the wealth of research to date, only small numbers of studies actually carry over into the real world of language use. Thus, the questions this presentation wishes to ask are: Does our applied linguistics research matter outside of academia? Do the practitioners in professional institutions care to learn about our discourse studies' findings? The past decade has produced a substantial number of volumes focusing on 'real-world' language problems (e.g., Behrens & Parker, 2010; Heritage & Clayman, 2010; Mahboob & Knight, 2010; van Leeuwen, 2008). There has been an expansion of single-setting research focusing on workplace, courts, medical institutions, or on issues such as gender discourse, disability discourse, and workplace discourse (e.g., Frignal, 2009; Gunnarsson, 2009; Hale, 2004; Koestler, 2010; Williams, 2011). However, few have engaged real-life application of the research findings and even fewer have addressed reflexivity in professional institutions (Candlin & Sarangi, 2011). Engaging the places of practice is neither easy nor straightforward (Candlin & Sarangi, 2004; Stubbs, 1983). Typically, institutions have their own discourse mechanisms that allow them to function and carry out their mission and goals. Many discourse studies have been conducted using such institutional data (e.g., from medical, educational or news institutions) but often the results are reported to the academic community but not shared with the places of practice. This presentation looks at academic, political and news institutions via the Framework for Application (Gurjicic-Alatryste, 2015). It showcases how different institutional settings can engage reflexivity and collaborate with discourse analysts to solve existing communicative problems or identify new ones. The presenter will outline the Framework for application and share plans for engaging institutional practice in order to achieve relevance and reflexivity in the field of discourse analysis.

Sandie Han, PhD  
*Professor (Presenter)*  
*Mathematics*

## **Bridging Pathways: Strategies to engage low income students in computer science**

**MINORITY SERVING COMMUNITY COLLEGES: CELEBRATING STUDENT SUCCESS, NOVEMBER 14-15, 2017**

### **ABSTRACT**

The Presidential Memorandum for the Secretary of Education released on September 25, 2017 stated that “minorities and students in rural communities often have even less access to computer science education. Nationwide, only 34 percent of African American students and 30 percent of rural high school students have access to a computer science class. Furthermore, even where classes are offered, there is a serious gender gap.” To address the issues of access and equity, New York City College of Technology (City Tech) of the City University of New York, a Hispanic and minority serving institution, has created a comprehensive computer science associate degree program to support low income minority students. For incoming freshmen computer science students, a free one-week summer bridge program designed to prepare them for college life and provide an introduction to computer programming, has resulted in a high one-year retention rate. Peer-Led Team Learning (PLTL) supported mathematics courses for computer science students have showed a 10-15% higher pass rates than nonparticipants. Moreover, the PLTL Leadership program provides a job prospect for low income students which retains them in the degree, trains them in a leadership role, reinforces their mathematics concepts, and provides an opportunity to join a community of high achievers. For second-year students, the Code in R competition creates a strong collaborative experience while strengthening skills in programming. Additionally, the undergraduate research experience promotes a deeper understanding of the subject matter, and the experience in presenting at a national or local conference increases students’ likelihood to see themselves in the career path. As a result of these best practices, the graduation rates of computer science associate degree students have increased over the years. This program is supported by a DOE MSEIP grant #P120A150063.

## PDAC Abstract Huntington NAMM 2018

February 2, 2018

John Huntington  
Professor, Entertainment Technology

This is my first trip to the enormous NAMM show and conference, and I went this year because they have expanded the show and conference beyond traditional music technology and into professional sound, lighting, and staging. One of the partner organizations, the Entertainment Services and Technology Association (ESTA) invited me to come and present two workshops.

An intro workshop:

<https://www.namm.org/thenammshow/2018/events/introduction-show-networking>



### Introduction to Show Networking



Saturday, January 27, 2018 - 11:00am to 1:00pm

Introduction to Show Networking

Anaheim Hilton, Monterey (Level 4)

 Add to Calendar

Presented by:

- John Huntington

Standard computer industry networking technologies now form the backbone of control and audio/video distribution systems on shows of nearly any size. Ethernet today is used to control lighting equipment, carry other protocols like DMX512, link video systems, or transport audio. This basic session for beginners introduces networks and their applications on shows and offers an overview of the protocols that make modern networks work. Key topics like IP addresses, network topology, and basic transport protocols will be introduced, basic aspects of network operations will be demonstrated.

 Facebook  Twitter  Google Plus  LinkedIn

An advanced panel discussion which I moderated:

<https://www.namm.org/thenammshow/2018/events/advanced-ethernet-networking>

**Delaram  
Kahrobaei**  
*Full  
Professor  
Math  
Department*

**Presentation Title  
Analysis in Quantum  
Information Theory,  
November 15-27, 2017**

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Analysis in Quantum Information Theory, Institute Henri Poincare, Paris, France

Quantum Information Theory (QIT) is a rapidly developing field whose significance ranges from fundamental issues in the foundations of quantum theory to new state-of-the-art methods for secure transmission of information. The potential for powerful new methods of computation, data transmission and encryption has led to new perspectives on such entire fields as computational complexity and Shannon information theory. Work in this highly interdisciplinary and competitive area overlaps many different fields of mathematics and has widespread applications in fields like computer science and physics. The main feature of this program will be a systematic exploration of QIT via analysis (considered in a broad sense). More precisely, we will concentrate on the role of operator structures and of probabilistic tools in QIT. The operator structures of importance in QIT are in particular operator algebras, operator spaces, and operator systems. Conversely, the impact of quantum information science on these fields has been significant in the last few years. Operator algebras have a long history as a framework for quantum theory. In QIT, interactions with the environment play a major role, corresponding to the auxiliary spaces which are an essential component of operator spaces and systems. The probabilistic tools include concentration of measure, random matrix theory and large deviation theory. A related area which has probabilistic flavor, but deserves to be mentioned separately, is the asymptotic geometry of high dimensional convex bodies, which grew out of geometric functional analysis and classical convexity. At the intersection of operator algebras and (quantum) probability, there is also free probability theory, which was developed by Voiculescu in the 1990s with the aim of classifying  $II_1$  factors in von Neumann algebra theory. Free probability also turns out to play a major role in QIT, a fact which will be emphasized during the program.

<http://ihp.fr/en/programs/current>

**Tina Kao**

*Rank: Assistant Professor*

*Discipline: Psychology*

*Department: Social Science*

**Presentation Title****Knowledge of Ordinal Position Across Lists Following Transitive Inference Training**

*Conference Title: Annual Meeting for the Society for Neuroscience*

*Date Conference: November 11-15, 2017*

*Theme: Human Perception and Spatial Learning*

**ABSTRACT**

Transitive inference (TI) is the ability to infer that, if  $A > B$  and  $B > C$ , then it follows that  $A > C$ . Most animals that have been tested have demonstrated an ability to perform TI. Specifically, they are able to infer the relative positions of items in an ordered list, ABCDE, based only on trial-and-error training of the adjacent pairs (such that  $A > B$ ,  $B > C$ ,  $C > D$ , and  $D > E$ ). To demonstrate inference, tests of TI also measure performance for non-adjacent pairs (B vs D) that were not initially trained. However, training on a single list is not sufficient to discover if participants integrate information about absolute position across lists. In our study, 35 human participants (14 males; 21 females) learned five different 5-item lists within a single 1-hour session (520 trials). During training, only adjacent pairs were presented and the correct response was to choose the earlier list item from each pair. Immediately following training, participants were tested with five "derived" lists constructed by taking one item from each of the five training lists. During the testing phase, participants were presented with all ten possible pairs ( $A > B$ ,  $A > C$ ,  $A > D$ , etc.) for each of these five derived lists. Not only did participants reliably show evidence of transitive inference during the testing phase, but they also responded accurately to each pair on the derived lists, even though all of those pairings were novel. That is evidence that participants acquired knowledge of each item's ordinal position during training on the original lists. These results point collectively to a representational framework that not only allows transitive inferences with respect to item rank within a list, but comparison of item ranks across multiple lists. Implications for related topics in serial learning are discussed.

Supported by NIH-MH-081153 and PSC CUNY Research Award.



**Paul C. King,**  
*Associate Professor*  
*Architectural Technology*

***Formal or Informal Mentoring***

*10<sup>th</sup> Annual Mentoring Conference, The University of New Mexico Mentoring Institute. October 23-27 2017*  
*A Decade of Cultivating an Inclusive Mentoring Community: Developmental Networks for Innovation, Achievement, and Transformation*

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*American Anthropology Association Conference 2009*  
*The End/s of Anthropology*

**ABSTRACT**

Formal or Informal mentoring? What are the strengths of each approach? This presentation and paper looks to review the subject from both direct experience working as a mentor as well as a literature review on the topic.

Over the past 7 years Professor King has been involved in a wide range of mentoring experiences including his participation in his colleges' formal Emerging Scholars Program, outlined in the CityTech "Handbook on Mentoring Students in Undergraduate Research" as well as the informal mentoring that occurred as the second lead faculty member in the International Solar Decathlon Competition, a student run project sponsored by the US Department of Energy. Prof. King has published and presented at conferences on the topics of mentoring and interdisciplinary studies including two recent papers titled The Solar Decathlon: Mentoring a Diverse Urban Population of Over 40 Nationalities, 9th Annual Mentoring Conference: (2016) and Mentoring in Architecture: It all starts in the classroom, 7th Annual Mentoring Conference: (2014) and two book chapters entitled Integrated Projects and the Development of Interdisciplinary Problem Solving Strategies " (2012) and The Solar Decathlon: Team DURA and Interdisciplinary Place Based Learning (2017).

These experiences have involved strategies that make use of both formal and informal mentoring techniques. Through both direct experience working as a mentor and through literature review as part of prior publications it has become apparent that further research and publication on the interactions of formal and informal mentoring and their effectiveness would be a valuable exercise.

**David H. Lee, PhD**

*Assistant Professor*

*Communication*

*Humanities*

**A Vaccination Exhibit as an Illocutionary Enthymeme**

*National Communication Association Conference 2017*

*Medicine, Technology and Ethics (panel).*

Cases of vaccine-preventable disease (such as measles) have seen spikes in recent years, and this suggests that public health authorities need to do a better job convincing parents to get their kids vaccinated. In order to improve adherence to public health recommendations, it is necessary to look closely at the type of messages the public is receiving about vaccination. In this study of a science museum exhibit about immunity, I analyze the messages displayed and interview museum visitors about their responses.

The “Body Armor” exhibit at the Tampa Museum of Science and Industry (MOSI) is an elaborate form of medical rhetoric, with messaging happening across text, pictures, charts. In addition to passing on factual information, the exhibit tries to get visitors to identify their level of risk, and asks them to take actions to minimize it. I describe the exhibit as a verbal and visual persuasive argument, combining assertions of fact, predictions about the likelihood of disease, and admonitions to change behaviors. Elements of the exhibit are characterized as “speech acts”—a term for the different functions of communication (such as stating, commanding, promising, etc.). Sometimes, one or more of these speech acts are not stated explicitly, because they rely on background knowledge the visitor already has. Aristotle called such arguments with unstated premises “enthymemes.” This qualitative study uses concepts from classical rhetoric and speech act theory to describe a multivocal, multimodal health promotion message. The results show that identifying the “illocutionary point” of a message (that is, what type of action it performs) could lead to a better understanding of health promotion messages.

**Anne E. Leonard**  
*Associate Professor*  
*Library*

**Walking as Embodied Learning: Finding the Ped in Pedagogy**  
*2017 Annual Symposium on Pilgrimage Studies < October 6-8, 2017*  
**What is Pilgrimage?**

**ABSTRACT**

Drawing on a large and multidisciplinary body of literature that considers the learning affordances of walking, the *Framework for Information Literacy in Higher Education*, (<http://www.ala.org/acrl/standards/ilframework>) and my own experience on the Camino Frances, my paper explores how the information literacy frame *searching as strategic exploration* mirrors the experience of pilgrimage. It imagines how introducing walking experiences, such as pilgrimage, to higher education learning settings would enhance the quality of students' research aptitudes. Place-based learning at the undergraduate level involves close study of a particular place and the complex issues, problems, and solutions rooted in that place. Students engage with the place they study beyond classroom assignments and emerge with enhanced abilities to judge the scope of a project and to self-evaluate and reflect upon their own work, embodying the iterative, exploratory process of research. My paper addresses the fruitful intersection of experiential/place based learning and the information literacy frame *searching as strategic exploration*. These concepts - information literacy and embodied, place-based, experiential learning - seem disparate. Yet their intersection is a rich junction of progress for a novice researcher to transform into an experienced one. As pilgrimage is a journey to a sacred place in hopes of enlightenment or to prove devotion, so is the iterative process of research a journey with a goal of wisdom or sophistication. A student gaining information literacy competencies through strategic exploration progresses from a beginner's aptitude with research to a persistent and strategic explorer whose inquiries yield ever more confident and executable research questions, hypotheses, and proposals.

On my first full day on the Camino Frances last September, a rainy 18 kilometers between Refuge Orisson and Roncesvalles, my compadre said to me, "While I'm on the Camino, I'll write one thing I learned in my journal every day." The TIL or todayIlearned, borrowed from the web content discussion and rating site reddit, is a popular reflective formative assessment method among college instructors. An entire Camino's worth of todayIlearned might transform a novice researcher with simple questions answered through rote query of a limited set of known resources into a sophisticated, confident researcher who makes use of a range of relevant information sources, refines strategies when necessary, persists in the face of challenges, and is comfortable with serendipity and ambiguity.

My paper concludes with a reimagining of an interdisciplinary course that I co-teach, Learning Places: Understanding the City, that blends study of the built environment with information literacy learning outcomes achieved through interrogation of archival primary sources. I envision a "special topics" semester of the course taught as a pilgrimage: along the way, students learn to observe and document the built environment and also gain research skills locating relevant primary sources that place their observations in important context, learning to tell the story of the places and landscapes they are immersed in through a slow and constant passage.

**Evans Lespinasse, MS, RT(R)(M)**

Assistant Professor, Chair

Department of Radiologic Technology & Medical Imaging

**The Association of Educators in Radiologic Technology of the State of New York**

Spring 2018 Annual Conference

I attended the preconference board meeting of the Association of Educators in Radiologic Technology of New York State (AERTSNY) on Tuesday, April 17, 2018, at 2:30 pm by invitation, to present a report on the work performed as editor of the organization's annual Newsletter. Thereafter, I attended all professional lectures and completed 12 continuing education units for maintaining my professional credentials (ARRT certification and NYSDOH licensure).

The report presented at the preconference referenced the spring 2018 edition of the Blackboard Newsletter. This edition consisted of 16 pages and reflected the scholarly and opinion writings of the following authors:

- Prof. Anthony DeVito
- Mr. Michael Burns, AERT President
- Dr. Derrick Eng as first author, along with Dr. Tiffany Crider, Ms. Janet Cordero, and Dr. Subhendra Sarkar.
- Prof. Jennett Ingrassia
- Prof. Evans Lespinasse
- Prof. Mary Jo Perry

Following numerous revisions of the above, the layout was completed and emailed to the board members on April 9<sup>th</sup>, 2018, for their approval and posting at the AERTSNY website, along with the 2016 and 2017 issues. Expressions of gratitude were presented to all contributors and especially Mr. Mikael Burns, (outgoing President) for the opportunity to serve the organization on the capacity of Newsletter Editor.

**Nan Li, PhD**

*Assistant Professor*

*Mathematics*

*Department of Mathematics*

**Quantitative Estimates on the Singular Sets of Alexandrov Spaces**

*Geometry & Topology Seminar, December 04, 2017*

*Research seminar, to present the most recent results and exchange ideas.*

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**ABSTRACT**

The notion of quantitative singular sets for spaces with lower Ricci curvature bounds was initiated by Cheeger and Naber. Volume estimates were proved for these singular sets in a non-collapsing setting. For Alexandrov spaces, we obtain stronger and volume-free estimates. We also show that the  $(k, \epsilon)$ -singular sets are  $k$ -rectifiable and such structure is sharp in some sense. This is a joint work with Aaron Naber.

**Sean P. MacDonald**

*Associate Professor*

*Economics*

*Social Science*

**Could Required Servicer Participation have Produced a Stronger Mortgage Modification Outcome Under the Home Affordable Modification Program?**

*New York State Economics Association Conference, October 2017*

*Macroeconomics and Housing*

**ABSTRACT**

This paper conducts a study of the relative effectiveness of the Home Affordable Modification Program (HAMP) - the primary federal mortgage loan modification program - from early 2009 through 2016. It evaluates U.S. Treasury Department and other data sources, and reviews the recent literature on the relative success of the program. The analysis suggests that HAMP's success rate in modifying mortgage loans was likely constrained by its voluntary design, a structure that enabled lenders and servicers to prioritize the interests of investors in assessing the risks of modification. It then considers the economic issues surrounding the foreclosure issue and presents a theoretical analysis, posing an alternative model suggesting where modification can actually be cost reducing. The paper concludes with thoughts on how changes to policy design could have produced a stronger modification success rate

**Ariane Masuda, PhD**  
*Assistant Professor*  
*Mathematics*

**Permutation Polynomials over  $F_{q^2}$  from Rational Functions**  
*American Mathematical Society Spring Eastern Sectional Meeting 2018*

**ABSTRACT**

We discuss a method for constructing permutation polynomials over  $F_{q^2}$  by using rational functions that induce bijections either on the set  $\mu_{q+1}$  of the  $(q + 1)$ -th roots of unity or between  $\mu_{q+1}$  and  $F_q \cup \{\infty\}$ .

**Awardee:** Amit Mehrotra

Assistant Professor

Hospitality Management

**Title:** “Using Technology for Student-Centered Learning – Examining and Sharing the Best Practices for Digital Pedagogy”

Presented at ICHRIE 2017

**Abstract**

This presentation will focus on identifying best practices for implementing digital pedagogy to enhance student learning. It also highlights some of the best practices using technology in the classroom for active learning. Faculty need to begin to employ intentional instruction design practices in the development of their courses. Digital Pedagogy is precisely not about using digital technologies for teaching but, rather about approaching those tools from a critical pedagogical perspective. The panel will share their individual philosophies, research, and experiences on creating an effective set of teaching and assessment strategies. Given the high likelihood of technology incorporation into the classroom, the target audience can be anyone participating at I-CHRIE.

**Keywords:** Technology, Pedagogy, Emerging Media, Assessment, Teaching Strategies, Social Media, Hospitality Education, and Tourism Education



**Benito Mendoza-Garcia**

*Assistant Professor*

*Computer Engineering Technology*

**Incorporating Undergraduate Research Experiences in an Engineering Technology Curriculum**

*ASEE Middle Atlantic Fall 17 Conference*

*American Association for Engineering Education*

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**ABSTRACT**

I am Secretary/Treasurer of the *ASEE Middle Atlantic* section. We had a Section meeting the first day of the conference. In this meeting we discussed matters regarding the organization of the section (finances, plans, objectives, etc.), the current conference (awards, statistics, etc.), and future conferences. This time I didn't present a paper, I just attended the conference. However, I took the opportunity to keep myself updated in the areas of engineering education research, assessment, and academic advisement and leadership. The keynote speakers were phenomenal. It is always interesting and inspiring to meet important scholars from other institutions who share how they achieved their goals or how they solved some issues in their institutions. One interesting topic discussed during this conference was the use of artificial intelligence and augmented reality on education. I think these technologies will play an important role on revolutionizing education. Besides of attending several interesting talks, I had the opportunity to see how Penn State Berks runs some of their Computer, Electrical, and Mechanical Laboratories and research facilities. This gave me some ideas that can be implemented in our department.

**Diana Mincyte**  
*Assistant Professor*  
*Sociology*  
*Social Science*

**Let's Do It, World! Occasional Activism and the Politics of Care in the Europeanizing Baltics**  
*25<sup>th</sup> International Conference of Europeanists*  
*Chicago, IL, March 28-30, 2018*

**ABSTRACT**

*Let's Do It!* is a media-based environmental campaign that began in Estonia in 2008. In Lithuania, the campaign gained instant popularity by drawing large crowds of volunteers: in 2016 as much as 8% of the country's population were involved in cleaning illegal dumps and planting forests. Focusing on the Lithuanian case, we examine social mechanisms that enable such global, media-based environmental activism to take root locally. While the literature on environmental movements is voluminous, it tends to overlook the interplay and tensions surrounding global and local forms of mobilization. Relying on the feminist approaches to the ethics of care, we argue that the eventification (Jacob 2013) of global environmental campaigns where volunteers mobilize for a few hours are expressions of a particular form of care for nature that does not require long-term commitments, responsibility or engagement, yet generate powerful public experiences of collective action and leave a lasting material mark on local landscapes. To capture these processes of both commitment and non-commitment, this paper develops the notion of occasional activism. More broadly, we show how these forms of activism become sites for practicing and experiencing ecological citizenship (Dobson 2003). Building on participant observations and content analysis of media report, our research shows how ecological citizenship becomes linked to the state nation-building process through which global campaigns materialize in local performances of care for the national territory as well as the larger European project.

**Prof. Douglas Moody, PhD**  
*Assistant Professor*  
*Computer Science*  
*Computer Systems Technology*

**Available Educational Tools' Impact on Developing Computational Thinking**  
*Singapore, Computer Science Innovation and Technology – CSEIT 2017*

## **ABSTRACT**

The subject of teaching computer programming has grown substantially in recent years. The advent of interactive e-books, online sites (e.g. CodeAcademy), youth directed tools (e.g. Scratch, Tynker) and the vast library of open source code, have dramatically changed the landscape of computer programming pedagogy. These tools each purport to address different audiences as well as varying skill sets of student programmers, such as coding literacy and computational thinking, key abilities of successful programmers. However, developing computational thinking, which is similar to generic problem-solving, remains difficult and elusive in many educational programs and online pedagogical tools. We analyze, from an educational psychology perspective, how well known educational tools develop computational thinking abilities and we provide suggestions for future tool development.

*Marissa J. Moran, Esq.*  
Associate Professor  
New York City College of Technology, CUNY  
Law & Paralegal Studies Department

## **New Paradigm in Teaching Forensic Science in the Legal Studies Curriculum**

### Abstract:


In teaching the legal studies student about forensic science as it relates to the law, the instructor has a wealth of criminology and other similar scientific textbooks from which to draw upon for their lectures and class discussions. Much of what is contained in these resources is written from the viewpoint of someone working in the science disciplines with a focus on how law enforcement makes use of particular aspects of science to investigate crimes along with a peppering of condensed case studies. In order to assist the legal studies students in realizing the significance of and recognizing the connection with forensic science towards improving and refining their skills in the legal realm, in essence the legal aspects of forensic science, an instructor essentially must improvise these materials. The gap in the legal studies curriculum, particularly in this blended subject area of law and science, needs to be bridged for those students who choose to study law and who choose to work in the legal environment. The presentation will examine alternate methods in which forensic science & the legal process can be taught to maximize the potential for the legal studies student so that they may utilize this specialized knowledge and acquired skills from the course to deftly assist attorneys in the workforce.

*“Wherever he steps, wherever he touches, whatever he leaves, even without consciousness, will serve as a silent witness against him. Not only his fingerprints or his footprints, but his hair, the fibers from his clothes, the glass he breaks, the tool mark he leaves, the paint he scratches, the blood or semen he deposits or collects. All of these and more, bear mute witness against him. This is evidence that does not forget. It is not confused by the excitement of the moment. It is not absent because human witnesses are. It is factual evidence. Physical evidence cannot be wrong, it cannot perjure itself, it cannot be wholly absent. Only human failure to find it, study and understand it, can diminish its value.*

- Paul L. Kirk, 1953 *Crime Investigation: physical evidence and the police laboratory*. Interscience Publishers, Inc. New York.

Djafar K. Mynbaev  
Professor  
Optical communications  
ETET

**New horizons in wireless communications:**

RUSSIA-JAPAN-USA-EUROPE SYMPOSIUM ON FUNDAMENTAL & APPLIED PROBLEMS OF  
TERAHERTZ DEVICES & TECHNOLOGIES (RJUSETERATECH-2017), OCT. 1  5, 2017  
RENSSELAER POLYTECHNIC INSTITUTE, TROY NY 12180, USA

**Abstract**

Terahertz (THz) electromagnetic phenomena have found many commercial applications yet the relevant fundamental physics has not yet been fully explored or understood. The symposium will bring together researchers working on “Fundamental & Applied Problems in Terahertz Devices & Technologies”, will stimulate discussions on their state-of-the-art results and promote international collaborations. Continuing the tradition of preceding symposiums in Japan, Russia, and USA, the 6th RJUSE will take place in the oldest US Technological University – Rensselaer Polytechnic Institute on Oct. 2 – 6, 2017.

The importance of the terahertz region of the EM spectrum stems from the fact that this band is not licensed and allows for flexible approach to wireless communications. This symposium was dedicated to the development of the fundamental aspects of terahertz technology though some presentations focused on the engineering basis of such devices as transmitters and receivers. There were very informative presentations concerning with applications of new materials such as graphene and metamaterials in terahertz technology. The other group of presentations displayed the latest development in such important aspect of communications as modulation and detection of signals. In addition, the solutions to such fundamental restrictions as diffraction limits were presented. In short, practically all aspects of the fundamentals of terahertz technology in applications to modern communications were discussed at this symposium. I reported the summary of my participation in this symposium to my department. I will include all the appropriate information in my teaching materials and in my research.

**Susan Nilsen Kupsch, RDH MPA**

Associate Professor

Dental Hygiene Department

December 1, 2017

Technology for Biofilm Management Educator Conference/Clinical Educator's Workshop  
Abstract of course taken on November 17, 18<sup>th</sup>, 2017

Per the requirements of the PDAC award, I am submitting an abstract in which I will try to summarize the material presented during these sessions.

The title of the Educator Conference was "Technology for Biofilm Management". The day and a half conference included lectures, pre-clinical practice, then hands on with a "live" patient. The evidence based technology presented indicates a need for a paradigm shift in the way we sequence the treatment for our patients to stay current with the profession. Since we know that it's the bacteria in the biofilm that initiates disease in the mouth, we should be removing all the visible biofilm "plaque" in the beginning of the session rather than at the end which is our normal protocol.

The new technology introduced to us utilizes a handheld unit which employs glycine powder. Glycine powder is an amino acid, with very little medical contraindications for use and a very small particle size, 25 microns, which means virtually no damage to enamel, cementum or restorative materials. This is in contrast to the two polishing methods we currently teach; engine polishing using an abrasive paste and air polishing using sodium bicarbonate. Both of which have much larger particle sizes and are proven to damage dental structures and restorative materials. Glycine powder is a much safer, effective and efficient method of managing a patient's biofilm and is also safe enough to be used on the oral mucosa and tongue.

The course also reviewed the technology and technique of the Piezo ultrasonic instrument. Participants were allowed to use the equipment in a pre-clinic setting on a variety of items.

This conference also provided time for the attenders to share curriculum ideas of how to incorporate this new technology, teach the faculty, when in the curriculum it should be presented, and where to obtain funding for the equipment. I see this material being taught in DEN 1200 alongside engine polishing and if we can purchase some of the units.

I have to say this was one of the best conferences I have been too and so happy I was able to attend. Thank you for your support and award which helps made this possible.

**Unurjargal Nyambuu**

*Assistant Professor*

*Economics*

*Social Science*

## **Globalization and Collateralized Resources: Implications for Foreign Trade in the Context of Modern Technology**

*International Business and Economy Conference XVII, IBEC 2018, San Francisco, California, January 4-7, 2018*

### **ABSTRACT**

By increasing flows of goods, capital, and labor, globalization has amplified investment and trade opportunities not only to developed countries, but to emerging economies as well. This process has been catalyzed by technological advances that have eased logistical issues, enabled accurate supply-chain management, and enhanced communications. Countries have become increasingly interdependent and, consequently, exposed to changes in external supply and demand, and international financing; this is in addition to domestic resources and markets already developed. We make a distinction between those economies that rely on natural resources, and those that do not. I compare their respective production processes and economic growth and investigate how these are affected by globalization. The impact of these resource-based constraints on sustainable economic growth and the welfare of society are analyzed. In particular, resource extraction technology is discussed. Extractive industries contribute to the global economy both directly and indirectly. Since resources are used in the production of various goods, demand for them has been growing in tandem with the development and openness of nations that were, previously, relatively closed. Thus, extractive industries have expanded rapidly. Technology has contributed to an increased supply of these resources by facilitating extraction and production processes and providing better access to deposits. Numerical analysis of this paper demonstrates the fact that energy exporters are experiencing excessive debt burdens and increased default risk and borrowing costs. Furthermore, “backstop” technology is incorporated to assess its impact on the extraction processes and whether it contributes to the problem of exhaustible resources.

**A. Lavelle Porter, Ph.D.**

Assistant Professor

English

**“W. E. B. Du Bois, *The Quest of the Silver Fleece*, and the Over-Education of the Negro”**

African American Intellectual History Society (AAIHS) Conference, 2018

“Black Thought Matters”

Brandeis University, Waltham, MA

### **ABSTRACT**

In this paper, I interpret W. E. B. Du Bois’s *The Quest of the Silver Fleece* (1911) as an academic novel, and evaluate it through a discursive formation that I refer to as “The Over-Education of the Negro.” Du Bois’s fictional works about higher education were driven by his desire to create counter-narratives to racist discourses about black intelligence and educability, as well as to express a black interiority that exists beyond the clutches of white supremacy. Du Bois (like other black authors of academic novels) uses the form of academic fiction to contest, undercut, and ridicule racist conceptions of black intelligence in higher education. I evaluate white supremacy as “discursive” in Foucault’s sense of a relationship between knowledge, institutions, power and language, and I argue for “The Over-Education of the Negro” as a particular discursive formation in which black educability was questionable, black higher education was discouraged, and black people were encouraged to be wary of higher education’s effects upon themselves. In *The Quest of the Silver Fleece* Du Bois aestheticizes the black educational experience in Post-Reconstruction America, critiques educational policy toward black citizens, and presents the challenges of building black higher education in a post-slavery American labor market.



**José M. Reyes Álamo, PhD**

*Assistant Professor*

*Computer Engineering Technology*

**A Study of Online Assessment Tools to Practice Programming and Their Effect on Students Grades**

*American Society for Engineering Education (ASEE) Mid-Atlantic Spring 2018 Conference*

**ABSTRACT**

“Practice makes perfect” is an old phrase that proves true in many aspects of the life of a computer engineer. Students in programming courses are reminded constantly by their instructors to practice in order to become better developers. Traditionally, book exercises have been used or assigned to students for practicing programming. However unless these exercises are counted for credit, some students will lack the motivation to do them. On the other hand, assigning too many problems for credit can become a time consuming activity for both students and faculty as well as a grading burden for instructors. It is also known that there are a lot of online and electronic resources for practicing programming, but students can get overwhelmed with so many tools. In this paper we present our preliminary results of how using online assessment tools can help student practice and improve their programming skills. The tools used provide immediate feedback and automatic grading. The hypothesis is that these tools help students to practice more and by giving them immediate feedback and quick grading, they get better at programming and consequently get better test scores. Preliminary data collected shows this to be the case. In this paper we present different scenarios how these tools were used and their effect in the final exam results in different semesters.

**David Sánchez Jiménez, PhD**

*Assistant Professor*

*Applied Linguistics*

*Humanities*

**Retórica intercultural de las funciones retóricas de la cita en el discurso académico escrito por estudiantes universitarios estadounidenses y españoles**

***(Intercultural rhetorical functions of citation in the academic discourse written by American and Spanish postgraduate students)***

*VII Coloquio Internacional sobre la Historia de los Lenguajes Iberorrománicos de Especialidad (CIHLIE)*

*Universidad de Alcalá in Alcalá de Henares (Madrid), October 19-20, 2017*

**ABSTRACT**

This research derives from the interest in learning the cultural differences in citation practices of native Spanish (Ee) and American writers of English (Ai) in the academic genre of Master's thesis from a discursive and rhetorical perspective. Prior to the discussion of the main topic, we start with a historical review of this rhetorical-discursive feature since it was first encountered within the scientific community of the Philosophical Transaction of the Royal Society of London, the aim of which is to discover how citation evolved in the Natural Science. We will then revise the different typologies of the rhetorical functions of citations identified by linguists in the last three decades.

Accordingly, the rhetorical functions of citations of sixteen (16) Masters theses written in Spanish by eight (8) Spanish and eight (8) American postgraduates were analyzed. A quantitative and qualitative methodology was used to study this phenomenon based on the computerized textual analysis of the rhetorical function of citations arranged in typological classification that modified the outline proposed by Petrić in his 2007 article.

The results obtained from the research showed that the different cultural conventions in the thesis writing indicate that when compared with native Spanish writers, the American writers of English use the highest number of citations and write a relatively longer Introduction and Conclusion parts.

**Ashwin Satyanarayana, PhD**

*Rank: Assistant Professor*

*Discipline: Computer Science*

*Department: Computer Systems Technology Dept.*

**Common Assessment of Two Related Courses to Reduce Grading Bias and Improve Readiness of the Students for Corporate Environments**

*ASEE Mid-Atlantic Conference Fall 2017, Penn State (Berks) University, Oct 6<sup>th</sup> – 7<sup>th</sup> 2017*

*Theme: Engineering Education*

**ABSTRACT**

This paper presents an approach to assess students attending two related computing courses. To demonstrate our approach, we evaluated students taking either Fundamental Networking or Fundamental Database courses. Towards the end of the semester, students taking both courses were asked to individually finish a common term project resembling a scenario in the corporate environment. One of the objectives of this assignment was to let students recognize benefits of mastering different but related areas of study. Another goal was to teach them that various computer technology courses are interconnected and that a computer specialist can use skills learned in one area to better understand concepts of the other one. The students were evaluated based on their abilities to combine knowledge from the subject they studied with researched information about a related area in computer technologies. Each student's project was assessed by two professors and the results were analyzed to better prepare future interdisciplinary assignments while eliminating potential grading bias. This type of assessment methodology could benefit students, by introducing them to advantages coming from broader knowledge, and educators, by letting them develop cross-disciplinary assignments that are resilient to instructor's grading bias while stimulating students interests.

**Jennifer Sears, PhD**

*Assistant Professor*

English Department

**What Mennonite Girls are Good For**

Conference Theme: Mennonite/s Writing VIII: Personal Narratives of Place and Displacement

Centre for Transnational Mennonite Studies

The University of Winnipeg, Manitoba Canada

October 19–21, 2017

**ABSTRACT**

This narrative draws on my family's church participation in the Underground/Overground Railroad, a program that transported political refugees fleeing Central America to Canada during the 1980s and 90s. In this story, a young woman, Larissa, interacts with the war traumatized men marooned in Newton, Kansas because her father, a Mennonite minister, gives the single men her phone number if they request it. When Larissa takes one man, Raúl, to a deteriorating Native American petroglyph site in the Ellsworth County, unexpected gunfire ignites a physical reaction in Raúl, causing uncomfortable consequences that reveal the imbalance of power that divides them.

**Shelley E Smith, PhD**  
*Associate Professor*  
*Architectural Technology*

**Presentation Title:** **The History of Architecture: Pedagogies for Professional Education**  
*Conference Title:* *Society of Architectural Historians 71<sup>st</sup> Annual International Conference*  
*Session Title:* *The Audience for Architectural History in the 21st Century*

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## **ABSTRACT**

Faculty at the City University of New York's senior technical college are exploring model pedagogies for incorporating architectural history into an undergraduate professional architectural program. This exploration fits into a larger endeavor on campus, the re-envisioning of general education for a college of technology, and into a larger national conversation around humanities education. In an increasingly complex and contentious milieu framed by the intersection of the man-made and natural worlds, it is critical that professionals of the built environment engage a deep understanding of issues and behaviors in human societies throughout history, of how to think critically and transferably about those histories, and of what role we want for the profession—and for technology—in the 21<sup>st</sup> century. The discipline of architectural history is well-positioned to contribute to this important conversation in the five-year undergraduate architectural programs that provide the terminal degree for many future entrants into the profession, particularly those at the urban public university.

The architectural “survey” has expanded in content to include non-Western traditions and everyday built environments. Models also include structural alternatives to the chronological framework, perhaps beginning with Columbia University's Art Humanities Core Curriculum (now at its 70<sup>th</sup> anniversary). Today there is cause for optimism that the “irrevocable split . . . between the academic world of the studio and the academic world of the historians” about which Mark Jarzombek forewarned in 1999 has not come to pass. At a time when scholarly work is as likely to frame around an issue, process, or technology, as around an artist, place or period, our discipline has expanded its potential for direct linkages to the concerns of studio pedagogy. Selected case studies from U.S. institutions highlight core strategies and successful models for the role of architectural history in undergraduate professional education.

**Christopher Swift**

*Assistant Professor, Theater*

*Department of Humanities*

**Paper Title: Medieval Bodies Matter: Toward an Ethical Historiography of Spectacular Violence**

*American Society for Theatre Research, November 16-19, 2017*

*Extra/Ordinary Bodies*

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When real violence occurs on stage, challenges arise that make it difficult for audiences to maintain their faith in the dramatic frame. Violence conjures the imagination to taboo thoughts, often triggers emotional zeal, raises ethical issues, and contests notions of boundaries between the state and individual, discipline and freedom, and, in the context of performance, representation and real presence. For theatre historians, the challenge of writing about stage violence is to produce an informative chronicle that honors the unique values of the past while also attending to universal humanistic mores concerning suffering and death. Anthony Kubiak's 2002 monograph *Agitated States* challenged some of my own unexamined conceptual boundaries between social acts and theatricality, particularly his claim that contemporary acts of terrorism derive "their perverse impact from a single fact of performance,"<sup>i</sup> a notion that coheres to a dominant strain in theatre studies that explores corporal visibility and social efficacy. Jacques Rancière's concept of the *spectacle*, for instance, has been useful for a number of performance scholars in describing "new regimes of perception and signification" that break down the traditional boundaries between social actor and spectator and open the possibility for political action.<sup>ii</sup> Despite the fact that Rancière's concept "could be meaningful in a time when faith in received political narratives has collapsed," his theory is centered on the struggle to possess the dominant *image* of society, and therefore true emancipation feels delusional. As Janelle Reinelt argues, material practices by, and outcomes on, spectators and actors must also be considered in conflicts over production and visibility.<sup>iii</sup> Applying this logic to staged violence to earlier historical periods, our understanding of the "spectacle of the scaffold" and other disciplinary regimes in medieval and early modern Europe should expand beyond the outcomes of the visual discursivity of violence. By doing so we can nourish a historiography of the victims of violence, who are neither social performers nor ritual spectators: they are always already occluded from subjectivity, agency, and action.

In live theater, the human body is both creator and object of creation, and as such the performing body is bound up in the universals of corporal wellness and decrepitude. The aim of this paper is to demonstrate that when performers and audiences are deprived of their creativity and agency, and all that remains are the moldable plastics of tissue and bone, the spectacle can no longer be an exposition on truth or a representation of action. It is pure disappearance.

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<sup>i</sup> Anthony Kubiak, *Agitated States: Performance in the American Theater of Cruelty* (Ann Arbor: University of Michigan Press, 2002), 1.

<sup>ii</sup> Jacques Rancière, *The Emancipated Spectator*, trans. Gregory Elliott (London and New York: Verso, 2009), 49.

<sup>iii</sup> Janelle Reinelt's "'What I Came to Say': Raymond Williams, the Sociology of Culture and the Politics of (Performance) Scholarship," *Theatre Research International*, Vol. 40, no. 3 (2015): 235-49 (246, 247).

Ryoya Terao  
Associate Professor  
Entertainment Technology  
Session Organazer/Panelist

### **Session Title**

Type title as it should appear in the Program (limit to twenty-five words). Your title should NOT be all capitals or all lower-case.

More Diversity in the Industry Through Outreach

### **Abstract**

At urban colleges, diversity is often prominent. The industry is both close by and, at the same time, far, especially for minorities. Hollywood, for example, is notorious for white male dominance, even today. There have not been many films, directed by women or racial minorities. Technical positions are similarly unbalanced. In a new trend, in New York City, some experts are reaching out to students of diverse backgrounds, trying to shift characteristics of the field.

### **Rationale**

According to research published by the Media, Diversity & Social Change Initiative (MDSC) at the University of Southern California (Annenberg) in 2017, only 4 percent of directors of the 1,000 top-grossing films during the past 10 years were female. Likewise, only 5.1 percent of directors were black and 3 percent were Asian. This is the harsh reality in Hollywood, where even among technical positions, white male dominance has been and is a common practice. However, some industry professionals have started reaching out to students during recent years, welcoming diversity. For example, at the City University of New York (CUNY), which consists of 24 senior and junior colleges and has a very diverse student body, there are now several student chapters of the Society of Motion Picture and Television Engineers (SMPTE). This has helped students learn about some of the latest technologies and also to network with industry professionals. In addition, recently, some special events have taken place for CUNY students, involving such organizations as the International Cinematographers Guild, Local 600 IATSE, Motion Picture Editors Guild, and 700 IATSE. Through these sessions, comprehensive career examples are presented to the students as well as union information. Such outreach by the industry illustrates that professionals wish to continue their organizations to thrive, and also wish to become more inclusive. As media advisors, educators must encourage and foster this type of change and increase in opportunities. This panel will discuss industry outreach examples in details, including successes and challenges, and how some industry experts are willing to communicate with remote colleges and universities via webinar or Skype.

**Junior Tidal**

*Associate Professor  
Library*

**ABSTRACT**

**Making It More Accessible: A Case Study of the Ursula C. Schwerin Library Website**

*86<sup>th</sup> ABQLA Annual Conference (2018)*

*All Inclusive: Leading, Inspiring, Empowering.*

Over the summer and fall semester of 2017, a university wide initiative to make all sites under the cuny.edu domain accessible was put into place. In turn, the New York City College of Technology (colloquially known as City Tech), CUNY Ursula C. Schwerin Library website was updated to be more accessible. The session will outline the background of the library and the community it serves, define accessibility within the context of a library website and describe the workflow of making the site accessible, problems encountered in using the accessibility and future accessibility initiatives



**M.A. Umyy, PhD**

*Associate Professor*

*ETET Department*

New York City College of Technology

**Beam Combining of SOA-based Bidirectional Tunable Fiber Compound-ring Lasers with External Reflector**

*PHOTOPTICS 2017*

*5<sup>TH</sup> International Conference on Photonics, Optics and Laser Technology*

Feb 27-March 1, Porto, Portugal.

**ABSTRACT**

A simple, stable and inexpensive dual- output port widely tunable semiconductor optical amplifier-based fiber compound-ring laser structure is demonstrated. This unique nested ring cavity enables high optical power to split into different branches where amplification and wavelength selection are achieved by using low-power SOAs and a tunable filter. Furthermore, two Sagnac loop mirrors which are spliced at the two ends of the ring cavity not only serve as variable reflectors but also channel the optical energy back to the same port without using any high power combiner. More than 98% coherent beam combining efficiency of two parallel nested fiber ring resonators is achieved over the C-band tuning range of 30 nm. Optical signal to noise ratio (OSNR) of + 45 dB, and optical power fluctuation of less than  $\pm 0.02$  dB are measured over three hours at room temperature

**Melanie Villatoro, P.E.**

*Assistant Professor*

*Construction Management and Civil Engineering Technology*

**Benefits of PLTL Workshops for Engineering Students**

*Peer Led Team Learning International Society Sixth Annual Conference*

*Integrating Research and Practice: PLTL in Action*

**ABSTRACT**

Peer leading is an asset that can teach new and experienced peer leaders communication skills, problem-solving techniques, responsibility, and procedures that can be applied to aid other students as well as themselves. Statics is the branch of mechanics that deals with bodies at rest or forces in equilibrium. It is the cornerstone for most engineering courses as well. Peer leaders who lead this workshop will be able to understand how forces act on different bodies at rest; they will also develop techniques that can be utilized to approach different kind of problems. By peer leading statics workshops, peer leaders will use this basic knowledge to move forward on different engineering courses.

**Yu Wang**

Assistant Professor

Computer Engineering Technology

**Presentation Title:** Lab Manual Design with Engineering Learning Style and Flipped Learning Model in Computer Engineering Technology Education

*Conference Title and Date:* 2018 ASEE Northeast Section Annual Conference, Hartford, CT, April 27, 2018 - April 28, 2018

*Conference Theme:* The American Society of Engineering Education ASEE-NE2018 conference with the theme of Leadership and Entrepreneurship is an ideal forum to interact with engineering educators and to present your research with undergraduate/graduate students, and to listen to the approaches of educators in other institutions. This conference brings together all the vital aspects of engineering education starting with faculty and students, but also including partners from industry, government, and the community.

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**Lab Manual Design with Engineering Learning Style and Flipped Learning Model in Computer Engineering Technology Education**

*2018 ASEE Northeast Section Annual Conference*

**ABSTRACT**

We have designed a lab manual based on Felder-Silverman learning style model (FSLSM) and the flipped classroom model for engineering education. This lab manual is developed for the early junior year course of “Microcomputer Systems Technology” and emphasizes student-centered active learning experiences with practical exercises and open-ended questions. Instead of taking traditional assembly language to study computer architecture, we are looking for a different approach to teach students to learn the assembly language by embedding an inline assembly language module into a C program. Our lab guide consists of online videos and practical exercises using various platforms including Microsoft Windows OS, Linux OS, Microsoft Visual Studio, and Visual Studio Community. With this new approach, students will be able to design creative lab projects instead of following a lab procedure. Students are able to work on the platform using multiple programming languages (C/C++ and Assembly), and multiple hardware devices (PC or Laptop, x86 device, Linux). With this new lab manual design, we guide students to preparatory contents and materials before coming to class by various activities described in online videos and practice exercises, etc. This lab-learning approach combined with the principle of flipped classroom and engineering learning styles can provide additional opportunities to advance the students’ engagement in the studies of computer engineering technology.

**Laura Westengard, Ph.D.**

*Assistant Professor*

*English*

*English*

**Sadomasochistic Temporality and Trauma in M. Lamar's *Negrogothic***

*Northeast Modern Language Association Annual Conference 2018*

**ABSTRACT**

M. Lamar is a performer, visual artist, composer, singer, and filmmaker whose work engages the history of slavery while asserting its lingering effects, namely the violently racialized aspects of black masculine sexuality. This paper argues that his 2014 solo exhibition, *Negrogothic, A Manifesto, The Aesthetics of M. Lamar*, deploys Gothic sadomasochism as a queered temporality that accesses historical trauma and forces his viewers to encounter the then and now of histories that they might rather forget in favor of a liberal “post-race” contemporary consciousness. Lamar’s work fits snugly into Elizabeth Freeman’s argument regarding the temporal possibilities of sadomasochism as it “relentlessly physicalizes the encounter with history,” providing an access point that fuses past and present in order to perform reparative work in relation to a traumatic past (*Time Binds*). I will argue that Lamar’s conscious turn to sadomasochistic Gothicism does not exclusively perform the reparative work Freeman describes. Instead, Lamar offers the sadomasochistic scene as a visceral reminder of the continuation of traumatic history, creating intense discomfort and, ultimately, traumatizing his viewers as a political intervention. Performative sadomasochism offers a temporality that not only brings traumatic histories into the present but also collapses the weight of the future into the present. As a state of indefinite and anticipatory deferral, the sadomasochistic present is in constant negotiation with all possible futures, offering a politicized temporality in which responsibility falls on the public now to remain always unsettled, vigilant, and adaptive by recognizing complicity in present violence and the histories and futures tied to it.

experience. While acoustic ecologist R. Murray Schafer has drawn attention to the denigrating effects of mechanical reproduction on the auditory environment, I argue that residents and state actors in Taiwan actually come to know noise through the tools of mechanical reproduction. In Taiwan's efforts to be a modern, rational state, the act of hearing noise becomes contingent upon technological mediation. I contribute to existing historical and ethnographic studies of noise by drawing attention to a locally-situated, technologically aspirational approach to noise.

### **Adam Wilson, "Improvising Music with Flawed Creative Software Agents"**

When it comes to artificial agents performing human tasks – and despite disagreement around the precise nature of human intelligence – it is reasonable to state that AI systems, at present, do not exhibit human intelligence; they differ from explicitly programmed automated systems in that they employ learning models that allow artificial agents to infer the rules governing particular human behaviors. The "noble goal" of such artificial intelligence systems is to reproduce human activities without error. In the creative domain, this objective becomes problematic. While we may develop software agents that learn a particular musical style and generate novel music within the confines of that style, a well-designed agent will never deviate from the learned style, or produce innovation. AI techniques may still, however, be usefully deployed in the service of computational creativity: by intentionally incorporating flaws into an artificial agent to allow some degree of non-idiomatic deviation from a human-derived corpus, and by including a feedback mechanism for human ratification or dismissal of deviations, we may produce an agent that facilitates and extends human creativity. I intend to talk about the details of this kind of human-computer interaction as it pertains to my work in music improvisation.

### **Anna Xambo, "Live Repurposing of Crowd-sourced sounds: Challenges and opportunities of using online repositories in music performance"**

There exist a number of online user-generated audio databases with field recordings, musical samples, sound effects, and musical pieces released under Creative Commons licenses (e.g., Freesound, Jamendo, cc-Mixer). The European funded-project Audio Commons (<http://www.audiocommons.org>) is looking into how Creative Commons content can be used by creative industries based on identifying user needs and developing suitable technologies.

In this talk, I will present the state-of-the-art of repurposing crowd-sourced sounds in music performance. Then, I will reflect on my own practice in musical live coding, a music improvisation practice that is based on generating code in real time, using SuperCollider, the online database of Freesound.org, and music information retrieval techniques in creative forms. The challenges of repurposing this material in live performance will be discussed, such as dealing with an heterogeneous sound palette consistently, making visible the performer's actions to the audience, collaborating with other musicians, and making sure to attribute correctly the work to the authors during performance and in future dissemination.

This work contributes to the Audio Commons project by promoting the use of open audio content and developing technologies that can inform an ecosystem of content repositories, production tools and users from a music performance perspective. The Audio Commons Initiative is funded by the European Commission through the Horizon 2020 programme, research and innovation grant 688382.

**Daniel Wong**

*Associate Professor  
Communication Design  
Technology & Design*

**Design Incubation Colloquium 4.2: CAA 2018 Los Angeles**

*College Art Association (CAA) 106<sup>th</sup> Annual Conference, Los Angeles  
Advancing Art & Design*

**ABSTRACT**

Internationally, Communication Design research continues to be investigated among academics in somewhat of a vacuum. Researchers' varied interests, experience, and types of methodologies are as different as their backgrounds.

During this session, 7 design researchers presented works including personal, local investigations such as bespoke signage in Tennessee to published research on the topic of Research for Designers. The presenters included a graduate student, a professional lecturer, and assistant professors up-to full professor titles. The affiliated institutions were from as far as Hong Kong, though most were from U.S. public and renowned private art & design schools.

The commonality was that all presenters were working within the field of communication design research, and expectations for each was similar. However how these academics approached their work was as diverse as their personal backgrounds.

The mission of Design Incubation, a collaborative organization of design academics, and particularly the ongoing Colloquium series is to bring together communication design researchers and encourage discussion of the approaches to design research investigations. The effort of Design Incubation for this session, as an affiliated society of the College Art Association aimed to expand the dialog on this topic.

**Chen Xu, PhD**

*Assistant Professor*

*Computer Engineering Technology*

*Department of Computer Engineering Technology*

**Presentation Title: Identifying an optimal time window for predicting response to neoadjuvant chemotherapy using breast cancer subtypes and hemoglobin parameters assessed by US-guided Optical Tomography**

*Biophotonics Congress: Biomedical Optics Congress 2018, April 15-17*

*Conference Theme: Technological solutions to medical challenges and medical applications.*

**Abstract:**

The increasingly widespread use of neoadjuvant chemotherapy (NAC) in breast cancer patients has improved surgical outcomes by pre-operatively downsizing tumor volume. Since the introduction of NAC breast-conserving surgery rates have increased. Moreover, patients who have achieved pathological complete response (pCR) show improved survival rates as compared to those who did not achieve pCR. This relationship is so strong in fact, that pCR is becoming a surrogate endpoint for evaluating the effectiveness of newer chemotherapy protocols. Early assessment of the degree of patient response to NAC can have a major impact on individualized treatment management. Optical tomography and spectroscopy using near infrared (NIR) diffused light has been explored as a novel tool to predict and monitor tumor vasculature response to NAC. The NIR technique utilizes intrinsic biomarker of hemoglobin contrast, which is directly related to tumor angiogenesis. We have developed ultrasound-guided optical tomography using NIR diffused light coupled with a commercial ultrasound system (NIR/US) to improve light localization and quantification accuracy in diagnosis of breast cancer and in predicting NAC response. The logistic prediction models we developed utilizes tumor pretreatment pathological parameters and hemoglobin content measured before NAC to predict pathological response. The present study was designed to identify the best time window for predicting pathological response during NAC using breast cancer subtypes, pretreatment biomarker of total emoglobin level (tHb), and changes of tHb during early treatment cycles

CONTROL ID: 2802883

CONTACT (NAME ONLY): Ozlem Yasar

### Abstract Details

**PRESENTATION TYPE:** Oral Presentation Preferred

**CURRENT SYMPOSIUM:** BM05: Polymer Gels in Materials Science—3D/4D Printing, Fundamentals and Applications

**KEYWORDS:** Composition & Microstructure/Material Type/biomaterial, Composition & Microstructure/Material Type/polymer, Composition & Microstructure/Material Type/tissue.

### Abstract

**TITLE:** Investigation of 2,2-dimethoxy-2-phenyl-acetophenone Concentration Effects on PEGDA-based Hydrogels

**AUTHORS (FIRST NAME, LAST NAME):** Ozlem Yasar<sup>1</sup>, Ozgul Yasar-Inceoglu<sup>2</sup>

### **INSTITUTIONS (ALL):**

1. City University of New York, Brooklyn, NY, United States.
2. Mechanical Engineering, California State University, Chico, Chico, CA, United States.

### **ABSTRACT BODY:**

**Abstract Body:** In recent years, Tissue Engineering has been studied to improve or regenerate the damaged tissues. In this promising field, tissues can be regenerated only if the right biomaterials, cell types and scaffolds with the required mechanical properties are used. Currently, synthetic, natural polymers and linear aliphatic polyesters are extensively used to fabricate the scaffolds. In this research, we propose to use poly(ethylene glycol) diacrylate (PEGDA) which is a biocompatible and also biodegradable scaffold fabrication material. Since PEGDA is also a photocurable material, it can be easily fabricated with photolithography. In this technique, 2,2-dimethoxy-2-phenyl-acetophenone (DMPA) was used as a photoinitiator to initiate the polymerization process. In this study, the effects of photoinitiator on compressive mechanical properties of PEGDA based hydrogels were investigated. Firstly, 0.02% (w/v), 0.06% (w/v), and 0.1% (w/v) photoinitiator-solvent mixtures were prepared to alter the DMPA concentration. Then, each batch was mixed with PEGDA and exposed to the UV light for about 3 minutes. As a result of interaction between UV light and PEGDA-photoinitiator mixture, PEGDA got solidified and took the shape of the cylindrical mold that was used to keep the initial liquid form of PEGDA-photoinitiator solution. After that, INSTRON 3369 testing machine was used to do the compression tests. Our experimental results indicated that, as the DMPA concentration was increased, ultimate strength of PEGDA decreased. For the 0.02% (w/v), 0.06% (w/v) and 0.1% (w/v) DMPA-solvent mixture average ultimate strengths were 6.36 MPa, 4.75 MPa and 4.03 MPa, respectively. Therefore, these results showcases, compressive mechanical properties of PEGDA can be controlled by changing the photoinitiator concentration.



## Effect of Novel Multi-target Compounds binding onto BACE1

Mai Zahran

New York City College of Technology, City University of New York

Alzheimer's disease (AD), discovered over a hundred years ago, is a fatal progressive neurodegenerative disease that is the most common form of dementia. In the United States, AD is the sixth leading cause of death, while an estimated 5.5 million Americans are currently living with an AD diagnosis. Although the multifactorial etiology and complex pathogenesis of AD are poorly understood, AD-positive patients show a progressive cerebral atrophy, a high concentration of amyloid plaques between nerve cells, and a high concentration of neurofibrillary tangles inside nerve cells.

These symptoms are hypothesized to be due the accumulation of amyloid beta (AB) peptides, crucial to the onset and progression of AD. The amyloid precursor protein (APP) is an integral membrane protein present on the surface of nerve cells, predominantly in the synapse, and contains the AB peptide sequence. Initial cleavage of APP by a transmembrane aspartyl protease known as the beta-site APP cleaving enzyme 1 (BACE1) forms the amino terminus of the AB peptide, while a second aspartic proteolysis cleavage event by the presenilin portion of the integral membrane protein complex known as gamma secretase forms the carboxyl terminus portion of the AB peptide, ultimately leading to AB peptide deposits of varying neurotoxic isoforms: AB42 and AB40, in the surrounding extracellular fluid. These neurotoxic fragments begin to accumulate over time, forming AB oligomers and eventually AB plaques. Hence, developing therapeutic agents that inhibit BACE1's specific cleavage event has the potential to halt AB aggregation and consequently, halt AD progression overall. We are here investigating 6 potential therapeutic agents for BACE1 inhibition both *in vitro* and *in silico*. We used molecular docking to identify the binding sites and calculate the binding affinity of each compounds. Molecular dynamics (MD) study is used to simulate the internal motions and BACE1 conformational changes upon substrate binding. Hence, we were able to observe the affects each compounds on BACE1.

Martínez, A., Alcendor, R., Rahman, T., Podgorny, M., Sanogo, I., & McCurdy, R. (2016). Ionophoric polyphenols selectively bind Cu<sup>2+</sup>, display potent antioxidant and anti-amyloidogenic properties, and are non-toxic toward *Tetrahymena thermophila*. *Bioorganic & medicinal chemistry*, 24(16), 3657-3670.