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# Senior Symposium 2020

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Kotcher, Jacob	Geoscience	Nan Crystal Arena
Kreps, Emily	Music	Charity Lofthouse
Krimmel, Andrew	Sociology	Kendralin Freeman

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Leffler, Anna	Biology	David Droney
Lippman, Rose	Women's Studies	Michelle Martin-Baron
Lucchesi, Sam	Entrepreneurial Studies	Craig Talmage
Ludwig, Elena	Education	Mary Kelly
Luschen-Miskovsky, Ethan	Music	Charity Lofthouse
Malamas, Victoria	Environmental Studies	Robin Lewis
Maratovic, Lukian	Sociology	Kendralin Freeman
Mast, Isabelle	Sociology	Kendralin Freeman
McCorkle, Ara	Sociology	Kendralin Freeman
McCorkle, Ara	Sociology	Jim Sutton
McCutcheon, Matthew	Entrepreneurial Studies	Craig Talmage
McFeeters, Quinn	Economics	Jennifer Tessendorf
McGowan, Colleen	Sociology	Kendralin Freeman
Mueller, Sam	Entrepreneurial Studies	Craig Talmage
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Nash, Caroline	Sociology	Kendralin Freeman
O'Connell, Cooper	Sociology	Kendralin Freeman
Owens, Gillian	Psychology	Brien Ashdown
Phillips, Canieshia	Education	Jim MaKinster
Pietrorazio, Gabriel	Media and Society	Rebecca Burditt

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Rollins, Laura	Education	Jim MaKinster
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Sockett, Kaitlynn	Chemistry	Erin Pelkey
Soucie, Jamie	History	Lisa Yoshikawa
Steinfeldt, Meredith	Sociology	James Sutton
Sturges, Corey Jaye	Sociology	Kendralin Freeman
Suriel, Tatianna	Sociology	Kendralin Freeman
Suriel, Tatianna	Women's Studies	Michelle Martin-Baron
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#### WHERE ARE THE PEOPLE OF COLOR? MAPPING SPACE TO EXPLORE WHITENESS AT HOBART AND WILLIAM SMITH COLLEGES

Muriel Allen, Stephanie Buchel, Corey Jaye Sturges and Hallie Varenka

White supremacy is the maintenance and perpetuation of white privilege through formal and informal structures (Pulido 2015). Critical race theory suggests that institutions of higher education make decisions that reproduce white supremacy on campus, thereby creating arrangements contributing to a hostile environment for people of color (Hiraldo 2010; Hippensteel 2016; Bourdieu 1989). Previous literature has shown that cultural spaces on campus perpetuate white tradition and stereotypes while discounting black experiences, overall entailing a lack of diversity (Bourke, 2010). Moreover, students of color face microaggressions that impact the academic and social spaces a student occupies and report negatively on the racial climate (Rankin and Reason, 2005).

We utilize the literatures of critical race theory and space on college campuses to analyze spatial discrepancies that reproduce white supremacy on Hobart and William Smith Colleges (HWS) campus, a predominantly white institution. We employ content analysis of public institutional resources, such as the *Herald*, bias incident response team (BIRT) notifications, and HWS website data, in order to frame the racial climate at HWS. This study also will highlight these power-laden, often invisible practices through visual representations of the colleges' space. These visual illustrations will erect a form of "spatial analysis" which is a way of seeing how racial discrimination is physically manifested through spaces on campus. We will utilize spatial analysis through spatial mapping of the HWS faculty offices, student housing, and club meeting locations on campus.

HWS prides itself on diversity and equity so the results of this study will inform administrators as they make decisions about the future of the institution regarding increased diversity within the student and faculty populations as well as reanalyzing the allocation of space on campus.

Bourdieu, P. (1989). Social Space and Symbolic Power. Sociological Theory, 7(1), 14–25. JSTOR. Hippensteel, H. B. (2016). Voices From The Pipeline: An Interpretive, Critical Race Theory Study Of Thriving Among Underrepresented College Student Alumni Of A Targeted Pre-College Preparation Program. ProQuest. Hiraldo, P. (2010) "The Role of Critical Race Theory in Higher Education," The Vermont Connection: Vol. 31, Article 7. Matthews, S., Bacon, R., Lewis-McCoy, R. L. H., & Logan, E. (2019, October 30). Spatial Analysis. Retrieved from

https://www.oxfordbibliographies.com/view/document/obo-9780199756384/obo-9780199756384-0058.xml Pulido, Laura. "Geographies of Race and Ethnicity 1." Progress in Human Geography; London 39, no. 6 (December 2015): 809–17.

#### A HEALTHY RELATIONSHIP? CATEGORIZING THE NATURE OF THE TOWN-GOWN RELATIONSHIP BETWEEN GENEVA AND HOBART & WILLIAM SMITH COLLEGES

#### Samuel Allen, Isabelle Mast, Caroline Nash and Marissa Reed

Social researchers use the concept "town-gown" to describe the unique relationship between institutions of higher education and the town in which the institution resides (Bruning et. al 2006). This paper utilizes a typology developed by Stephen Gavazzi et. al, (2014) originally developed by Cuber and Harroff (1965), to assess the strength of intimate partnerships, Gavazzi (2014), and we apply it to gauge the nature of the towngown relationships. Specifically, we examine the relationship between Geneva, NY and Hobart & William Smith Colleges (HWS). Through content analysis of local and collegebased newspapers, we seek to categorize Geneva and HWS's relationship as either: devitalized, conflicted, traditional, or harmonious, each of which will be clearly defined in the paper.

To make this categorization, we analyze and code a number of newspaper articles that discuss numerous factors that influence the Geneva-HWS relationship. To characterize this relationship, we draw on existing town-gown literature to code for factors that have demonstrated significance in assessing the nature of town-gown relationships, including the relative socioeconomic makeup of the town and college, the physical proximity of the college to the town, cultural and economic-sharing between the college and town, and the rate at which college graduates stay in the town post-graduation. We hypothesize that this relationship most closely aligns with the "traditional" form, as the Geneva-HWS relationship is stable and has both positive and negative aspects.

Though prior town-gown research has mainly focused on large, urban-based universities, our research offers a unique contribution to the field by studying a small liberal arts college in a more rural setting. Moving forward, we call for further research on liberal arts town-gown relationships, particularly those located in small towns like Geneva.

Bruning, Stephen D., Shea McGrew, and Mark Cooper. "Town–gown relationships: Exploring university– community engagement from the perspective of community members." Public Relations Review 32.2 (2006): 125-130. Cuber, John F., and Peggy B. Harroff. "Five kinds of relationships." Sourcebook in marriage and the family (4th ed., pp. 212-219). Boston: Houghton Mifflin (1965) Gavazzi, S. M., Fox, M., & Martin, J. (2014). Understanding Campus and Community Relationships through Marriage and Family Metaphors: A Town-Gown Typology. Innovative Higher Education, 39(5), 361-374. doi:http://dx.doi.org/10.1007/s10755-014-9288-1

# REMOTE SENSING THROUGH THE USE OF CONSUMER DRONES: HARMFUL ALGAL BLOOMS IN THE FINGER LAKES

#### Joshua Andrews

With the recent commercialization of drones in the United States, many affordable research applications can be explored. The prevalence of Harmful Algae Blooms (HABs) causes many issues to the local population within the Finger Lakes Region. Standard insitu water quality testing to determine the presence of HABs in the lakes is often time consuming and expensive. The use of drones to detect HABs could prove to be a more cost effective and efficient practice. This project evaluates the success of different quantitative analysis indices in attempt to correlate the RGB bands found in the lake images taken by the DJI Phantom 3 Advanced with standard water quality measurements taken from Owasco and Seneca Lake in 2019.

# COMMENSALITY'S EFFECT ON SOCIETY, CULTURE, AUTHENTICITY, TASTE AND MEMORY WITH IVORIAN FOOD

#### Djeneba Ballo

The question that I seek to answer is how does the practice of commensality affect the dynamics of eating and the choices people make while eating and preparing food? For the purposes of this presentation I will be explaining the concept of commensality, defined as bringing people together, creating social groups and forming loyalties and obligation (both social and cultural) that are so tied to our being (Crowther 2018), and its effect on society, culture, taste, memory and authenticity, using my Ivorian cuisine as an example. Eating together is the point where time and effort of food getting and cooking comes to fruition in a meal served (Holtzman 2009). By using readings and interviews, I was able to take a deeper look at what commensality looks like and its effect on culture, society, rules of eating, authenticity, taste, memory, through the use of the Ivorian peanut butter stew dish.

My personal stories of cooking with my mother are examples of the intimate domestic cooking and meal scene that is reproduced across the world and is shared by people who are close to one another. In order to understand the cultural and social patterns of meals, we need to take a seat at a meal and consider the where, when, what, how, and with whom you're eating alongside. The social nature of eating affects the way people come together, how cuisines are prepared, manners and daily social values that are exhibited around the table. In my findings, I learned that commensality will continue to be with us into the future, and expresses hospitality, care and love, memory, and valuing a relationship with people. Authenticity brings the element of agency to taste, to choose a dish and people to share the dish alongside, while taste and memory imbue dishes with unique family traditions and cultural identity.

Crowther, Gillian 2018 Eating Culture: An Anthropological Guide to Food. Toronto: University of Toronto Press.

Holtzman, Jon 2009 Uncertain Tastes: Memory, Ambivalence, and the Politics of Eating in Samburu, Northern Kenya. Berkeley: University of California Press.

# THE SPEECH COMMUNITY OF AFRICAN HAIR BRAIDING: OUMOU EXPRESS HAIR BRAIDING

#### Djeneba Ballo

What are the speech patterns used at Oumou Express Hair Braiding and how do they affect employees' daily interaction with each other and their customers? For the purposes of this presentation I explore why we speak differently in different social contexts, as well as the social functions of language and how they convey social meaning by using Oumou Express Hair Braiding as an example.

Hair Braiding has existed since at least 1300 BC; in the late 1800s, it was used as messages for enslaved people to find their way back home once they had crossed the oceans. During the late 1900's, high rates of West Africans arrived in America; many opened African Hair Braiding Salons. Oumou Express Hair Braiding opened in 2008 and has employees from Mali, Ivory Coast, Guinea, Niger, and Senegal.

This research is ongoing, but early results suggest that commonly used speech rituals used by both employees and clients at Oumou Express Hair Braiding include greetings, prayers, and insults.

#### PARENTAL ACCEPTANCE-REJECTION AND SPYING ON ROMANTIC PARTNERS IN THE USA

#### Leland Barclay

Interpersonal acceptance-rejection theory (IPARTheory) suggests that people who perceive themselves as rejected by important people in their lives tend to have more psychological maladjustment. Because IPARTheory claims universal applicability, it is important to explore its predictive powers with various theoretically-related constructs, such as romantic relationships. I examined whether or not individuals who experienced more parental rejection are more or less likely to stalk or spy on their romantic partners. I asked participants from the United States to answer questions about how they perceived their relationship with their mother, the presence of relationship anxiety in their current and past relationships, perceived jealousy, experiences with cheating on romantic partners, sociosexual orientation, and beliefs about culturally-based gender norms. Participants (N = 512, Mage= 36.22 years, age range = 19 years to 81 years, gender identified as 51.2% female) completed online surveys via MTurk. Inferential statistics including correlations and regression analyses will be used to determine the relationships between sociosexual orientation, beliefs about gender norms, jealousy, relationship anxiety, and prior experience with cheating. The present research will broaden the understanding of variables leading to spying and stalking behaviors in romantic relationships in the United States, and possibly provide more support for the universal application of IPARTheory.

#### FORGET NOT: AN ANALYSIS OF THE USE OF MESENCHYMAL STEM CELLS AND THEIR BIOLOGICAL PROPERTIES WITHIN ALZHEIMER'S DISEASE

#### Tamari Bekauri

Alzheimer's disease (AD) is the most common form of dementia among human populations. Patients with AD suffer from deficiencies in cognitive function such as memory and learning [1]. Though the etiology of AD is complex, one mechanism determined to be a key initiator of the disease is the accumulation of beta amyloid peptides [1]. Determining ways to treat this disease is a primary goal of human medicine. One path towards treatment is the use of stem cells to replace damaged brain tissue. Mesenchymal stem cells (MSCs) are multipotent cells with the ability to differentiate into several cell types, thus serving as an attractive candidate for regenerative medicine approaches [2]. The biological properties of MSC offer many possible routes to therapy. One example is a subcellular vesicle within MSCs called the exosome, which is a structure that contains signaling molecules used in cell-cell communication. MSCderived extracellular vesicles have been reported to internalize and degrade beta amyloid peptides and therefore are currently being investigated as a means to treat AD [3]. This presentation will describe a proposal for new experiments examining the biology of MSCs with the goal of moving towards clinical trials in humans. Broader implications of this grant proposal project will be considered from a public health perspective.

Reza-Zaldivar, E. E., Hernández-Sapiéns, M. A., Gutiérrez-Mercado, Y. K., Sandoval-Ávila, S., Gomez-Pinedo, U., Márquez-Aguirre, A. L., Vázquez-Méndez, E., Padilla-Camberos, E., & Canales-Aguirre, A. A. (2019). Mesenchymal stem cell-derived exosomes promote neurogenesis and cognitive function recovery in a mouse model of Alzheimer's disease. Neural regeneration research, 14(9), 1626–1634.
Rani, S., Ryan, A. E., Griffin, M. D., & Ritter, T. (2015). Mesenchymal Stem Cell-derived Extracellular Vesicles: Toward Cell-free Therapeutic Applications. Molecular therapy : the journal of the American Society of Gene Therapy, 23(5), 812–823.

<sup>[3]</sup> de Godoy, M. A., Saraiva, L. M., de Carvalho, L., Vasconcelos-Dos-Santos, A., Beiral, H., Ramos, A. B., Silva, L., Leal, R. B., Monteiro, V., Braga, C. V., de Araujo-Silva, C. A., Sinis, L. C., Bodart-Santos, V., Kasai-Brunswick, T. H., Alcantara, C. L., Lima, A., da Cunha-E Silva, N. L., Galina, A., Vieyra, A., De Felice, F. G., ... Ferreira, S. T. (2018). Mesenchymal stem cells and cell-derived extracellular vesicles protect hippocampal neurons from oxidative stress and synapse damage induced by amyloid-β oligomers. The Journal of biological chemistry, 293(6), 1957–1975.

#### F\*\*K MEN: DEBUNKING MYTHS ABOUT FEMINISM, WITH FOCUS ON INTERSECTIONALITY

#### Morgan Bilecek

Women's Studies teaches students to broaden their global perspectives and think beyond Western ethnocentric views. Within this major, multiple Feminist perspectives and lenses dissect human rights issues in order to disrupt white Western male-dominated narratives. We are constantly analyzing the intersectionality of bodies and identities, and acknowledging the overlap in multiple perspectives. With these important perspectives always being at the forefront of our learning, it makes us more aware of the consistent gaps in the literature, data, epistemology, and discourse. Women's Studies, as an interdisciplinary course, allows us to infiltrate multiple spheres including but not limited to the sciences, health, politics, psychology, environmentalism, economics, and more. Who is Women's Studies for? Women's Studies is for everyone! Some of the many things that Women's Studies encourages include activism, global citizenship, empathy, strength, open-mindedness, curiosity, and the ability to engage in difficult conversations.

I will discuss how Women's Studies can create an intersectional way of understanding the world: it not only informs us about the insidious injustices different bodies experience from day to day, but it also informs us and reminds us about the uniqueness of our experiences.

#### DARK SIDE OF PHILANTHROPY AND DARK ENTREPRENEURSHIP THEORY

#### Agnes Bisselle

This study aims to uncover the dark side of philanthropy by analyzing decision making in community foundations. My presentation will discuss previous foundation scandals and their founders/leaders to explore corruption and ethics within charitable organizations. I will tie these concepts back to the dark side of philanthropy and dark entrepreneurship theory.

My interest in this topic stems from my summer internship at the Cleveland Foundation, where I supported the foundation's mission to strengthen the surrounding communities by giving grants to local non-profits, and learned how vital foundation support is to the success of many small non-profits. Later, learning about dark-side entrepreneurship theory sparked my interest in exploring philanthropy through a critical lens that seeks to examine scandals and questionable leadership choices. By exploring examples of charity leaders who have abused their power and influence for personal gain and the interplay of intentions and harm, my work exposes the potential dark side of practices usually recognized as beneficial.

#### SELLING THE HOUSEWIVE'S IDENTITY: AN ANALYSIS OF GENDER AND RACE IN POST-WAR ADVERTISEMENTS

#### Ava Blumberg

Advertisements both reflect and shape the race and gender ideologies of a time period, which is a function of capitalism. In Betty Friedan's revolutionary book *The Feminine Mystique*, she argues that it was not the patriarchy, but capitalism that pushed women back into the domestic sphere in the Post-World War II Era. In my project, I seek to explore this argument by analyzing 1950s advertisements for products being marketed toward White and African American housewives. By comparing advertisements across publications and between two races, this project seeks to uncover what ideologies were being perpetuated about housewives during the 1950s, and whether these messages towards housewives were different when being marketed towards Black and White women.

By analyzing advertisements from newspapers and women's magazines of the 1950s through the work of gender and media theorists like Betty Friedan and Noliwe M. Rooks, I seek to uncover the ways that these images both created and reflected ideologies about the American housewife through close reading and visual analysis of advertisements that feature keywords such as "housewife" from both White, mainstream newspapers, such as *The New York Times*, and publications read by an African American audience, such as *The Chicago Defender*. I also examine popular women's magazines of the time. My findings complicate our cultural understanding of the term "housewife" and allow us to reflect upon how capitalism shapes our understanding of race and gender.

#### F\*\*K MEN: DEBUNKING MYTHS ABOUT FEMINISM, WITH A FOCUS ON EDUCATION

#### Isabelle Boone

Women's Studies teaches students to broaden their global perspectives and think beyond Western ethnocentric views. Within this major, multiple Feminist perspectives and lenses dissect human rights issues in order to disrupt white Western male-dominated narratives. We are constantly analyzing the intersectionality of bodies, identities, and acknowledging the overlap in multiple perspectives. With these important perspectives always being at the forefront of our learning, it makes us more aware of the consistent gaps in the literature, data, epistemology, and discourse. Women's Studies, as an interdisciplinary course, allows us to infiltrate multiple spheres including but not limited to the sciences, health, politics, psychology, environmentalism, economics, and more. Who is Women's Studies for? Women's Studies is for everyone! Some of the many things that Women's Studies encourage include activism, global citizenship, empathy, strength, openmindedness, curiosity, and the ability to engage in difficult conversations.

I will be talking specifically about ways to incorporate feminist practices inside the classroom. As an aspiring elementary school teacher, I am working to find ways to teach students in a variety of modes to ensure that my content is accessible to students of all backgrounds. I want to discuss the ways that we can create a more inclusive curriculum that can be taught to all students.

#### MML 48: A NEW PRE-MAIN SEQUENCE ECLIPSING BINARY

#### Max Brodheim

We announce the discovery of a new pre-main sequence eclipsing binary, MML 48, and present its fundamental properties. Confirmed to be an eclipsing binary by data acquired by the SuperWASP survey, MML 48 is a 16 million year old binary star system in the Upper-Centaurus Lupus subgroup of the Scorpius-Centaurus OB association. We obtained nominal masses and radii by collecting new multi-band time-series photometric and high-resolution spectral data at the Cerro Tololo Interamerican Observatory, along with generating a preliminary model using the eclipsing binary modeling software PHOEBE 2.1. MML 48 (P eriodEB = 2.0171 d) has a mass ratio of approximately 0.3, with a primary mass of approximately 1.1M $\square$  The effective temperature of the primary is approximately 5300K, and the secondary is 3500K. These properties provide essential data for the testing of stellar evolution models for young, low-mass stars.

#### EVOLUTION OF COAT COLOR IN EASTERN GRAY SQUIRRELS (SCIURUS CAROLINENSIS)

#### Alessandra Bryan

In the United States, the demand for city living has grown immensely and continues to grow. Urbanization causes many ecological changes, such as increased air and surface temperatures, lack of natural ground cover and vegetation, and increased impervious surfaces such as roads, driveways, sidewalks and roofs. Urbanization affects evolution such that ecological changes can act as strong selection pressures on organisms, which can lead to evolutionary change. The eastern gray squirrel (Sciurus carolinensis) is an excellent organism for studying adaptive evolution and the effects of urbanization.

There are two common, genetically-based, color morphs of the eastern gray squirrel, gray and melanic (black). Prior to European settlement, the black morph dominated rural forests, but today are most prevalent in cities. The objective of this study is to investigate possible causes of natural selection in rural and urban areas that could explain the decline of the black morph in rural forests and its abundance in cities. For forests, the change in forest structure from old growth to younger, secondary forests may have advantaged the gray morph in terms of crypsis. Old growth forests were common prior to European settlement and appear darker than the secondary forests that have replaced them. Predation is the dominant cause of squirrel mortality in forests—including from human hunters—and may select for individuals that better match their background. In cities, predation pressure is relaxed and replaced by vehicular collisions as the dominant cause of squirrel mortality. Roads may advantage the black morph as they stand out better on road surfaces, as compared to the gray morph, resulting in quicker detection by drivers and a greater likelihood of avoidance (less vehicular collisions) and increased survival.

I have addressed my research question in two ways. First, I have quantified background matching of the gray and black morph in each of the three environments, old growth forests, secondary forests and on roads. Secondly, I have measured the amount of time it takes humans to visually detect each morph in each of the three different environments, using a web based-hidden object game. Together, I will use background matching and detection time results to investigate the evolution of coat color in eastern gray squirrels along an urban to rural gradient.

# HOW EACH ACT LEADS TO TACKLING HEALTH (HEALTH): PROPOSING A MINDFUL MAKERSPACE IN THE COMMUNITY

#### Cassidy Carrafiello, Canieshia Phillips and Avery Wickersham

Educational initiatives such as the Common Core (NYSED 2018) are increasingly focusing on social-emotional standards. We are prioritizing a space that further supports and advances the health of school aged children. Specifically, we identified fitness, nutrition, mental, and social-emotional factors as fractions of the larger whole that make up a healthy human being, and for our Master's project a makerspace in Geneva that is based on accessible resources and focused on nutrition, mindfulness, and exercise to promote emotional, physical, and mental health.

The development of our makerspace is based on three complementary goals grounded in "community ethnography" as pedagogy (Tan 2018). This perspective on educational initiatives prioritizes the community members' perspectives, as they are the most knowledgeable within a particular context. We will focus on the utilization of existing resources in the community as tools to support well-being through understanding the foundations of proper nutrition, mindfulness, and exercise; build on students' foundation of mental, physical, and emotional health; and foster the development of a community that supports and respects one another, both in and outside of the makerspace. These goals have an intentional focus on the lived experiences of the participants. The impact of this makerspace will be the establishment of an accessible resource for children in Geneva that builds long-term wellness strategies unique to each individual.

Tan, E., Barton, A. C., & Schenkel, K. (2018). Equity and the maker movement: Integrating children's communities and social networks into making. Science & Children, 55(7), 76–81.

#### UNIVERSITIES' INVISIBLE FIRST-GENERATION INFORMATION: THE PREVALENCE OF ONLINE RESOURCES SUPPORTING THE UNIQUE CHALLENGES OF FIRST GENERATION UNIVERSITY STUDENTS

#### Nate Cary, Cooper O'Connell, Brian Salazar and Jacob Wallman

Not every student arrives at university with the same experiences and needs. Sociologists and education researchers have identified first-generation students (students whose parent(s)/legal guardian(s) have not completed a bachelor's degree [Pike & Kuh, 2005]) as a group that faces unique challenges at universities. In particular, these students lack access to what sociologist Annette Lareau (2016) calls "the rules of the game": the institutional knowledge, experience, or connections that allow people to navigate everyday institutions (like universities). Without access to these "rules," first-generation students can face difficulties in accessing on-campus resources, self-advocating with professors, and thriving in individualist university settings. In turn, these challenges have negative impacts on the grades and retention rates of first-generation students (Ineklas et al., 2007).

Lareau notes that even though the "rules of the game" are crucial tools for everyday life, there is often no well-advertised "rulebook." Universities may theoretically provide a "rulebook" in the form of online resources, but these resources have received little attention in previous research. We fill this gap in the existing research by documenting the extent to which university websites advertise resources that address the challenges of university students. Using the Carnegie Classification to find schools and thereby differentiating between types of institutions (public, private non-profit, or private for-profit), we conduct content analysis to present results demonstrating the different strategies that institutions of higher education take in presenting resources for and to First Generation College students.

Inkelas, Karen Kurotsuchi, et al. "Living–learning programs and first-generation college students' academic and social transition to college." Research in Higher education 48.4 (2007): 403-434. Lareau, A., Adia Evans, S., & Yee, A. (2016). The rules of the game and the uncertain transmission of advantage: Middle-class parents' search for an urban kindergarten. Sociology of Education, 89(4), 279-299. Pike, G. R., & Kuh, G. D. (2005). First-and second-generation college students: A comparison of their engagement and intellectual development. The Journal of Higher Education, 76(3), 276-300.

#### DANCING ON THE EDGE OF DESTRUCTION: BALLET DURING THE SIEGE OF LENINGRAD

#### Sarah Cavanaugh

I am investigating how the Mariinsky (Kirov) Ballet survived the Siege of Leningrad from 1941 to 1944 and what effect ballet had on the residents of the city. By looking at theatre records, newspapers, and diaries from the Siege, I hope to gain a deeper understanding of the impact that ballet dancers had during this time; my goal is to highlight how ballet played a role in how the culture of Leningrad survived the Siege. During the Siege of Leningrad, all but a select few dancers were evacuated from the Kirov Ballet and its school, the Vaganova Academy of Ballet.

This project stems from my double-major in Russian Area Studies and Dance, as well as personal experience from dancing ballet and studying abroad in Barnaul, Russia. The story of ballet during the Siege is still being told and I learned that even in the toughest of times, the dancers still danced. They helped the city's inhabitants and culture survive the Siege and I have found that the perseverance of the Mariinsky (Kirov) Ballet helped to keep the culture of Leningrad alive in the face of adversity.

#### F\*\*K MEN: DEBUNKING MYTHS ABOUT FEMINISM, WITH FOCUS ON TRAUMA

#### Yamileth Cedeno

Women's Studies teaches students to broaden their global perspectives and think beyond Western ethnocentric views. Within this major, multiple Feminist perspectives and lenses dissect human rights issues in order to disrupt white Western male-dominated narratives. We are constantly analyzing the intersectionality of bodies, identities, and acknowledging the overlap in multiple perspectives. With these important perspectives always being at the forefront of our learning, it makes us more aware of the consistent gaps in the literature, data, epistemology, and discourse. Women's Studies, as an interdisciplinary course, allows us to infiltrate multiple spheres including but not limited to the sciences, health, politics, psychology, environmentalism, economics, and more. Who is Women's Studies for? Women's Studies is for everyone! Some of the many things that Women's Studies encourage include activism, global citizenship, empathy, strength, openmindedness, curiosity, and the ability to engage in difficult conversations.

I will be discussing how the history of trauma against marginalized bodies is a human rights issue. Women's Studies majors have the privilege in higher education to access literature regarding epistemology and pedagogy about marginalized bodies. I have had the privilege to add my own trauma to the epistemology at HWS, which has influenced my white peers' perspectives in parallel to the literature they read. Learning about these traumas largely influences one's ability to be open to learning about different communities and the issues that do not directly impact them. This lens has the ability to empower women to acknowledge and dismantle systematic racism and sexism.

#### NEOLOCALISM IN THE FINGER LAKES

#### Julien Choiniere Denicourt

This presentation explores two overarching questions: "What role does neolocalism play for local breweries?" and "how do local breweries leverage neolocalism in their marketing?" In particular, this presentation explores the 40+ breweries in the Finger Lakes region of New York.

The Finger Lakes region of New York has seen a dramatic rise in the number of breweries with 50% of the breweries launching in the past five years. My interest in this industry stems from my microeconomic class here at HWS, where we concentrated on specific businesses and analyzed their performances. Leveraging neolocalism as the basis of my project, I explored a variety of readings to determine the various meanings of the term. Using definitions of neolocalism, I crafted a rubric to evaluate the level of neolocalism different breweries were using. Breweries' menus were analyzed and an aggregate score was created to explore associations between neolocalism and consumer ratings of the 43 breweries in the Finger Lakes sample used. Consumer ratings were obtained from Untappd, an app built for craft beers, which became an important tool for my research. Controlling for other factors such as lake views, launch years, and ratings of particular beer types (e.g., IPAs), a regression equation was calculated between brewery ratings and neolocalism in order to assess how neolocalism potentially impacts success in the craft beer industry in the Finger Lakes.

#### PLEN: 21ST CENTURY LEADERSHIP

#### Emma Consoli

The Public Leadership Education Network (PLEN) is a national, nonpartisan organization based in Washington D.C. The aim of PLEN nationally is to promote and empower women in the field of public policy through networking, mentorship, and professional development. On campus, the William Smith Chapter of PLEN employs a similar mission statement, but does not focus solely on public policy. At HWS, our PLEN chapter aims to create a community for members of the Colleges to engage in discussions on a range of topics (including course registration, study abroad, and pronoun usage), participate in professional development (through salary negotiation workshops and networking opportunities), and listen to inspiring speakers (like Geneva City Manager Sage Gerling and President Jacobsen) share their stories.

PLEN at HWS has evolved tremendously over the last decade, but it has particularly grown over the last two to three years. What was once a group of 10 to 12 students gathering for bi-weekly breakfasts, now regularly sees 35 to 40 students. We also host a range of other events including trips to Seneca Falls, movie nights at the Smith Opera House, and game nights at our Theme House. As a leadership team, we have implemented 5 goals which have driven our programing. These goals are to make PLEN a space on campus for first-year students and members of the HWS community in transition to find a new community; to ensure that PLEN becomes more representative of our campus and the world in terms of diversity of thought, socio-economic status, race, ethnicity, religion, gender identity, and geographic location; to promote PLEN across campus to make it more well-known entity; to become more involved in the local Geneva community; and to bring elements of a national PLEN seminar to campus, so that even more students have the opportunity to attend these events. Over the course of the year we have seen many of the changes we have been striving for come into fruition. PLEN's motto is "Preparing Women to Lead," and we believe that we are helping the student on this campus become informed, well-rounded leaders.

# CASABLANCA AND STAR WARS "A NEW HOPE": SAME FILM, DIFFERENT PROPAGANDA

# Katherine Consoli

The central question for this project was to explore the overlapping themes within the 1942 film *Casablanca* and 1977 film *Star Wars "A New Hope"* in an effort to determine the subliminal social impact of both of these films. The goal was to investigate these themes in the context of psycho-analytics and dominant social ideologies in order to not only contextualize these films within their time periods but also to determine whether they were released as war propaganda. My interest in this was sparked through my Media and Society courses, as well as a film showing during my study abroad experience that detailed the large part feature films had in furthering political movements. Upon my return to campus, I conducted this research through an independent study that focused on the analysis of film theory and how it both impacts and is influenced by society.

To begin my investigation, I read articles by philosopher Louis Althusser, psychoanalyst Jacques Lacan, and finally feminist film theorist Laura Mulvey. These works discussed the role of Ideological State Apparatuses (ISAs), what is known as the 'mirror stage' in psychology, and voyeuristic pleasure in film, respectively, which allowed me to create a framework for my analysis. Then I watched both films, analyzed them within the context of the readings, and finally compared them to one another.

I found that the narrative arcs and main character developments in both *Casablanca* and *Star Wars "A New Hope"* are essentially the same. The reinforcement of the patriarchy and the use of political themes are consistent in both films; however, despite the fact that they used the same themes, Casablanca was pro-WWII and Star Wars was anti-Vietnam.

# LINGUISTIC ACROBATICS: TRANSLATING SHUKSHIN'S RUSSIAN PROSE

## Alexandra Curtis

The art of translation is far more complicated than modern internet translation tools might lead one to believe. While some of these internet-based tools can (and do) serve as valuable reference resources to the modern translator, it takes a particular attention to detail and workmanship to truly complete an honestly representative translation. Especially in the world of literary translation, where translators are often thrown into the role of poet themselves, the factors of personal interpretation and expression become even more influential.

The prosaic works of Russian actor, screen director, and author Vasily Makarovich Shukshin (1929-1974) present a particularly challenging set of obstacles to the translator. Writing within the genre of Village Prose, Shukshin employs a vast array of idiomatic expressions, language, and motifs. These are the aspects that made his writing so wildly popular and his prose so beautifully lively to read, but creates nightmares for a translator trying to accurately depict such things to an English-speaking audience. Despite these challenges, I have translated from Russian to English a 1960 short story of Shukshin's titled "Cherednichenko and the Circus." My research indicates that this will be the first time it has ever been translated into English. The text tells the story of a lonely middleaged man (Cherednichenko) who falls obsessively in love with a female circus artist one evening when he watches her preform. Through my project I tackle not only the complications involved in translating such a work, but I also analyze the cultural and theoretical contexts in which it was written.

## THE ENTREPRENEURIAL CONTRACTOR AND THEIR EQUIPMENT

### Patrick Delpha

The financial crisis of 2008 exploited entrepreneurial contractors with low liquidable assets, while large companies with a high net worth were able to survive the crisis. Afterward, renting equipment and machinery became a popular option for contractors. Difficult decision-making regarding owning or renting equipment and machinery requires finding the most efficient financial advantage between renting and owning equipment, while taking into account the high levels of liquidable assets, money and the limited liquidity of equipment. The entrepreneurial contractor leads projects to completion by managing the material, labor, work and equipment needed for the project, and the decisions made by the contractor can shift the value of the company for better or worse. The contractor may jump on financial advantages through the renting process and ownership of the equipment and machinery. Ownership is a key feature of equipment; it allows the contractors to easily address frequent business projects and actions that provides less risk when preparing and planning out new contracts.

## TEACHER AND STUDENT RACIAL AND GENDER MATCHING: ITS IMPACT ON HIGH SCHOOL GRADUATION RATES

## Molly Diviney, Andrew Krimmel, Colleen McGowan and Caitlin Murphy

Students' racial and gender identity impacts graduation rates (Joo & Jeounghee 2016), which can adversely affect their lives in the long-term. Most previous literature that addresses education and graduation rates, focus on best practices (Dobbie & Roland 2013), diversity of students (Inskeep 2018), diversity of teachers (Ursery 2016), and public versus private schools (Joo & Jeounghee 2016). However, this study examines how the match between teacher racial and gender identity and student body racial and gender identity at the school level (as opposed to the classroom level) impacts school graduation rates.

Our study is unique as it studies one borough in depth and assesses the meso-level impact of racial and gender matching on an entire student body rather than on individual students contained within a classroom. We root this work in power differential theories (Haase 2008), particularly focusing on gender and race in schools, which highlight the importance of having a high degree of matching between student and teacher identities. Specifically, we ask how does the gender and racial identity match of faculty and students in Manhattan public high schools influence student graduation rates? To answer this question, we analyze data from the Department of Education of New York state. We focus on Manhattan because of the unique socio-historical context of New York City and the degree of racial diversity in Manhattan ("Manhattan Population 2020"). At a bivariate level, there is a lack of male teachers and teachers of color working in a school system attended predominantly by students of color. We expect that school-level racial and gender matching between faculty and students in Manhattan public high schools will have a positive impact on student graduation rates.

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### WANT A CIGAR? LET'S TALK CUBA

#### Grant Emerson

This paper will use a theoretical framework constructed around intervention and the major concepts of identity, such as discourse, alterity, gender, maintenance, and security, to examine the relationship between U.S.-Cuban foreign policy from 1959 to 1963, and in particular the U.S. trade embargo on Cuba. The time-frame for the analysis covers the end of Eisenhower's administration to the beginning of Kennedy's administration, as both presidents are important to the decision to enact the 1962 embargo on Cuba: necessary to understanding the specific policies at play in the discussion of U.S.-Cuban foreign policy is the idea that no policy decision is monolithic, which means that untangling the complexities that make understanding the impact of a foreign policy decision difficult. To best illustrate how foreign policy decisions are made up of many different actors' interests and also how policies affect actors differently, it will be beneficial to focus on a representational sample of sources from the period of 1959 to 1962 from *The New York Times, Life Magazine*, and governmental policy papers. All together, the discussion will explain why the embargo was placed on Cuba and the consequences associated with the embargo.

# THE DIFFERENTIAL IMPACT OF SETTING ON SCHOOL-BASED CRIME IN AMERICA

Davida Eyam-Ozung and Lukian Maratovic

The argument that crime is more prevalent and violent in urban and suburban areas than in rural areas has driven much of the criminological literature that explores crime and space today Chen (2008). Sociologists such as Gorman et al. (2011) theorize that most criminological studies fail to account for factors that influence how crime rates in various settings are reported, producing discrepancies that paint inaccurate pictures of the criminal atmosphere across rural, urban and suburban settings. As such, over recent years, sociologists have attempted to evaluate under which conditions this argument holds. Recent findings state that crime most significantly varies in type rather than in rate or degree of violence across various settings (Fishbaugh et al 2015).

In light of this research, we draw on overlapping arguments across sociology and criminological theory to relate the locale of school setting with the kinds of crimes committed by students in American schools. We conduct secondary data analysis of the School Survey on Crime and Safety (2006) to assess how crime varies in type across different settings. Our study is unique because unlike most studies, e.g., Fishbaugh et al (2015), we shift the research focus from the relationship between space and rate of crime to the relationship between space and type of crime. We additionally explore the effectiveness of several policies to mitigate school crime, examining the rates of crime in similarly located schools that implement particular policies and those that do not. Our results will help guide policy makers and school administrators in implementing and generating targeted disciplinary measures and policy interventions to curtail crime, as it varies in type, across American schools.

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### RED SEA COMMERCE DURING THE ROMAN EMPIRE

#### Elizabeth Fajardo

The Red Sea in the Roman Empire was the central axis of a large, interconnected system of commerce, stretching from China to Rome, from the coast of Africa to the Port of Alexandria and beyond. The goods traded, the hands between which they passed, and the paths traversed makeup a large subdiscipline of Ancient Economics and Trade of two kinds: international trade between India, China, Africa, and the Roman Empire, and interprovincial trade between Egypt and the other Roman provinces. Though both of these trades traversed Egypt and the area around the Red Sea, the kinds of goods which were traded and consumers of these goods are very different. Redistribution and exchange, from Polanyi's forms of integration, shaped Red Sea commerce and economy through both private trade and public exploitation. The State, on the other hand, was involved in this trade only insofar as it could extract money from it, be that through taxation or more active repossession of goods and services. It is in spite of rather than due to the interference of the Roman Empire that Red Sea trade flourished in the 1st and 2nd centuries CE. In fact, the private and public transpiration of goods facilitated each other, allowing for further growth of this profitable trade route, both for the State and the private Roman citizen.

# COMPETITION FOR FOOD RESOURCES BETWEEN THE INVASIVE ROUND GOBY AND NATIVE LAKE STURGEON

## Katherine Foley

The Lake Sturgeon is the oldest, freshwater fish swimming in New York, although due to past population decline, it was considered a vulnerable species. Efforts are underway to restock this native species into its natural habitat, although when these hatchery-raised juvenile Lake Sturgeon are released they will find themselves in competition with an invasive species, the Round Goby.

To understand potential impacts of this competition, I analyzed prey preferences of each species. Using laboratory feeding trials, the Lake Sturgeon's consumption rate of snails, mussels and amphipods was tested in three different competition types: no competition, interspecific competition, and intraspecific competition. Data was collected through the analysis of stomach contents and counting the prey that remained in the tank after the fish were removed. Through this analysis, it was possible to determine what prey species was most commonly consumed in each competition type. Lake Sturgeon did not display a significant change in the consumption rates when faced with different competition types. From analysis of stomach contents and remaining prey in tanks, it was determined that both the juvenile Lake Sturgeon and Round Goby showed a prey preference towards the amphipods. These feeding trial experiments opened new doors to analyzing competitive behaviors between these two fish and the possible limitation that Round Goby could place on the reestablishment of the hatchery-raised juvenile Lake Sturgeon in the St. Lawrence River, Cayuga Lake, and the Genesee River, while also better understanding the diet preferences of these two fish.

# GO FUND YOURSELF: ENTREPRENEURIAL STRATEGIES FOR LIFE INSURANCE

## Brian Fraga

My work analyzes the entrepreneurial value in using life insurance policies to fund a long-term investment strategy. My independent major in Enterprise and United States Society has provided me an enhanced interdisciplinary view of how our economy impacts societal trends and how the social structures of the United States can influence economic markets. This presentation specifically focuses on the life insurance market and both the economic and social benefits life insurance provides individuals. Today, an individual can borrow up to one hundred percent of equity from their policy in order to fund long term investment strategies. Also, life insurance professionals may sell particular plans, but later the companies may merely administer plans that the buyer has already purchased. The short and long-term effects of how life insurance is administered today deserves questioning. This presentation is not about "getting rich quick," but rather it explores entrepreneurial ways to use your life insurance, a risk-based product, towards financial gain. Furthermore, this presentation explores how investing in life insurance may be an opportunity for individuals to climb out of potential financial prisons. Different life insurance models and strategies are discussed and explored to identify potential best practices.

# SENECA LAKE'S NEXT INVADER: THE EFFECT OF ROUND GOBY ON BENTHIC MACROINVERTEBRATE LAKE COMMUNITIES

# Mckenzie Frazier

The Finger Lakes Region has experienced invasions from multiple species over the last few years. These invaders include zebra mussels and quagga mussels, both of which have traveled to the United States in ship ballast water. The Round Goby (Neogobius melanostomus) is a generalist-benthic fish from the Ponto-Caspian region and has inhabited Cayuga Lake (Finger Lakes region, NY) since 2012. They have not been documented in Seneca Lake yet but are projected to arrive soon. My project, under the advisement of Dr. Susan Cushman, examined how this fish has altered the lake benthic macroinvertebrate community in Cayuga Lake, by altering species richness and desired prey abundances. We also wanted to understand the changes that might occur in Seneca Lake post-invasion of this fish.

In late summer 2019, benthic macroinvertebrate lake samples were collected using a mini ponar. I compared data from a study done by the Watershed Assessment Associates (WAA) in 2012 to 2019 data to gain a better understanding the impacts of gobies in Cayuga Lake. In the lab, samples were subsampled until 300 macroinvertebrates were identified or until the entire sample was sorted. I found that species richness has declined significantly in Cayuga Lake since 2012. Favored prey species also had significant changes in percent abundances since the WAA study. Since the invasion of the Round Goby, the benthic lake community has changed in both biotic and abiotic ways. This study has allowed us to predict the changes we will soon encounter once the Round Goby becomes established in Seneca Lake.

# IMMERSIONS IN PLACE AND MEMORY: EXPLORING THE LYRIC ESSAY

## Abigail Frederick

My honors project explores the lyric essay as a hybrid form. The lyric essay is a controversial genre because lyric essays, by their very nature, defy conventions and traditions—in terms of both form and content. Therefore, in order to develop a deeper understanding of the many shapes lyric essays can take, I studied a wide selection of texts, ranging from early genre-bending works and theoretical texts to contemporary pieces and hybrid works, and wrote a collection of essays that investigates how personal identity is rooted in memory and place; many of the texts I read explore place and memory, constituting a lineage in which my own essays have their roots. I used epigraphs in many of my essays to reflect the influence of the essays I read on my own work.

Over the course of my project I experimented extensively with form. Most of my essays involve vignette-like sections separated by white space. These sections, while often not explicitly related, resonate formally and thematically when placed together. My essayistic style grew more experimental over the course of the project as I investigated how image can add an additional layer of resonance in an essay. The largest work in the collection, "Annotations in Blue," is a standalone book which I hand-bound and illustrated with watercolor. The text resembles verse and prose poetry, and I arranged it with attention to visual composition, treating the page as a canvas. My essays borrow elements from traditional forms of nonfiction (memoir, the personal essay, etc.) but meaning emerges in them as it often does in poetry: via associative logic, recursive imagery, lyricism, metaphor, and the visual arrangement of words on the page. The essays are a way of thinking on the page about the liminalities of memory and place.

In a genre that expands with each new essay that is written, every essayist must define the lyric essay for herself; ultimately, by working with an evolving definition of the lyric essay form, I was able to aim for artistic innovation while enabling new forms of personal expression.

## ARE WOMEN INFLUENTIAL? THE IDEOLOGICAL INDICATORS OF THE UNITED STATES' LARGEST VOTING BLOC

#### Tucker Grout, Ara McCorkle, Tatianna Suriel and Ergisa Xhuveli

Given that women are the largest voting bloc in the United States (Edlund, L., and Pande, R. 2002), why do elected officials continue to reify patriarchal values? Rooting our approach in a Gramscian tradition of hegemonic domination, our research seeks to understand how women make decisions about voting as a result of their own ideological perspectives. Hegemony ideology that has become wholly dominant and can thus structure all aspects of civil society, influencing morals, customs, political principles and social relations (Woolcock, 1985). We conceptualize ideology as a collection of beliefs on gender, welfare, immigration, and religion. Based on this question of how individual agency operates in conjunction with or in opposition to structural hegemonic beliefs, we hypothesize that oppositional and compliant ideologies within hegemony are patterned and correlated with how women vote and with which party they affiliate. While women are one large voting bloc, they are rarely united for one candidate: we aim to uncover how ideology on the individual level plays a role in creating this in-group divide. Our research explores how ideology influenced the way women intended to vote in the 2016 presidential election and their political party identification. To do this, we utilize the American National Election Survey (ANES), nationally representative survey data of voters in the United States. This research expands upon existing literature that largely ignores ideology as a mediating factor on how women vote.

Manza, J., & Brooks, C. (1998). The Gender Gap in U.S. Presidential Elections: When? Why?

Implications? American Journal of Sociology, 103(5), 1235-1266. doi:10.1086/231352

Woolcock, J. (1985). Politics, Ideology and Hegemony in Gramsci's Theory. Social and Economic Studies, 34(3), 199-210.

Edlund, L., and Pande, R. 2002. Why Have Women Become Left-Wing? The Political Gender Gap and the Decline in Marriage. Quarterly Journal of Economics, 117: 917–61.

Hout, M., Brooks, C., & Manza, J. (1995). The democratic class Struggle in the United States, 1948-1992. American sociological review, 805-828.

# CREATIVE PLACEMAKING: STRENGTHENING THE COMMUNITY THROUGH SHARED ART AND INTERACTIVE STORYTELLING

## Grace Hammett and Caroline Turino

Traditionally, public art and urban planning initiatives have been studied from a topdown perspective, giving voice to those with expertise and power as opposed to the users and everyday people. One new approach is creative placemaking: an emerging discipline in urban planning that seeks to use the arts, culture, and creativity to respond to greater community needs and desires. Theorists such as Martin Zebracki and Debra Webb argue that when utilized successfully, creative placemaking can lead to community growth and transformation that is built around a sense of place and belonging, encouraging public art and planning initiatives to be a collaboration between users and organizers. Creative placemaking works to blur the definition between user and maker, with the result that community members have greater appreciation for their space. Additionally, creative placemaking seeks to make visible the value of the everyday by drawing attention to shared experiences and perspectives. To put our academic course of study into practice, we are organizing a community art event in Geneva that is, first, accessible to everyone, and second, uses the power of shared art-making and interactive storytelling to bring community members together. We hope to hold an event in early April, ideally in a public park or other accessible setting within a neighborhood. At this event, we will create miniature books filled with prompts designed to help readers think about their life, experiences, memories, and their sense of place and belonging. We hope this event will use the artistic practice of bookbinding in conjunction with the idea that conversation is a valuable product. Inspired by the tenets of the Downtown Revitalization Initiative (DRI), we wanted to bring the positive benefits of this initiative to the surrounding areas, particularly Geneva's Wards 4, 5, and 6.

Webb, Debra. "Placemaking and Social Equity: Expanding the Framework of Creative Placemaking." Artivate, vol. 3, no. 1, 2014, pp. 35–48. JSTOR, www.jstor.org/stable/10.34053/artivate.3.1.0035. Accessed 11 Mar. 2020. Zebracki, Martin. "Beyond Public Artopia: Public Art as Perceived by Its Publics." GeoJournal, vol. 78, no. 2, 2013, pp. 303–317. JSTOR, www.jstor.org/stable/42006321. Accessed 11 Mar. 2020.

# THE NCAA: A DARK SIDE, CARTEL-LIKE ENTERPRISE

### Will Harrison

The NCAA is an organization that aims to accommodate student athletes in finding paths that help them succeed not only in the scope of athletics, but also in life after college; often, much gets lost in the execution of that goal: too many times we have seen the NCAA in the national spotlight for negatively affecting student athletes.

This presentation leverages dark entrepreneurship theory to examine the NCAA's power. I claim that the NCAA paradigm seems to have shifted from helping student athletes to demonstrating cartel behavior: the NCAA lacks competition in its mission to help student athletes regarding the best athletic and educational opportunities to fulfill their dreams and careers, and shows little regard for the negative externalities of dark-side practices.

If we aspire to have a society in which student athletes have the best opportunity to succeed, then the NCAA has to take some serious steps in resurging its initial mission: I outline recommendations for course correction.

# ROUTINE VS. RITUAL, HUMANITY AND THE FREEDOM FROM LOSING IT: THE SIEGE OF LENINGRAD

## Jack Hladky

For my senior symposium paper, I will be researching the many stories surrounding the Siege of Leningrad, similar to stories from a collection of the different experiences people had while in the Gulags that I have previously studied, through the lens of Rituals vs. Routines. I was intrigued by the connections between these two groups of stories, which seemed to have very similar themes involving people who follow a daily routine or ritual in order to survive. I want to look further into the difference between Routine and Ritual and a resulting dissociation from a normal lifestyle into one focused strictly on survival that extreme suffering throughout the Siege of Leningrad caused. I would like to see how some people are able to find a routine or ritual and in a sense make the best of the situation. For this project I will be using diaries from this event as well as a few other novels and primary first-hand accounts. I will also be using social science papers on dissociation caused by traumatic events ideally related to the Siege.

# COWORKING IN NEW YORK CITY: DISRUPTING THE REAL ESTATE MARKET

## Eric Holden

Over the last five years, the buzzword phrases "Coworking" and "Flexible Office Space" have become frequent topics of conversation in the world of real estate. With the rise of WeWork, the major coworking giant initially valued at \$47 Billion, coworking has caught the eye of investors, startups, and independent workers. While WeWork has seen their valuation quickly fall due to financial issues, it is clear that coworking and flexible office spaces are here to stay. As of this year, WeWork now leases the most office space of any company in New York City, far ahead of second-place JP Morgan, and many other coworking companies have begun to lease large amounts of office space. Since these companies are leasing space, it is necessary that companies find people who are willing to pay membership fees to work in the flexible office spaces. This necessity has resulted in changing real estate prices over the years, and this study aims at explaining how and why prices have changed. Because coworking spaces often arise in already attractive locations in cities rather than less developed areas, coworking may also further gentrification in cities.

This presentation analyzes the rise of coworking spaces and their associations with real estate prices in the New York City boroughs of Manhattan, Brooklyn, and the Bronx to explore how the rise of coworking has drastic social and economic impacts including raises in rent and gentrification. I draw on critical perspectives on entrepreneurship and economic development in my discussion of short- and long-term impacts of the rise of coworking and flexible office spaces.

# ASSESSING ANTI-CANCER POTENTIAL AND MECHANISM OF ACTION OF STAUROSPORINE ANALOGS

## Brianna Hurysz

Staurosporine is a compound isolated from Streptomyces bacteria that is known to halt cell growth and induce cell death, giving it potential as an anti-cancer therapy. However, staurosporine is not specific enough to target only cancer cells, since it interacts with multiple intracellular targets and thus is also toxic to healthy cells. My research, in collaboration with the Pelkey Research Group, works to modify the structure of staurosporine to ultimately discover a better cancer therapy that is more specific to cancer cells. We have discovered compounds that are highly potent using a cytotoxicity assay and now aim to determine the intracellular target of these compounds. The intracellular target will provide us with information about whether or not these compounds would be plausible anti-cancer therapies. Preliminary results indicate our compounds may be targeting tubulin, which is promising since other tubulin targeting agents have been tested in clinical trials for the treatment of various cancers. Tubulin is involved in cell structure. migration, and cell division. Inhibiting tubulin can thus help prevent the rapid proliferation and migration of cancer cells. Additionally, our lab has worked to confirm cell death occurs via apoptosis using fluorescent microscopy via special dyes. In the process of this experiment, we noticed morphological changes occurring after treating cancer cells with our compounds. We hypothesize that, since these are immune cells, they may actually be differentiating into macrophages and mounting an immune response. Going forward, we aim to verify differentiation and confirm that inhibiting tubulin polymerization is the mechanism of action of our compounds.

# A PHILOSOPHER IN PHYLOGENOMICS: THE EPISTEMOLOGY OF BASIC PLANT BIOLOGY RESEARCH

# Rizky Kafrawi

What constitutes useful contributions of knowledge in scientific disciplines such as plant biology? For my honors project, I investigated the dynamic interplay between the mitochondrial and chloroplast genomes for select genera of the milkweed family and developed my understanding of possible underlying causes of this phenomena. The use of Next Generation Sequencing (NGS) has given insights to the structure of DNA, allowing researchers to identify genome characteristics that provide criteria through which the interrelatedness of select genera for a family of interest may be determined. NGS offered a bioinformatics lens through which I was able to explore instances where the intergenomic exchange of hereditary material between the chloroplast and mitochondrial genomes occurred and provided insight into possible evolutionary events that may have facilitated this interaction.

In this presentation, I will use this research to explore ways that contemporary science is dominated by paradigms that encapsulate the practical aspect of disciplines such as data gathering methods, data analysis approaches, and the general "habits" which are practiced (1). The public responsible for funding research operates under a positivist paradigm which places credence on a posteriori knowledge in order to 'solve' immediate socioeconomic problems, at the expense of research that is simply being conducted for the sake of knowledge. Such paradigms are not unique to scientific communities: I posit that the positivist paradigm dominating the public's perception of scientific research ignores the downstream contributions of knowledge generated via basic groundworks research for disciplines such as plant biology, and fails to recognize that scientific literature that can only be built on a robust foundational base.

<sup>(1)</sup> Godfrey-Smith P. 2003. Theory and reality: an introduction to the philosophy of science. Univ. of Chicago Press, Chicago.

# FOSTERING A FAILING FORWARD CULTURE (F3C) IN A MOBILE MAKERSPACE

## Alyssa Kelly, Laura Rollins and Sarah Underwood

We are proposing the establishment of a mobile makerspace that provides accessible experiences for kids to develop self-confidence, inter-community connectivity, and autonomy within and around the community of Geneva, NY. This project is based on the Makers Education movement, which is focused on providing a wide range of participants the opportunity to "make."

"Making" happens through co-creation, technology, and multimedia materials within an inclusive space that encourages a process of trial and error through exploring how failure can be positive progress. Our mobile makerspace, utilizing a recycled school bus, will provide participants with opportunities to collaboratively design and make projects, with a focus on life skills, such as cooking, sewing, and personal repairs. Our goal is to empower participants through building life skills that promote autonomy and self-confidence as they engage in creative problem-solving, collaboration, communication, time-management, and goal setting. Furthermore, we plan to actively involve participants in their community and resource building. Both facilitators and participants will be actively engaged in "making," which provides them with the opportunities for personal growth. Participants will be connected to community members through workshops, meet-and-greets, and shareable contacts. They will be encouraged to engage with the community members to create their own network of stakeholders and resources, which can be leveraged in the future.

The most significant outcome of our makerspace will be the ways in which we foster what we have termed a Failing Forward Culture (F3C); reframing failing as an important learning opportunity is an essential mindframe to teach young people in order to encourage appreciation of the iteration process. Therefore, our F3C culture will position failing as a transformative making experience.

### **REVISITING PAST PROJECTS**

#### Nicholas Khan

As part of the process of composing my professional design portfolio as a requirement for my Architectual Studies major, I formulated a theoretical and conceptual framework; as part of an independent study course, I used this theoretical and conceptual framework to redevelop both ideas and projects that have been in development over the course of my four years at Hobart and William Smith Colleges. In doing so, I have realized the importance of revisiting one's past work and how further design iterations can propel new conceptual thinking that goes beyond the original thoughts and motives of a project. This presentation will emphasize the idea of iterative process in the development of ideas and intentions as it is expressed in three different design projects: a reworked a Lantern Project, a Plaster+Wood Composition, and Furniture Design.

# QUALITY AND CRAFT: AN INQUIRY INTO THE EFFECT OF STREAMING ON MUSIC

## Ryan Klimkewicz

Although scholars have generally failed in identifying key components of what quality and craftsmanship are, historically quality and craftsmanship have been defining factors of what is considered good work. Since the advent of music streaming, the definitions of quality and craft have become even more difficult to define, as access to services like SoundCloud and Spotify have erased the adjudication process traditionally held by record labels. This, combined with a media-centered capitalist market, may have ultimately eroded the quality of today's music.

It is important to note that any quality erosion would be an unintended consequence of streaming—a byproduct of increase in creator access to streaming services—not a direct objective. By examining works from Pirsig, Babit, Gladwell and others, I will attempt to provide a clear and concise definition of quality and craft, and apply them to streaming services and the music on their platforms in order to deduce whether or not quality has been eroded by the introduction of steaming.

## ORIGINATION OF MARINE ANIMALS THROUGH GEOLOGIC TIME

### Jacob Kotcher

Paleontologists have studied patterns of extinction and diversity extensively in the fossil record. Meanwhile, origination – the first appearance of genera – has been studied very little. This investigation looks to answer this question: is there a pattern to origination and do CO2, sea level, and continental dispersion correlate with it? These factors may be important because CO2 has been correlated with warmer climates and in modern times, warmer climates have higher diversity. In addition, when sea level is higher, there is more habitat space for marine organisms, which are the subject of this study. When continental dispersion is greater it may lead to more isolated populations which could produce more speciation.

I assessed patterns of origination through geological time. Faunal data for this study came from the published literature and is a global dataset of marine invertebrates with the highest stratigraphic and taxonomic resolution to date. A LOESS trendline and a 99% confidence interval was applied to the origination data when assessing the pattern through geologic time. This allowed for the identification of points above and below the CI. I also gathered correlate datasets from the published literature. Correlate data were analyzed using multiple linear regression to assess the correlation between the variables and origination. There is a robust, predictive relationship between origination and CO2 and sea level as well, while continental dispersion appears to be less well correlated with origination.

## THE PAST, PRESENT, AND FUTURE OF MUSIC NOTATION

#### **Emily Kreps**

I interrogated the idea of notation and what it means for different cultures and groups. From a design perspective, I examined Western, Asian, Pacific Island, and Braille notations, looking at their strengths and limitations with an eye toward potential lacunae and improvements. Next, I investigated how technology is being used in music notation, specifically how computer graphics capabilities can contribute to music visualization and music theory. As a result of this research, I proposed ideas for my own system of notation using a Tonnetz lattice diagram and the torus geometric shape in an attempt to make significant patterns clearer to the untrained eye.

# MAKING AND MENTORING: THE PROPOSAL FOR A VOCATION-FOCUSED MAKERSPACE AND MENTORSHIP PROGRAM

# Pippa Kula and Makayla Pydych

We are proposing the establishment of a makerspace at the Geneva Community Center that will focus on the acquisition of vocational skills through a mentorship program that empowers youth. Such a space would ultimately facilitate the development of "maker identities" for participants. This project seeks to accomplish three main goals. We will: a) establish a supportive environment for makers to take risks while making, b) facilitate a mentorship program focused on the development of young leaders through the opportunity to engage with younger makers, and c) ensure the empowerment of young makers' confidence and growing expertise, both within the makerspace and in other aspects of their lives.

Makerspaces are locations created with the intention to promote collaboration, skill, and project building. Ultimately, they are places in which people of all ages can come together to learn new skills and develop ideas. Having become a popular concept in community settings, many makerspaces enable young people to create within a space in ways that make them feel supported, independent, and empowered regarding their skills and expression of ideas to others. The establishment of a makerspace in Geneva would provide the resources for participating makers to learn and hone useful life skills, primarily with a vocational focus.

Our makerspace would work within the confines of the Geneva Community Center; the making materials would move through the space based on current projects (i.e. materials that need an art room, a kitchen, a computer lab, etc.). Additionally, we would use the Community Center vans and minibus to take field trips to local studios and businesses to learn new skills—many of these community partners would also make on site visits as they lead workshops for the makers. Furthermore, it would strengthen community ties through partnerships with local businesses and professional makers while also providing a space for mentoring that enables participants to learn how to be both a strong leader and follower.

# EXAMINING THE RELIABILITY AND VALIDITY OF INTERPERSONAL ACCEPTANCE-REJECTION THEORY IN VIETNAMESE ADOLESCENTS

#### Khanh Le

One major aspect of the Interpersonal Acceptance and Rejection Theory (IPARTheory) is examining how parental acceptance-rejection affects people's psychological adjustment. This theory has been validated in many countries and cultural groups around the world, but has not been utilized in the Vietnamese context. This research aims to assess the validity and reliability of IPARTheory measures in Vietnam. Participants included 162 students from a high school in Hanoi (Mage = 15.58; 69.8% female), who gave their affirmative assent and whose parents provided consent to participate in the study. Materials consisted of Vietnamese versions of the IPARTheory measures: Parental Acceptance-Rejection Questionnaire (PARQ Father & Mother), Personality Assessment Questionnaire (PAQ), Interpersonal Relationship Anxiety Questionnaire (IRAQ) and a Personal Information Form designed specifically for this research. Analyses showed that psychological maladjustment significantly correlated with perceived paternal rejection (r = .43, p < .01), maternal rejection (r = .28, p < .01) and their subscales. Cronbach's alphas were strong, ranging from .73 to .97, except for the Dependency subscale (.39) and Hostility subscale (.56) of PAQ. Thus, results from this study provided evidence for the reliability and validity of the IPARTheory in Vietnam. The relationships found in this study have great implications for parents, teachers and psychologists .

# VARIATION IN EXPLORATORY BEHAVIOR OF RED-BACKED SALAMANDERS FROM THE FINGER LAKES NATIONAL FOREST (FLNF)

## Anna Leffler

Human alteration of the landscape is having profound impacts on animal populations. Forest fragmentation is one of these examples of human alteration, causing separation of animals in their native habitats. By investigating how individuals within populations respond to stress, we can better understand how forest fragmentation will impact animal populations. This project focuses on variations in individual's exploratory behavior when faced with stressful conditions. Specifically, for my Honors project in Biology, I studied how chemical cues to conspecifics influenced the exploratory behavior of individuals from populations collected in the Finger Lakes National Forest. This was a continuation of research that I had been a part of in the Summer of 2018, and was completed in the Spring of 2019.

# F\*\*K MEN: DEBUNKING MYTHS ABOUT FEMINISM, WITH A FOCUS ON ACTIVISM

## Rose Lippman

Women's Studies teaches students to broaden their global perspectives and think beyond Western ethnocentric views. Within this major, multiple Feminist perspectives and lenses dissect human rights issues in order to disrupt white Western male-dominated narratives. We are constantly analyzing the intersectionality of bodies, identities, and acknowledging the overlap in multiple perspectives. With these important perspectives always being at the forefront of our learning, it makes us more aware of the consistent gaps in the literature, data, epistemology, and discourse. Women's Studies, as an interdisciplinary course, allows us to infiltrate multiple spheres including but not limited to the sciences, health, politics, psychology, environmentalism, economics, and more. Who is Women's Studies for? Women's Studies is for everyone! Some of the many things that Women's Studies encourage include activism, global citizenship, empathy, strength, openmindedness, curiosity, and the ability to engage in difficult conversations.

I will discuss how a degree in Women's Studies gives us the tools to become activists through having an understanding of issues that impact us and the world around us. As feminist activists, we are able to disrupt and challenge socially constructed ideas of who can be a feminist and what gender means.

Ashdown, B. K., Gibbons, J. L., de Baessa, Y., & Brown, C. M. (2017). Using adolescents' drawings to reveal stereotypes about ethnic groups in guatemala. American Journal of Orthopsychiatry, 87(6), 626-635. Stiles, D. A., & Gibbons, J. L. (2000). Manual for evaluating individual and social values expressed in international adolescents' drawings of ideal woman and man. World Cultures, 11(2), 181-221.

# DARK SIDE DECISION-MAKING: LESSONS LEARNED FROM CORRUPT AND EGOTISTICAL ENTREPRENEURS

## Sam Lucchesi

For my presentation, I use dark-side entrepreneurship theory to highlight some of the world's once most acclaimed entrepreneurs (spanning age and gender) who at one time had a successful operation and later came crashing down due to corruption and illegal practices. Specifically, I showcase nine entrepreneurs who exemplify dark-side practices in an effort to map similarities and differences between each entrepreneur, their enterprises, and their environments.

This project's purpose is to shed light on a side of entrepreneurship that gets less coverage in typical business articles or even in entrepreneurship classrooms. I used research and popular media search engines to gather stories about entrepreneurs who engaged in dark-side entrepreneurship practices, searching beyond the headlines to unearth failed companies and enterprises that many have forgotten.

# BARKING UP THE WRONG TREE: SERVICE DOGS AND THE RELATIONSHIP WE HAVE WITH THEM TODAY

## Elena Ludwig

This semester I had my service dog, Tramp, accompany me to campus. I am not physically disabled; Tramp is my psychiatric service dog, and isn't a "typical" service dog breed. Because of this, Tramp and I face many questions that exhibit a lack of undersanding about service dogs. My projects ask what can be done to break the stereotypes around service dogs and further educate people of all ages about them?

Using laws created by the Americans with Disabilities Act and New York State service dog laws, I have been able to further educate myself and others, and gather information so I know my rights when I am with Tramp in public spaces and travelling. I seek to further educate HWS campus, the public, and the students I work with in the art classrooms about service dog functions, as well as etiquette important in treating service dogs and their handlers. I hope to continue constructing a path that is easier for service dogs and their handlers.

## TYLER, THE CREATOR: MUSICAL AESTHETICS OF ANDROGYNOUS HIP-HOP

## Ethan Luschen-Miskovsky

Given his nonchalant approach towards the effect of his often sexist and homophobic lyrics, Tyler, The Creator's reputation in pop culture has been that of a provocateur. However, his reputation for being homophobic was reconsidered in light of his public statements questioning his own sexuality on his 2017 album Flower Boy. This presentation examines Tyler's shift in both the lyrics and musical techniques toward the feminine and androgynous in his two most recent albums, Flower Boy and Igor, as well as the effect that this change had on Tyler's reception and fan base. I argue that Tyler's lyrics become more muted in comparison to that of his earlier work, but musically we see a similar aesthetic to early albums that signals Tyler has not completely moved beyond the violent and hypermasculine music of his past, but has instead incorporated his new queer identity into this hypermasculine body of works. In doing so, he has forged a path that is all his own.

## ASSESSING THE LONG-TERM IMPACTS OF THE SUSTAINABLE LIVING AND LEARNING COMMUNITY PROGRAM ON STUDENTS' PROFESSIONAL AND PERSONAL DEVELOPMENT

### Victoria Malamas

The Sustainable Living and Learning Community (SLLC) is a year-long first-year seminar where students live and learn on the same floor of a residence hall. Professor Robin Lewis and I conducted a study to evaluate the long-term impacts of the SLLC program on HWS students' personal and professional growth, specifically: academic as well as professional skills; a sense of belonging in our campus community; and understanding of the relationship between sustainability and consumption. We conducted two rounds of surveys using the Delphi technique to alums through a Facebook group. Alums were asked to complete the survey based on their experience in the program in two main sections: academic/professional skills and perspectives on and/or role(s) in the campus community. Our research revealed that alums experienced changes in academic/professional skills as well as shifts in perspectives on and/or role(s) in the campus community: it is evident that the students who take part in the community experience development of academic/professional skills through collaboration/group work, and research & citation skills, while the perspectives on and/or role(s) in the campus community prompted them to reflect on their own beliefs, behaviors, habits, practices, etc., increasing their knowledge of sustainability efforts on campus, and aided them in finding friends. Understanding these outcomes allows for a greater understanding of the importance of SLLC on campus and how it can be used as a model for other Living and Learning Communities on campus as well as in other academic contexts.

# PROFESSIONALIZATION OF PAST CRIMINALITY AND ADDICTION: HOW FORMER PRISONERS AND ADDICTS MANAGE A "PROFESSIONAL EX" IDENTITY

## Ara McCorkle

In our punitive society, former prisoners and addicts are often forever stigmatized and viewed as being incapable of change, yet many of these people do change: some transform so profoundly that they focus their lives on helping others who are attempting to make similar changes. How do individuals with these stigmatized statuses successfully make life-altering changes, and how do they view themselves?

Through in-depth interviews with a small group of majority women ex-prisoners and exaddicts, I explore how their present identity is simultaneously in opposition to and in relation with their past. These individuals are all Professional Ex's, meaning their professional role is directly linked to their personal experiences with crime and incarceration, substance addiction, or both; such occupations include assisting with prisoner re-entry, advocating for at-risk youth, and working in drug treatment. These roles require them to be positive examples in the present, while simultaneously utilizing past stigmatized status as a form of professional currency.

Through the investigation of these two seemingly incongruent identities, this qualitative study not only offers a glimpse into how people change, but also how others embarking on re-entry or recovery might be supported along the way by learning from those who have already succeeded in making similar changes. This Honors project builds off of the existing desistance and life-course literatures within Criminology that underscore the importance of identity, connects it to the understudied topic of Professional Ex's, and sheds light on women historically excluded within Criminological research.

## WHEN LARGE ENTERPRISES NEED BIG INNOVATIVE CHANGE

## Matthew McCutcheon

"How do companies react in a time of decline?" This project explores a 10+ year followup examination of several large companies that were previously discussed in Jim Collins's book *How the Mighty Fall*. I explore how some companies in decline made major decisions that led to their downfall, while others made different decisions that led to their survival or even led them to thrive. I revisit the same companies discussed in Collins's book and the strategies to avoid failure found in the book.

This project is part of my individual major titled, "Innovative Change." In the investigative portion of my project, I examined news articles and financial data for the various companies found in Collins's book to craft a rubric for assessing the risk of decline or failure. I have organized several similar business practices and approaches of thirty different enterprises. Organizational leaders had key decision-making moments, which are analyzed and discussed. My data showcases evidence of successful business choices and risky business choices by comparing companies in decline to successful companies.

Collins, James C. How the Mighty Fall: And Why Some Companies Never Give In. Harper Collins Publishers, 2009.

## LIT ON THE GRID: HOW DO STREET NETWORKS AFFECT THE NIGHT LIVES OF CITY DWELLERS?

## Quinn McFeeters

The grid is the last thing on our minds during a night out, but is it possible that the street network is really the life of the party? In this analysis I construct the variable of intersection density, which measures the density of a city's street network, and measure its effect on the earnings and number of nightlife firms in 39 of the largest cities in the United States. I test the theory that tightly knit networks create a more desirable environment for consumers, leading to superior performance for firms in cities with greater intersection density. I used OLS regression to test the validity of my theory, controlling for several demographic and structural variables. The results were mixed, but overall my main independent variable was not significant in determining the earnings of nightlife firms. I will discuss ways to modify my project to obtain more precise results and how this, and related theories, can possibly be used by developers and city planners to enhance the nocturnal vibrancy of the grids we call home.

#### BREAKING BARRIERS IN SPORTS

#### Sam Mueller and Bayley Tranmer

The Premier Lacrosse League (PLL) and the XFL, a professional American football league, are two sports leagues that began their inaugural seasons in 2020. Both leagues spun off from the other established professional leagues with recognized success in sports entertainment, Major League Lacrosse (MLL) and National Football League (NFL) respectively. The founders of the PLL and XFL, Paul Rabil and Vince McMahon, envision better governing bodies for their organizations and large opportunities for growth. Vince McMahon spotted the lack of football during the NFL's off-season as an ideal opportunity to capitalize on an already existing customer base: Americans who still want to watch football on Sundays. This opportunity recognition epitomizes Kirzner's entrepreneurship theory. Vince McMahon also recognized that football could become more violent to attract more fans. His opportunity recognition has implications showcasing the darker sides of entrepreneurship. Paul Rabil, also demonstrating Kirznerian entrepreneurship, looked at lacrosse and how the MLL had been a stagnant league for the past decade and leaving many athletes with troubles trying to make ends meet. The MLL lacked the professional treatment and incentives found in other major leagues (e.g., NFL). Rabil crafted the PLL model to consist of different teams traveling together playing in different cities each week. Rabil aimed to evangelize the game of lacrosse by targeting hotbed cities to recreate the excitement seen at college lacrosse final fours. Both the XFL and PLL had changed ways but utilized different approaches to gain viewership for their games. This presentation will showcase how entrepreneurship theory is reflected similarly and differently in the approaches taken by the XFL and PLL to launch and grow these two emerging sports leagues.

# GUATEMALAN TEENAGERS' HOPES AND DREAMS FOR THE FUTURE: A QUALITATIVE STUDY OF DRAWINGS AND CHARACTERISTICS FOR FUTURE SELVES

### Gillian Owens

Utilizing adolescents' drawings in order to investigate their perceptions of self has a long history in psychology (Ashdown et al., 2017; Stiles & Gibbons, 2000). The tactic is particularly useful in places, such as Guatemala, where the population has relatively lower levels of literacy and less experience engaging with Western-style research surveys. By asking adolescents to draw a picture of themselves as they hope to be in 15 years, we were able to collect valuable data on issues such as the students' desires for the future and what they see as possible for themselves. Participants (N = 81, Mage = 14.56 years, age range = 12 years to 17 years, 51.9% female, all from Jocotenango, Guatemala) provided five characteristics that they hoped to have 15 years in the future, and then drew a self-portrait of themselves 15 years in the future. They also completed the MEIM-R (a measure of strength of ethnic identification) and a demographics form.

I used thematic analysis to determine patterns and themes that are prevalent in the data. Common themes among the characteristics include specific jobs they hope to have, gaining higher education, getting married, having a family (children), and selfimprovement. In the drawings, the common themes are similar: gaining more education, mentioning specific careers, getting married, being successful, and having a family. These codes have been evaluated in the context of demographic variables such as age, gender, ethnicity, and socioeconomic status. This data will help determine what type of futures these students hope for in order to ensure that schools and other institutions are providing the tools students will need for those futures.

Ashdown, B. K., Gibbons, J. L., de Baessa, Y., & Brown, C. M. (2017). Using adolescents' drawings to reveal stereotypes about ethnic groups in guatemala. American Journal of Orthopsychiatry, 87(6), 626-635. Stiles, D. A., & Gibbons, J. L. (2000). Manual for evaluating individual and social values expressed in international adolescents' drawings of ideal woman and man. World Cultures, 11(2), 181-221.

### PROJECTIONS OF PRISONS IN UPSTATE NEW YORK

### Gabriel Pietrorazio

Prisons as we know them have become an inseparable part of American political society. Although prisons are erected at the peripheries of society, offering few chances for the greater public to simply peek in, they are in fact standing in the foreground: prisons are at the heart and center of our nation's debate when we ask ourselves whether we are achieving a truly democratic society, while the carceral state challenges the very conception of the free press, one where members of the media could access these enclosed spaces and aptly report on the injustices that the incarcerated face.

In the aftermath of the Attica Uprising of 1971, the bloodied and deadly legacy of Attica set forth a new news industry precedent, influencing local-regional media reporting on prisons across New York State. Prisons solely appear in the public consciousness virtually through the institutions and structures of local-regional newsrooms as projections, like shadows cast onto cavern walls. These projections of a perceived and marginalized population challenge and perpetuate myths surrounding incarceration while also calling into question the economical and ethical considerations of prison reporting. Those who are locked behind iron bars lack all rights, including their freedom and agency, and especially their voice. Prisons render incarcerates invisible to the public memory until a riot arises or a brawl breaks out, but until then the incarcerated remain silent and agentless in the absence of responsible news media. Consequently, without truly understanding the role of newsrooms in creating, crafting, writing and highlighting certain stories of incarceration, we cannot comprehend the consequences of local-regional journalism in shaping the many narratives and myths about prisons that are projected right into our own communities.

# CRITIQUING FAST FASHION AS LINKED TO GLOBAL CONSUMPTION PATTERNS

## Elisabeth Rowedder

Capitalist societies require constant consumption and a push for consumerism. The fastfashion industry has been a catalyst for these requirements by leveraging low wage and potentially dangerous machinery to produce garments made to be worn for short time periods. Companies like Forever 21, H&M, Zara and many others have and continue to amass fortunes through patterns of hyper-consumption. Their fast-fashion goods are sourced from low-income countries and reify work environments with low employee wellbeing and overall safety. What are the effects resulting from fast-fashion companies? What patterns can be drawn across history on how customers make choices regarding quantity bought?

My presentation identifies potential answers to these questions. I focus on potential generational shifts and innovative marketing strategies, as consumers who are considered Gen Z and Millennial get bombarded with new companies and products that are selling a more minimalist lifestyle while in tandem producing and creating "new arrivals." I also explore how fast-fashion utilizes different marketing techniques from traditional fashion enterprises of the past. Additionally, as more companies turn towards green marketing to signal environmental sustainability, I explore the question of sustainability and how fast-fashion companies address sustainability concerns.

The fast-fashion industry epitomizes inconsistencies in the logic of consumption. I will explain my findings by showcasing patterns and variations in reasoning behind why there has been this trendy shift toward a new minimalist, sustainable lifestyle that, like social media and influencers, may only last a split second.

## MERCURY BIOACCUMULATION IN FISH FOOD WEBS OF THE FINGER LAKES' TRIBUTARIES

### Allie Seminer

Mercury, a potent neurotoxin, accumulates within organisms and up food webs. In this study, the bioaccumulation of mercury in Rainbow Trout (Oncorhynchus mykiss), Brown Trout (Salmo trutta), and forage fish like the Blacknose Dace (Rhinichthys atratulus) and the Creek Chub (Semotilus atromaculatus) is examined. These fish (100 in total) were collected from tributaries leading into the Finger Lakes, with a particular focus on Catherine's Creek (Seneca Lake), Naples Creek (Canandaigua Lake), Cold Brook (Keuka Lake), and the Cayuga Lake Inlet (Cayuga Lake) watersheds. The fish were analyzed for total mercury (THg) concentration, trophic and diet positions based on carbon and nitrogen isotope analysis, and age as determined by otolith extraction. These results will be used to further examine the effects of mercury bioaccumulation in fish that vary in body condition as well as in differing trophic levels. The data will then be compared with current mercury health guidelines to determine possible health effects for both the organisms living in the tributaries and the anglers who catch and consume the fish.

### THE FORCES BETWEEN US: A STUDY OF THIOPHENE AND CARBON MONOXIDE

### Tiara Sivells

Intermolecular forces (IMFs) are important in explaining how much of our environment works. Specifically, IMFs are important to cloud formation and atmospheric chemical reactions, as well as impacting how particles interact with surfaces. Computational chemistry is a useful tool in analyzing these interactions, which are difficult to interpret in experimental studies. Additionally, computational chemistry can also be used to supplement experimental studies. I examine the 1:1 thiophene and carbon monoxide complex, using computational and experimental studies to observe how thiophene and carbon monoxide interact. The lowest energy geometry of the thiophene : carbon monoxide was determined through multiple ab initio calculations. The majority of these calculations showed the interaction between the  $\alpha$  C—H of thiophene and the O of carbon monoxide. Currently, experimental studies of the thiophene : carbon monoxide complex are being examined using matrix-isolation FTIR, in which the vibrational frequencies determined from the computational studies can be verified. Interestingly, the major interaction observed differs from the expected; as such, a new interaction is observed and presented.

## PANNING FOR GOLD: THE PURSUIT OF STRIKING GOLD IN THE SYNTHESIS OF A POTENTIAL ANTI-CANCER THERAPEUTIC

## Kaitlynn Sockett

In organic synthesis nature has remained the ultimate inspiration: natural products are typically comprised of complex systems that possess valuable biological activity. In an interdisciplinary project at HWS, we are inspired by the natural product, staurosporine. Staurosporine was isolated from the bacterium Streptomyces staurosporeus and has anti-cancer properties; however, this natural product is too toxic to be used as an anti-cancer therapeutic. We believe alterations to its structure can result in an increased specificity for cancer cells and the proteins involved in cancer causing pathways, all while keeping its inherent cytotoxicity intact. Staurosporine contains a fused cyclic backbone and a sugar moiety. In our lab, we have turned our focus to the cyclic backbone, staurosporinone, as a model for potential anti-cancer agents. We explore new synthetic methods designed to form important carbon-carbon bonds resulting in novel staurosporinone analogs.

The ability to generate the furanone analog of staurosporinone shaped the core of my Honors project. Here I liken my research project to panning for gold and the ensuing successes and failures inevitable when in the pursuit of striking gold. My talk will focus on my efforts to strike gold by generating the bis-indole furanone analog and the unexpected outcomes that become the gold.

### **RED PANDA CONSERVATION**

#### Jamie Soucie

The Red Panda (Ailurus fulgens) is a carnivore the size of a raccoon. They live in the forests in the Himalayas in India, China, and Nepal. The species was labeled as Endangered in 2015 on the IUCN Red List due to habitat destruction and disease; their numbers continuing to decline. Although Angela Glatston, a zoologist who worked at the Rotterdam Zoo for over four decades and is a board member of the Red Panda Network, a non-profit organization based in Nepal and Oregon with a goal to protect the Red Panda, published *Red Panda: Biology and Conservation of the First Panda* in 2011 and the book is accessible to a wide audience, the red panda population has continued to decline, and patterns in previous research indicate that scientists know very little about this animal because they are hard to find in their habitat that consists of bamboo.

My project looks at how Red Panda research has evolved in the last decade. I have located 300 works in the last decade and examined the 50 most relevant. Among these articles, anatomy, conservation, and captive information have been the dominant categories. An increasing number of scientists from Asia are in the field, and 25 among the relevant articles are by South Asian scientists, while a significant number are by Chinese scientists.

## BECOMING EMPATHETIC: AN EXPLORATION OF EMPATHETIC MASCULINITIES ON CAMPUS

### Meredith Steinfeldt

Approximately 1 in 5 college women report being sexually victimized during their time at college.<sup>1-5</sup> For decades scholars have sought to determine the causes of and solutions to this issue. Peggy Sanday, a professor, feminist, and the author of *Fraternity Gang Rape*, argues that dominance and sexual prowess have been connected to masculinity, while empathy has been closely tied with feminine characteristics.<sup>6</sup> This, Sanday argues, has contributed to a culture of indifference towards victims of rape and a hegemonic masculinity that endorses entitlement, power, and dominance over women.

In an effort to determine how college campuses can promote a safer environment for students, my project analyzes men who do not subscribe to this version of masculinity, but instead perform empathetic masculinities. Drawing from 10 qualitative in-depth interviews, this study gives voice to the experiences of students on campus who have empathy for women and are opposed to sexual violence. Preliminary data analyses suggest male role models, turning points, and social support as key in shaping positive masculinities. Drawing from this information, I propose a model that college campuses can draw from to promote empathetic masculinities.

<sup>1.</sup> Wies, J. "Title IX and the State of Campus Sexual Violence in the United States: Power, Policy, and Local Bodies." *Human Organization* 74, no. 3 (2015): 276–86.

Canan, S., Jozkowski, K., and Crawford, B. "Sexual Assault Supportive Attitudes: Rape Myth Acceptance and Token Resistance in Greek and Non-Greek College Students From Two University Samples in the United States." *Journal of Interpersonal Violence* 33, no. 22 (2018): 3502–30. https://doi.org/10.1177/0886260516636064.

<sup>3.</sup> Rich, M., Utley, A., Janke, K., and Moldoveanu, M. "'I'd Rather Be Doing Something Else:' Male Resistance to Rape Prevention Programs." *Journal of Men's Studies* 18, no. 3 (2010): 268–88.

Holland, K., and Cortina, L. "It Happens to Girls All the Time': Examining Sexual Assault Survivors' Reasons for Not Using Campus Supports." *American Journal of Community Psychology* 59, no. 1/2 (2017): 50–64.

<sup>5.</sup> Wade, L. American Hookup. 1st ed. W.W. Norton and Company, 2017.

<sup>6.</sup> Sanday, P. Fraternity Gang Rape. New York University Press, 2007.

## F\*\*K MEN: DEBUNKING MYTHS ABOUT FEMINISM, WITH FOCUS ON LABOR

### Tatianna Suriel

Women's Studies teaches students to broaden their global perspectives and think beyond Western ethnocentric views. Within this major, multiple Feminist perspectives and lenses dissect human rights issues in order to disrupt white Western male-dominated narratives. We are constantly analyzing the intersectionality of bodies, identities, and acknowledging the overlap in multiple perspectives. With these important perspectives always being at the forefront of our learning, it makes us more aware of the consistent gaps in the literature, data, epistemology, and discourse. Women's Studies, as an interdisciplinary course, allows us to infiltrate multiple spheres including but not limited to the sciences, health, politics, psychology, environmentalism, economics, and more. Who is Women's Studies for? Women's Studies is for everyone! Some of the many things that Women's Studies encourage include activism, global citizenship, empathy, strength, openmindedness, curiosity, and the ability to engage in difficult conversations.

I will be discussing how women are disproportionately affected by the second shift of a gendered division of labor, especially across different cultures and countries. While we have continuously fought for equal opportunities and rights in society, we must consider the long strides we must take in order to be inclusive of all local and global inequalities.

# THE FUTURE OF DENTISTRY: CRITIQUING CONSOLIDATION AND TECHNOLOGY IN THE INDUSTRY

### Sarah Sveen

This presentation explores recent trends occurring in dentistry concerning these intersections. Critical perspectives on entrepreneurship are leveraged to understand the positive and negative impacts of these shifts in dentistry. Trends in dentisry include: consolidation of dental practices, attractive to graduate dental students unsure of how to run dental businesses and showcasing movements away from family dental businesses; a move toward decreasing the time and payment of procedures, such as with the cone-beam computed tomography and three-dimensional printing technology for dental crowns; nanotechnology offering potential changes regarding several different types of procedures that could be performed on patients; the move, as a profession, toward an upward trend in geriatric and pediatric patients, but a decrease in adult patients; and finally, more women are joining dentistry.

These overlapping aspects of technology, profession, and industry bring many important questions to the surface. How are patients and dentists affected? How will specialization shift and enterprise structures change (i.e., family practice vs. consolidated practice)? Does the new consolidation of dental businesses allow for entrepreneurial aspects to be applied to the business, or are dentists losing the opportunity to be entrepreneurs? This presentation aims to address some of these questions and pinpoint new, important questions to be asked by and to current and aspiring dentists, as well as patients.

### PETS GONE ROGUE

#### Whit Swanson

The word "pet" in the English language has fluctuated in meaning throughout its history. "Pet" once described spoiled children but over time referred primarily to cats and dogs. Animals have long been used as human resources, providing food, raw materials, and muscle power. Pets, however, are distinguished from other animals as they are allowed in the house, have proper names, and are not consumed. In recent decades they have become our best friends, companions, caretakers, and therapists, fulfilling an intimate role as child, spouse, or friend. This newly appointed position prompted an expansion of pet merchandise and services, such as life preservers, helmets, human-canine summer camps, birthday parties, surveillance cameras, passports, and health insurance, to name a few. This growing intimacy raises the stakes. When a pet's health becomes compromised, owners are often willing to spend a fortune to ensure the care of both physical and mental health. When a pets' health becomes critical, end of life discussions present euthanasia in euphemisms. Owner's express grief and mourning couched in terms such as "mercy" and "passing away," and closely mirror the language used for mourning children, spouses, and friends.

My anthropological research examines how the growing intimacy between humans and animals becomes evident through memorialization and other death rituals. Through internships and interviews with medical researchers, veterinarians, and animal activists, I have determined that pets and humans are closer than ever before. The deep feeling of grief experienced during pet death is disruptive; moreover, the surge in exotic and formerly wild species, as pets signifies a shifting boundary between humans and animals. The expansive and comprehensive nature of the pet category is destabilizing the invisible fences and challenging older boundaries of speciesism.

### CROOKS IN VIETNAM: NIXON'S RHETORIC

### Mouhamed Thiam

In 1968, Richard Nixon told a lie: in his campaign for president he claimed he had a plan to end the war in Vietnam. The goal of my project is to show the disparity between Nixon's rhetoric in his speeches vs. his memorandums on Vietnam in the State Department archives. I will compare two of Nixon's speeches, "The Silent Majority" and "Appraisals from Manila," which both demonstrate Nixon's claims of promoting peace in Vietnam, with his own expressions of nonnegotiablility in his contemporaneous "Telephone Conversation Between President Nixon and the President's Assistant for National Security Affairs (Kissinger)" memorandum.

Rhetorical analysis and close reading reveal large discrepancies between Nixon's public and internal expression; while proclaiming a need for peace overseas, Nixon covertly enacted policy that prolonged the Vietnam War and suggested a forced military presence in Vietnam. Nixon's rhetoric versus his hidden curriculum indicates inconsistencies in how he promoted peace overseas.

As Nixon used the war to manipulate the outcome of the election, Americans developed a frustration with the Vietnam war that resulted in numerous demonstrations opposing the Vietnam war, using forms of protest that were categorized as "unlawful" and "unamerican." I will also examine how these discrepancies impacted America's credibility in the eyes of Asian nations.

## GENEVA REUSE PROJECT: A VIABLE ENTREPRENEURIAL OPPORTUNITY?

### Carter Weitekamp

The construction and demolition industry (C&D) in the U.S. currently faces substantial waste issues. Research from the Environmental Protection Agency shows that in a single year, more than half a billion tons of C&D waste flows directly into landfills all over the U.S. This presentation aims to determine how C&D waste can be converted into a profitable enterprise through the implementation of materials reuse.

C&D waste is inextricably linked to trash and mass consumption of objects, which has changed greatly since the Great Depression. I explore the different environmental footprints (e.g., carbon, water, and energy) of specific C&D materials and their impacts on local communities. Reviewing different reuse businesses models in Pittsburgh, Ithaca, and Rochester, further research is conducted to understand the viability of a reuse center in the City of Geneva. I also draw on conversations with Geneva community members as well as local realtors, developers, contractors, non-profit organizations, and business professionals. These conversations showcase potential viability for a reuse center in the Geneva area, given a successful marketing campaign to ensure consistent flow of material. The results indicate that construction materials can be resold to reduce the flow of material to landfills and limit the use of raw materials and a strong community reputation.

Further research can identify other factors that could improve this material turnover rate by looking into more densely populated areas, especially those with high vacancy rates. Thus, this presentation highlights local information available regarding the viability for reuse in Geneva.

## PORTABLE HYDROELECTRIC: GENERATING ENERGY IN REMOTE LOCATIONS

### Jasper White

Remote sensing of streams provides scientists with important data about the surrounding watershed that can lead to informed hypotheses about how and why the ecosystem is changing; however, the sensors used to monitor streams require off-the-grid power sources in order to reliably run continuously. Common off-the-grid power sources include solar and battery technology, but each has their unique shortcomings: batteries are non-renewable and solar sources require ample sunlight exposure. Where solar and battery sources fail, hydroelectric generators that convert the kinetic energy of moving water to usable electric energy may provide an effective alternative.

I designed and built a portable hydroelectric generator prototype. This presentation focuses on the power electronics design involved in manipulating the electrical signal produced by the generator into electrical signals that power the remote sensors monitoring the streams.

## WITH LIBERTY AND BENEFITS FOR ALL: A LOOK AT THE POSITIVE IMPACT WELFARE HAS ON IMMIGRANTS AND THE UNITED STATES

## Olivia Wojnovich

Immigrants deserve access to welfare but, in the new era of restrictionism that started in 1996, low income immigrant households from Latin American countries living in the United States experienced a lack of access to and fear of trying to access public health benefits. My presentation will hone in on the topic of immigrant women and children's access to healthcare, through the lenses of the administrations of President George W. Bush and President Barack Obama.

With more people than ever using federal welfare, this presentation hopes to show that the collective benefit to all. At present, lawful Permanent Residents (LPR), well known as green card holders, can earn public benefits, but not until they have been legal residents for five years, leaving a gap in which basic needs may not be covered; undocumented immigrants, who contribute over 11 billion dollars to state and local economies, do not have any type of access to federal or state benefits that their labor helps fund. Through the use of statistics, census data and success stories, I will demonstrate the gains that every human makes when welfare programs are in place for immigrants.

## F\*\*K MEN: DEBUNKING MYTHS ABOUT FEMINISM, WITH FOCUS ON THE ENVIRONMENT AND PUBLIC HEALTH

### Kristina Worts

Women's Studies teaches students to broaden their global perspectives and think beyond Western ethnocentric views. Within this major, multiple Feminist perspectives and lenses dissect human rights issues in order to disrupt white Western male-dominated narratives. We are constantly analyzing the intersectionality of bodies, identities, and acknowledging the overlap in multiple perspectives. With these important perspectives always being at the forefront of our learning, it makes us more aware of the consistent gaps in the literature, data, epistemology, and discourse. Women's Studies, as an interdisciplinary course, allows us to infiltrate multiple spheres including but not limited to the sciences, health, politics, psychology, environmentalism, economics, and more. Who is Women's Studies for? Women's Studies is for everyone! Some of the many things that Women's Studies encourage include activism, global citizenship, empathy, strength

I will be discussing how a degree in Women's Studies highlights the broader environmental and public health issues we are grappling with daily. Through the topics of ecofeminism and the politics of health, women play a critical role in carrying out the change in these sectors, since they are affected the most by these inequities.