CASCON 2021

Session 1

Life Along the Shore

Jennifer H. Mattei (Biology) – "Coastal Ecology and the Fantastic Five: Five Projects, Five Undergraduates and Five Professors!"

Since 2009, faculty from the Department of Biology, Sacred Heart University have played an active role in Stratford Point's restoration efforts including writing, applying for, and managing local, State and Federal permits and numerous grants. After remediation of the four-acre intertidal zone, our team has experimented with re-establishing the coastal food web. The foundation species of this ecosystem include saltmarsh grasses and oysters. These species add function and structure to the habitat that allow biodiversity in the area to recover. In the summer of 2021, we will investigate: 1) what are the biotic and abiotic impacts of marsh grass (Spartina alterniflora) on the surrounding area, 2) if the growing oyster population is still growing and if it has allowed for additional species to become established, 3) does a declining and once dominant species, the horseshoe crab, spawn in the newly established habitat and is nesting success comparable to local established habitats, 4) a comparison of benthic biodiversity in an eroding marsh, newly restored marsh and nearby established marsh, 5) the restoration of the high marsh grass (Spartina patens) what has worked and what methods have not, could added plant diversity be the key? Time will tell.

Lisa Piastuch (Biology) – "Recruiting shellfish and macroalgae on a hybrid living shoreline at Stratford Point, Connecticut"

Oyster beds were once part of the biologically diverse coastal habitat at Stratford Point, Connecticut. After a large-scale remediation project removed approximately 300 tons of lead and the failure of subsequent marsh restoration initiatives, 46 meters of artificial reef was installed in 2014 using 64 reef balls as a pilot study in efforts to restore foundation species and curb erosion. An additional 225 meters of reef was installed in 2016 adjacent to the pilot reef. The artificial reef is located at the mouth of the Housatonic River, where pelagic larval stages of eastern oyster Crassostrea virginica. We hypothesized that the reef balls would be suitable substrate for the settlement of C.virginica and macroalgae, which are common in the area. To determine the distribution patterns of oysters and macroalgae on the pilot reef, we surveyed invertebrates and macroalgae monthly from June to October 2015 and again in summer 2016. Beginning in 2017, oysters and macroalgae were surveyed annually on the expanded reef. Adult oysters were primarily found in the open portals and the lower portion of the reef balls. The dominant macroalgae species changed throughout the

summer and fall, with Ulva intestinalis prevailing early on, only to disappear in the middle of July and be replaced by Fucus spp. C. virginica survival on the expanded reef was highest lower in the intertidal zone, and Fucus spp. dominated all of the reef balls in the annual surveys. Our results show that reef balls can successfully establish foundation species like oysters and provide substrate for macroalgae as part of a hybrid living shoreline.

Jo-Marie Kasinak (Biology) – "Stratford Point Living Shoreline: assessing carbon sequestration."

Salt marshes provide many valuable ecosystem services, yet are disappearing at alarming rates due to anthropogenic climate change and global sea level rise. Recent research stresses the importance of preserving and restoring these coastal systems to increase shoreline resilience and storm protection. Coastal habitats sequester nutrients and carbon and serve as nurseries for economically important species. However, all salt marshes do not provide ecosystem services at the same levels. Carbon sequestration, a critical ecosystem services, was examined in recently restored marshes in Stratford, CT (2014, 2017) and naturally established marshes in Milford, CT. It was hypothesized that while newly established marshes would show lower levels of ecosystem services when compared to natural marshes, the level of ecosystem services would approach those of natural marshes within 15 years of restoration. This lag reflects the time it takes for the marsh to become established and build a stable peat layer. Results indicate that restored marshes had lower carbon sequestration rates in 2018. The restored sites showed a greater range of carbon sequestration due to dynamic sediment transport. Ongoing monitoring will be used to assess the timeframe to parity, with comparisons occurring in 2019-2022.

LaTina Steele (Biology) – "Marsh madness: restored vs. natural marsh grasses"

Salt marshes are critical coastal ecosystems that provide habitat for economically important species and protect shorelines from erosion and storm surge. Human activities threaten marshes worldwide, causing accelerated shoreline erosion and harming some fisheries. For the past six years, I have been working with other faculty in the Biology department to restore a fringing marsh at Stratford Point, Connecticut. We began with a small pilot project in 2014-2015 and expanded the restored marsh in 2017. In the time since we planted these marshes, I have been working with undergraduates to compare the performance of the restored marsh grass populations to naturally occurring marsh grasses at Stratford Point and at nearby Milford Point. My students and I have examined attributes of the plants themselves (e.g., plant density, height, chemical defense production in the leaves and flowers), as well as seaweeds and invertebrates that inhabit the marsh. Not only am I interesting in documenting structural differences between the restored and natural marsh grass populations, but I also examine dynamic processes like predation on invasive crabs and snail feeding activity.

This work provides insight into differences between restored and natural marshes and highlights the implications of marsh restoration for other aspects of coastal management (e.g., controlling invasive species). When students participate in this work, they get their hands dirty collecting ecological data in the field, but they also explore the connection between field-based biological data and lab-based measurements that utilize knowledge and skills from other disciplines like chemistry and physics.

Wondering about Wellness

Jessica Samuolis (Psychology) – "Faculty-Student Collaborations to Investigate College Students' Mental and Physical Health during the COVID-19 Pandemic Campus Red Alert Status"

This presentation will review two faculty-student projects to investigate college students' mental and physical health during the COVID-19 pandemic campus red alert status. The first project involved the development, programming, and implementation of a campus-wide survey assessing mental and physical health. The second project involved the analysis of the data collected and examined the extent to which the psychological impact of the pandemic was associated with mental and physical health during the red alert time period. Recommendations for assessing and promoting mental and physical health among college students during public health crises involving highly restrictive guidelines will be discussed.

Suzanne Marmo & Jennifer Wilson (School of Social Work) – "The trauma informed classroom in higher education"

Trauma informed college classrooms seek to promote supportive and inclusive learning spaces through the establishment of safe learning environments. For many college students, the COVID-19 pandemic, as well as increased awareness of racial injustice, has intensified trauma exposure and response including actual or perceived risk of death or injury, lack of safety and community trauma. Students from lower socioeconomic backgrounds and communities of color are at higher risk for experiencing observable stress and traumatic response, such as work avoidance and decreased self-efficacy, while also being less likely to be referred to, or feel comfortable asking, for support services on college campuses.

The integration of trauma informed teaching practice has become an important element of K-12 educator preparation, but less attention has been given to this need in higher education classrooms. While university mental health services are responsible for treatment of mental health problems that can develop due to trauma exposure, trauma informed college faculty can easily integrate evidence-based teaching practices to create safer learning environments, decrease unnecessary stressors and limit opportunities for potential retraumatization. Little research has attempted to examine

the knowledge base of college faculty in trauma informed teaching practice and if heightened awareness can lead to more successful outcomes in college classrooms.

Professors Jennifer Wilson and Suzanne Marmo will present on the emerging research area of in person and virtual trauma informed classrooms in undergraduate and graduate education, along with plans for future research and development of faculty training programming in trauma informed higher education classrooms.

Victoria A Osborne, PhD., MSW (School of Social Work) – "Assessing Readiness to Integrate Virtual Reality to Practice Clinical Skills: results from a faculty and a student survey"

Although students in health professions, nursing, and social work learn clinical skills in the classroom, they don't receive much hands-on practice. Experiential learning can include simulations with "standardized patients (SPs)": actors who portray the role of patient, to make the encounters more real. While the use of SPs is highly effective, it can be resource-prohibitive. Also, online students cannot take part in these simulations.

Virtual reality (VR) platforms are beginning to be used for clinical skills training, specifically around medical or surgical procedures. There is paucity of research examining the use of VR to teach students to take a patient history, assess mental health or educate patients.

Particularly relevant, perhaps, in light of the pandemic, VR could be used when learning onground is not feasible.

To this end, surveys were developed to assess the readiness to learn and utilize VR for the purposes of practicing clinical skills. Faculty and students from the SSW, CON and CHP were recruited to participate.

Survey data collection is ongoing; preliminary data shows support for developing a VR platform for clinical skills training. 80.6% of students and 69.3% of faculty are willing to try VR. Over 80% of students and of faculty are open to using VR in the curriculum. Lastly, 55.6% of students and 62.9% of faculty believe that integrating VR in clinical coursework would make the program more appealing (students) or add value (faculty). Over 70% of students and faculty strongly agree that adding VR can improve clinical skills.

The Suffering of Jesus in Theology, Philosophy, & Art

Chelsea King (Catholic Studies) – "The Suffering of Jesus in Theology, Philosophy, & Art"

Christianity has long emphasized the importance of suffering and sacrifice. But before his arrest and eventual crucifixion, Jesus prays, "My Father, if it is possible, let this cup pass from me; yet not what I want but what you want." In Luke's Gospel, Jesus sweat is described as drops of blood, indicating the profound agony that he faced at the prospect of what might come next. But the second part of the prayer raises a troubling question: Did God want Jesus to suffer and die on the Cross? If so, why? In this paper I wrestle with this tension between Jesus' desire not to suffer and God's apparent will for his suffering and death.

Daniel Rober (Catholic Studies) – "Whose Punching Bag? Andy Warhol and Jean-Michel Basquiat on the Suffering of Christ"

Andy Warhol and Jean-Michel Basquiat came from different generations and background, but both included important and perhaps surprising Catholic themes in their works. This is evident especially in their late-career collaborations which brought their religious interests to bear in a special way. In no work is this more evident than in Ten Punching Bags, an extraordinary artwork encompassing themes of religion, suffering, and object art. This presentation will examine how this unusual work, which some might accuse of irreverence, portrays Christ's suffering in a unique way that coheres with both artists' broader ouevres and also offers theological insight.

June-Ann Greeley (Languages & Literatures) – Panel: "The Suffering of Jesus in Theology, Philosophy and Art" My paper: "The Optics of Grief: Art and the Garden of Gethsemane Scene"

As a member of this panel that will focus on themes related to the event of Jesus' suffering in the Garden of Gethsemane just prior to his arrest, I will explore artistic renderings of the Garden scene from different historical eras in order to address the shifting understanding of key themes in the narrative, particularly with reference to what the scene might suggest about the human experience of suffering. The paper will also consider the role art plays/ can play in conversations about vulnerability and "other-abledness" as well as about the centrality of the "broken God" in Christian spirituality.

Ono Ekeh (Theology/Religious Studies) – "The Suffering of Jesus in Theology, Philosophy, & Art."

The Gospel scene of Jesus' agony in the garden has long been an uncomfortable episode for theologians. The dramatic scene highlights Jesus' humanity in what could

be considered an unflattering way and even suggests that Jesus (at least temporarily) willed an outcome other than the will of God. This presentation will speculate on why Jesus was in such anguish in the Garden of Gethsemane and will offer proposals for expanding the range of interpretation of this unique episode in the life of Jesus.

New England and the Civil War

Kelly Marino, Jennifer McLaughlin, and David Thomson (History) – "New England and the Civil War"

In May of 1861, the Hartford Soldiers' Aid Society (HSAS) organized to support state Civil War regiments and their families as well as ship items to the United States Sanitary and Christian Commissions. It received liberal donations of clothing, food, money, materials, and medical supplies. During its first two years, the Society raised over twenty thousand dollars in cash and over sixty thousand in goods. Although the Sanitary Commission to which the HSAS was closely affiliated was headed by men, much of the grassroots leadership was in the hands of women. This panel explores Northern involvement in the American Civil War on both the home front and military front. Panelists consider different aspects such as gender and grassroots activism to aid soldiers, other state and local participation, and economics and financing the conflict. Since little fighting occurred in Northern particularly New England states, their involvement in the crisis is too often underplayed.

Session 2

Diverse Identities: Aging, Canines & Creativity and Whiteness

Jonix Owino (Psychology) – "Aging out of place: Factors Related to Quality of Life among Older Refugees in the US"

Refugees flee their home countries, migrating to countries such as the US for safety. The psychological distress they experience may compromise their adaptation and well-being. However, little is known about quality of life among aging refugees who migrate to the US as adults, and in particular whether quality of life varies by sociodemographic factors such as age, sex, country of origin, and length of residence. Moreover, limited research exists on the association between social connectedness and quality of life among aging refugees. The current study explores sociodemographic and social connection factors associated with quality of life among aging refugees (aged 50+). Refugees from Bhutan, Burundi, and Somalia were recruited from to complete an in-depth survey assessing social factors and well-being. Hierarchical regression analyses

showed that females, older individuals, and African refugees reported lower quality of life. There was no significant association between length of residence and quality of life. When controlling for sociodemographic factors, social integration was positively, and loneliness was negatively associated with quality of life. There was also a significant interaction between loneliness and sex in predicting quality of life, indicating that greater loneliness was associated with reduced quality of life for women but not men. Study findings will be discussed in light of cultural variations within refugee groups and with the goal of highlighting ways to best support aging refugees' well-being in the host communities.

Michael T. Vale (Psychology) – "Stigma across the Lifespan: Balancing Risk and Resilience"

This presentation will spotlight two programs of research that aim to identify the consequences of stigma on health and well-being in older adulthood and explore the resilience factors that protect against such stigmas. First, this presentation will overview research examining age differences in minority stress in sexual minorities (e.g., LGBTQ+ adults). Minority stress refers to unique stressors and stigmas that are specific to minority groups, such as disclosing one's sexuality and being discriminated against (Meyer, 2003). Specifically, this presentation will feature the latest results from a project that utilized day-to-day measurements to capture experiences of minority stress in a lifespan sample of sexual minorities (aged 18-79). Additionally, this presentation will provide a brief overview of research examining benevolent ageism, or the seemingly positive stigma, directed towards older adults (Vale et al., 2019) from multiple perspectives, including younger adult attitudes, older adult experiences, and the context of COVID-19. The future directions across both lines of research will be discussed.

Dawn Melzer and Deirdre Yeater (Psychology) – "Comparative Psychology: Creativity and Canine Cognition"

Comparative Psychology provides a foundation for performing cross-species comparisons (human and animal), where we can assess the consistency of various cognitive abilities and potentially unravel the influence of environmental pressures on these abilities. Our presentation will give a brief overview of the projects currently being conducted in the Comparative Psychology Lab on marine mammal, canine and children's creativity and our new research in the Canine Cognition Lab focusing on object permanence in dogs and the impact of service learning animals on campus.

Brent Little (Catholic Studies) – ""The Displaced Person" and the Question of Catholic "Whiteness""

Scholars have long discussed how the title character of O'Connor's short-story, "The Displaced Person," disrupts the racial and economic status quo of the southern, segregated farm that forms the setting of the narrative. Many readers have focused on the xenophobia and religious bigotry provoked by the Displaced Person's Polish,

Catholic identity. Other readers have taken a somewhat less-traveled hermeneutical approach, one that has explored the Displaced Person's threat to the identity of southern whiteness. In other words, the Displaced Person not only threatens the racial segregation and economic order of Mrs. McIntyre's farm, he also undermines conventional assumptions about white identity due to his status as a foreigner. This presentation extends this second, scholarly discussion and argues that while O'Connor's story continues to remain relevant for contemporary Americans to reflect critically on "whiteness," the story possesses an inherent limitation that could be extended to O'Connor's fiction in general: while provocative, O'Connor's narrative never turns the same critical lens upon white, Catholic identity as it does upon white, Protestant identity. Catholicism is depicted as a needed subversion to the ills of American whiteness. Thus, while it continues to speak powerfully to the current American cultural situation, the story should also be read in dialogue with thinkers who challenge contemporary Catholic consciousness around issues of race so as to prevent a false Catholic-oriented interpretation that would regard the sin of racism as a predominantly Protestant one.

Re-Presenting Representations in Theatre and Performance Studies

Charles Gillespie (Catholic Studies), Emily Bryan (Languages and Literatures) & Rachel Bauer (Theatre and Media Arts) – "Re-Presenting Representations in Theatre and Performance Studies"

What can plays, musicals, and performance art help us to discover anew? Even while delighting and entertaining us, theatre re-presents our ideas about science, identity, ecology, and public health. Join members of the CAS faculty who research the wide-ranging field of Theatre and Performance Studies to learn how dramatic theory and theatrical practice work together across disciplines. This panel will introduce some of the key terms and techniques that help us study theatrical representations of disease and illness, design and climate crisis, and embodied knowledge on stage and in everyday life.

Irish Writers and the Environment

Abby Bender (Languages & Literatures) – "Women's Work and the Natural World in Doireann Ní Ghríofa's A Ghost in the Throat"

Doireann Ní Ghríofa's 2020 memoir/autofiction/essay A Ghost in the Throat weaves the author's pregnancies and motherhood with the 18th -century poet Eibhlín Dubh Ní Chonaill, Caoineadh Airt Uí Laoighaire. Ní Ghríofa's rereading and new translation are entwined with personal narrative of women's labor: work of birthing, feeding, caring for children—bound up with natural world.

Richard Magee (Languages & Literatures) – "You meet yourself in the still point': Kerri ní Dochartaigh's Liminal Language"

Kerri ní Dochartaigh grew up in Derry. Its double name—Derry/Londonderry—symbolizes her memoir, Thin Places. Derry used by Catholics and Nationalists; Londonderry favored by Protestants and Loyalists. Ní Dochartaigh embodies split as the child of a Protestant and Catholic. The natural world is a foil; landscape on one side, the need for two names on the other. She slips through "thin places" from human-imposed artificial borders.

John Roney (History) – "Listening to Nature in Ireland and Finding the Human Story"

In Ireland naming places is connected to nature. In Thirty-Two Words for Field: Lost words of the Irish landscape, Manchán Magan shows Irish reflects a 'place-based culture' that "…not only describes things but also summons them into being, … communicates … to the psyche and the subconscious." Robert McFarlane, Landmarks, seeks to listen to the acoustics of nature by walking the hill *sides* or quietly sitting by lakes.

June-Ann Greeley (Languages & Literatures) – "The (Un)bearable Liminality of Being: Spirituality and Nature in the Poetry of Eiléan Ní Chuilleanáin"

Born in Cork, Ireland, Eiléan Ní Chuilleanáin has been celebrated in Ireland as one of the most important poets of the late 20th and early 21st centuries: her several books of poetry have been awarded prestigious literary prizes and she was appointed the Ireland Professor of Poetry from 2016 to 2019. Eiléan's poems are quiet meditations on what she identifies as the rich mystery at the core of (all) existence that transforms the physical and the material into "liminal" spaces, thresholds to an abiding, metaphysical reality. One of the most common motifs in her poetry is the image of 'crossing' or 'crossing over' or "bridging' from one physical place to another (for example, her notable poem "Crossing the Loire") and, in the poetic expositions of those journeys of passage, Eiléan Ní Chuilleanáin explores profound incidents of transition within an individual from a condition of unknowing to a more profound, sometimes inexplicable, understanding of the spiritual dimension of human existence.

Science Sampler

Barbara Pierce (Biology) - "Persnickety snackers: why migrating birds are so choosy about their diet"

It is common knowledge that high performance human athletes eat specific foods to increase performance capacity. Unlike humans, birds are required to complete their energy-intense long-distance flights over extended periods of time. In fact, some migratory flights have been equated to such athletic feats in humans as running 260 consecutive marathons without stopping! This means that birds must create energy

reserves large enough to fuel such physiological feats and must likely be even more careful than humans when it comes to choosing their diet. Unlike mammals who use primarily carbohydrates to fuel their exercise, birds use primarily fat. My research has shown that migratory songbirds choose foods with specific fatty acids which can provide them with an energetic advantage over birds which choose differently. Since my research uses two of the world's avian wind tunnels, my undergraduate research students have had the opportunity to perform research semesters abroad at international research facilities. My students have discovered that diet influences the composition of several body organs including muscle, brain, and heart. Most recently, my students and I are examining the impact of forest cover changes on the overall health of wild birds captured during fall migration in our own SHU backyard. These research experiences allow my students to get their hands dirty in the natural world, learn various laboratory techniques, and ensure they understand the connection between the changing natural environment in which birds live and its impact on the physiological success of the species.

Adrienne Crowell (Psychology) – "Studying the Self in the Lab: Multi-Method Approaches"

Dr. Crowell's Self and Emotions Lab studies how people respond to self-threats and exercise self-control. In this talk, she will provide an overview of previous and ongoing studies that incorporate emotional, physiological, and personality measurements, including studies on self-affirmation theory and a daily diary study on how people maintain daily habits.

Maureen Conard (Psychology) – "Personality and Leadership: The Bright and Dark Side"

What does it take to be a leader? Researchers have been investigating that question for decades, with varying answers. In this study of 280 undergraduates, we included all Big Five personality traits (mostly the "bright side" of personality, along with the "dark side" traits of dominance, aggression, and Machiavellianism. Leader emergence was predicted by two bright side traits (extraversion and openness to experience) and one dark trait (dominance). We'll explore why that is and how these results compare to previous studies.

Todd J. Sullivan (Chemistry) - Integrated screening for beta-lactamases and COVID-19 inhibitors identification of Pharmaceutical Hits and Lead Optimization

Beta-lactamase is an enzyme that is involved in drug resistance. Penicillin like antibiotics constitute 60 % of worldwide antibiotic usage. Bacterial cells use beta lactamase to resist penicillin like antibiotics. Employing computer software programs (two different programs); we have generated a model to produce docking studies data using nine different criteria evaluating the virtual compounds. The virtual compounds that we employ are drug like, similar in chemical moieties to known inhibitors, contain privileged structures and are readily available to purchase to test in vitro. Then using a

pivot table from excel the duplicates of the virtual compounds with the binding criteria is revealed. Docking studies reveal how tight the virtual compounds are binding at the active site along with structural (the pose at the active site), kinetic data we are searching for a pharmacological hit. Recently we discovered a compound Ractopamine that shows micro molar activity in vitro. Currently we have shown that a potential cancer drug (LG100268) has low micro molar activity in vitro. We are also applying our methodology to a protease enzyme that is in COVID-19. This enzyme generates peptides that are vital to the replication of the virus. It is a validated pharmaceutical target with no known human homologues. Eventually after optimizing our pharmaceutical hits with different virtual compounds generated from similarity searches. We will use synthetic organic chemistry, molecular modeling, and structure activity relationships to advance the projects into lead and drug space with acceptable pharmacokinetic properties.

Session 3

The Power of Food

Mary Ignagni (Psychology) – "The Effects of Foodstagrams on Male and Female Athletes' and Non-Athletes' Body Image and Body Esteem"

The goal of the present study is to determine the effects of viewing Foodstagrams on body image and body esteem for both athletes and non-athletes. As there is little empirical evidence on this topic, the current study will be able to provide pioneering research on this topic. The importance of this research is to bring a better awareness to how Foodstagrams, whether healthy or unhealthy, impact the individuals who are viewing them. By better understanding how these images impact individuals, specifically their body image and body esteem, the researchers will be able to bring awareness about their potential positive or negative influences. The sample in this research study consists of both male and female college aged students over the age of 18. In addition, this study is looking to determine the influence of Foodstagrams for both college level athletes and non-athletes with a special interest on college female athletes. The researchers want to determine whether viewing unhealthy Foodstagrams impacts body image or body esteem particularly for college female athletes.

Lisa Smith, Christina Gunther (Psychology, Health Sciences) – "Strategies for Healthy Cooking for College Students"

Cooking for ourselves or others can feel like an overwhelming task, especially when we are busy. Most of us know that we should be eating healthy, but encounter many obstacles to doing so. This presentation will discuss strategies for overcoming some barriers to cooking and eating healthy, such as how to shop for food, store food, and prepare meals so that eating healthier occurs with more frequency and with less stress.

The Ocean Deep and Stormy

Ashley Stoehr (Biology) – "Enzymes, Ecology, Evolution in Large, Active, Open-Ocean Fishes"

Temperature can determine fish movement patterns, as increasing or decreasing temperature will respectively increase or decrease chemical reaction rates and impact performance. Amongst, large, active, open-ocean fishes, swordfish (Xiphias gladius) and bigeye thresher sharks (Alopias superciolosis) make distinct, regular, long-duration foraging dives (>10 hrs) from warm, surface waters (>20°C) to cold waters at depth (~8°C). Studies suggest that these species experience similar water temperatures during dives, but only swordfish elevate red muscle temperatures above water temperature (i.e., RM endothermy).

This study sought determine what intracellular adaptations allow the swimming muscles of swordfish and bigeye thresher sharks to power swimming across broad temperature ranges. The activity of citrate synthase (CS) and lactate dehydrogenase (LDH) from the red, endurant muscle (RM) and white, burst muscle (WM) were measured at different substrate concentrations and temperatures (8°C- 24°C) in both study species and other active, open-ocean fishes. Results suggest little difference in the RM CS activity among species; but the WM activities tended to be greater in species with some capacity for RM endothermy. Temperature and substrate concentrations did not alter comparisons between species.

Although intracellular adaptations CS or LDH pathways do not appear to explain the distinct dive profiles of swordfish and bigeye thresher sharks; there exist some differences in fishes with RM endothermy. The ability to elevate RM enzyme activity with temperature elevation and the intrinsic elevation in WM enzyme activity, might enhance the ability of endothermic fishes to move between or forage within different thermal habitats.

Frank Robinson (Chemistry and Physics) – "Which characteristics of tropical islands control storm severity?"

Currently a major gap exists in the understanding of boundary-layer circulation over islands and their interactions with severe storms. This lack of understanding leads to major errors in climate models that are unable to resolve these circulations. Our study uses a hierarchy of models, informed by satellite observations to bridge this gap in understanding. Since cloud processes remain one of the "Achilles Heels" in global climate modeling, this project may ultimately contribute to improved simulations of future climate by shedding new light on processes governing convective clouds.

Hidden Stories, Drama and Rape

Michelle Loris, Emily Bryan, June Anne Greeley, Nidhi Shrivastava (Catholic Studies and Languages & Literatures) – "The Novels of Gloria Naylor: Hidden Stories, Drama, and Rape"

This panel will show the many interpretions of Gloria Naylor's stories as these stories are dramatized, reveal hidden figures, and speak about rape.