HONORS PROJECT CONFERENCE, 2015-16

MAY 4, 2016

1:00pm - 3:00pm
Honors Project Poster Presentations
Lippitt Hall, 3rd & 4th Floors

9:45am - 2:00pm
Honors Project Oral Presentations
Lippitt Hall, Room 302D
9:45-10:15am Faith Anderson
Gone With the Wind: Soil Moisture Effects on Gaseous Nitrogen Removal from Wastewater

10:30-11:00am Ivy Burns
Prevalence of Sexual Harassment and Assault Among STEM Graduate Students

11:15-11:45am Oscar Soons
Inequality & Financialization

12:00-12:30pm Grace Hanson
Examining the Effectiveness of Coral Restoration Nurseries

12:45-1:15pm Hannah Kaplan
Exploratory Research into the RNA Transcripts Present in Beluga Whale Blow Samples

1:30-2:00pm Kara Guezze
Video Campaign on Behalf of the RISPCA

Lippitt Hall, Room 402
9:45-10:30am Amelia Votta
The Evolution of a Feminist Film-Maker

3:30pm - 4:30pm
Honors Program
Awards and Celebration

Lippitt Hall, Room 402
HONORS PROJECTS

KELSEA ADAMS
Elementary Education, Biology
Sponsor: Bryan Dewsbury (CELS)
Retention Effects of an Experiential Pedagogical Approach

ANNALY ALDANA
Health Studies, Spanish
Sponsor: Jannelle Couret (Biological Sciences)
Mosquito-borne Disease Epidemiology: Occupation, Sex, and Age Impact on Chikungunya Disease Risk in Teculután, Zacapa, Guatemala

CARLY AMURAO
Communicative Disorders
Sponsor: Bethany Milner (Communicative Disorders)
A Case Study: Adult Cochlear Implantation Decision Analysis

FAITH ANDERSON
Biological Sciences, Psychology
Sponsor: Jose Amador (Natural Resources Science)
Gone With the Wind: Soil Moisture Effects on Gaseous Nitrogen Removal from Wastewater

SARA ATASH
Psychology
Sponsor: Mark Robbins (Psychology)
Assessing the Potentiality of a Counselor-In-Residence Program at the University of Rhode Island

FELICIA BAKER
Music: Vocal Performance
Sponsor: Norbert Hedderich (Modern & Classical Languages & Literatures)
Lost in Translation: Comparing German and English

SAVANNA BEBE
Psychology
Sponsor: Jody Lisberger (Gender and Women’s Studies)
Feminism on Campus: Why Students Do and Don’t Identify As Feminists
HONORS PROJECTS

LAUREN BREENE
Plant Sciences
Sponsor: Heather Faubert (Plant Sciences)
Regionalizing Institutional Food at URI

IVY BURNS
Biological Sciences
Sponsor: Holly Dunsworth (Sociology & Anthropology)
Prevalence of Sexual Harassment and Assault Among STEM Graduate Students

GABRIELA CARDONA
Communicative Disorders
Sponsor: Bethany Milner (Communicative Disorders)
The Effect of Grief on Bonding with a Deaf Child

KRISTEN CIAMPI
Pharm.D.
Sponsor: Angela Slitt (Biomedical and Pharmaceutical Sciences)
The Impact of Polybrominated Diphenyl Ether (BDE-47) Administration in Mice and its Implications in Non-alcoholic Fatty Liver Disease

ALEXA CLARK
Medical Lab Science
Sponsor: Jack Wands, MD (The Liver Research Center, Providence)
Is CA-125 the Leading Biomarker in Determining Early-Onset Ovarian Cancer Diagnosis in 2016?

ALLISON COREY
Communicative Disorders
Sponsor: Elizabeth Connors (Communicative Disorders)
Creating Therapy Materials to Improve Communication of Young Children

CIARA DAWSON
Marine Biology
Sponsor: Jacqueline Webb (Marine Biology)
Morphological Diversity of Photophores in Stomiiform Fishes
HONORS PROJECTS

MARISSA DEOLIVEIRA
Political Science
*Sponsor: Kyle Kusz (Kinesiology)*
The Curious Connections between Donald Trump and Tom Brady

SAMANTHA DESTREMPS
Psychology, Human Development and Family Studies
*Sponsor: Cathy Semnoski (Education)*
High-stakes Standardized Testing in Schools

ALEXANDER DIEHL
Business Administration
*Sponsor: Donna Gamache-Griffiths (Business)*
Play Time Theatre

RACHEL FREI
Environmental Science and Management
*Sponsor: Jose Amador (Natural Resources Science)*

TAYLOR FURGALACK
Supply Chain Management
*Sponsor: David Mitchell (Business)*
Learning to Lead: Applying the Situational Leadership® Model

TIFFANY GAGLIARDO
Nursing
*Sponsor: Joan Dugas (Nursing)*
Effective Coping Mechanisms for Nurses following Patient Death

CATHERINE GARCIA
Cell and Molecular Biology, Biological Sciences
*Sponsor: Cheryl Foster (Philosophy; Honors)*
Community Art Education for Children: Aesthetic Theory and Programmatic Practice
HONORS PROJECTS

KARA GUEZZE
Film Media, Communication Studies
Sponsor: Mary Healey Jamel
(Film Media, Communication Studies)
Video Campaign on Behalf of the RISPCA

GRACE HANSON
Marine Biology
Sponsor: Graham Forrester
(Natural Resources Science)
Examining the Effectiveness of Coral Restoration Nurseries

KAYLEIGH HILL
Nutrition and Dietetics
Sponsor: Rosaria Pisa
(Sociology & Anthropology)
Real Food: The Fight for Local Purchasing in Our Dining Halls

NIDA ISLAM
English
Sponsor: Skye Hawkins
(Academic Enhancement Center)
Close Reading Workshop

ANA JEROLAMON
Political Science, Economics, French
Sponsor: Leslie Kealhofer-Kemp
(Modern & Classical Languages & Literatures)
The Effect of Past Institutional Structures on Current Economic Development Levels: The Former French African Colonies

ANDREA JOHNSON
Film Media, English
Sponsor: Rob Cohen (Film Media)
The World of ‘The Cat's Table’: Literature through Production Design Analysis

HANNAH KAPLAN
Animal and Veterinary Sciences
Sponsor: Becky Sartini
(Fisheries, Animal and Veterinary Sciences)
Exploratory Research into the RNA Transcripts present in Beluga Whale Blow Samples
HONORS PROJECTS

EMILEE KILBURN
English
Sponsor: Peter Covino (English)
Metamorphosis through Modern Poetry

ERIN KILLEAVY
Cell and Molecular Biology
Sponsor: Alison Roberts (Biological Sciences)
The Role of Cellulose Synthase-like D Genes in Tip Growth of Physcomitrella Patens

YEON KIM
Pharm.D.
Sponsor: Ben Anderson (Art and Art History)
The Beauty of Outsider Art

JOSEPH KORZEB
Spanish, Political Science
Sponsor: Dean Libutti (Office of the Provost)
Examining the Holistic Make-up of After-School Programs in Rhode Island

ELIZABETH KOWALIK
Pharm.D.
Sponsor: Kristina Ward (Pharmacy Practice)
SSRI Use in Pregnancy and Congenital Heart Defects: A Meta-Analysis of Population-Based Cohort Studies

JULIA LAFEN
Nutrition and Dietetics
Sponsors: Ingrid Lofgren (Nutrition and Food Sciences), Leslie Mahler (Communicative Disorders)
Oral Health Disparities in Individuals with Neurological Disorders

NICHOLAS LEMIEUX
Finance
Sponsor: Michael Ice (Finance)
Forget the Bank: The Future is Peer-to-Peer Lending

DANIELLA MARKOWSKI
Nursing
Sponsor: Sara E Murphy (Thanatology, Honors)
The Complicated Process of Disenfranchised Grief While in College
HONORS PROJECTS

JASMINE MILLER
Biological Sciences
Sponsor: Howard Ginsberg (USGS Patuxent Wildlife Research Center, Coastal Field Station)
Effects of Environmental Factors on the Abundance of Blacklegged Ticks

LIA MOCERI
Biological Sciences
Sponsor: Lynne Derbyshire (Communication Studies, Honors)
Bleeding Keaney Blue: An Analysis of Sports Fandom and URI Basketball

ALISON MORROW
Classical Studies, History
Sponsor: Bridget Buxton (History)
Maritime Paraphernalia: Weights, Bells, and Rings

ALEXA MUNOZ
Nursing
Sponsor: Katherine Paquette (Nursing)
Spring 2016 Advanced Practice Nursing Forum

KARISHMA NAYAK
Animal Science and Technology
Sponsor: Becky L. Sartini (Fisheries, Animal and Veterinary Science)
Epigenetic regulation of gene expression during spermatogenesis

HELEN NGUYEN
Biological Sciences, Psychology
Sponsor: Andrea Paiva (Psychology)
Relationships between Social Media Exposure and Levels of Body Dissatisfaction

ERICA O’CONNELL
Psychology, Art
Sponsor: Gary Richman (Art and Art History)
Illustrations of Child Anxiety

YARUSKA ORDINOLA
Psychology, Anthropology
Sponsor: Marian Goldsmith (Biological Sciences)
Social and Scientific Implications of Genetic Testing in the Digital Age
HONORS PROJECTS

ALYSSA PIETRASZEK
Geology & Geological Oceanography, French
Sponsor: Rod Mather (History)

KEILANI-LYN RUDDERHAM
English, Biology
Sponsor: Sara Murphy (Thanatology; Honors)

SARAH SANGEADO
Psychology
Sponsor: Donna Hughes (Gender and Women's Studies)

KELLY SERNA
Health Studies
Sponsor: Lindsey Anderson (Psychology)

OSCAR SOONS
Economics, Applied Mathematics
Sponsor: Richard McIntyre (Economics)

COLBY SOUSA
Kinesiology
Sponsor: Christie Ward Ritacco (Kinesiology)

LUKE STABILE
Finance
Sponsor: Michael Ice (Finance)

SARAH SULTAN
Communication Studies
Sponsor: Marc Hardge (Africana Studies)

Environmental Impacts on the Success of Bermuda's Inhabitants
Aesthetic Sport Pressures for Men of Suicidal Minds
Impact of Pornography Use in Adolescent Boys: Boys’ Self-Reports on Their Use of Pornography
Norm Misperception among College Students at the University of Rhode Island
Inequality & Financialization
Exercise Is Medicine
Waiting on the Fed
Intercultural Communication within a Multigenerational Afghan Family
HONORS PROJECTS

RACHEL TETI
Elementary Education, Philosophy
Sponsor: Cheryl Foster (Philosophy, Honors)
The Enlightenment of Children as Philosophers: Color Perception, Critical Thinking and Individual Development

NIKKOLE TURGEON
Medical Laboratory Science
Sponsor: Annie De Groot, MD (Immunology and Immunoinformatics)
Paying for Success - Will Pre-insured patients and their Future Insurers Benefit from Pre-insured Healthcare?

ELIZABETH TUTU
Biological Sciences
Sponsor: Lynne Derbyshire (Communication Studies, Honors)
Becoming a Bridge

GABRIELLE TYER
Kinesiology
Sponsor: Christie Ward-Ritacco (Kinesiology)
Implementation of Exercise is Medicine at URI and the Surrounding Community

TAYLOR VETRANO
Nursing
Sponsor: Katheleen Hawes (Nursing)
Cultural Competence in the Neonatal Intensive Care Unit

HANNAH VITELLO
Political Science, Spanish
Sponsor: Skye Leedahl (Human Development and Family Studies)
Predicting Depression in Older Adults: Community vs. Nursing Home

AMELIA VOTTA
Film/Media
Sponsors: Nancy Caronia (Honors); Keith Brown (Film/Media)
Evolution of a Feminist Filmmaker
The quality and nature of delivery of education, especially at the K12 level is a major focus of the education reform movement. As an aspiring teacher, I am interested in developing a personal understanding of the efficacy of different modes of delivery. A large body of studies has examined the differences between experiential learning versus traditional classroom learning as well as effects on student retention. Traditional classroom learning involves literary texts, PowerPoint presentations and teacher-centered learning. In contrast, experiential learning is a hands-on, real world experience that provides students with an environment to expand their critical thinking skills and apply their learned knowledge outside of the classroom. As part of my professional development to become an elementary and middle level teacher, I became extremely interested in investigating different teaching styles and their impact on students' ability to retain lessons. In this study I utilized different teaching methodologies in order to educate children with a marine science lesson in order to compare student retention as well as measuring the effectiveness of my teaching. I used experiential teaching methods by educating children in an interactive tour boat and field site at the Long Island Aquarium and Exhibition Center on Long Island, NY. I also used traditional classroom teaching methods through a PowerPoint lecture, allowing student participation at Mystic Aquarium in Mystic, CT. In order to measure student achievement, students received a uniform pre and post assessment that aligned with the marine science curriculum provided. Variations in school demographics and access were also considered in our interpretation of the effects of the different teaching approaches. This study was conducted with three main goals: 1) to test my ability to teach a marine lesson in order to see if my methodologies were effective, 2) to compare the retention results of students in experiential learning versus classroom learning, and 3) to compare the students' achievement across varying demographics. Contrary to my original hypothesis, I found that experiential learning was equally effective as conventional model-based instruction. However, variations in improvement were seen along income and demographic lines. These results may have implications for resource-limited schools interested in exposing students to the natural sciences.
As no vaccine currently exists for the Chikungunya virus (CHKV), mosquito control and efficient public health campaigns are crucial for the prevention of disease propagation. The purpose of this research project is to identify populations particularly at-risk for acquiring Chikungunya, and to explore the role that cultural attitudes may play in impacting mosquito-borne disease. Due to its geographical structure and climate, Guatemala is an ideal territory for the spread of emerging and re-emerging mosquito-borne diseases. This project was developed by collaborating with the public governmental health clinic in the municipal town of Teculután, in the department of Zacapa in Guatemala. Over 100 epidemiological records of diagnosed CHKV cases and associated etiologic and demographic information were collected from the local public health clinic in Teculután, Guatemala. Data were analyzed using exploratory data visualization, comparing the demographics of suspected and confirmed CHKV cases to the population of Teculután as a whole. The most affected population was housewives, demonstrating the mosquito preference of lingering indoors.

A secondary aim of this research project is to quantify the level of knowledge of local residents about mosquito behavior, mosquito-borne diseases, and the practices taken to prevent mosquito bites. I conducted interviews with the local health center coordinator/doctor and nurses. They shared their experiences in treating, preventing and controlling the current epidemic of mosquito-borne diseases in the town of Teculután.

The results of the interviews demonstrated a lack of awareness of risk and low perception of disease risk by the population, which may ultimately contribute to the current mosquito-borne virus epidemic in the town of Teculután. Based on the preliminary interview results and similar studies in other locations, I developed a knowledge, attitudes, practices (KAP) survey to assess the knowledge and attitudes of Teculután residents about CHKV and Zika viruses, mosquito behavior, breeding habits, mosquito control, as well as the preventative practices used to reduce and prevent mosquito bites. This survey was reviewed by a panel of experts at URI. Once administered, the results can be used to inform a local public education campaign to reduce the burden of mosquito-borne disease.
A cochlear implant is an electronic medical device that replaces the function of the damaged inner ear, allowing the individual access to sound. In recent years, there has been tremendous progress in developing technology in the area of cochlear implants to aid those with severe/profound hearing loss. Specifically, there has been a movement towards bilateral implantation. Each cochlear implant candidate has a unique hearing loss, and must reach required bench marks in order to be considered a viable candidate for a cochlear implant. This process includes: meeting the required level of hearing loss, a required trial with hearing aids that must be concluded as unsuccessful for the candidate, selection for cochlear implant candidacy, device selection, and implantation.

A candidate may experience their hearing loss at any point in their lives; such as from a birth defect or suffering a sudden hearing loss at age 30. For this reason, the time frame in which a candidate progresses through the cochlear implant process can vary greatly. In children, early implantation is pursued in hopes to capitalize on the language acquisition period of the child. For adults, the time frame is often determined by external influences, such as family support, work schedule, impact of hearing loss on life. Cochlear implants within adults are less common, as the language acquisition period is passed.

This case study aimed to examine and tediously review the process a single cochlear implant candidate underwent before implantation; analyzing the participant’s unique case history, educational history, and hearing instrument experience over their lifetime. This data was collected in questionnaire form and interview form, and compiled in chronological order to portray the progression through the participant’s hearing history. Valuable information about the life altering impacts of cochlear implants was collected directly from the participant in hopes to better prepare future candidates and audiologists working with them. As the number of cochlear implants continues to rise, future studies could also be performed to establish a greater understanding of the impact the procedure can have.
Onsite wastewater treatment systems (OWTS), or septic systems, release nitrogen (N), which can be detrimental to aquatic ecosystems. The final step in the treatment of wastewater is dispersal onto a drainfield, where it percolates through the soil. Part of the N is removed from wastewater and released into the atmosphere as N2 and N2O by denitrification, which requires anoxic conditions. Previous studies looking at the effect of soil water-filled pore space (WFPS) on denitrification using clean water with a high level of dissolved O2 (DO) have identified a minimum of 60% WFPS for denitrification to take place. We examined the effect of WFPS on N2O production in drainfield soil using wastewater with low or zero DO. We used replicated (n=3) microcosms with fine or coarse textured soil and adjusted the WFPS using deionized water (DI; DO=8 mg/L), sand-filter effluent (SFE; DO=3 mg/L), or septic tank effluent (STE; DO=0 mg/L). We found that N2O production using STE or DI did not change with WFPS for either of the two soil textures. For SFE we observed N2O production that increased with WFPS, and that N2O was produced even at the lowest WFPS. Additionally, we saw no significant difference in the minimum WFPS resulting in denitrification between the two soil textures. Our results suggest that a high concentration of nitrate in SFE – and its absence in DI and STE – appeared to control the effects of WFPS on N2O production in both soils. Future experiments will examine the effects of nitrate addition to DI and STE on the effects of WFPS on N2O production.
SARA ATASH (Psychology)
Assessing the Potentiality of a Counselor-In-Residence Program at the University of Rhode Island
Sponsor: Mark Robbins (Psychology)

The demand for mental and behavioral health services on college campuses is growing. While current models of health and counseling centers encourage that students seek help, the stigma associated with seeking care for mental and behavioral health issues can often discourage students from doing so. As a result, many are not seeking care when they should or are waiting until their problems have grown severe.

With the hopes of addressing this problem, a new model has come into fruition. The Counselor-In-Residence (CIR) model revolves around placing counseling representatives directly in the residence halls in order to offer more opportunities for possible assessment, treatment and referral for students with mental and behavioral health issues. It is thought that by placing these services directly into the residence halls the CIR model will provide more familiarity with the counselors, reduce barriers to access, and reduce the stigma associated with going to the counseling center or health services for these issues. Evidence from universities that have implemented this model shows that students see visiting a CIR as less intimidating than visiting the counseling center.

The current project represents one of the first important steps in program development. The goal of the current study is twofold; first, to learn about the attitudes and experiences toward mental and behavioral health needs and treatment options for undergraduates at the University of Rhode Island (URI), and two, to present the CIR model to learn about participant attitudes, pros, cons, and barriers toward implementing the CIR model at URI. We will address these issues in three key stakeholder groups: 1) campus leaders (faculty and staff) who have a stake in the health and welfare of undergraduates, 2) undergraduate students who have lived in the residence halls, and 3) graduate students in Psychology and Human Development and Family Studies who might serve as the CIR’s. Results will allow it to become clear if URI is interested in implementing the CIR model, and if so, how it might need to be adapted to be suitable for use at URI specifically.
The world has become more condensed and original source documents have become more easily available on the World Wide Web. Therefore, working with documents and interacting with people from other countries is more common in the modern era than ever before in history. Because of this, many rely on Google translate or another source to translate documents from one language to another. However, as my research has shown by comparing and contrasting English and German, there are many opportunities for a person's meaning to become lost in translation. While my research was primarily conducted to gain a larger understanding of German because my career goal is to work in Germany as an Opera singer, what I have discovered are curious points that could also be applied to the study of other foreign languages.

With the mentorship of Dr. Norbert Hedderich, the chair of the Language department at the University of Rhode Island and a German citizen, I have looked at the two forms of translation. We began the comparison with the easier of the two translation methods (i.e. translating German into English) using “Jannach’s German for Reading Knowledge” by Richard Korb. Then we proceeded to work with a story I am composing as source text to translate from English to German, the more difficult of the two. Though intuition would argue that the first form of translation is more difficult than translating from English into German, it did not take long in my research to discover that this is not the case, and is part of the reason why online digital translators are not reliable.

Just like every other language ever created, the German language was and still is being shaped by the culture of the people. For comparison, German uses what are called declensions in order to affirm the parts of speech, i.e. to describe which word is the subject, direct object, and indirect object. Therefore, one can change some of the word order and the sentence would still have the same meaning. English relies more on word order to dictate the subject. Because of this difference, it is easier, as a native English speaker, to translate from German into English; I can trust that the author wrote the sentences correctly. All I must do, once I know what all the words mean, is switch the order so the text makes sense in English. When I finally began translating my own story, I encountered challenges I did not expect. Though I knew the intent of my sentences, there were many occasions where German did not have a word or a phrase that could describe my intent. German does not have a direct equivalent of the present participle (“-ing”), for example. There are many other minor cultural differences which I encountered unexpectedly, but were concepts that were not even addressed in the German-English dictionaries recommended to me by my mentor and may not have been realized if not for this project.
SAVANNA BEBE (Psychology)
Feminism on Campus: Why Students Do and Don’t Identify As Feminists
Sponsor: Jody Lisberger (Gender and Women's Studies)

Feminism is an often misunderstood term attached with negative connotations which has led to the lack of involvement in the feminist movement from both men and women. This same lack of involvement in the feminist movement happens on college campuses. Students of all genders will often agree with feminist issues, but refuse to identify as a feminist. A literature review was conducted to become informed of previous studies involving why feminism is underrated or unengaged with. Primary research includes interviews with 30 (N=30) students from the University of Rhode Island (URI) to help understand resistance towards feminism. Participants were selected at random to be interviewed on their understanding of feminism, experience with sexist behaviors and their active or inactive role in the feminist movement. Conclusions are made about where the resistance towards feminism may derive from. Based on previous studies and the interviews conducted with URI students, recommendations have been made for URI on what can be done to bring feminist awareness and its concerns for equality among genders to campus.
Regionalizing Institutional Food at URI
Sponsor: Heather Faubert (Plant Sciences)

In recent years a demand for locally sourced food has arisen among students, faculty, and staff at the University of Rhode Island. Having now recognized this demand the hour is upon us to organize and create a movement that is as enlightened as it is revolutionary. Published material regarding regionalizing institutional food, however, is fragmented and difficult to apply to URI. The aim of this project is to collect and analyze the existing research in order to produce a cohesive text written in the context of URI. The paper details the motivation behind this movement in the form of a gathering of scientific and anthropological writing on the subject, regional production statistics, and an evaluation of the URI purchasing process. The data compiled in this paper can be drawn upon by the ever increasing population of students, faculty, and staff at URI with an invested interest in eating regionally produced food at the dining hall and will assist those involved in defining ‘real food’ priorities for the completion of the Real Food Challenge at URI.
IVY BURNS (Biological Sciences)
Prevalence of Sexual Harassment and Assault Among STEM Graduate Students
Sponsor: Holly Dunsworth (Sociology & Anthropology)

There are many barriers for women in STEM careers (science, technology, engineering, and math); one often undiscussed barrier is the prevalence of sexual harassment and assault. In the summer of 2014 the paper “Survey of Academic Field Experiences (SAFE): Trainees Report Harassment and Assault” by Clancy, et. al. shed light on an issue facing many young women and men in science. According to the SAFE survey, a shocking amount of sexual harassment and assault was experienced by the, primarily female, researchers that volunteered to participate in the study, and very few knew how to report an incidence of assault. With this project I replicated part of the SAFE survey in regards to the graduate student “STEM” population at the University of Rhode Island. The data gathered were used to compare with the SAFE results as well as to gain a greater understanding of the climate experienced by URI’s graduate students in STEM. A list of reporting methods and resources was provided for every participant. This survey was distributed through college LISTSERVs; flyers and a Facebook group were also made to help advertise the survey. A presentation of the data was created to inform the URI population about this issue, provide resources, and share some of the stories gathered.
The Effect of Grief on Bonding with a Deaf Child

Sponsor: Bethany Milner (Communicative Disorders)

Since hearing screenings for children happen after birth, there is no way for parents to prepare themselves for having a child with hearing loss and any lifestyle changes that will follow. Many parents have trouble coping with and accepting the news of having a deaf or hard-of-hearing child. This diagnosis also often brings along with it the stress of additional necessary appointments and decisions. The parent's idea of a “perfect and ideal” child is gone. Parents need to grieve the loss of this idea while also tending to their child and giving their child the opportunities and support needed for success. The stress and emotional overload of the diagnosis of hearing loss on newborn hearing screenings can take away from the parent bonding with their child.

Over the course of my honors project, I self-published a children's book to be used by parents as a tool for bonding with their child. Reading to a child has been proven as an excellent way for parents to spend time with their child and to also promote literacy. A strong parent-child relationship is important for the development of the child. The aim of the book is to help promote age-appropriate social and communication behaviors, along with describing typical activities of a child with hearing loss: appointments, use of different forms of communication, and exploration of typical emotions of children with hearing loss and their families. The book also promotes a positive sense of self-esteem and identity and uniqueness in the child. It is essential that parents must accept their child's hearing loss in order to take the next step in helping their child succeed. My hope is that this book will serve the purpose of assisting parents in the journey of raising a child with hearing loss and creating a loving and meaningful relationship.
KRISEN CIAMPI (Pharm.D.)
The Impact of Polybrominated Diphenyl Ether (BDE-47) Administration in Mice and its Implications in Non-alcoholic Fatty Liver Disease

Sponsor: Angela Slitt (Biomedical and Pharmaceutical Sciences)

Non-alcoholic fatty liver disease (NAFLD) is a disease characterized by the accumulation of fat in liver cells that is not due to alcohol consumption. Steatosis results when more than 5-10% of the liver's weight consists of fat. People who are overweight, or who have diabetes or high cholesterol are more likely to develop NAFLD. Over time, NAFLD can advance to cause cirrhosis, and eventually, liver cancer or failure.

Polybrominated diphenyl ethers (PBDEs, BDEs) are brominated flame-retardants, and are found in many plastics and household products such as cars, textiles, televisions, and computers. BDEs are released into the environment and can reach humans by being ingested or inhaled. Accumulation of this environmental pollutant has been discovered and studied in the human liver, with implications on the induction of hepatic steatosis and non-alcoholic fatty liver disease (NAFLD). Previous literature has shown wide distribution of BDEs to the liver, with BDE-47 being the most prominent detected in the liver and tissues, in both mice and humans. The effects of BDE-47 after its administration in mice will be explored to demonstrate the link between its exposure and predicted accumulation in the liver.

Preliminary studies have been conducted to determine the effects of BDE exposure on cultured human hepatocytes (HepG2 cells). The BDE-47-treated HepG2 cells displayed an increase in total lipids and triglycerides, as well as an increase in modulated lipogenic gene expression, suggesting BDE-47 has a potential to induce lipid accumulation in human liver. However, a limitation to HepG2-based studies is the lack of significant extension of the findings in vitro to an in vivo model. We hypothesized that administration of BDE-47 in mice fed either a normal or high fat diet would increase liver fat content. For a period of approximately 8 weeks, adult male mice were fed BDE-47 through their diets (0.0003% in 10% kcal or 45% kcal high fat diets). Food consumption and body weights were collected every 2 to 3 days. Through lipid and triglyceride assays, quantification and analysis of hepatic lipid and triglyceride contents of each mouse were measured as markers of fat accumulation and steatosis. Gene expression will also be tested and measured to determine what genes, in the presence of BDE-47, will stimulate lipogenesis, which can further contribute to fat accumulation. BDE-47 exposure data from this animal study and its implications in hepatic accumulation, steatosis and NAFLD will be presented.
Epithelial ovarian cancer is the most lethal gynecologic malignancy with very ineffective efforts at early detection and therapeutic methodologies to reduce mortality. The origin and pathogenicity of ovarian cancer is vastly unclear, which is why diagnosing the disease early on is difficult. CA-125 is a used as therapeutic tumor marker for ovarian cancer, but it is not diagnostic or specific. The role of CA-125 in the early detection of ovarian cancer is extremely controversial and has not been widely accepted for screening in women who do not show any symptoms. In order to enhance the sensitivity for early disease detection there have been three notable advances taken; current research to diagnose early-onset cancer includes obtaining longitudinal measurements of CA-125 to calculate the probability of ovarian cancer for a patient using the Bayesian algorithm, using tumor marker Human Epididymis Protein (HE4) in combination with CA-125 to screen asymptomatic women in the general population through genomic strategies and the development of algorithms Risk of Malignancy Algorithm (ROMA) and Risk of Malignancy Index (RMI), and assembling panels of biomarkers to create a “composite marker.” This review will examine the current biomarkers for ovarian cancer and their comparison to ongoing research performed to better diagnose early-onset ovarian cancer.
ALLISON COREY (Communicative Disorders)
Creating Therapy Materials to Improve Communication of Young Children
Sponsor: Elizabeth Connors (Communicative Disorders)

Once children start preschool, they should be able to speak in simple sentences and use basic grammar. When they complete preschool and begin kindergarten, they should be using complete, complex sentences, have an extensive vocabulary, and use correct grammar. However, sometimes a child's language doesn't develop as expected resulting in speech delays or impairments. This problem could arise for a multitude of reasons, for example, the child may be on the autism spectrum, he/she may have a specific language delay, or it may be due to an articulation/phonology problem. The role of a Speech Language Pathologist (SLP) in a school system is to help these children improve their language and communication while reducing or eliminating these difficulties.

The SLP conducts therapy sessions during the school day, while the length and frequency of sessions depends on the child's specific needs. In addition to conducting therapy, SLPs in the school system need to construct many of their own therapy materials for their children. When developing these materials it is important to make them interactive, easy, fun and creative. Most times SLPs will make games to keep the child engaged and interactive in the activity.

Last semester I had an internship at the South Kingstown Inclusionary Preschool working with Speech Language Pathologist, Sally Cole-Major. I made six therapy materials across the semester to track the progress of children with speech impairments at the preschool level. I wanted to expand my knowledge of the intervention process and determine if these children improved in their speech and language skills after working with the SLP over this period of time.
Morphological Diversity of Photophores in Stomiiform Fishes

Sponsor: Jacqueline Webb (Marine Biology)

Studies of bioluminescence in deep-sea fishes are challenging due to the environment in which these organisms live. Morphological studies on the photophore distributions and diversity among different genera within a taxonomic order may aid further studies in how and why these species produce light. The variation among photophore type and orientation may indicate different functions for bioluminescence in fishes. There is also variation seen between basal fishes and more derived species that could indicate the evolution of bioluminescence within an order. The aim of this study was to identify the number of photophores, including their distribution, orientation, and density in select groups of stomiiform fishes. Specimens from the Webb lab were observed under a Nikon dissecting scope for fluorescence imaging, and then analyzed. Variation in photophore size was found within many species, and orientation was variable among more derived species, indicating a potential evolutionary trend within the order.
MARISSA DEOLIVEIRA  (Political Science)
The Curious Connections between Donald Trump and Tom Brady
Sponsor: Kyle Kusz (Kinesiology)

This project seeks to understand the curious affinity between Tom Brady and Donald Trump using various media texts as sites to analyze for their racial, gender, and political meanings. Sports popularity and audiences’ likelihood of consuming sports without a critical socio-political lens has long made sport media content an excellent tool to promote political and cultural ideologies valued by the powers that be. Sports figures such as Tom Brady, often get constructed as symbolic embodiments of particular cultural and political ideologies and thus become important figures who, through critical observation, can reveal emergent, residual, and dominant ideologies at a particular moment in history.

With extreme, bombastic rhetoric, Trump has capitalized on, and attempted to exacerbate, a prominent climate of fear, anxiety, and insecurity amongst a sizable portion of socially conservative white Americans by proudly defying the supposed limits of political correctness on public speech, railing against Mexican immigrants, Muslims, women, people with disabilities, among others, and transforming these groups into threats who inhibit “American” public safety and compromise American exceptionalism. Critics of Trump have compared his form of populism to the fascists of the early 20th century and even pointed out some of the ways Trump and his campaign have been connected to white supremacist and Nazi ideas and histories.

Since announcing his run for the presidency, Trump has often cited Brady as a friend and attempted to connect himself with Brady’s presumed popularity, particularly when Trump campaigns in New England. In addition, in the fall, reporters noted a Trump ‘Make American Great Again’ hat in Brady’s locker and asked him whether Brady endorsed Trump for President. While stopping short of such an endorsement Brady did affirm his friendship with Trump and said he thought it would be great if Trump became president. Since Trump’s rhetoric and pronouncements became more blatantly xenophobic, racist, and Islamophobic, reporters have not directly pushed Brady to comment on his relationship with Trump or his feelings about his divisive rhetoric. During the fall of 2015, an Under Armour commercial was produced that featured Tom Brady in red and black colored workout gear and with movements, images, and sounds that can easily be read as evoking Nazi themes found in Leni Reifenstahl’s infamous propaganda film, Triumph of the Will. So then, in this project I attempt to explain how Trump and Brady function as contemporary symbols and embodiments of white masculinity, more similar than different, that reveal how affects and ideas of white supremacy still orient American cultural life in 2016.
High-stakes Standardized Testing in Schools
Sponsor: Cathy Semnoski (Education)

Standardized testing provides an important means to measure students’ performance relative to their peers and grade-level learning objectives. Over the past twenty years or so, the use of results from standardized testing has been expanded as a measure of performance of schools and school districts. Increasingly, these results are also being used for making decisions regarding graduation, grade promotion, teacher’s pay and employment, school funding, and more. The purpose of this paper is to review the literature on high-stakes standardized testing, including the impact of this movement towards accountability, what the test scores are used for, implementation of testing and policies, and how their use affects certain populations. I used various search engines, such as Google Scholar, EBSCOhost, AccessERIC, and JSTOR, to find journal articles, news articles, book chapters, and editorials to understand the intended purpose of using standardized test scores for making these decisions and to understand the effects this practice has on students, teachers, and schools. Predominately, results were found in Educational Horizons, Journal of Law and Education, and Creative Schools: The Grassroots Revolution that's Transforming Education. I found that there can be many threats to the validity of standardized tests in general and, when scores are used in high-stakes situations, the effects can be misleading and detrimental. The intention of implementing accountability and associated policies was to improve the quality of education for all students, but they have actually been shown, in many cases, to do more harm than good. Suggestions put forth in the literature to assess student achievement in a more valid and less harmful way were reviewed and elaborated on.
ALEXANDER DIEHL  (Business Administration)

Play Time Theatre

Sponsor: Donna Gamache-Griffiths (Business)

I grew up participating in the theatrical performing arts since the age of three. Since then, I have been in, on average, at least one production a year for eighteen years. I attribute much of my success to the life lessons I learned growing as up a “theatre kid.” Theatre is a great creative outlet for individuals to grow into their best selves in a diverse atmosphere where each person’s uniqueness is celebrated. From my experience, and the experience of others around me, I have found that theatre helps individuals build self-esteem, confidence, and happiness. Although there are so many advantages to participating in theatre, it is underappreciated by society. This is represented by many school programs cutting the budgets of arts education. In the state of Rhode Island, theatre programs are currently scarce and expensive. For my project, I explored the entrepreneurial effort of starting my own children’s theatre company called “Play Time Theater.”

This project has two main components: theory and application. The theory component is a comprehensive business overview that brings together and explains the various dimension of running a business. These dimensions include marketing, business law, human resources, and entrepreneurship. As a company, Play Time Theater offers creative writing and acting classes that teach the fundamentals of theatre education as well as basic creative writing and story-telling techniques. The company’s goal is to create a safe and inclusive atmosphere where children can grow. The application component is executing my theatre class in the local community. For this project, I taught my acting class at a local YMCA. It is important to apply the theory component of the project to be able to observe how the business actually operates. This project was extremely beneficial as it provided me the opportunity to apply the knowledge learned in my general business administration major in an actual business setting. The experience has furnished me insights I would not have learned in a classroom setting and I feel it has better prepared me for my future.

Sponsor: Jose Amador (Natural Resources Science)

Climate change is the long-term alteration in the Earth's average weather conditions believed to be driven by greenhouse gases (GHG): carbon dioxide (CO2), methane (CH4) and nitrous oxide (N2O). These alterations are expected to cause more extreme weather events, gradually warmer global temperatures and greater amounts of precipitation. Roughly 20% of the Earth's CO2, one-third of CH4 and two-thirds of N2O emissions, originate from soils, and earthworms are known to accelerate GHG. As climate change proceeds, there is expected to be an increase in global temperature of 2-6°C. Temperature is a key factor in determining the rate of soil biological processes that produce and consume GHG. To test how temperature could impact the effects of earthworms on GHG production in soils, we placed earthworms in microcosms with agricultural or forest soil with plant detritus, and incubated the microcosms at 15°C and 20°C for six weeks. We found that CH4 soil consumption decreased at higher temperature and in the presence of earthworms, while CH4 consumption fluctuated negatively and positively in soils without earthworms at both lower and higher temperature. Production of CO2 decreased at higher temperature in the absence of earthworms, but production increased in the presence of earthworms at higher temperature. N2O production increased, lowering the soils ability to absorb N2O, with higher temperature and the presence of earthworms. CH4 production was increased in agriculture soil with some minor decrease in absorption in forest soil. CO2 production fluctuated greatly in agriculture soil. Forest soil CO2 production was mostly stable with little variability. Both soils experienced the same trend in N2O flux where there was a sudden production of gas followed by a slowed leveling out with minor fluctuation between production and consumption. Our results show strong evidence that changes in temperature, due to climate change, can impact the effect of earthworms on GHG production and consumption.
Studies show that effective leaders use the Situational Leadership® Model originally created by Paul Hersey and Kenneth H. Blanchard to successfully manage and lead. This leadership style entails evaluating each situation individually and using a variety of strategies to solve problems. Leadership style should be influenced by follower maturity and participant willingness as well as external factors. Using the Hersey-Blanchard Model, a leader can analyze the follower maturity and readiness to complete the task and use proper techniques to guide their followers.

To complete my project, I organized three groups of students to complete independent study marketing projects for local Rhode Island businesses. The first group worked for Fresh from RI helping the business to promote a new online publication about eating local, healthy, organic food. The second group completed a marketing plan for an online platform called Rhode Island Food Innovators (RIFI) and promoted an event in which local food companies brought their product to a food show, The Rhode Island Table. The third group created a marketing plan for a photographer, Robyn Ivy who was influenced by the D-Strong campaign and takes headshots for famous people as well as children fighting cancer to raise awareness for pediatric cancer.

As a situational leader, I worked with each of these groups individually throughout this process, assessed their position, willingness, abilities, and external factors and determined how to guide each group toward success. There was constant evaluation and reflection to successfully lead and manage these groups to learn exactly what it takes to use the Situational Leadership® Model.
The loss of a loved one affects family and friends but also the nurses and health care providers. At the time of death, nurses are at the bedside providing comfort and words of support. But who is there to support the nurses when the patient dies? The objective of this research project is to identify positive coping mechanisms that nurses can use on a daily basis through an extensive analysis of the literature and individual nurse interviews.

Unfortunately, patient death may be more common for nurses who work on Intensive Care Units (ICU) and Hospice agencies. With the daily requirements of this profession, nurses must cope following sudden and expected patient death. The literature review revealed several coping mechanisms that were effective in assisting nurses to cope with the death of a patient. These coping mechanisms include: establishing a “curtain of protection”; increasing a nurse's experience of providing care to dying patients, recognizing one's attitudes toward death, and increasing education and knowledge related to the dying process. These methods were then supported with interviews conducted with two ICU and two Hospice nurses. Both specialties recognized the importance of fellow nurse support following a patient's death.

With education, on-site training, support from fellow nurses, and resources, nurses have been able to care for dying patients while maintaining their own physical and mental health. It is necessary to prepare and provide ongoing education and support for nurses to utilize positive coping mechanisms following patient death.
Catherine Garcia (Cell and Molecular Biology, Biological Sciences)

Community Art Education for Children: Aesthetic Theory and Programmatic Practice

Sponsor: Cheryl Foster (Philosophy, Honors)

Extensive research suggests a relationship between artistic education and academic success. Students enrolled in art programs tend to score higher than their peers on standardized tests. In addition, training in the arts promotes cognitive development that manifests itself in an increase of IQ, structural changes to the brain, and the enhancement of attention. Creating and discussing art, furthermore, enhances language and social development, enabling young students to express strong emotions and to engage in self-reflection. Discussion around art also allows students to practice public speaking skills while heightening the ability to listen to others, allowing them to reason and think more critically and become better problem solvers.

Students who do not have the opportunity to come into ample contact with the arts, however, miss out on these benefits. For example, the establishment of Common Core has led to an emphasis on STEM education in schools, often diminishing art instruction time in poorer school districts. Socioeconomic barriers further prevent parents in these districts from providing artistic opportunities for their children outside of school. As a result, millions of American elementary school students do not have access to in-school or community arts instruction.

This project attempts to redress the imbalance of exposure to the arts through the development of a short program of art education aimed at underserved children ages 7-8, all of whom attend a Hispanic church in Central Falls, Rhode Island. The program consists of two distinct workshops based on extensive research into the theory and practice of aesthetic education. It seeks the initial development of capacities that will serve the children beyond the duration of the classes.

Workshop one focuses on children as makers of art, highlighting three theoretical concepts or frameworks in the creation of art and life: originality, form and expression. Originality is introduced through plan deviation and creativity in the use of musical variation. Formal choices are taught using a framework of purpose identification and choice of materials, composition and color to achieve that purpose. Expression as a means to communicate frustrating emotions is also accentuated, with children making links between creativity, feeling and form.

Workshop two highlights children as appreciators of art, centering on the interpretation of expressive traits in works of art as well as the identification of formal elements through the use of age-appropriate technical vocabulary. Short films with emotive themes allow the children to practice detection of expressive elements, while the works of children’s book illustrator Eric Carle prepare the children to create and then critique the collective works they have created throughout the duration of the short art program. During the critique, the context of artistic intention will be introduced as a point of comparison with formal and expressive analysis of surface properties in the works.
Video Campaign on Behalf of the RISPCA
Sponsor: Mary Healey Jamiel (Film Media, Communication Studies)

According to the American Society for the Prevention of Cruelty to Animals, it is estimated that 70-80 million dogs and 74-96 million cats are owned in the United States. It is impossible to determine how many stray dogs and cats live in the US, but estimates for cats alone range up to 70 million. There will always be a need for the protection and care of stray, abandoned, and abused animals, as well as management of their population. These companion animals are our best friends and have easily integrated into our families over the years. For over 146 years, The Rhode Island Society for the Prevention of Cruelty to Animals (RISPCA) has been dedicated to speaking for those who cannot speak for themselves. Through legal, educational, legislative and investigative means, the RISPCA is dedicated to the rights and welfare of animal life. They are quite the unique organization as they are the only animal rescue in the state of Rhode Island that is legally able to investigate and prosecute animal cruelty cases. The RISPCA’s humane officer, Joe Warzycha, is a major component of their mission. He embarks on hundreds of cruelty investigations and cases per year that include a variety of different species of animals. He plays a vital role in our society, and more importantly, saves the lives of many companion animals statewide.

Based on what I have learned from production classes and experiences here at URI, I plan to convey the RISPCA’s mission to speak for those who cannot speak for themselves by creating and producing instructional videos. This project has entailed much collaboration, extensive research, a series of interviews, scripting, storyboarding, visual and audio production, and postproduction, to educate local Rhode Islanders and the general public. It is evident that the general public must be fully aware of matters involving the feral cat dilemma, puppy mills, backyard breeding, and especially animal cruelty to protect our companion animals. I believe education is the first step toward change.
GRACE HANSON (Marine Biology)
Examining the Effectiveness of Coral Restoration Nurseries
Sponsor: Graham Forrester (Natural Resources Science)

Numerous ecosystems throughout the world are declining and facing conservation challenges. A variety of techniques have been developed in response with active restoration being one of them. Active restoration usually involves planting vegetation in order to restore the area to its previous state. It has been used in multiple ecosystems including seagrasses, forests, and salt marshes. Coral reefs have experienced severe declines worldwide and active restoration has been utilized to help combat their decline. It is generally done by collecting healthy fragments of coral and either transplanting them directly to a declining reef or placing them on a nursery allowing them time to grow and then transplanting them. The effectiveness of using nurseries in an active restoration has been the subject of debate with some arguing they are unnecessary and others rebutting they decrease mortality of fragments upon transplantation. To date, I know of no quantitative analysis done examining the efficacy of using a nursery in a coral reef active restoration. In this project I conducted a metaanalysis of published coral active restorations to examine the effectiveness of using a nursery compared to directly transplanting coral fragments. Mortality data was extracted from usable papers and the mortality of coral fragments that were directly transplanted to a reef was compared to that of fragments that were placed on a nursery and then transplanted to a reef. By examining the effectiveness of using a nursery, restoration practices will be better informed and improved.
Over the past decade sustainability has become more than just a buzzword at the University of Rhode Island. We have adapted it into the fabric of our school and created a student body that is focused on the health of our future, on promoting environmental, social and economic prosperity that is created and sustained by action on a local level. In other words, we have realized that before we can “Think Big”, we have to first consider the impact our actions have on every level of society. This project focuses on how the action of eating is a direct reflection to the kind of future we wish to create. The aim is to bring “The Real Food Challenge” (RFC) to our campus. This is a campaign that provides support to universities that are looking to create a healthy, fair and green food system. This is accomplished by petitioning to the president of the college to sign “The Real Food Campus Commitment”. The commitment is a documented pledge saying that our campus intends to purchase 20% of our food from regionally sourced producers.

This project aims to unite student run organizations such as; Slow Food, The Agriculture Club, Student Action for Sustainability, The Animal Veterinary Science Club, and many others, in educating and petitioning for the increase of local food at URI. This has been accomplished by hosting events supporting sustainable food systems, administering a survey and collecting signatures for an ever-growing petition. While observing schools like UMass Amherst and The University of Vermont, that have already committed to this campaign, it was found that the RFC has been a success and the pledge for 20% real food is a reasonable request. These schools stressed that the engagement of the student body and the support of faculty is the key to sustaining the RFC on college campuses. This project is meant to connect the students of URI to their food and to encourage them to challenge the University to support a more sustainable food system through the increase of local purchasing and the decrease in support to large-scale industries.
NIDA ISLAM (English)
Close Reading Workshop
Sponsor: Skye Hawkins (Academic Enhancement Center)

Close reading is an in-depth analysis of a text's features (e.g., syntax, punctuation, tone, and vocabulary) to acquire a comprehensive understanding of a piece of literature. At the National Council of Teachers of English Conference in 2001, Robert Scholes, a retired professor of English at Brown University, voiced his concern about the lack of ability in freshly enrolled college students to engage with the intricacy of texts. Jane Gallop, Professor of English at University of Wisconsin—Milwaukee, further argues the interdisciplinary benefits of close reading and attests to the consequences of students' inability to perform intense reading of literature. As a student in the undergraduate department of English at the University of Rhode Island (URI), I notice a similar lack of close reading skills in my peers. My peers struggle to use the text as evidence in their arguments. In addition, I observe that the absence of developed close reading skills limits students' capability to properly interpret and engage with texts in a multidimensional and dynamic manner. Most importantly, I notice the effects of undeveloped close reading skills on students' academic success.

I conducted close reading workshops to address the lack of close reading skills in the URI student body. The workshop collected scientific data to test my observation that the URI student body has insufficient close reading skills, and also collected data on the effectiveness of the workshop itself. The objectives of the workshop were to a) measure current close reading skills in the subjects, b) promote the practice of close reading skills, and c) re-measure the students' close reading abilities after attending the workshop to determine the workshop's effectiveness. 50+ students attended the workshops. In the workshop, students read a piece of poetry together and then completed a survey to test their comprehension of the text. Afterwards, the students closely read the text with the coordinator and then retook the same survey again to measure any differences in students' comprehension of the text before and after the close reading workshop.
The Effect of Past Institutional Structures on Current Economic Development Levels: The Former French African Colonies

Sponsor: Leslie Kealhofer-Kemp  (Modern & Classical Languages & Literatures)

By the early 1960’s, most of the French colonies in Africa had gained independence. Since then, these former colonies have reached economic development levels that vary widely by country. This project will argue that while most of these countries were official colonies for less than one hundred years, the institutions that were created during the colonial period still have an effect on the current economic development of such countries. Since political institutions become intertwined with the culture and structure of a country, they are extremely hard to modify; therefore, we can expect to find the presence of institutions that are similar to those created during colonization. For my honors project, I explore the reasons behind the current differences in economic development levels, focusing on the type of colony that was created. I divide the colonies into three groups: settlements, resource extractions, and agricultural plantations. I argue that these different types of colonial models create institutional structures that get perpetuated and ultimately affect the economic development levels in the long run.
ANDREA JOHNSON (Film Media, English)
The World of ‘The Cat’s Table’: Literature through Production Design Analysis
Sponsor: Rob Cohen (Film Media)

‘The Cat's Table’ by Michael Ondaatje is a rich piece of literature that has a diverse set of characters confined to one pivotal location, a ship. Just as the novel builds a world around its characters, in this project I attempted to build a space around immersive design choices.

Production Design is a visual response to analytic reading. By taking a written piece or concept and creating the physical/visual atmosphere for the work, a production designer's job is to create the overall look and tone of a creative production, be it for a film, play, or museum space. This is done through the creation and dressing of sets, finding locations, and being attuned to the decisions that go into wardrobe and lighting. A large part of the design process is research and reasoning while making artistic choices in order to capture the essence of the original work.

Designer's often create a swatch book of possible design choices for any given production. For my project, I am creating an exhibition as an immersive 3D swatch book that encapsulates the entire production design process of ‘The Cat's Table’ by Michael Ondaatje. This presentation space will be based on my interpretation of the novel, and the themes that careful reading shows to be most prevalent or most important to the understanding of the piece. Through the careful selection of furniture, props, wardrobe, color, lighting, sound, and the creation of a texture rich collage based on prominent moments in the novel, the exhibition will become an immersive experience.

Production design represents an excellent blending of my two fields of study, English and Film. It is my hope that this project will shine a light on the importance of production design to film and theater and ultimately to the analysis of literature. Creating films, plays, and artwork based on literature is a contemporary way to explore the subtext and themes presented in a novel in an entirely different way from close reading.

It is my hope that as soon as you step into the space you will be transported into the world of ‘The Cat's Table’.
Exploratory Research into the RNA Transcripts present in Beluga Whale Blow Samples

*Sponsor: Becky Sartini (Fisheries, Animal and Veterinary Sciences)*

Research with beluga whales is important because climate change is affecting their environment, which can impact their health. The usual approach for obtaining working samples is an invasive procedure. However, previous work has successfully developed non-invasive methods using exhaled to obtain samples for hormonal and genetic analysis.

DNA has been isolated from beluga whale exhaled and can provide important information about whale gender and population genetics. The isolation and amplification of RNA in beluga whale exhaled has not been reported. Amplification of RNA can lead to insights into gene expression related to animal health, including immune system function. In this project, messenger RNA (mRNA) was isolated using the RNeasy Microkit from beluga whale exhaled samples consisting of 1-3 exhaled. RNA from 3 exhale samples was isolated in concentrations from 1.95-18.66 ng/μl. The 1 exhale samples result in isolated RNA numbers from 1.889-6.661 ng/μl. Transcripts Rpl8, TNF-α, and IL-12 have been amplified in these isolations by reverse-transcriptase polymerase chain reaction (RT-PCR) and visualized by gel electrophoresis. Rpl8 is theoretically present in every cell and is used to determine if the RNA is isolated properly from the exhale samples. TNF-α and IL-12 are cytokine genes that can provide information about immune system health. Sequencing of the amplified products confirmed that the transcripts were amplified. This is the first report of the amplification of transcripts related to immune function from exhale samples, which could provide a non-invasive way of gathering this information. Future research could investigate if changes in expression of these genes can indicate changes in the environment via the change in health of individual beluga whales.
EMILEE KILBURN  (English)

Metamorphosis through Modern Poetry
Sponsor: Peter Covino (English)

I have memories of being in my room with a notebook, scribbling lines and rhymes about cats and fireworks. I have proof of these memories—a staple-bound booklet of poetry, illustrated with clipart and colorful text. I was so proud of the work; it was the project of a third grader's time, effort, imagination, and mind. Even in my movement from that childhood room to the campus at the University of Rhode Island; and my maturity from nursery rhymes to Chaucer and Shakespeare, I have always carried a passion for language and creativity.

For the Honors Project, I wanted to return to the intricate roots of poetry, specifically poetry defined by the Modernist Avant-garde movement: poetry that is textured, complex, intertextual, that examines the self in an ever-changing world. The project consists of two main components: one, an in-depth survey of four modernist poets; the other, the writing of original poetry. In my focus on the works of Gertrude Stein, Mina Loy, Wallace Stevens, and Blaise Cendrars, I pay attention to poetic technique and application of poetic elements, while also considering the works’ application to broader contexts. Two of these contexts are my personal writings and public performance. In the poems that make up my collection, I attempt to emulate aspects of poetic presentation that I observed in my survey of modernists. In a curated reading, I will supplement original work with photography and examples of modern art in an attempt to intensify and enrich the experience of the poetry—poetry has certainly added intensity and richness to my experience. Through my experience of composition and performance, I not only improve my ability to navigate the intricacies of language, imagery, form, and sound; but, I also begin to discover and develop my own poetic voice within the context of a continuously metamorphosing literary art form.

When I transferred to URI as a junior, I was still developing my voice and presence within the world. In my short time at URI, I have transformed considerably—a transformation largely influenced by my engagement with poetry. I have become bolder across the page and in life; I take more risks and am more inclined to explore unfamiliar territory, both in my writing and my actions; I have learned to confidently inhabit my poetry and comfortably inhabit space. The culmination of my project: a curated reading and collection of original poetry in the form of a chapbook, is meant to demonstrate my own metamorphosis—both personal and literary.
Physcomitrella patens is a non-vascular plant with a relatively small genome and is amongst the few eukaryotic organisms that have a high rate of homologous recombination. This is valuable in biological research because it allows for targeted genetic modification of the organism. In vascular plants like Arabidopsis thaliana, a model organism, Cellulose Synthase-like D (CSLD) genes have been discovered to be important in tip growth. This type of growth is observed in the pollen tubes and root hairs of these plant types. The CSLD genes in Arabidopsis were found to play a crucial role in the growth of root hairs and the production of cellulose or cellulose-like β-1,4-glucan chains in root hair tips. The CSLD genes have also been recognized to be important in pollen tube growth of vascular plants. Physcomitrella patens also contains genes similar to the vascular plant CSLDs, but their functions are not yet fully understood. Within the P. patens genome there are eight genes that make up the CSLD gene family. Additionally, the life cycle of P. patens includes a stage that consists primarily of tip growing cells. This growth stage can be optimized in order to study the role of CSLD genes in tip growth of P. patens.

In an effort to further study the roles of the CSLD genes in tip growth of P. patens, we constructed a plasmid that expresses the CSLD1 protein with a green fluorescent protein (GFP) tag. This allowed us to visualize the expression of CSLD1 in living cells using fluorescence microscopy. We also constructed plasmids that were designed to remove specific CSLD genes from the genome and transformed them into wild type or CLSD1 knockout tissue of P. patens. This created single or double knockout mutants that could then be compared to the wild type for changes in the phenotypic characteristics of the plant. These findings will aid in uncovering the roles of the CSLD gene family in P. patens and may provide insight into the functions of these genes in other plants.
We are living in a world that is surrounded by art. There are different types of art such as drawing, painting, and sculpture. But who are those people responsible for artistic outcomes? Artistic statements can be created by anyone from young children to the elderly, those who do not have any education about art and those with disabilities. I want to focus on the art that is created by people with mental disabilities who have not had any formal education about art. These people who are often living in their “own world” create art objects as a way of coping with the world around them. This type of art is called Outsider Art.

There are well known people with physical disabilities who are acknowledged by many for their talents that overcome their disabilities. However, most are familiar with the athletes or musicians with disabilities and who are famous for their success. In order to broaden the familiarity of those who are in art, I want to focus on the artwork created by people living “outside the conventions of society” and “The Outsider Artists.”

This project is created with the hope that many people would be able to explore the abilities of the disabled, ill, or uneducated in the production of artwork. My goal is to introduce others with the idea that people with mental disabilities are not only incapable and vulnerable but can bring inspiration. Moreover, by researching Outsider Art and the artists, I aspire to make the topic familiar to the audience by exploring their process and their influence on the art world.

I want to show the audience that anyone can demonstrate the traits and characteristics that are often seen in Outsider Art by creating my own paintings and drawings that borrow the outsider artists’ techniques and attempt to identify the key traits and aspects of how the outsider artists may think in the production of their work.
Examine the Holistic Make-up of After-School Programs in Rhode Island

Sponsor: Dean Libutti (Office of the Provost)

There is a saturation of scholarly research affirming the existence of a gap in academic achievement between students in need and students of privilege in the United States. However, there is a current debate to decide the most effective intervention strategies that should be employed to close this achievement gap. This study will examine the role that after-school programs play in closing the gap. Specifically, I am interested in investigating best practice components for after-school programs and will attempt to determine if select after-school programs in Rhode Island provide proven best practices for students in need.

I plan to identify what constitutes “best practices” by examining existing literature that has studied after-school programs as an intervention strategy for closing the achievement gap. In doing so, I will determine if select after-school programs in Rhode Island are offering programs for students in need which fulfill the best practices that are proven to be effective in serving students and closing the achievement gap. I believe that this study will help to provide the context needed to understand which best practices are utilized in actual programs and the benefit elicited from these practices.
ELIZABETH KOWALIK (Pharm.D.)
SSRI Use in Pregnancy and Congenital Heart Defects: A Meta-Analysis of Population-Based Cohort Studies
Sponsor: Kristina Ward (Pharmacy Practice)

The American College of Obstetricians and Gynecologists estimate that 10-23% of pregnant women in the US face depression at some point during their pregnancy. However, no clear recommendations regarding the treatment of depression in pregnancy are available. Antidepressants are commonly used during pregnancy without clear evidence of their safety. A study of 1,106,757 women in 47 states found that 89,980 (8.1%) had taken an antidepressant at some point during their pregnancy. The Centers for Disease Control and Prevention found that 298 (4.5%) of 6582 women in 10 states between 1998 and 2005 had taken an antidepressant at some time during pregnancy or up to three months before pregnancy. Of the women, 250 (3.8%) used a selective serotonin reuptake inhibitor (SSRI) making them the most commonly used type of antidepressant in pregnancy. A major concern with SSRI use during pregnancy is the risk for congenital malformations, including congenital heart defects (CHD).

Therefore, the study purpose is to determine if risk of CHD is associated with the use of SSRIs during pregnancy. After an extensive review of the biomedical literature and extraction of data from existing studies of CHD risk with SSRI use during pregnancy, a meta-analysis will be completed. Few meta-analyses examine the effects of the SSRI class on CHDs; existing meta-analyses focus on paroxetine. The goal of this meta-analysis is to pool data from studies meeting inclusion criteria to examine a possible connection between the use of SSRIs during pregnancy and CHD. An extensive data search was performed using three databases: PubMed, EMBASE, and Cochrane Databases. From all searches, a total of 1,417 results were found, including duplicates. Studies were narrowed based on topic relevance, medications studied, and study type. Eight studies were selected for further analysis based on several criteria. Studies included in the analysis were population-based cohort studies with specific data including: number of women exposed and unexposed to SSRIs, and number of CHDs in both exposed and unexposed women. Studies were excluded if they included women exposed to antidepressants other than SSRIs. From the eight studies included in the analysis a total of 65,710 women were exposed to SSRIs during pregnancy and 719 cases of CHD were reported. Of the 5,869,362 women who were not exposed to an SSRI during their pregnancy, 27,405 CHD outcomes were reported. The studies included in analysis show mixed results individually. Three of the studies found no association between SSRI use and CHD (Huybrechts et al, Margulis et al, Winchman et al). Five studies found an association (Berard et al, Kundsen et al, Jimenez-Solem et al, Malm et al, Pedersen et al). Even within the studies variation is found. For example, in Berard et al., cardiac malformations were not significant with SSRI use; however, when further analyzed by type of malformation, ventricular and atrial septal defects were associated with SSRI use.

Due to lack of knowledge about effects of SSRIs on CHD, this meta-analysis will help to clarify this much-debated topic. The results will help women and providers make educated assessments regarding potential risks from SSRI use during pregnancy and balance that knowledge with risks of not treating depression during pregnancy.
oral Health Disparities in Individuals with Neurological Disorders

Sponsors: Ingrid Lofgren (Nutrition and Food Sciences), Leslie Mahler (Communicative Disorders)

Maintaining personal oral health requires coordinated physical movements and fine motor skills, which may be lacking in individuals with neurological disorders (1). Neurological disorders, such as Parkinson's disease (PD) and acquired brain injury (ABI), are diseases of the nervous system that impact functioning of the spine, brain, nerves, and muscles (1, 2). Globally, over 1 billion people are affected by neurological disorders and this is projected to increase in the future (2,3). As a result of impairments in cognitive function and motor movement, many with neurological disorders experience trouble with the fine motor skills, hand-eye-coordination activities, swallowing and chewing that can directly compromise oral health (2, 3, 4). This research project focuses on oral health in individuals with PD and ABI because limited research has been performed in this population on this to date.

In this study, 13 participants (10 PD and 3 ABI) answered 11 questions related to oral health focused on three topics: fine motor skills, existing medical conditions and personal oral hygiene. Participants were primarily male (n=10, 76.9%) and most (n=11, 84.6%) were 58 years or older. All the participants met the recommendation of brushing teeth 2 times per day. All of those with ABI flossed ≥5 times per week. In those with PD, 7 out of 10 participants flossed ≥5 per week. One person with ABI and 2 people with PD experienced bleeding gums. Overall, 10 out of the 13 participants visited a dentist on an annual basis (7 with PD and 3 with ABI). When asked about previous dental work, 2 of those with ABI had dentures, implants crowns or fillings whereas 7 of those with PD answered yes to having dentures, implants, crowns or fillings. A majority (n=8) reported that they were unsure if they drank fluoridated water. When asked about dry mouth, 4 of 10 with PD reported and 1 out of 3 of those with ABI reported yes to experiencing dry mouth.

This study explored the relationship between oral health and neurological disorders. While a majority of participants reported daily oral hygiene practices, there are areas for improvement such as education regarding the importance of drinking fluoridated water. A considerable number of participants reported experiencing dry mouth, thus education regarding the negative side effects of prolonged dry mouth may be beneficial to these populations. Health professionals should keep in mind that those with neurological disorders such as PD and ABI often have impaired motor skills thus may have a harder time maintaining optimal oral health. Future research in this field may help professionals create new resources to make achieving optimal oral hygiene practices easier for those with neurological disorders. Future research could also look longitudinally at whether oral health practices decline over time as the disease states progress.

Citations:
The year was 2006, the housing market was booming, and it seemed as though any borrower was able to get a loan. The housing bubble finally burst in 2007-2008 leading to the worst financial crisis since the 1930’s Great Depression. This crisis threatened the collapse of many large financial institutions and was prevented only because of the American Recovery and Reinvestment Act of 2009. A bailout of $831 billion between 2009 through 2019 led to capital regulations of big banks. These requirements are put in place to ensure these institutions do not take on excess leverage and become insolvent. By establishing these regulations, financial institutions are forced to hold enough capital to ensure continuation of a safe and efficient market and withstand any foreseeable problems. However, these capital requirements make it harder for the average American to receive a loan from the banks, and near impossible for low FICO score individuals to receive a loan.

This has forced many borrowers to turn elsewhere to find a loan. Lending Club is a relatively new form of investing and borrowing founded in 2006. It takes the age-old concept of lending money to a friend and combines it with the advancements in technology to create a new form of borrowing called peer-to-peer lending. Soaring in popularity for its ease of use and ability to receive loans, Lending Club has claimed 15.98B in loans through December 31st 2015. In August of 2014 they launched their IPO on the NYSE and saw the stock rise 56% by the next day. This valued the company at 8.5B. Although a relatively young industry, peer-to-peer lending has been picking up steam and generating extreme interest across the country.

Lending Club offers two forms of business, the lending and the borrowing side. My project, Forget the Bank: The Future is Peer-to-Peer Lending, focused on the lending aspect of Lending Club and began with a personal seed investment of $500. This allowed me to invest in 20 “partial” $25 notes of larger borrowing requests. Although I am not able to meet the borrower face to face, Lending Club offers key statistic’s that allow me to generate an investment profile of the borrower. These statistics include monthly income, FICO Credit score, job title, debt to income ratio, and delinquencies in the last 3 years. Using these statistics I was able to generate an idea of to whom I would be lending money. Lending Club then ranks the loans according to possible risk on a scale from A-G. From there, I can build a portfolio based on the amount of risk and ideal return I want to garner. My goal was to take a personal investment of $500 and achieve a 12% interest rate throughout the 3 months of my Honors study. During this time I researched the industry of peer-to-peer lending, generated an investment profile, and dug deep into the backbone of Lending Clubs business model.
The Complicated Process of Disenfranchised Grief While in College
Sponsor: Sara E. Murphy (Thanatology, Honors)

In order to demonstrate the importance of understanding and recognizing grief, this research project explores the capacity for young adults within the college setting to experience two negative grief processes: disenfranchised and complicated grieving. In broad terms, disenfranchised grief occurs when society does not recognize the grief a bereaved person is experiencing; complicated grief occurs when the bereaved continues to grieve for a prolonged period of time in which they are unable to adapt their grief to their life. While it can be difficult to define a specific population who is at risk for experiencing these types of grief, society often fails to recall that death and subsequent grief can be experienced at any time during life, resulting in a lack of realization that college-age students are no less susceptible to experiencing loss and grief. I argue that this population is underrepresented in relation to recognizing and experiencing a grieving process, perhaps leading them towards a disenfranchised and complicated grieving pathway more often than society realizes.

With a particular focus on research from Dr. Kenneth Doka, among other thanatologists, my research examines both disenfranchised and complicated grieving processes in relation to experiencing them while in a college setting; focusing on topics such as how the college culture, relationships with the deceased, and mode of death and stigma impact the grieving process along with gender, social media, and meaning-making influences on grief. In hopes of combatting this lack of representation and to educate others on disenfranchised and complicated grief, I created a presentation entitled, “Death Education for Resident Advisors: Helpful vs. Harmful Responses” and presented it to The University of Rhode Island Housing and Residential Life's Resident Advisors during their winter training, in conjunction with my research paper. This experience, along with my research, enabled me to expand my personal knowledge while representing this unrecognized population.

Death is a difficult subject matter for many, and bringing the topic of grief, especially grief that is, by definition, more challenging to move through, to the foreground of academia is necessary to further education and decrease instances of negative grief. Like the inevitably of death, there is the inevitably of grief. Despite this definitive process of death and subsequent grief of the survivor, the mode in which death occurs and the type of grief experienced are not definitive or predictable in nature. This contributes to an individualized grieving process, a course that society deeply struggles to openly value and discuss. This research explores these grieving processes to allow for an important and greater conversation about grief to begin.
Effects of Environmental Factors on the Abundance of Blacklegged Ticks

Sponsor: Howard Ginsberg (USGS Patuxent Wildlife Research Center; Coastal Field Station)

The nymphal stage of the blacklegged tick, Ixodes scapularis, is the major vector of Lyme disease, the most common vector-borne disease in North America. Tick abundance has generally been estimated using either flag/drag samples or samples from hosts. However, the biases of these sampling methods have not been adequately studied. We compared samples using both methods from sites in Massachusetts and Wisconsin. Tick abundance was compared with variables related to weather (temperature, relative humidity, and tickadverse moisture events), vegetation (canopy cover, tree density, shrub density, ground vegetation, and leaf litter cover), and host abundance (mice, small mammals, mediumsized mammals, and all hosts). A model with relative humidity in the leaf litter and canopy cover variables gave the best prediction of tick numbers per flag/drag sample (R² = 0.829, p = 0.0006). In contrast, the number of small mammals collected per sample in Sherman traps and pitfall traps gave the best prediction of ticks collected per sample from all hosts (R² = 0.580, p = 0.0057) and the number of ticks per mouse (R² = 0.580, p = 0.0057). Therefore, the most significant environmental factors that influence I. scapularis abundance vary, based on the particular location of the tick sampled. Ticks found in leaf litter and ticks found on hosts experience very different environments and the factors that influence their abundance are different, so studies of tick population biology should select sampling methods based on the features of the population under study. These results indicate that risk of encounter with host-seeking ticks is greatest in areas with dense canopy cover and moist leaf litter.
LIA MOCERI (Biological Sciences)
Bleeding Keaney Blue: An Analysis of Sports Fandom and URI Basketball
Sponsor: Lynne Derbyshire (Communication Studies, Honors)

In the United States, sports are so prevalent on the national, state, and local level that researchers assert they have become a major component of everyday life. In fact, millions of Americans consider themselves sports fans. Studying sports fandom offers an interesting insight into the human condition.

This paper begins by looking at sports fans on a psychological level by examining socialization, the process of becoming a sports fan. It also examines the reasons people become fans and the degree to which people identify as a fan. An important psychological aspect when studying sports fans is identity and how a sports team can often become a crucial part of a person. Another interesting concept is pride and how it is often not enough for someone to like a team intrinsically, but they must publicly display their allegiance. Along with this comes a very strong culture of tradition and superstition characteristic of very involved sports fans. Die-hards often care so deeply about a team that it has a profound effect on aspects of a person's behavior and emotion.

Next, sports fans are examined on a sociological level. Humans instinctually categorize people into groups they can easily understand. For sports fans, this becomes people that support your team and the opposition. Instinct causes us to feel a connection with the group we are a part of, which is one of the reasons why when two strangers see each other wearing the same team apparel, they are no longer strangers; they instantly have something in common.

The last perspective used in this study of sports fandom is a physiological one. Fans feel so intensely during games because of hormonal changes like surging adrenaline, but also because their bodies cannot tell the difference between playing a sport themselves or watching their favorite team play it. This accounts for why spectators often become so invested and also why sometimes people cannot help but jump out of their seats.

In addition to this theoretical framework of sports fandom, I looked at the members of our own community who support University of Rhode Island Basketball. As captain of the Ramettes Dance Team, I have been deeply involved in the basketball program and witness, first hand, every game how it feels to be a passionate URI basketball fan. I became interested in the crazy sports fanatics that fill the Ryan Center every game and conducted interviews with some of the most dedicated and obsessive Rhody fans to see how deeply their fandom ran. I heard the stories of many, from current students to lifelong season ticket holders. One alumni has barely missed a game in fifty years and one of the dancers described basketball season as “the most wonderful time of the year.” It is clear that not only are these fans a perfect demonstration of the fandom principles studied by professionals, but that they truly bleed Keaney blue.
At the Yavne-Yam site in Israel, a Bronze Age coastal industrial establishment, a variety of lead objects were found which appear to have some connection with fishing and maritime activities, including bells, weights, and rings of various sizes. At numerous other ancient coastal sites throughout the Mediterranean, similar objects have been documented but no systematic or typological study yet has been made of them. This study focuses primarily on the archaeological context and potential uses of the lead rings that have been found in maritime contexts, which range in size from small grommets to large, saucersized circlets.

The potential uses for such lead rings include net and anchor weights, devices for detangling caught fishing line, and securing brail lines. The context, size, and typology of the rings could be indicative of their functions as well as the size of the assemblages and their date. Additionally, ancient texts can provide some insight on ancient sailing and fishing practices, in particular the work of Strabo and Oppian. Some preliminary results and conclusions based on these investigations are presented here.

In addition to a variety of rings, a lead “bell” with a ball in the middle and several similar objects were also found at the Yavne-Yam site. In context, these discoveries suggest that bells were used in certain types of fishing at Yavne-Yam in antiquity, perhaps as described in Oppian. Conversely, they could also have been used as sounding weights to find the depth of the water and what the seabed was made of. Since the “bells” come in different shapes and sizes, they could have served multiple different purposes.

This study helps us understand the range of possible identifications and functions when considering the correct labelling of Yavne-Yam’s lead objects. Most importantly, connecting these uses to their societies and creating a more accurate historic profile provides a way for Mediterranean archaeologists to help identify the objects and understand their role on a bigger stage.
ALEXA MUNOZ  (Nursing)
Spring 2016 Advanced Practice Nursing Forum
Sponsor: Katherine Paquette (Nursing)

The Future of Nursing: Leading Change, Advancing Health (2010) by The Institute of Medicine (IOM) is a clinical report that sets initiatives and recommendations for the future of the nursing profession. This report suggested increasing the number of nurses in advanced practice nursing roles in the future years. It proposed that “each accredited nursing school should ensure that at least 10 percent of all baccalaureate graduates matriculate into a master's or doctoral program within 5 years of graduation.” Advanced practice nursing is defined by Hamric, Spross, and Hanson (2005) as “the application of an expanded range of practical, theoretical, and research-based competencies to phenomena experienced by patients within a specialized clinical area of the larger discipline of nursing” (p. 89).

The Spring 2016 Advanced Practice Nursing (APRN) Forum was conceived and developed to fulfill the Nurse of the Future IOM initiatives by providing timely and real-life information on APRN roles to baccalaureate nursing students. I used strict organization and prioritization to ensure that all aspects critical to the program were addressed. I conducted research on advanced practice nursing as well as areas of interest to nursing students to provide the most accurate and appealing information to the participants. The purpose of the Forum was to provide critical information to College of Nursing students on advanced practice nursing roles, as experienced by the practitioners themselves. Participant objectives were to: 1) identify educational pathways to becoming an APRN, 2) describe a variety of APRN roles, 3) obtain knowledge and a better understanding of advanced practice nursing, 4) consider advanced practice nursing as a possible career path, and 5) feel that the Forum provided valuable information for their future educational endeavors. The Forum panel was composed of a Certified Registered Nurse Anesthetist, Family Nurse Practitioner, and two Clinical Nurse Specialists.

The Forum on April 4, 2016 from 5:30 – 7:00pm was attended by 120 undergraduate nursing students. Each panelist spoke for five to ten minutes on their current practice, educational trajectory, experience in their role as an APRN, and the reasons that motivated them to pursue an advanced practice degree in nursing. Following the panelists’ presentations, a question and answer session took place with questions that had been previously identified by the College of Nursing’s May 2016 graduating class as well as those from the audience. The questions included educational requirements, financial reimbursement, malpractice insurance, and advice on suggested years of practice before pursuing an advanced practice degree. Participants were asked to complete a forum evaluation based on the objectives. The response rate was 63%. All participants either strongly agreed or agreed that all objectives were met. My personal goals for this Forum were to improve my task organization and prioritization skills, enhance my nursing research skills, and gain knowledge and information on different areas of advanced practice nursing. Future development of this project should involve diversifying the panel by including more APRN roles and more culturally diverse APRNs. An APRN Forum should be included as part of the undergraduate nursing curriculum to support the Nurse of the Future IOM initiatives and encourage baccalaureate nursing to pursue advanced practice nursing education.
Epigenetic regulation of gene expression spermatogenesis

Sponsor: Becky L Sartini (Fisheries, Animal, and Veterinary Science)

In the US livestock production industry, improving reproductive efficiency will improve animal welfare and maintain reasonable costs of meat and milk for consumers. In recent research, abnormalities in epigenetic markers in sperm during spermatogenesis, has been linked to male subfertility in many species. Epigenetics is the study of changes in organisms caused by modifications of gene expression, including DNA methylation, rather than alteration of the genetic code itself. When this process is disturbed, it can negatively impact semen therefore decreasing its fertility. Through further research on how DNA methylation influences gene expression during spermatogenesis and its impact on sperm quality, we can begin to build a comprehensive assay on sire fertility.

In this study, the aim was to compare the methylation status of male germ cell genes in spermatozoa using a ram model. We hypothesized that there is variation in DNA methylation level of specific genes among individual rams. We chose to investigate the gene SIRT1, which is partially responsible for sperm maturation and capacitation, and methylation status, which has previously shown to be correlated with bull fertility. To date, a protocol to isolate genomic DNA in ram sperm after a Percoll wash to remove seminal plasma has been developed using the Qiagen DNA Blood and Tissue Kit (catalog number: 69504). From these experiments, we have routinely isolated an average of 20.38 ng/uL of DNA per sperm sample, with a range of 7.15 - 51.48 ng/uL for each collection. The average DNA purity number is 1.82, with a range of 1.5 - 2.63. Validation of the methylation specific polymerase chain reaction and comparison of amplification using primers that anneal to methylated and unmethylated DNA will determine if individual ram semen samples vary with DNA methylation.
HELEN NGUYEN (Biological Sciences, Psychology)

Relationships between Social Media Exposure and Levels of Body Dissatisfaction

Sponsor: Andrea Paiva (Psychology)

The digital age has resulted in major technological inventions leading to great advances; however there are also clear costs. Television allows identical picture images to be broadcasted into millions of homes, the internet is a gateway to seemingly limitless information, and the cell phone is the ultimate connection device. Each of these communication modalities have spread the thinness ideal that is prevalent in Western societies, with the Internet being ridden with pro-eating disorder websites, cell phones providing handheld excess to peer-comparison, and all mediums presenting images of the thin body as ideal. The prevalence of eating disorders is still substantial, with unprecedented growth in the last two decades with 30 million Americans currently affected. While more people may be struggling with an eating disorder or negative body image, funding for research remains low and treatment of eating disorders hardly improves.

This research project sought to explore relationships between social media exposure and levels of body dissatisfaction. Social media has now become part of daily life for many people including adolescents and young adults. The most popular social networks include Facebook, Tumblr, Pinterest, Twitter, YouTube, and Instagram, and they all may have an influence on the user’s body satisfaction. Studies have focused on the effect of mass media on a person; however information pertaining to the effects of social media is very limited.

The current study developed a survey which included measures from the Eating Disorder Inventory, the Body Image Assessment, the Mother Influence Scale, the Parent Involvement Scale, the Peer Dieting Scale, and the SATAQ, with adjustments to relate measures to social media. The results of the study will be presented and add to the literature regarding social media and body image by presenting correlations and relationships between social media exposure and all other variables. Results provide insight towards intervention and prevention methods as well as raise consciousness about social media use.
I have found through my experience at The University of Rhode Island that two things are lacking; attention to the arts, and conversation about mental illness. Books are not only used as an educational tool for literacy among children but also as a way to introduce challenging topics. Combining my two majors, Art and Psychology, I aimed to create a real life tool that exposes children to the topic of mental health. The targeted age group for this book is between 4 through 6 years. By introducing this conversation to children at an appropriate level of learning, my hope is that future generations will grow to be aware of and sensitive to the multitude of issues involving mental health.

The first step during this process was to develop a character that is relatable to a wide audience, but also suffers from Germaphobia, an Obsessive Compulsive Disorder. I created a 7-year old boy named Henry. Henry is just like every other child and enjoys common activities such as art, sports, and writing. Yet the activity of ‘circle time’, a common practice in elementary schools where children sit on the ground, gives him chronic stress due to his irrational fear of germs. Henry works to overcome this obstacle through family therapy, utilizing breathing techniques, and exposure therapy. I wanted to convey that there are resources available for a child with mental illness and that they are not alone in their fight. Henry also is seen overcoming an obstacle, but not without difficulty. This was included in the story to show that children do have the ability to overcome obstacles of mental health but it is a process that does not include an immediate cure.

Images are created by carving into linoleum with a sharp tool of varying widths. The panel then goes through the printing press covered with ink. A large amount of pressure is exerted imprinting the image onto a piece of paper. I chose to work with linoleum due to its ability to produce raw images and significant contrast. I felt that the images would be able to translate content more clearly than alternative media. I also wanted to get more comfortable in this medium, as it is related to the art of the illustrated book. To create the book, I used the process of a storyboard. A storyboard deals with space, time, sequence, and narrative. The largest challenge of this project was to take a mature subject and reimage it at a new level. I worked to create sentences and compositions that convey the message of a mature concept, but have it be understood by a child. To do this there needed to be continuity in the imagery style, which proved to be difficult stylistically. Also, the syntax of the book needed to be at an elementary level while also effectively telling a story. The purpose of illustration is to build an understanding between words and pictures. The combination of words and images allows for higher levels of comprehension for a child by targeting more of the senses.
From Mendel's law of inheritance in the 19th century through Watson and Crick's revolutionary observations of the double helix in the 20th century, genetics has been a fascinating and continuing topic of discussion in the field of science (Collins & McKusick, 2001). Major studies like the Human Genome Project (HPG), initiated in 1990 and completed in 2003, provided a starting point from which scientists could more thoroughly investigate the human condition on a genetic level. Arising from this study, personal genomics is considered a blooming field in genetics - in which rapidly developing technological advances are able to provide easier and cheaper access to genetic testing methods. Although genetic testing is used as a tool for medical examiners in order to determine an individual's potential for detrimental diseases, genomic companies also seek to use this developing technology in order to provide an opportunity for the public to have open access to personalized genomic testing (Bandelt, Yao, Richards, & Salas, 2008).

As new policies and regulations emerge from the rapidly growing field of personal genomics, the objectives of this project focus on an overview of accumulating literature reviews about the integration of new scientific methods in personal genomics and their public interpretation and understanding. In an attempt to determine how commercialized genomic companies present their results, this project will also focus on the social implications in the public interpretation of this information. In addition to evaluating how public genomic results are presented, this project also focuses on identifying different methods used by genomic companies for sequencing. In the process of differentiating different methods, this project explores online public access to genomic research databases, and uses personal genotyped results provided by the company 23andMe to learn how to utilize these online databases efficiently. In sum, this project explores new scientific developments and methods in the field of personal genomics, with an interdisciplinary approach that examines the potential effects of genomic information on public perception about genetics, personal genomics, and healthcare.
Environmental Impacts on the Success of Bermuda’s Inhabitants

*Sponsor: Rod Mather (History)*

The island of Bermuda (32° 20’ N, 64° 45’ W), consists of carbonates interbedded with terra rossa paleosols, situated on top of an eroded shield volcano of mid-to-late Eocene through early Oligocene age. The impacts of this distinctive geology, in combination with the island’s isolated geographic setting, have shaped human occupation of Bermuda since it was first settled in 1612.

Since the seventeenth century, Bermudian societies have optimized their activities to accommodate their distinctive geologic and geographic setting. Such accommodations include the collection of rainwater as a source of freshwater, the production of sloops out of local Bermudian cedar, the utilization of limestones as well as unique local woods as a building material in the construction of homes and other structures, and the construction and utilization of fishing wells. Other adaptations include a close proximity of buildings on the island so as to accommodate a high population density, the development of a maritime economy, and an emphasis on trade and tourism. The relationship between Bermudian society and its environmental and geographic setting is reflected by this suite of adjustments that have been made by Bermudians throughout the last five centuries which have made it possible for them to thrive on the island. This poster presents these distinctively Bermudian accommodations with reference to their geological and geographical setting, underlining the significant influence setting has played upon the establishment of a successful society.
Aesthetic Sport Pressures for Men of Suicidal Minds

Sponsor: Sara Murphy (Thanatology; Honors)

All experiences are unique to every person because each person perceives their surroundings individually. People living with suicidality struggle with consistent pain which effects their cognition and perception. Their pain directly influences how they perceive their experiences and their surroundings. Simultaneously, a person suffering from suicidality must face the stigmas society associates with mental illnesses. Suicide and related mental health concerns are frequently stigmatized and discourage those experiencing it from discussing the pain they feel. They are limited in receiving help as the pain is internalized. Through a creative fiction, first-person narrative account, this honors project investigates the pressures associated with males in aesthetic sport, such as gymnastics or dance, which complicate suicidality.

Suicidality is a pre-existing condition within the body and the pain associated with it may be triggered by internal and external pressures. Male dancers are placed within environments which harbor risk for traumatic events that can trigger such pain. As a male dancer, there is a specific aesthetic look idealized by dancing companies. A male ballet dancer is expected to be tall, lean, and muscular but not too tall, too lean, or too muscular. He has a small window of what is acceptable for his body’s physical appearance which contradicts the body type formed from his physical expectations. He is expected to continually dance and perform jumps, leaps, turns, and lifts without hesitation or exhaustion. However, it becomes a constant conflict between having a body physically able to complete such a task while being in the window of the ideal body type.

A man becomes entrapped by a constant pressure for the need to “fix” his body. Pressures from instructors, competitors and peers all play a role in consuming a man under such stresses. Meanwhile, pressures from a family become complicated by having a male participate in a sport considered highly feminine. As such pressures are internalized; pressures of the self become increasingly dangerous for the suicidal mind.

The narrative demonstrates the influential power suicidal pain can have on men. Concurrently, the piece portrays how external pressures and gendered expectations may affect a male individual in such a high-stress environment. The first-person narrative provides insight for looking at and experiencing the dance world as a suicidal male may experience it. Despite the advancements made in understanding suicide, the topic is still considered taboo. Misconceptions of the suicidal mind continue to fuel society in stigmatizing the uncontrollable existence of such a mental illness. This text provides a gateway for openly discussing suicide and the intersectional issues individuals may experience with their illness. As more people discuss these issues, they may become educated, more understanding, and reduce the stigma surrounding the topic.
SARAH SANGEADO (Psychology)
Impact of Pornography Use in Adolescent Boys: Boys’ Self-Reports on Their Use of Pornography
Sponsor: Donna Hughes (Gender and Women’s Studies)

Pornography use has become more prevalent in recent years and research has shown that excessive use can lead to addictive behaviors. This is of special concern for adolescents, who are more vulnerable to addiction because of their immature brains and heightened response to visual stimuli. This study is an inquiry into what adolescent boys are saying about pornography’s effect on their sexual and social functioning. A content analysis was done on messages from online pornography forums written by adolescent boys 19 years of age and younger. A total of 125 comments were extracted and placed into six different categories: 1) Age of beginning use of pornography; 2) Awareness of problem from using pornography; 3) Symptoms of withdrawal from using pornography; 4) Triggers for relapse; 5) Coping skills and 6) Indications of management of use of pornography. The findings suggest that the adolescent boys are aware that they have a problem with pornography, and discuss their problem like it is an addiction using terms such as “slips,” “relapses,” and “triggers.” The boys refer to themselves as “addicts” and discuss skills for coping as well as share their strategies for managing their addictions. The findings from this study suggest there is a significant problem among adolescent boys who excessively use pornography, and that this problem could be defined as an “addiction.”
College is a time when students are expected to focus on academic learning, personal and professional growth, and the assumption of greater independence and responsibility. Unfortunately, the college population is also uniquely vulnerable to mental health issues such as anxiety, depression, and eating disorders (Zivin, Eisenberg, Gollust, & Golberstein, 2009). The pressures of academic achievement and social fluency can be burdensome, and those students with mental health concerns face a greater challenge. Surprisingly, despite these issues, many colleges and universities do not offer adequate mental health resources (NEDA, 2013). While increasing the availability and options for mental health resources on college campuses is needed, it is also important to focus on prevention and identification of risk factors.

The purpose of this study is to explore some of the factors that have been shown to influence the development of eating disordered behavior on college campuses (Giles, Helme, & Krcmar, 2007; Johnson, Edwards, and Gidycz, 2014; (Keel, Forney, Brown, & Heatherton, 2013). Specifically, this study examines changes in norm misperception in terms of disordered eating behaviors across class years (freshman, sophomore, junior, and senior) and help to identify possible developmental milestones associated with greater or lesser misperception. We used various measures to assess student’s perception of importance of thinness (females), importance of musculature (males), acceptability of unhealthy weight loss behaviors, and prevalence of disordered eating behaviors among peers. Although there has been much research related to eating disorders on college campuses, no study has yet to investigate class year as a factor of the development of such behaviors. The results of this study will be used to give us insight as to what measures to take to prevent the development of eating disorders on college campuses and how to promote a healthy body image among this population.
OSCAR SOONS (Economics, Applied Mathematics)
Inequality & Financialization
Sponsor: Richard McIntyre (Economics)

This paper analyzes economic inequality in the United States and makes a connection between rising inequality and “Financialization” since the 1970’s. I provide an overview of how and why income and wealth inequality have changed over time. The increase in inequality since the 1970’s is correlated with an increase in Financialization, measured by a Financialization index that I created. Financialization, defined as the increasing size, power and influence of the financial sector in the economy and politics, has changed the economic and political landscape in the U.S. in a way that increases economic inequality.
COLBY SOUSA (Kinesiology)
Exercise Is Medicine
Sponsor: Christie Ward Ritacco (Kinesiology)

College student are often faced with new challenges upon arrival to campus, including making independent decisions about their health and wellness. As students face new academic and social responsibilities, issues with time management and stress often compromise many students abilities to adopt and maintain health promoting behaviors, including eating well and participating in regular physical activity. The adoption of less health promoting behaviors is associated with increases in rates of illness, increases in weight, adoption of poor sleeping patterns and increasingly poor stress management.

As such, knowledge of the importance of proper nutrition and physical activity/exercise for optimal health and academic performance is vital for college students. For these reasons, a team of students and faculty has enrolled the University of Rhode Island in the Exercise Is Medicine University on Campus (EIM-OC) initiative. This initiative promotes the importance of physical activity as key in the prevention and management of chronic disease. The URI EIM-OC leadership team consists of two student leaders, a supervisor, a health care professional and a health fitness professional. During the spring 2016 semester, this team brainstormed creative ways to build relationships with members of the campus community including URI Health Services, Campus Recreation and Housing and Residential Life, to establish partnerships and programs to help the entire URI community become healthier through programs of regular physical activity.

To establish a presence on campus the URI EIM-OC team participated in the Spring 2016 health fair where we began to collect emails of those interested and provided informational handouts addressing the importance of physical activity and proper nutrition for lifelong health and wellness. The EIM-OC team also collaborated with URI Campus Recreation, due to similar interests in spreading the Exercise Is Medicine message throughout the campus community, to man health promotion booths in the fitness center and to inform students about proper nutrition and safe and effective approaches to exercise. Additionally, as there is an important role that Resident Advisors (RAs) play in the university community for resident students, a collaboration with Housing and Residential Life is ongoing. RAs often act as role models and resources for their residents, therefore the EIM-OC team has designed a training session and resource manual for RAs pertaining to information on the benefits of regular exercise for stress management, sleep habits, and general health and wellness.
LUKE STABILE (Finance)
Waiting on the Fed
Sponsor: Michael Ice (Finance)

The year 2015 will, without a doubt, make a mark in history as one of the most remarkable economic periods of the 21st century. After 8 years of interest rates being at zero, the Federal Open Market Committee (FOMC) decided it was in the best interest of the U.S. economy to increase the target federal fund rates by 25 basis points. Over the last year, the U.S. Economy has become somewhat of an enigma. Century long correlations cease to exist, metrics that measure the economy’s progress are being questioned, security prices and spreads are at record levels, and the FOMC has to steer the U.S. economy back towards traditional fundamentals.

Throughout the last 6 months I have had a front row seat to the media circus that is the U.S. economy. I have prepared a 50-page brief on the past, present, and future conditions of the U.S. economy, monetary policy, and analysis of several security markets. This brief offers a condensed analysis and unique interpretation of market conditions. Although my initial forecasts were proven far too dovish for an already procrastinating Federal Reserve, this project has expanded my knowledge on the topic and assisted me during my recent job search. I can say, with certainty, that my recent experience with spreads helped me land my position, as a fixed income analyst, with J.P Morgan. In addition, this project required me to stay abreast of market trends and current news throughout the school year; this could have easily become low in the list of priorities amongst other college work demands.
SARAH SULTAN  (Communication)
Intercultural Communication within a Multigenerational Afghan Family
Sponsor: Marc Hardge (Africana Studies)

“If you were in Afghanistan would you have to wear a hijab?” After being asked that question all of my life, I focused my entire honors project on bringing light to misconceptions regarding Afghanistan and its people. I do this through extensive research into the diaspora of Afghan families and the creation of an instructional video. There are many ways in which Afghanistan and the United States are similar, but also different, which is showcased by Afghans throughout the video. Afghan members from different generations share their perspective, experiences, and lifestyles and explain how the culture of Afghanistan and America vary. In the course of this video, I hope to eliminate the predetermined ideas people frequently have about Afghanistan and its people based on what they see and hear on the news and social media.

Through directed research, I learned about intercultural communication and how it plays a role in the way cultures communicate differently. Intercultural communication is the sharing of information, knowledge, experiences, and sentiments by people of different cultures. “Communicating between cultures means the sharing and mutual understanding of different cultural backgrounds, preconditions and conditions of people linked together;” (Anthropos, 646). “Intercultural communication can be difficult due to the language barrier, processes accented speech, stereotypes, perception of appropriateness/inappropriateness, and the lack of mindfulness that exists. Researchers have noted to overcome such difficulties requires motivation, a positive attitude, communication skills of empathetic listening and instrumental expression,” (Young, Faux, 186). After conducting interviews with Afghans, some of the results and findings are contradicting and shocking.

This project will shed light on the culture in Afghanistan, compare and contrast life in Afghanistan versus America, and reveal the intergenerational differences that exist among an Afghan family and their generations. More importantly, it will hopefully minimize the negative connotations tied to Afghanistan.
RACHEL TETI (Elementary Education, Philosophy)

The Enlightenment of Children as Philosophers: Color Perception, Critical Thinking and Individual Development

Sponsor: Cheryl Foster (Philosophy, Honors)

Research on philosophy for children suggests that an education consisting of philosophical topics, such as ethics, aesthetics, and logic, can foster the growth of young minds and improve their performance in other areas. Philosophy conducted in an age-appropriate manner can also help students improve socially and emotionally by reaching multiple intelligences. While numerous philosophy books for children exist currently, none focus specifically on topics related to perception in the area of philosophy known as epistemology (theory of knowledge).

Yet, the perception of color, and creativity with colored pencils, crayons, markers and materials, form a strong part of early childhood and elementary education. Furthermore, students must become aware of their own perception in order to comprehend their views and how those of others differ from them. Color is a prime example of differences in perception, since many people experience color blindness and synesthesia. Finally, the way that people perceive color is just one of many fascinating avenues by which they experience the world. Differences from other human beings allow someone to discover their unique identity and purpose. When one becomes aware of the processes and limits of their own perception, they can begin to live in a way that constructs an authentic Self while learning how best to communicate that in the surrounding world.

Therefore, for my project, I have created a children's philosophy book leveled at primary school grades 3 and 4, an age at which students exhibit conscious fascination with color as well as with how they might be the same as, or differ from, their peers. More precisely, my book – entirely original in text and illustration - focuses on philosophical issues in the perception of color. For example, discrete sections discuss what sight and light are and how they combine to create the phenomenal experience of color. Another section centers on the “I” that represents personal views, both physically and intellectually. The final section, titled “Philosophy and You,” invites young readers to identify themselves as philosophers and thus grow as pupils.

My goal for the project is to produce a creative resource that helps children become more aware of themselves and their world while improving their development as learners. Children are natural philosophers through both their own curiosity and their receptivity to ideas and experiences outside of their own. As a future elementary school teacher I aim to encourage these traits in young thinkers in order to deepen and broaden their already imaginative and intellectual minds. Through doing philosophy, using resources such as the one I have created, children can develop incomparable critical and creative thinking skills with respect to their own lives. This in turn helps them to comprehend the world that they experience as well as the lives of others more fully, which encourages ultimate compassion and connection.
NIKKOLE TURGEON (Medical Laboratory Science)

Paying for Success - Will Pre-insured patients and their Future Insurers Benefit from Pre-insured Healthcare?

Sponsor: Annie De Groot, MD (Immunology and Immunofinformatics)

Millions of Americans without insurance under the Affordable Care Act expansion fall into two categories: the ‘coverage gap’ and the ‘citizenship gap’. These two groups are disproportionately affected by health disparities due to low-income or legal status. Health disparities affect individuals in many aspects of their lives, including their health, finances, and overall quality of life. To improve the lives of uninsured individuals in Providence, Rhode Island Clinica Esperanza/Hope Clinic (CEHC) proposes to set up a Social Investment Bond Pay for Success program. CEHC has teamed with the Rhode Island Office of Health and Human Services and other RI organizations to coordinate this program, to be called, Bridging the Gap, which will enroll primarily Spanish-speaking, low-income residents of Providence in continuity of care at the clinic and, in addition, nutrition education and lifestyle change programs. These patients will be followed as they transition to insured care, and the resulting reduction in the insured cost of care and health benefits (to the patients) will be measured and tracked. To prove that CEHC can successfully improve the health of our patients a feasibility assessment was performed (N=41) to show the improved results of chronic care management and access to healthcare. Based on a comprehensive chart review, this cohort of patients improved their health measures from baseline to endpoint (average follow up 0.5-5 years). The lowest level of improvement was a 37.5% decrease in total cholesterol in the hyperlipidemia patients. The highest level of improvement was an 88.9% improvement in HA1c <9%. In terms of Quality Adjusted Life Years an average of 4.55 QALY were saved, per patient over the period of 0.5-5 years; the estimated value of the QALY savings was $215,472 per year for this cohort of 41 patients. This pilot study demonstrates that access to continuity of care, nutrition education and lifestyle change programs for the pre-insured improves the health of the patients and is likely to translate into cost savings, once patients transfer to insured healthcare programs.
ELIZABETH TUTU (Biological Sciences)
Becoming a Bridge
Sponsor: Lynne Derbyshire (Communication Studies, Honors)

Ghana is a developing country in West Africa with a population of approximately 25 million people. Although this beautiful and fruitful nation has made strides to better the economy by ways of improving the politics, the infrastructure of the nation, the education system and the healthcare system, Ghana is still suffering. Similar to many other developing countries, illness and mortality are still commonly faced struggles in the nation of Ghana. The healthcare system is falling short of its potential; it needs people who are willing to catalyze change. Healthcare providers must identify how they can satisfy the medical needs of the population. Within the past few decades, there has been a shortage of people who are capable of fulfilling these needs. The first goal of my project is to be a bridge. As an aspiring physician, I want to be the bridge between the healthcare disparities in our developed country and the developing and underprivileged countries that need better medical attention. As a bridge, I want to raise awareness about the conditions that threaten the quality of life of the Ghanaian people, as well as bring attention to the motivated people and organizations working to make a difference. I will bring attention to this subject matter, via a public service announcement. With an emphasis on communication, I am hoping to reach a wide audience with my campaign and encourage other healthcare providers to bridge the gap between our two nations. Foreign language acquisition is the second goal of this project. Foreign languages are integral parts of international relations, trade, and communication. Specifically, I am learning the Akan language, Twi, predominantly spoken in Ghana to exemplify how learning a foreign language can be a large component of bridging the gap between developing countries such as Ghana and the United States. The public service announcement will be spoken in Twi and will include English subtitles. By bringing together the two languages, I am hoping to unify the people of these two nations. With aspirations to become a physician and travel to Ghana to practice medicine, I am hoping I can spearhead other healthcare providers to also travel to Ghana, and other nations like it to work to better the lives of so many people.
GABRIELLE TYER (Kinesiology)
Implementation of Exercise is Medicine at URI and the Surrounding Community
Sponsor: Christie Ward-Ritacco (Kinesiology)

According to the Centers for Disease Control and Prevention National Center for Health Statistics, the leading causes of mortality and morbidity in the United States are chronic diseases, including heart disease, lung disease, cancer, cerebrovascular disease and diabetes. There has been recent attention paid to the role that higher levels of physical activity and lower levels of physical inactivity can play in the prevention and management of chronic disease. As a result of the strength of this evidence, the American College of Sports Medicine, in partnership with the American Medical Association, created the Exercise is Medicine (EIM) initiative. The goal of this global health initiative is to promote the benefits of regular physical activity and exercise for optimal health and wellness.

The EIM program was originally formed to promote the evaluation of physical activity levels at regular office visits by physicians and other health care providers. The hope was that measuring physical activity as a vital sign at office visits would demonstrate its importance in maintaining health and wellness, just as refraining from smoking and consuming only moderate amounts of alcohol does. This initiative is founded on the belief that physical activity is a preventative measure, just like immunizations, and a treatment, like prescriptions, for many common disease conditions.

The EIM mission, to spread the message about the importance of physical activity, has been extended beyond health care providers’ offices into the local community, including university campuses. As college is a time of self-discovery and a key time for establishing independence, health habits are often created and reinforced in this time frame. Therefore, as of February 2016, the University of Rhode Island is a registered organization within the EIM on Campus (EIM-OC) network. This project created the URI EIM-OC leadership team that is working to make physical activity part of campus culture and collaborating with campus organizations to maximize resources for physical activity that can be accessed through Health Services and Campus Recreation on the URI campus. In addition to participating in University events, including the University Health Fair in April 2016, the URI EIM-OC team designed a lesson for incorporation into URI 101 lessons for first year students. This lesson focuses on the benefits of regular physical activity for life long health and wellness outcomes, how physical activity and exercise can be beneficial for the acute management of stress, and how to take advantage of the resources available to all URI students.
Three years ago I lost my newborn cousin to Cytomegalovirus, a virus notorious for crossing the maternal placenta and causing neonatal disease. As a student nurse the pain and grief that I felt through this difficult time helped uncover my desire to give infants born in critical situations like my cousin a chance to survive, and to provide compassionate family-centered care to support families like my own. My passion for Neonatal Intensive Care Unit (NICU) nursing has driven my honors project, with the hope of obtaining the experience necessary to achieve my goal. This included an exclusive internship with the NICU nurse educator at Women and Infant’s Hospital, where I noted a lack of cultural competence affecting the quality of care provided to the families of infants from diverse cultures.

Cultural competence is a set of behaviors, attitudes, and skills that allow a professional to work effectively in cross-cultural situations (Shen, 2015). These culturally competent behaviors and attitudes are found to be lacking in health care professionals today but can be cultivated through educational intervention, which I examined in a review of literature. Simulation experiences and training are both methods proven to have a positive impact on cultural competence in health care professionals and subsequently increase quality of care, patient outcomes, and family satisfaction.

Based on the diverse population I have been exposed to through my experience in the NICU this year, I believe cultural education should be offered to NICU nurses across the nation. Cultural competence of nurses and other health care professionals is just one small change that can help provide culturally diverse families with the empathy, strength, and support they need to take on the incredible challenge of having an infant in the NICU.
HANNAH VITELLO (Political Science, Spanish)
Predicting Depression in Older Adults: Community vs. Nursing Home
Sponsor: Skye Leedahl (Human Development and Family Studies)

With the population of the United States slowly growing older, the issues surrounding long-term services and supports (LTSS) will become more prevalent. Little research has been done comparing older adults living in nursing homes to older adults living in the community, especially regarding mental health and depression. Depression is a mental illness that affects people emotionally and physically, as well as mentally, which can lead easily into other health complications in the older adult population. This study seeks to determine if factors such as demographics, health, social interaction, and family relationships affect mental health in nursing home residents differently than older adults in the community. For this study I have used the 2010 University of Michigan Health and Retirement Study (HRS) Data. The HRS is a longitudinal panel study that surveys a representative sample of approximately 20,000 Americans over the age of 50 every two years. My independent variables include gender, race, age, poverty status, and marital status in the demographic category. The independent variables in the health category are: experience with pain, number of chronic conditions, number of activities of daily living (ADLs), and cognitive health status. Finally, in the social interaction category this study uses driving status, volunteer status, and number of grandchildren. With the HRS data, I have used SPSS (statistical analysis software) to analyze the data. These include independent samples t-test, chi-Square, and bivariate regression analyses to compare the differences between nursing home and community residents. With these findings, I hope to inform policy makers, people working in the public health sector, and LTSS workers about the differences in mental health between older adults in the community in comparison to nursing homes so that they may better develop plans and policies for treatment.
AMELIA VOTTA (Film/Media)
Evolution of a Feminist Filmmaker
Sponsors: Nancy Caronia (Honors); Keith Brown (Film/Media)

My honors thesis film, Whisper Violet, is a short film that follows a couple during a rough patch in their relationship. Iris and Owen find themselves dealing with the natural human tendency to linger on the smaller details, when the larger burdens are too much to bear. The film delves between dreams and expectations, meshed with the harshness and uncertainty of reality.

This year long project has assisted me in shaping the filmmaker I want to be. The first semester was devoted to film theory, films, and the script. In particular, as a feminist, I knew I wanted to avoid the tendency towards one-dimensional female characters, and avoid the common ultimatum of clearly defined “good” or “bad” characters. At the same time, I wanted to write about characters who would reveal the complications of relationships when the couple is not in the same page, and look into that gray area where it is possible to love someone and still have things not work out. Whisper Violet is a glimpse into the life of a couple who follow the human tendency to get caught up on the things that don’t matter in order to avoid the larger issues at stake. The film highlights the innate ambiguity in relationships. Viewers fill in the blanks with their own experiences and thoughts. Creating the connection between physical content and viewership is an important aspect in storytelling since it further highlights how complicated and gray human relationships can be.

In making Whisper Violet, the screenplay is focused not only on the dialogue between the two characters, but also and especially, the visual aspect of their relationship. The cinematography and editing of the film work to seamlessly connect through a single narrative thread the realm of fantasy and reality. Editing and cinematography are key elements in creating this visual narrative. Set design and lighting work to strengthen the definition between the two. I have cultivated a devoted, skilled team to implement all of these elements together and create what is a film that both showcases my interests as a filmmaker and my advancement as a producer, writer, and director.

The majority of the second semester was spent in creating a marketing and branding plan in order to raise the $2000 minimum budget needed to shoot the film. Aside from grants from the school, the majority of our funds were raised on Kickstarter, a crowd funding website. This campaign was marketed to strangers, as well as friends and family. Amazingly enough, we reached 75% of our goal in 24 hours, and the goal itself in just a few days. This money has been carefully budgeted to go towards things such as food for cast and crew, location fees, equipment rentals, and transportation costs.

Overall, Whisper Violet is a showcase of everything I have learned over my last four years as a writer and a filmmaker, and should serve as my strongest film yet.