



2013 *Showcase of*
UNDERGRADUATE RESEARCH
EXCELLENCE

October 1, 2013

5:30 pm – 7:30 pm

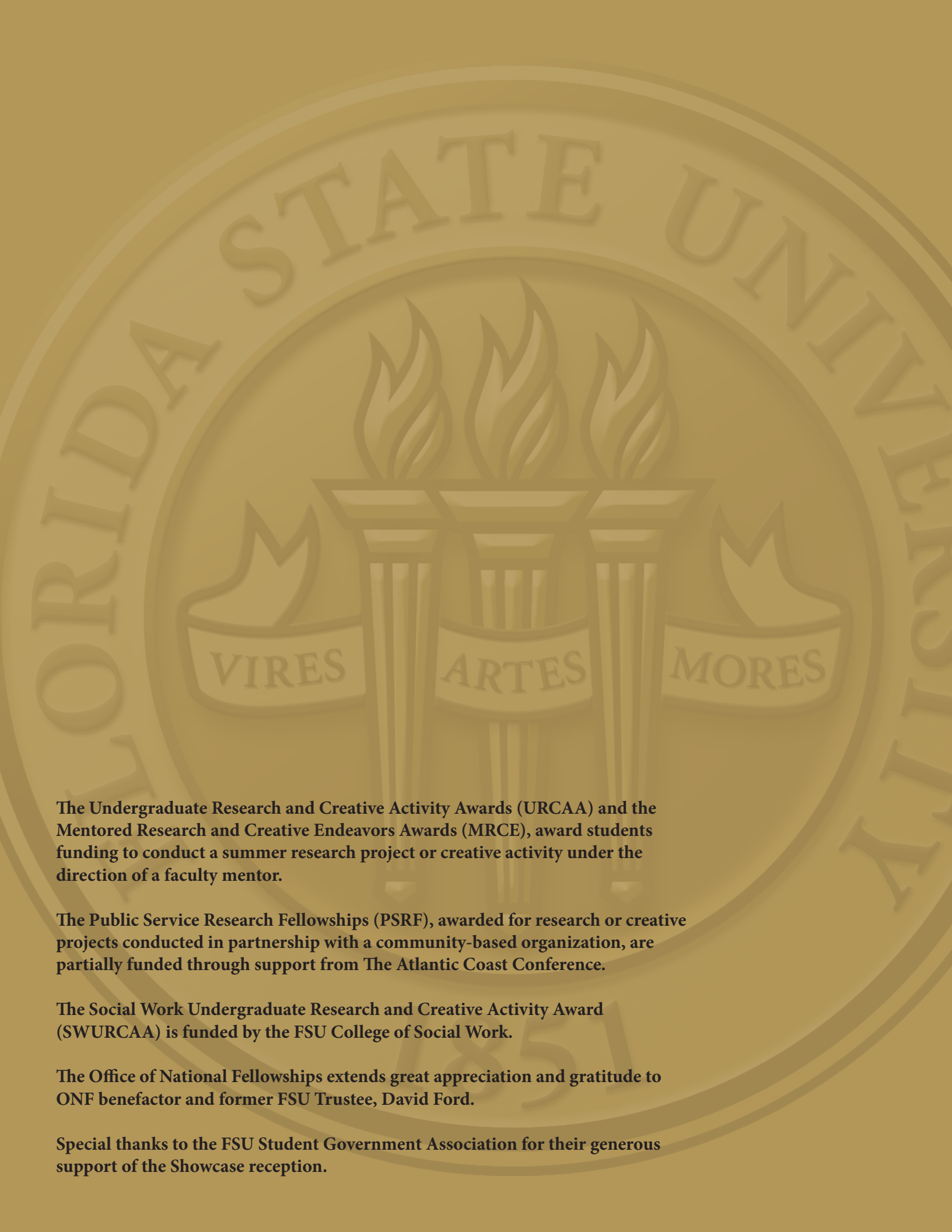
Augustus B. Turnbull III
Florida State Conference Center



Division of

UNDERGRADUATE STUDIES

Office of Undergraduate Research



The Undergraduate Research and Creative Activity Awards (URCAA) and the Mentored Research and Creative Endeavors Awards (MRCE), award students funding to conduct a summer research project or creative activity under the direction of a faculty mentor.

The Public Service Research Fellowships (PSRF), awarded for research or creative projects conducted in partnership with a community-based organization, are partially funded through support from The Atlantic Coast Conference.

The Social Work Undergraduate Research and Creative Activity Award (SWURCAA) is funded by the FSU College of Social Work.

The Office of National Fellowships extends great appreciation and gratitude to ONF benefactor and former FSU Trustee, David Ford.

Special thanks to the FSU Student Government Association for their generous support of the Showcase reception.

WELCOME TO THE 2013 SHOWCASE OF UNDERGRADUATE RESEARCH EXCELLENCE!



Joe O'Shea, Ph.D.
*Director, Office of
Undergraduate Research*

We are delighted that you could join us tonight in celebrating outstanding undergraduate research. The students who will present their projects have enhanced their undergraduate experience by taking on directed research and creative activity under the supervision and mentorship of some of Florida State University's most distinguished faculty. Co-sponsored by the Office of Undergraduate Research (OUR) and the Office of National Fellowships (ONF), this event serves as the culmination of the Summer Research Award experience, but the work these students present tonight does not end here. Many of the awardees will continue their intellectual pursuits through honors theses, independent study projects, graduate research, and creative work, both here on our campus and beyond. Their Florida State University-funded research and creative activity will continue to flourish through academic conferences, scholarly journals, art showcases, festivals and competitions. This evening's oral presentations are presented by students awarded the Undergraduate Research and Creative Activity Award (URCAA) and the Public Service Research Fellowship (PSRF), as well as the first recipient of the newly established Social Work Undergraduate Research and Creativity Award (SWURCAA). Throughout the atrium you will find posters showcasing the research of the Mentored Research and Creative Endeavors Award (MRCE) recipients.

These awards are a reflection of the University's commitment to developing students as scholars and innovators and are a testament to the stimulating education undergraduates receive at Florida State. These students' projects demonstrate the University's mission of nurturing independent thinkers, who are learning to create solutions that enrich both our campus and our larger communities.

Please also join us tonight in recognizing David Ford, Jim Lee, and Phi Eta Sigma for their continued financial support of our summer research awards. We also extend special recognition to John and Sally Day, Phil and Linda Lewis, and Scott and Ina McNichols, whose first sponsored awards were presented this year. Our sincerest gratitude is also offered to all the faculty members who have volunteered their time and expertise to mentor these student researchers.



D. Craig Filar, Ph.D.
*Director, Office of
National Fellowships*

If you're attending this event as a student, we hope you'll be inspired to develop your own research or creative projects. We are pleased to announce the launch of the Summer 2014 Research Awards application tonight. You can also find this online at <http://our.fsu.edu/awards.html>. The awards featured tonight have allowed their recipients a rich opportunity to investigate their academic interests while also providing inspiration for a new generation of young researchers to embark upon this journey.



KATRINA CRANKSHAW

Katrina Crankshaw, a participant in the Global Scholars program, is a junior studying Anthropology. Born in Philadelphia and raised in sunny St. Petersburg, Florida, while growing up she was never interested in leading a normal 9 to 5 corporate America desk job. Rather, she dreamt of traveling the world and learning about its diverse cultures and people. With her degree, Katrina plans on becoming a traveling Anthropologist with a focus on indigenous tribes and culture. Her time in India has immeasurably opened up her mind to the beauty of the world and how much she aspires to study its rich diversity.



DAVID CROMER

David Cromer, born and raised in Gainesville, Florida, is a senior majoring in Social Work. His research focuses on effective means to address and ameliorate race relations through inter-group dialogue in conjunction with community service participation and eating together. David plans to pursue post-graduate studies in Social Work to fulfill his passion to contribute to the success of teenagers in the public school system. David is a self-proclaimed activist, philosopher, theologian, and magician.



KRISTIN ENGBRETSEN

Kristin Engbretsen is a senior from Stuart, Florida, who is graduating in December 2013 with a major in Biology and a minor in Chemistry. She has been working in Dr. Emily Moriarty Lemmon's lab since fall 2012, where she has been studying a potential hybridization zone between two species of chorus frogs. She is planning to submit her research for publication this fall. She is passionate about conservation biology and wildlife ecology and plans to pursue her Master's degree in one of these fields. She also hopes to return to Africa to pursue research there.



LAUREN HLUBNY

Lauren Hlubny is a senior Theatre and Anthropology major from Yalaha, Florida, pursuing a minor in Museum Studies. Her research interests include practice-based performance research, specifically as it overlaps in the fields of Anthropology and Museums, which will culminate in an Honors Thesis mentored by Dr. Kris Salata. Lauren is the Undergraduate Research Opportunity Program (UROP) leader for the Arts, and she hopes to cultivate arts research in her future endeavors. Currently she is developing performance pieces for the Dali Museum in St. Petersburg, Florida, and the American Society for Theatre Research (ASTR) Conference in Dallas this November.



CARLIE HOFFMAN

Raised in Jacksonville, Florida, Carlie Hoffman is a senior double-majoring in Biological Sciences and Psychology with a minor in Chemistry and is also serving as an Undergraduate Research Opportunity Program (UROP) leader. Her research focuses on evaluating a potential new rodent model of attention deficit/hyperactivity disorder (ADHD) through behavioral analyses and treatment with a common ADHD medication, methylphenidate. After graduation, she plans on obtaining a Ph.D. in Neuroscience with the ultimate goal of teaching neuroscience courses at a research university. She aspires to continue to research and enhance the understanding of the causes and treatments of common neurological disorders through her career.



OLIVIA GRUDER

Olivia Gruder is a senior Biological Sciences major and current Undergraduate Research Opportunity Program (UROP) leader from Tampa, Florida. She has worked in Dr. Dennis' laboratory since freshman year, to further her understanding of the compaction of DNA in the nucleus. She believes this research provides a foundation for a new field of biology that has been greatly undiscovered and will aid in the production of drugs to combat a wide array of diseases. In the future, Olivia aspires to become a physician and engage in clinical trials.



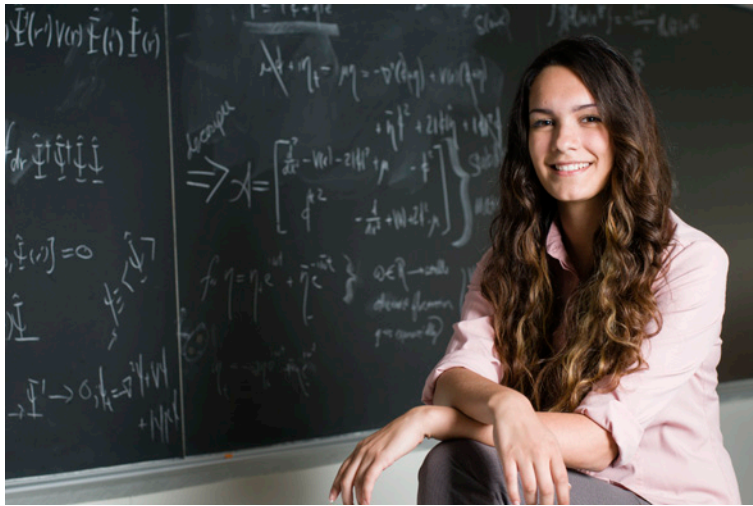
ELIZABETH MARTIN

Elizabeth Martin, a senior from Vancouver, Canada, is pursuing a degree in Political Science and International Affairs, as well as the Research Intensive Bachelor's Certificate. Her research is primarily in the field of education inequality and school choice, and she is currently completing an Honors Thesis on the subject. After graduation Elizabeth plans to pursue a Ph.D. in Political Science, with the long term goal of making a positive difference in education policy.



LEXI MORGAN

Lexi Morgan, from Palm City, Florida, is a senior Biochemistry major. At Florida State, she has researched across several disciplines, spanning from genetics with Dr. Wu-Min Deng to synthetic organic chemistry with Dr. Igor Alabugin. She was also selected to be a Summer Undergraduate Research Fellow at The Scripps Research Institute in Jupiter, Florida. Working with Dr. Kate Carroll, she focused on finding new and innovative ways to target sulfenic acid. She returned to TSRI again this summer to expand upon her original project. After graduation she plans on applying for a Fulbright Fellowship in Ireland to continue her scientific education abroad.



KELLY ANN PAWLAK

Kelly Pawlak is a senior majoring in Physics and Applied and Computational Mathematics. Originally from Burlington, New Jersey, she spent many years intrigued by these subjects, which later led to her avid pursuit of them. Kelly's main interests are in condensed matter and mathematical physics. After graduation she will pursue graduate school in these fields in hopes of obtaining a position at a STEM research university.



MATTHEW A. PRINCE

Matthew A. Prince is a junior pursuing a dual degree in Public Relations and English Studies, with minors in Social Work and Business. A participant in the Undergraduate Research Opportunity Program (UROP), Global Scholars, and the Center for Academic Retention and Enhancement (CARE), Matthew aspires to attend law school after graduation and to enter the field of entertainment public relations with courtroom applicable skills.



DANIEL RUIZ

Daniel Ruiz was born in Bayamon, Puerto Rico, and raised in Orlando. A junior at Florida State, Daniel majors in Creative Writing and minors in Psychology and Spanish. Currently, he is the poetry editor of *The Kudzu Review*, a barista at the Barnes & Noble Café, and is at work on an Honors Thesis in poetry called *Reasons for the Dark to Be Afraid*. Since enrolling at FSU, he has won the Literati Poetry Award and the URCAA, allowing him to study poetry in translation all summer long.



ISABELLA STEELE

Isabella Steele is a senior who is seeking degrees in Studio Art and Creative Writing. Her art is influenced by her interest in camp and pop aesthetics, as well as her love for gay male culture and sexuality. She enjoys confronting people with playful depictions of the clash between "gay" and "straight" America, and is interested in exploring the performative nature of gender and sexuality through drag. She hopes to eventually become a part of the New York art scene after she graduates and to one day be a contestant on *RuPaul's Drag Race*.



LEE ANNE STEERS

Lee Anne Steers, a Global Scholar, is working towards a Bachelor of Fine Arts at Florida State University. Her endless curiosity has made her a very well-rounded artist with a gift for connecting disciplines and media. She came to Florida State with a very open mind and equally open future, and she is learning how to blend all of her interests into something tangible through her participation in the Art Department and the Office of Undergraduate Research. With these experiences, she will be able to explore a range of opportunities after graduation.



SEAN TACEY

Sean Tacey is a senior in the Chemical Engineering program. This curriculum has allowed him to garner significant insight into the intricacies of the production of various materials. Additionally, he has taken part in various on-campus musical ensembles, as a tuba player in the Marching Chiefs and Seminole Sound Pep Band. It is his future hope to continue to delve further into the realm of scientific research and to develop products and technologies that will help to alleviate the world's various burdens. As a result, he hopes to continue his academic pursuits in graduate school, and to obtain a Ph.D. to work either as a professor or on a team of researchers in the private sector.



KELLY VASBINDER

Kelly Vasbinder is a junior from St. Petersburg, Florida, pursuing a degree in Biological Sciences with a focus on Marine Science. She works in Dr. Janie Wulff's lab and her research focuses on the ecological interactions of sponges, specifically the interactions that affect sponge regeneration and growth. She is a 2013 NOAA Ernst Hollings Scholar and she is interested in pursuing a graduate degree.



LENA NATERO WEISSBROT

Lena Natero Weissbrot is a junior from St. Petersburg, Florida, pursuing a BFA in Studio Art/Digital Media. Her work explores the relationship between technology, evolution, and sexuality in terms of a trajectory that ideally resolves in gender equality. She is currently working on a "Choose Your Own Adventure" computer game for her Honors in the Major thesis. After graduation, she plans to pursue a rap career while attending a graduate New Media Arts program.

2013 *Showcase of*
UNDERGRADUATE RESEARCH
EXCELLENCE

PRESENTATION SCHEDULE

5:30 to 7:30 PM

POSTER PRESENTATIONS

ATRIUM

6:00 PM

ROOM 205

**SPONGE REGENERATION AND FOOD
 ABUNDANCE**
 KELLY VASBINDER

5:40 PM

ROOM 208

WELCOME

DR. ERIC J. BARRON, PRESIDENT
 FLORIDA STATE UNIVERSITY

ROSIE CONTRERAS, PRESIDENT
 STUDENT GOVERNMENT ASSOCIATION

RECOGNITIONS

DR. KAREN LAUGHLIN, DEAN
 UNDERGRADUATE STUDIES

DR. JOE O'SHEA, DIRECTOR
 OFFICE OF UNDERGRADUATE RESEARCH

6:00 PM

ROOM 214

**"IT'S NOT GAY IF THEY DON'T TOUCH":
 CHALLENGING HETERONORMATIVE EMPIRE
 AND COUNTERING THE 'CLOSETING OF
 HISTORY' THROUGH ART**
 ISABELLA STEELE

6:25 PM

ROOM 114

**SCHOOL CHOICE AND SEGREGATION
 IN FLORIDA**
 ELIZABETH MARTIN

6:00 PM

ROOM 114

BRIDGING THE GAP
 KATRINA CRANKSHAW AND LEE ANNE STEERS

6:25 PM

ROOM 201

**STABILITY OF BOSE-EINSTEIN CONDENSATES
 IN A RANDOM POTENTIAL**
 KELLY ANN PAWLAK

6:00 PM

ROOM 201

ENZYMATIC HYDROLYSIS KINETICS
 SEAN TACEY

6:25 PM

ROOM 205

**UTILIZATION OF A DIAZENE CORE TO TARGET
 SULFINIC ACID**
 LEXI MORGAN



6:25 PM

**LIVE ENCOUNTERS: PERFORMANCE
IN MUSEUMS**
LAUREN HLUBNY

ROOM 214

7:15 PM

**ARE MICE WITH GENE-TARGETED DELETION
OF THE KV1.3 ION CHANNEL SUITABLE
BEHAVIORAL MODELS OF ATTENTION
DEFICIT/HYPERACTIVITY DISORDER?**
CARLIE HOFFMAN

ROOM 201

6:50 PM

**WOMEN'S EMPOWERMENT THROUGH
MARKETING**
MATTHEW A. PRINCE

ROOM 114

7:15 PM

**INTEGRATIVE COMMUNITY SERVICE PROJECT
AND RACE RELATIONS**
DAVID CROMER

ROOM 205

6:50 PM

**ZYMOSEAN FUNGAL INFECTION INDUCES
NUCLEOSOME DISTRIBUTIONS DURING
THE INNATE IMMUNE RESPONSE ON A TIME
DEPENDENT MANNER**
OLIVIA GRUDER

ROOM 205

7:15 PM

**MAYBE SHE LIKES IT: A WEB COMIC EXPLORING
INTERNET TECHNOLOGY AND GENDER
EQUALITY**
LENA NATERO WEISSBROT

ROOM 214

6:50 PM

**THE DYNAMICS OF THE DISTRIBUTION OF
PREDATORS IN AN ENCLOSED RESERVE IN
SOUTH AFRICA**
KRISTIN ENGBRETSSEN

ROOM 214

7:15 PM

**"HIS PANIC": LATIN-AMERICAN POETRY IN
TRANSLATION**
DANIEL RUIZ

ROOM 114

Undergraduate Research and Creative Activity Awards (URCAA)

LIVE ENCOUNTERS: PERFORMANCE IN MUSEUMS

LAUREN HLUBNY
SUPERVISING PROFESSOR: DR. KRIS SALATA

In recent decades, museum curators have shown a growing interest in live performance events that would alter the often austere and intimidating atmosphere of the exhibits. Major museums, including the Smithsonian's National Museum of the American Indian in Washington, D.C. and the Museum of Modern Art in New York City, have begun to incorporate regular performance programming, including live interactions between performers and audience members, ranging from reenactments to live human installations. This project had a research and a creative component. It addressed the question of performance in the museum, treating the museum venue as a site of societal ritual. I approached the subject with an interdisciplinary focus, employing practical and theoretical knowledge from the fields of theatre and anthropology. The first phase involved the completion of a hands-on internship at the Spanish-Apalachee Living History Museum Mission San Luis in Tallahassee, Florida, where performance is an accepted and necessary part of everyday museum operation. In the second phase of the project, I led a small ensemble of performers in creating and testing out various modes of performance for five different museums throughout the state of Florida, ranging from "invisible theatre" to personally driven monologue pieces within the framework of the museum as a ritual site. I gathered insightful information through participant observation and interviews and drew innovative conclusions.

ARE MICE WITH GENE-TARGETED DELETION OF THE KV1.3 ION CHANNEL SUITABLE BEHAVIORAL MODELS OF ATTENTION DEFICIT/HYPERACTIVITY DISORDER?

CARLIE HOFFMAN
SUPERVISING PROFESSOR:
DR. DEBRA FADOOL

Attention deficit/hyperactivity disorder (ADHD) is a condition characterized by excessive levels of impulsivity, inattention, and hyperactivity. ADHD research often utilizes animal models, the most widely studied being the spontaneously hypertensive rat; however, a wholly representative model of the diagnosis has yet to be discovered. While examining mice subjected to gene-targeted deletion of the Kv1.3 ion channel, it was noted they expressed behavioral symptoms of ADHD, indicating these mice may be models of the ADHD diagnosis. Deletion of Kv1.3 ion channel (thus producing knock-out, or KO, mice) results in mice with enhanced olfaction, an increased metabolism, and resistance to obesity; it is thought this increased metabolism may be the cause of ADHD-type hyperactive behaviors. While ADHD is most often documented in children and adolescents, it has also been proven to last into adulthood; as a result, both young (two to five month old) and adult (eight to twelve month old) as well as KO and genetically unaltered mice were examined. The observed hyperactive behaviors of the KO mice were first quantified through use of metabolic chamber analysis and object-based attention testing. Metabolic chamber analysis involved placing the mouse in a cage equipped with an infrared laser, enabling KO hyperactivity levels to be recorded. The object-based attention test involved presenting a mouse with one familiar toy and one unfamiliar toy and using the amount of time spent on each toy to determine attention span. Symptoms of ADHD in both animal models as well as human patients are often treated with methylphenidate, which dampens hyperactive behaviors and increases the attention span. Thus, all mice were subjected to treatment with methylphenidate before repeating behavioral testing to determine whether KO mice responded to the drug. These findings will aid in future research on the cause, diagnosis, and treatment of ADHD.

**ZYMOBAN FUNGAL INFECTION INDUCES
NUCLEOSOME DISTRIBUTIONS DURING
THE INNATE IMMUNE RESPONSE ON A TIME
DEPENDENT MANNER**

OLIVIA GRUDER
SUPERVISING PROFESSOR:
DR. JONATHAN DENNIS

Chromatin structure plays a critical role in the regulation of the human genome. An understanding of the role of chromatin structure and its relationship to gene regulation is critical to developing new strategies to prevent and treat diseases. We chose to investigate the anti-inflammatory response of human macrophage-like cell line (THP1) to Zymosan, in order to elucidate the regulation of chromatin. Zymosan is a component of the fungal cell wall that induces an innate immune response. After THP1 were treated with Zymosan, we hypothesized that the fungal infection would initiate an inflammatory response by altering nucleosome redistribution and/or altering chromatin structure in a time-dependent manner. Based on previous results that showed rapid, widespread, transient changes in nucleosome distribution in the innate immune response, we chose to look at multiple time points at high temporal resolution: 0 (control), 20', 40', 60', 80', 100', 2h, 3h, 4h and 12h. We measured nucleosome distribution at each of these time points at hundreds of genes transcription start sites involved in the immune response. We saw the greatest changes in nucleosome positioning from 20 to 60 minutes, and it appeared that these changes were transient since they reverted back to their original after the 60-minute time point. These results support our prediction that all cells have the same nucleosome distributions during their resting states, but can be altered with the addition of an insult. In response to a stimulus, a biochemical "yawn" occurs to provide accessibility to genes needed to provide a response. The data indicates that widespread but transient changes occur to the entire genome upon response to an environmental stimulus.

**SCHOOL CHOICE AND SEGREGATION IN
FLORIDA**

ELIZABETH MARTIN
SUPERVISING PROFESSOR:
DR. CAROL WEISSERT

Although the 1954 case of *Brown v. Board of Education of Topeka* prohibited de jure racial segregation in American public schools, de facto segregation persists in many schools around the country. There is research to suggest that one of the causes of this segregation is the school choice movement, which includes charter schools, magnet schools, vouchers, and other programs intended to allow parents more choice in the school their child attends. This project examines the effects of the school choice movement on both racial and socioeconomic segregation in Florida, a state that has fully embraced the school choice movement. I used data from the National Center for Education Statistics and the US Census to examine segregation on the school, district, and state levels in order to gain a thorough understanding of the effects of schools of choice. The results indicate that charter and magnet schools are more racially unbalanced than traditional schools in Florida, and that since the opening of charter schools in the state, more Florida public schools have become racially unbalanced. Unfortunately, results for socioeconomic segregation are slightly more unclear due to data constraints on poverty within schools and changes in measures between years. Overall this research shows that there may be unintended consequences to school choice. This is important for the state of Florida in particular to consider, since the ideological rhetoric surrounding the issue of school choice and education reform often outshines the concrete evidence of its costs.

UTILIZATION OF A DIAZENE CORE TO TARGET SULFINIC ACID

LEXI MORGAN
SUPERVISING PROFESSOR:
DR. IGOR ALABUGIN

Hydrogen peroxide (H_2O_2) regulates an array of physiological functions and acts as a second messenger at low levels. However, the elevation of these levels can lead to oxidative stress, a state that is implicated in the progression of human diseases, such as cancer and Parkinson's disease. Cysteine is highly susceptible to oxidation from hydrogen peroxide because of the nucleophilicity of the thiol group ($R-SH$) to form sulfenic acid ($RSOH$). The thiol group can be further oxidized to form sulfinic acid (RSO_2H) and sulfonic acid (RSO_3H). Each of these species exhibits unique chemical properties as well as a versatile mechanism to alter protein function. While the regulatory function of sulfenic acid has been widely studied, very little is known about the role sulfinic acid plays. Mounting evidence suggests that the cysteine sulfinic acid is more regulated than once thought. An enzyme called sulfiredoxin was found to reduce the sulfinic form of certain peroxiredoxins. The discovery of a sulfinic acid reductase suggests a more fundamental role for this modification, thus the proposal of the "sulfinic acid switch" in regard to the protein regulation by hydrogen peroxide. At The Scripps Research Institute, Dr. Kate Carroll's goal is to monitor the oxidation of cysteine through the utilization of novel probes. This project focused on the utilization of a diazene core ($R-N=N-R$) with a variety of functional groups in order to target sulfinic acid. This electrophilic nitrogen-containing species acts as a specific reagent to target the nucleophilic sulfinic acid. This selective ligation reaction with sulfinic acids has potential utility for detections of oxidative modifications, as well as regulations, in biological systems.

STABILITY OF BOSE-EINSTEIN CONDENSATES IN A RANDOM POTENTIAL

KELLY ANN PAWLAK
SUPERVISING PROFESSOR:
DR. ZIAD MUSSLIMANI

In 1924 Bose and Einstein predicted that certain types of atomic gases, when cooled down to almost 0K, tend to condense (while remaining a gas) and form a "super atom" that behaves like a single wave rather than an assembly of particles. This phenomenon, known as Bose-Einstein condensation (BEC), is counterintuitive as gases usually solidify at very low temperatures. Over the years, many scientists have failed trying to directly observe this phenomenon in laboratory experiments until 1995. Using a new experimental technique called laser cooling, two groups led by Wolfgang Ketterle and Eric Cornell (MIT) and Carl Wieman (CU) finally observed the formation of BECs and were awarded the physics Nobel Prize in 2001. BECs are now a very active topic in theoretical and experimental physics, having potential use in dozens of applications. Theoretically, the dynamics of the condensate are accurately modeled by the Gross-Pitaevskii equation (GPE). The analysis of the GPE is formidable due to its nonlinearity and therefore numerical simulations are necessary to survey basic BEC dynamics. As a result, there are many open questions regarding the behavior of BEC's and their dynamics. My research looks to answer the question of stability of the condensate. Given a certain experimental configuration, will the condensate remain stable so that data can be collected? Certain kinds of experimental variations are accurately modeled by a low frequency random potential (i.e. "noise"). By including this noise into mathematical workups of common experimental configurations, we can theoretically test the stability of the condensate. We use a 1D mathematical model with the assumption that the gas is dilute and non-interacting sans infrequent elastic collisions between the particles. The results are non-trivial, and show that the condensate favors periodicity.

**“HIS PANIC”: LATIN-AMERICAN POETRY
IN TRANSLATION**

DANIEL RUIZ

**THE MICHAEL J. SHAARA UNDERGRADUATE
RESEARCH & CREATIVE ACTIVITY AWARD**
SUPERVISING PROFESSOR: DR. DAVID KIRBY

Though I learned it first, I no longer speak Spanish fluently. Wishing to reconnect myself to my language and my culture—my own interests also piqued by the romantic sound of the language and the sheer brilliance and precision of the Spanish-language poets I had read—I returned to the language through poetry translation in an attempt to morph what had become unfamiliar (Spanish) into the language with which I have become most familiar (English). The purpose of this presentation is to give insight into processes—of writing, rewriting, translating poems from Spanish to English, and learning to confront and accept the unfamiliar. Over the summer, I traveled to Uruguay and Argentina, where I was forced to speak Spanish only, where even my limited Puerto Rican Spanish was foreign to the European-influenced Spanish of South America. Living in Tallahassee before and after my trip, I worked to improve my Spanish and focused my reading on poets from Latin-American countries and on the notable essays and books on translation that are considered paramount in the field. My period of focus is the twentieth century, and while English-language poets were writing about “The Everyday”, their Latin-American counterparts, while still, as Emerson says, embracing “the common,” often focused on the big issues of Life, Death, Time, and especially Love. My goal is this: I wish to relay the experience of working in two languages instead of one, and to show how the discourse between languages altered my writing and the way I think about language.

**“IT’S NOT GAY IF THEY DON’T TOUCH”:
CHALLENGING HETERONORMATIVE EMPIRE
AND COUNTERING THE ‘CLOSETING OF
HISTORY’ THROUGH ART**

ISABELLA STEELE

SUPERVISING PROFESSOR:
PROF. PAUL RUTKOVSKY

My project revolves around the “closeting of history”, which is the phenomenon in which evidence that suggests gay or bisexual behavior is omitted from the narratives of important historical figures, thus allowing them to be imagined as heterosexual by future generations (and depriving young people of gay and bisexual icons). I wanted to create artwork that counters this phenomenon, by placing historical figures and popular characters in situations that complicate their sexuality, removing them from the heterosexual narrative that they have been confined to. I first began to explore this concept with a series of drawings of several American presidents as drag queens, complete with drag names, such as Abraham “Babe” Lincoln. I want these and other art pieces of mine to challenge the idea of “normativity” as applied to sexuality by re-appropriating iconic figures such as presidents, who have been symbols of heterosexual masculinity and success, as tools for showing sexuality as a performance—something that is fluid rather than compartmentalized. I want key works to simultaneously tackle the discomfort associated with excessive femininity, particularly when that femininity is applied to powerful individuals, and to negate the idea of the effeminate as weak. My artwork consists primarily of colorful and playful drawings and paintings, inspired by the camp aesthetic and sense of humor. At the end of the day, I just want to confront people with fun images of gay male sexuality, so that they might question what it is about it that makes them uncomfortable, and whether their discomfort is truly warranted.

PRESENTATION ABSTRACTS

ENZYMATIC HYDROLYSIS KINETICS

SEAN TACEY

THE DAVID B. FORD UNDERGRADUATE RESEARCH & CREATIVE ACTIVITY AWARD

SUPERVISING PROFESSOR: DR. JOHN TELOTTE

Energy has become a much needed commodity throughout the world; as such, the development of environmentally safe fuel sources is of great importance. Agricultural residues (cellulosic material) are turning out to be an attractive source for production of biofuels due to their cost, availability and power to generate required quantities of fuel. A method to convert these residues to fuel is by enzymatically breaking them down to form sugars and then fermenting these sugars to produce useful fuels and chemicals. However, significant challenges remain in developing an economic and efficient conversion process. One challenge is in determining the rate at which enzymes break down the cellulosic material and in developing a comprehensive model which aids in the design of reactors for biofuel production. My work has focused on determining the rates at which the enzymatic hydrolysis of cellulose into glucose occurs, and how outside factors can alter these rates. This has been accomplished through the use of a quartz crystal microbalance (QCM), a device that detects minute changes in the mass (i.e. nanogram quantities) of a coated material through frequency measurements. The gold crystals used in the QCM device are coated with a thin cellulose film using an environmentally friendly solvent, NMMO. Cellulose hydrolysis has been studied using commercial enzyme mixtures and it has been discerned that the QCM can directly measure the amount of enzyme adsorbed, as well as the subsequent rates of hydrolysis, in a single measurement – factors which will aid in the development of a theoretical model. Further, efforts have been made to study the effect of different products (e.g. glucose and solvent) in regard to their influence on the rates of the hydrolysis reaction. This will aid in developing a comprehensive model of the hydrolysis process.

SPONGE REGENERATION AND FOOD ABUNDANCE

KELLY VASBINDER

SUPERVISING PROFESSOR: DR. JANIE WULFF

Sponges are an integral part of marine ecosystems, especially coral reefs, because they perform many functions necessary to keeping the ecosystems healthy. The most important of these functions is the filtration of the water around them. Sponges feed by filtering bacteria and other small plankton from the surrounding water, which keeps the water clean for the rest of the animals on the reef. When a sponge is wounded, it has a decreased filtering ability and can also lose its ability to perform other important functions. Sponges are able to regenerate after wounding, and this study compares the regeneration and growth rates of sponges in two different habitats. This is relevant because different habitats have different concentrations of bacteria, and sponge food abundance in a single habitat can change based on many different factors, including factors that can be influenced by humans, such as nutrient concentrations. Mangrove habitats have a higher concentration of sponge food in the water than reef sites, so individual reef sponges from the species *Ircinia felix*, *Verongula rigida*, *Callyspongia vaginalis*, *Niphates digitalis*, and *Mycale laevis* were placed on mangrove and reef sites. Genotype matching was used to ensure accurate comparison. Each sponge was wounded, and every sponge in a species was wounded in the same way. The sponges were then allowed to regenerate these wounds, and the regeneration and specific growth rates of each individual were calculated and compared. From the analyses to date, the concentration of sponge food in the water may increase regeneration rates in *V. rigida*, *C. vaginalis* and *N. digitalis*. It also affects the organization of tissue at the regeneration site in *C. vaginalis* and *V. rigida*.

MAYBE SHE LIKES IT: A WEB COMIC EXPLORING INTERNET TECHNOLOGY AND GENDER EQUALITY

LENA NATERO WEISSBROT
SUPERVISING PROFESSOR:
PROF. CARRIE ANN BAADE

“Maybe She Likes It” is a web comic that tells a surreal story of a girl’s development, as though she were immersed in a reality where social internet culture occupied a physical space. “Maybe She Likes It” reflects the voice of the Millennial as the first generation to grow up with the internet during adolescence and to experience aberrant content previously unavailable in print and other mass media forms such as child pornography, bestiality, real-rape and snuff. I conclude that such media is contributing to a shift in socio-cultural perceptions on gender and sexuality. Socializing on the internet is a unique sort of out-of-body experience where one has the ability to be judged by the quality of one’s soul, and thus allows users to experiment with identity easily; one can easily pretend to be male or female. It is my hope that this experience enables more people to see gender as mostly a social construct and to stop imposing double standards on both men and women. Many commonly held perceptions about gender and sexuality are outdated because of the way technology has compensated for biological disadvantages which originally influenced these perceptions that have become socially engrained. Though print editions of “Maybe She Likes It” are available, the comic was created to be viewed online, closely relating its content to its form; the web comic is a commentary on the very “space” it occupies. The format of the web comic is inspired by the style of shōjo manga (Japanese comics for girls), using emotive layouts and backgrounds to create a tone and atmosphere, while simultaneously referencing shōjo manga as a medium through which women were able to manipulate social perspectives on female sexuality. My research includes interviews with the owner of the World Erotic Art Museum, Naomi Wilzig, gallery owner/curator, Catherine Clark, and artist, Masami Teraoka. “Maybe She Likes It” can be read at universehacktress.com/maybe-she-likes-it-project/.

Public Service Research Fellowships (PSRF)

BRIDGING THE GAP

KATRINA CRANKSHAW AND LEE ANNE STEERS
SUPERVISING PROFESSOR: DR. AMY KOWAL

Our project explores the role of education within the community of Pamohi village and the Parijat Academy in Assam, India, while simultaneously examining the compatibility and effectiveness of our respective disciplines: Anthropology and Photography. For three months we lived with the Teron family in Pamohi, while also interning and conducting research at the Parijat Academy, a school founded by the Teron family that provides free education to children who would not otherwise be able to attend school. Our research addresses questions such as: How can education be used to address social inequality? How can art and anthropology be combined to comment on social issues? How can we investigate the gap between anthropology and art, the gaps formed by different languages, cultures, and social classes, as well as between Parijat and the rest of the world? And, finally, what is our role in this process as international volunteers? The culmination of our project includes an ethnography that addresses education as a tool for social change. Through interviews conducted with Uttam Teron, students from the school, and other volunteers, we explore how formal education—though not widely available—is one of the most successful tools for combatting social inequality in Assam and throughout India. Our project also utilizes visual imagery—photographs and video footage—as an important medium for breaking the language and cultural barriers we encountered, allowing us to learn how Pamohi village, and India in general, values education. Finally, our hope is that all of these project components assist Parijat in its mission to “break the cycle of poverty.”

PRESENTATION ABSTRACTS

THE DYNAMICS OF THE DISTRIBUTION OF PREDATORS IN AN ENCLOSED RESERVE IN SOUTH AFRICA

KRISTIN ENGBRETSSEN
SUPERVISING PROFESSOR:
DR. FRANCES C. JAMES

Siyafunda Conservation Initiative conducts wildlife research on the Greater Makalali Private Game Reserve, a 61,000 acre fenced reserve in South Africa. Their objective is to reintroduce native species to the reserve and reestablish the natural ecosystem that was once present across much of South Africa. The purpose of my research trip was to examine the activities of mammalian predators and create GIS-based maps that show predator distribution in the reserve. The predators I focused on were lion, cheetah, leopard and hyena. My goals were to receive training and field experience in conservation research and to provide Siyafunda with information that could help with decisions for future management. During my six weeks living in the reserve, we took daily monitoring drives to collect information, such as demographic statistics, prey selection, reproductive behavior, and habitat usage for multiple species. Using the predator information I collected in six weeks, as well as eight years of Siyafunda's previous data, I created maps to visualize predatory home ranges in the reserve. I also helped with updating the identification system for individual animals and creating family trees that help identify the bloodline of individual predators. I studied the past data to help analyze predator movement and population dynamics throughout the years. I also investigated the ways that adding or removing animals from the system affects already established populations. I am working with the director of Siyafunda, Michael Job, to develop a GIS-based distribution model that can be continuously updated. My research should assist the managers of the GMPGR as they continue to assure the health of the ecosystem, especially regarding the challenges within a closed system of overpopulation or species decline from competition.

WOMEN'S EMPOWERMENT THROUGH MARKETING

MATTHEW A. PRINCE
SUPERVISING PROFESSOR:
DR. STEPHEN MCDOWELL

This project operates through the lenses of two disciplines: communications, as it relates to cross-cultural mediums and varying target groups, and the business-marketing field, as it investigates how to create effective marketing material for a non-profit agency. Specifically, I investigated the relationship between the sale and promotion of goods made by a women's artisan collective, which was located in the Sacred Valley region of Peru and is supported by the non-profit, ProWorld. This research culminated in the creation of marketing materials with three main goals: to connect the community to potential consumers for the products, to highlight the quality of the goods being produced, and to document and share a little about the women's lives as creators. This research was sparked by my desire to explore the commonly held assumption that marketing materials used by a non-profit association are far less significant because their effectiveness is usually not quantified through sales. During the course of this investigation I was able to see exactly what goals a non-profit organization might have in regards to promotional material, and how this can help guide those who work to produce such materials. During my time in Peru I was able not only to explore how to increase the effectiveness of marketing a non-profit, but with this particular project, I was also able to create marketing methods targeting tourists, the most likely buyers of these artisan goods.

Social Work Undergraduate Research and Creative Activity Award (SWURCAA)

INTEGRATIVE COMMUNITY SERVICE PROJECT AND RACE RELATIONS

DAVID CROMER
SUPERVISING PROFESSOR:
DR. STEPHEN TRIPODI

Many people believe the misconception that Americans live in a “post-racial” society, which overlooks the significance of race on Florida State’s campus and across the country. As forms of racism have evolved from overt to covert, its pernicious effects propel the desire to research means by which to connect diverse populations. Intergroup dialogue theory addresses strategies to improve relations between races by concentrating on fostering a healthy environment for diverse populations to exercise group cohesion methods. The purpose of this research was to use the intergroup dialogue theory combined with participation in community service and dining together to construct meaningful and cohesive relationships between diverse people groups. The sample was comprised of Florida State University students who identify as Black or White. The recruitment process involved contacting the Black Student Union via email and snowball sampling for the White participants. Eight participants met twice per week, for three consecutive weeks, to eat a meal together and dialogue concerning race relations in general and race relations at FSU in particular. Participation in group community service projects, e.g. packing meals for people experiencing homelessness, was also integral to the experience. Due to the potential for this topic to be sensitive or controversial, the food and group community service project was used to alleviate stress and provide comfort. A focus group was conducted at the conclusion of the third week in attempt to uncover themes. The participants responded extremely positively with a strong desire for this process to be used in future programs at Florida State and abroad. Some criticism outlined the need for more diversity and an increase in the number of participants to gain a better understanding of different perspectives with people from different backgrounds.

Mentored Research and Creative Endeavors Awards (MRCE)

EXPLORING THE ROBUSTNESS OF FEATURE-BASED REWARD PRIMING

RONALD ANDRINGA
SUPERVISING PROFESSOR: DR. WALTER BOOT

Ronald Andringa is from Chiang Mai, Thailand, and is majoring in Psychology. His Honors Thesis, which he defended last spring under the direction of Dr. Walter Boot, focused on exploring the relationship between reward and visual processing. His primary research interest focuses on the factors that determine the allocation of attention in complex visual environments and their implication for performance. After graduation he plans to pursue his Ph.D. in Cognitive Psychology.

MR ELECTRICAL IMPEDANCE TOMOGRAPHY OF ACETYLCHOLINE INDUCED NEURAL ACTIVITY

GRACE CHRZANOWSKI
SUPERVISING PROFESSOR: DR. SAMUEL GRANT

Grace Chrzanowski is a junior from Gainesville, Florida, completing her major in Biomedical Engineering and a Bachelor of Science in Chemical Engineering. A previous participant in the Undergraduate Research Opportunity Program (UROP), her research, under the direction of Dr. Samuel Grant, has focused on site-specific neuronal activation in *Aplysia californica*, with the use of acetylcholine in the presence of an 11.75T magnetic field. She has been intensely involved in Dr. Grant’s lab for two semesters and will continue building upon this project with an Honors Thesis. Grace hopes to tighten the gap between biomedical engineering and the medical field while pursuing a Ph. D. in Biomedical Engineering.

PRESENTATION ABSTRACTS

DETERMINING BY USE OF NESTED DELETIONS WHAT MAINTAINS PROPER REPLICATION TIMING

CAROLINE DAVIS
SUPERVISING PROFESSOR: DR. DAVID GILBERT

Caroline Davis is a senior majoring in Biological Sciences. She has been in the research setting for several years, starting first in Dr. Thompson's breast cancer research lab at the Mayo Clinic in Jacksonville. For the past two years she has been conducting replication timing research under the direction of Dr. Gilbert and is currently working towards completing her Honors Thesis. After graduation Caroline plans to attend graduate school to pursue a Ph.D. in Virology.

THE EFFECT OF COPPER PARTICLE SIZE ON THE PRODUCT DISTRIBUTION FROM THE ELECTROCHEMICAL REDUCTION OF CARBON DIOXIDE

JEFFREY ETHIER
SUPERVISING PROFESSOR: DR. EGWU KALU

Jeffrey Ethier, a Tallahassee resident, is in his final year of Chemical Engineering and is currently working on his Honors Thesis. Since the beginning of the year, he has been conducting research under Dr. Egwu Kalu at the College of Engineering. Upon graduation, Jeffrey would like to continue research in the renewable energy and energy conversion field while obtaining a Ph.D. in Chemical Engineering. His career goal is to conduct research for NASA or one of the National Laboratories in the U.S.

CULTURE, HEALING AND MEDICINE IN AMAZONIAN ECUADOR

PUNAM VINOD GOPAL
SUPERVISING PROFESSOR:
DR. MICHAEL UZENDOSKI

Punam Gopal is a senior from West Palm Beach, Florida, pursuing a degree in Spanish with minors in both Chemistry and Biology. Her research focuses on the use of medicinal plants in Amazonian Ecuador with an emphasis on the cultural value behind their perspective on health and healing. After graduation, Punam plans to pursue a Master's degree as a Physician's Assistant.

CHECKPOINT SILENCING REGULATION BY 14-3-3 PROTEINS

CURTIS GRAVENMIER
THE HELEN LOUISE LEE UNDERGRADUATE RESEARCH AWARD
SUPERVISING PROFESSOR:
DR. YANCHANG WANG

Curtis Gravenmier began his college research experience by studying interactions between anions and naphthalene diimides under the direction of Dr. Sourav Saha. As he delved deeper into the life sciences and genetics, he became particularly interested in cancer biology. In spring of 2012, he joined the laboratory of Dr. Yangchang Wang at the FSU College of Medicine. His current project seeks to understand mechanisms of chromosome missegregation implicated in cancer. Findings from the project suggest that 14-3-3 proteins could be targeted to enhance antimitotic chemotherapies. Curtis is also currently serving as an Undergraduate Research Opportunity Program (UROP) leader.

WE DA PPL: A PILGRIMAGE OF THE JADED YOUNG AMERICAN

MORGAN HAMILTON
SUPERVISING PROFESSOR:
PROF. CAROLYN HENNE

Morgan Hamilton is receiving his B.F.A. in Studio Art after transferring from Pensacola, Florida. He is a student of Art, Art History, Geography, and Politics and synthesizes all into an exploration of what it is to be a young American. He started as a painter and transitioned into experimental video to better expand his message.

THE SUNRISE CUBE - SHARING LIGHT

CHASE JONES
SUPERVISING PROFESSOR: PROF. ROB DUARTE

Chase Jones is a student in the Department of Art focusing his education on digital media, digital fabrication and sculpture. He is drawn to the idea of an "experience" and being immersed into new environments. Chase spent a year watching the sunrise every morning and asked over 200 people to join him in this experience. He desires to create art that revolves around the subject and object of Light. He and his dear wife, Jayne Jones, seek to share Light with others.

STUDY OF SHASHLIK DETECTOR PERFORMANCE UNDER HIGH PARTICLE PILEUP

SPENCER JONES

SUPERVISING PROFESSOR: DR. TODD ADAMS

Spencer Jones has been a part of the FSU physics program for two years and has spent about a year working under his research professor, Dr. Todd Adams. He has always been interested in physics but did not know that he wanted a career in it until a few years ago. Since then he has decided to go into the field of high energy physics which focuses on particle and field behaviors using particle accelerators like the LHC. He is very excited to be working with CERN and the LHC because of the impact that such an experiment has on our understanding of physics.

PREVENTION OF HYPERTENSION AND DIABETES IN GHANA

SYDNEY JONES

THE PHI ETA SIGMA ENDOWED SCHOLARSHIP TO ENHANCE UNDERGRADUATE RESEARCH

SUPERVISING PROFESSOR: DR. KARLA SCHMITT

Sydney Jones is a junior Exercise Science student who first got involved with research through the Undergraduate Research Opportunity Program (UROP). She then had the opportunity to intern at Our Lady of Grace Hospital in Asikuma, Ghana, for two months this summer through the Global Scholars program. While at FSU she usually assists Dr. Schmitt in research on Sexually Transmitted Diseases but decided to branch off while in Ghana and collect data on the prevalent diseases in her hospital area. Along with the public health brochure that she already produced from her data, she hopes to start an Honors Thesis that also involves the collected information.

PROTECTING AGAINST PHOTORECEPTOR DEGENERATION IN A MODEL OF RETINITIS PIGMENTOSA

JOSEPH LEBOWITZ

SUPERVISING PROFESSOR: DR. JAMES FADOOL

Joe Lebowitz, from Boca Raton, Florida, is a senior completing a major in Biological Sciences and a minor in Philosophy. After graduation, he plans on pursuing a Ph.D. in Neuroscience to study genetic and biochemical hallmarks of addiction and other mental illnesses. Ultimately, he hopes to elucidate the role of mindfulness practices as an alternative to pharmacological intervention in such cases.

LINDY HOP AND JITTERBUG: THE DEVELOPMENT OF AMERICAN SWING DANCE IN THE UNITED KINGDOM

DAVID G. MILLER

THE SCOTT AND INA MCNICHOLS UNDERGRADUATE RESEARCH AWARD

SUPERVISING PROFESSORS: PROF. PATTY PHILLIPS AND REBECCA STRICKLAND, M.A.

David Miller is a junior from Tallahassee majoring in Religion. Previously a student in the Undergraduate Research Opportunity Program (UROP), he is now serving as a UROP leader. He fell in love with the social dances of the 1920s and 1930s after taking a swing dance course offered through the FSU School of Dance during his freshman year. David is the president of the Swing Dance Club at FSU and is working to grow the Tallahassee swing dance community. He also teaches swing dance locally and actively pursues a deeper understanding of American vernacular dance through research and travel.

PRESENTATION ABSTRACTS

MECHANISTIC INVESTIGATIONS INTO 5-iodo-1,2,3-triazole formation

NAJEAH OKASHAH
SUPERVISING PROFESSOR: DR. LEI ZHU

Najeah Okashah, a previous student in the Undergraduate Research Opportunity Program (UROP), is currently pursuing her B.S. in Biochemistry and will complete her degree in the spring of 2014. She has been working with Dr. Lei Zhu since June, 2012 and is currently working on her Honors Thesis. After graduation, she is planning on continuing research and pursuing an M.D./Ph.D.

INTERACTIONS WITH THE OUTSIDE: EXPLORING THE RELATIONSHIP BETWEEN A NON-PROFIT, IMMIGRANTS, THE COMMUNITY, AND POLICY IN THE WASHINGTON D.C. METRO AREA

ALEXANDRA OLSEN
SUPERVISING PROFESSOR:
DR. DEANA ROHLINGER

Alexandra Olsen is originally from Cape Coral, Florida. She is studying French, International Affairs, and Sociology with a minor in Statistics. She is a Social Science Scholar, an Undergraduate Research Opportunity Program (UROP) leader, involved with Advocates for Immigrant and Refugee Rights and the College of Social Science Leadership council, and is an intern at Catholic Charities in their Immigration Law department. After finishing at Florida State she hopes to pursue a dual degree, a Ph.D. in Sociology and a Masters of Public Policy.

OBSERVATION ON THE VARIOUS PEDAGOGICAL APPROACHES IN PIANO LESSONS AND MASTERCLASSES.

JI EUN PARK
SUPERVISING PROFESSOR:
DR. VICKI MCARTHUR

A native of South Korea, Ji Eun Park has performed across the United States and Europe as an active soloist and a chamber musician. Recently, she has made successful debuts in Weill Recital Hall in Carnegie Hall and Steinway Hall in New York. She is currently studying Piano Performance along with specialized studies in Piano Pedagogy and Music Entrepreneurial Studies at Florida State University. While she enjoys performing as a pianist, her research interest involves various pedagogical approaches on piano lessons and masterclasses. Upon graduation, she plans to attend graduate school to further her studies and pursue a Master's degree in Music.

INDIVIDUAL VARIATION IN TASTE PHENOTYPE PREDICTS SUSCEPTIBILITY TO WEIGHT GAIN ON A HIGHLY PALATABLE DIET

LEANNE POLISCHUCK
SUPERVISING PROFESSOR: DR. LISA ECKEL

Leanne Polischuck is currently a senior pursuing a Bachelor's degree in Psychology as well as a minor in Biology. Her academic interests focus on the implementation of biological processes to investigate and understand human behavior. Her work in Dr. Eckel's lab has sought to uncover the anatomical and neural elements guiding obesity in humans, specifically dopaminergic pathways coupled with anatomical differences in opioid expression. Upon graduation, she plans to further expand her research background and pursue a postgraduate degree in Neuroscience.

APPRAISALS OF ACUTE STRESS ON SUBSEQUENT ACTS OF SELF-REGULATION.

BRANDON RAMSEY
SUPERVISING PROFESSOR:
DR. ROY BAUMEISTER

Brandon Ramsey is from Pensacola, Florida, and is pursuing a double major in Psychology and Sociology. He has worked in the Baumeister Lab for two years and his research interests include self-control, motivation, and their physiological correlates. After graduation he plans to continue his work on stress and self-control and pursue a Ph.D. in Social Psychology.

ACUTE STRESS AND SELF-CONTROL: THE EFFECT OF THREAT AND CHALLENGE CALCULATING THE FREE ENERGY DIFFERENCE OF R282Q AND R282W

KLARIZ TEVES
SUPERVISING PROFESSOR: DR. WEI YANG

Klariz Teves is a second year student studying Exercise Science. He was born in the Philippines and moved to Defuniak Springs, Florida, when he was eight years old. A former participant in the Undergraduate Research Opportunity Program (UROP), he took on this research project with Dr. Yang in the Department of Chemistry and Biochemistry because he has many interests in the various fields of science. He has been working on this project for one year, and though it is a slow process he will persevere until its completion. He is making the most of his undergraduate years by expanding his horizons through service and research.

THE DEBATE OF POPE PIUS XII'S SILENCE IN THE HOLOCAUST

KAYLEIGH WHITMAN
**THE JOHN W. DAY III UNDERGRADUATE
RESEARCH AWARD**
SUPERVISING PROFESSOR:
DR. NATHAN STOLTZFUS

Kayleigh Whitman is a native of Lakeland, Florida. During her senior year she will be completing an Honors Thesis under the direction of Dr. Nathan Stoltzfus. The thesis will explore the evolution of the debate on the controversial actions of Pope Pius XII during the years of the Holocaust. Kayleigh will graduate in the spring of 2014 with a degree in History and a minor in Religion. After graduation she intends to obtain both an M.A. and Ph.D. in American History.
**THE EQUILIBRIUM SERIES SUMMER
RESEARCH PROJECT**

MARY CHRISTINE WILLIAMS
SUPERVISING PROFESSOR:
PROF. LILIAN GARCIA-ROIG

Mary Williams is a Studio Art major. Living in Tampa Florida, for sixteen years she frequently visited the Dali Museum in St. Petersburg, which led to a heavily surrealist-influenced visual dialogue in her work. Her travels through Europe, intense interest in other religions and the visionary art movement also contribute the visual dictionary that she pulls from to create her pieces. She is currently pursuing her undergraduate BFA and plans on pursuing her Masters afterwards.



CREATING A COMMUNITY FOR SUCCESS: THE HONORS, SCHOLARS AND FELLOWS HOUSE

Florida State University enjoys a longstanding tradition of giving students the foundation they need to change the world. Our success is noteworthy, but now imagine a space that creates a sense of community among our very brightest, most hard-working students and provides them with the level of support that allows them to reach new levels of success. That is our objective in creating the Honors, Scholars and Fellows House.

The Honors, Scholars and Fellows House will bring together our most talented and motivated students in an inspirational setting which will enable them to share creative ideas, build lasting relationships, discover new ways of thinking and tap into academic services, programs and mentoring like never before. To help us finish the house, please contact Katherine Cline at the Florida State University Foundation at kcline@fsu.edu.

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