



2013 Spring

Fiat Lux

A showcase of Florida Southern College
student scholarship, creative works, and
research

ORAL PRESENTATIONS

CH 112

Time	Student	Title
9:45 to 10:00	Ortiz, Marina	James A. Haley Archival Exploration: The Arts
10:00 to 10:15	Restall, Tamala	James A. Haley Archival Exploration: Southern Manifesto
10:15 to 10:30	Stone, Chelsia	James A. Haley Archival Exploration: Equal Rights Amendment
10:30 to 10:45	Swygard, Destiny	James A. Haley Archival Exploration: Manatee School Crisis
10:45 to 11:00	BREAK	BREAK
11:00 to 11:15	Shiner, Amanda	Whistle While You Work: A Review of Research on Vocal Development in Odontocetes
1:30 to 1:45	BREAK	
1:45 to 2:00	Watts, Madeline	Christianity as a Means of Coping and Maintaining Well-Being
2:00 to 2:15	Mukherjee, Indrajyoti	Benefits of Free Enterprise
2:15 to 2:30	Varnum, Mitch	Genetic Analysis of 'Pink Pet'
3:30 to 3:45	BREAK	
3:45 to 4:00	Cardona, Juliana	Oral History: Colombia's Armed Conflict
4:00 to 4:15	Kuzma, Todd	Perceived External Influences in Subjects with Marked Concern for Body Image
4:15 to 4:30	Ferguson, Erin	Naked Business: How radical transparency impacts image, brand, and culture
4:30 to 4:45	Fogle-Miller, Carlene	Do Female Legislators Win at the Same Rate? Examining the Dimensions of Candidate Success
4:45 to 5:00	Ernest, Marah	Gendering the Klan: Women in the KKK's Internal Politics in the 1920s
5:00 to 5:15	Kuzma, Todd	Prowess: Sports Performance Center
5:15 to 5:30	Faison, Kristen	Educational Theory and Practice: Practical Implications of Educational Research and Theory within the Classroom.

ORAL PRESENTATIONS

CH 210

Time	Student	Title
9:45 to 10:00	Mader, Holly	Coral Reefs: The Pharmacy of the Sea
10:00 to 10:15	Raiford, Alyssa	Current Students' Thoughts and Perspectives
10:15 to 10:30	Manning, Katherine	A survey of self-perceived attractiveness and its influence on attractiveness perception in an undergraduate population
10:30 to 10:45	Brower, Chris	String Algorithms
10:45 to 11:00	Covello, Brian	1,25-Dihydroxyvitamin D3 and retinoic Acid in vitro modulation of PPAR-gamma and insulin resistance in diabetes mellitus II
11:00 to 11:15	McNab, Sarah	Students and the Media: The Impact News Knowledge has on Students' Success
11:30 to 11:45	BREAK	
1:45 to 2:00	Dittmer, Sarah	Gaussian Integers
2:00 to 2:15	Funcheon, Peter	Development of Graphical User Interface for Computational Nanophotonics Code
2:15 to 2:30	Madden, Kelly	The Monty Hall Paradox and Applications in Computer Security
2:30 to 2:45	Petit, Ryan	Versatile SERS substrates using period arrays of silver conical nano-
2:45 to 3:00	Dittmer, Sarah	Geometry of Singular Surfaces: The Cylinder
3:30 to 3:45	BREAK	
3:45 to 4:00	Brewer, Portia	A test of the 'dilution effect': Does biodiversity provide protection against parasitic infection in larval amphibians?
4:00 to 4:15	Brown, Nicholas	Impact of Leaf Destruction by Polka-Dot Wasp Moth (<i>Syntomeida epilais</i>) Larvae on Defensive Chemical Production in the Host Plant, <i>Nerium</i>
4:15 to 4:30	Hester, Sarah	Putting Your Best Face Forward: Manipulation Effects on Aesthetic Appreciation
4:30 to 4:45	BREAK	
4:45 to 5:00	Banks, Krystin	Microbial Biodiversity of Common Areas, and Efficacy of Household Cleaning Products, in Female First Year Residence Halls
5:00 to 5:15	Carson, David	The Implications of Anonymity as a Moderating Variable in the Context of Game Theory

POSTER PRESENTATIONS 9:45 to 11:30 CH LOBBY

Time	First student presenter's name	Names of other presenters	Title
9:45 to 11:30	Geras, Matthew	Gamba Lizwelicha and Nicholas Medina	Analysis of Water in Urban Lakes
	Lamons, Margarete	Kelsey Culms and Joseph Hendricks	Analysis of Water in Urban Lakes
	McCrimmon, Scott	Larry Mitchell	The Influence of Positive Affect on Hostile Conceptual Priming
	Miller, Cory	Rubens Petit and Kenneth Sullivan	Analysis of Water in Urban Lakes
	Schoemaker, Rachel	Samantha Hymson and Mary World	Analysis of Water in Urban Lakes
	Smith, Sarah	Louise Gammon and Rachel Belli	Analysis of Water in Urban Lakes
	Spiller, Kerrie	Courtney Davis and Lacy Halford	Analysis of Water in Urban Lakes
	Wheeler, Zack		Is Corned Beef Ethical?

POSTER PRESENTATIONS 11:45 to 1:30 CH LOBBY

Time	First student presenter's name	Names of other presenters	Title
11:45 to 1:30	Gennari, Elizabeth		Keeping it Pretty; Keeping the Faith
	Huffstutler, James	Josh Brown	Fracking - Hydraulic Fracturing: Its Effects on Natural, Business, and Legal Environments
	Lozano, Marcanthony	Jenna Capparello, Khaliah Brown, and Taylor Maldonado	Johnson and Johnson Green Journey
	Luecht, Katherine	Caitlin Owen, Amanda Welch and Tavril Saint James	Effects of Pre-admonition Suggestion on Eyewitnesses' Expectations, Choosing Rates, and Retrospective Judgments
	Pietrasiuk, Stacey		Can Coursework Actually Make Students Happier? Positive Psychology and Well-being
	Simpson, Calley	Tavril Saint Jean	Short Skirts, Parties, & First Dates: The Relationship between Greek Organization Membership and Victim Blaming
	White, Jamie	Phil Lancaster	Solar Energy
	Wood, Libby		The Effect of Self-Awareness and Self-Esteem on Facial Assortative

POSTER PRESENTATIONS 1:45 to 3:30 CH LOBBY

Time	First student presenter's name	Names of other presenters	Title
1:45 to 3:30	Beggs, Grace		Effects of reaction conditions on copper-4,4'-trimethylenedipyridine and 1,3-adamantanedicarboxylic acid
	Buzzell, Olivia	Rob Bledsoe	Florida Clean Indoor Air Act (FCIAA)
	Gann, Shauna	Elizabeth Hart, Allasyn Lieneck, and Jake Weinzetl	Ash the Trash
	Herres, Maritza	Taylor Maldonado	The Effects of Concussions On Playing Performance In Division II Male Lacrosse Athletes
	Lord, Chelsea	Tavril Saint Jean, Sharla Dyess, and Patrick Smith	Getting Graphic with the Brain: The Incorporation of Graphic Novelization into Neuroscience Pedagogy
	McCrimmon, Scott	Virginia Matha and Monika Dunn	Building Sustainable Coastal Environments in the Wake of Major Storms
	Miller, Amanda	Trissa Dodson	Children's Aesthetic Preferences and Recognition of Different Types of Landscapes
	Porasik, Cori		The Facebook Connection: The Influence of Attractiveness, Gender, and Facial Expression on Willingness to Initiate Friendship
	Porasik, Cori		When you wish upon a star, does that label who you are? Relationships between Disney film appeal and mental health stigma
	Rosen, Scott	Ashley Myrberg and Capone Ryan	Genetically Modified Organisms
	Shields, Jeff	Kyle Rutkowski and Mike Rothstein	Hydraulic Fracking and the Courts
Welch, Amanda	Elizabeth Gennari	Everybody Lies: The Relationship Between Personality, Peer Pressure, and Greek Membership On the Likelihood of Lying	

2013 Fiat Lux Abstracts

Name: Banks, Krystin

Major(s): Criminology, Biology

Faculty Mentor(s): Nancy Morvillo; Emily Bradshaw, Brittany Gasper

Presentation Type: Oral

Presentation time: 4:45 to 5:00

Room: CH 210

Title: Microbial Biodiversity of Common Areas, and Efficacy of Household Cleaning Products, in Female First Year Residence Halls

Abstract:

Public restrooms get a bad reputation for being filthy breeding grounds for bacteria. However, for college students, the decision to use these restrooms is not out of choice, but necessity. Often, in environments such as residence halls, students are at the mercy of the cleaning staff and other students when it comes to the issue of restroom cleanliness. What kinds of bacteria are actually present in the restrooms and common areas in Joseph Reynolds Hall, and what potential effects could this have on students' health? These questions were explored through a survey of samples collected and characterized using biochemical methods. Additionally, the effects of various cleaning products on the extermination of different types of bacteria collected have been analyzed and compared. This will also shed light on the question of whether or not "home remedies" work just as effectively against bacteria as harsh chemicals.

Name: Beggs, Grace

Major(s): Biochemistry and Molecular Biology

Faculty Mentor(s): Carmen Gauthier

Presentation Type: Poster

Presentation time: 1:45 to 3:30

Room: CH Lobby

Title: Effects of reaction conditions on copper-4,4'-trimethylenedipyridine and 1,3-adamantanedicarboxylic acid

Abstract:

Copper(II) nitrate hemipentahydrate, 1,3-adamantanedicarboxylic acid, and 4,4'-trimethylenedipyridine were used to synthesize a series of metal-organic frameworks (MOFs) with varying colors and structures. MOFs are robust structures containing transition metal ions and organic linkers. These frameworks have several unique properties such as high porosities, large surface areas, and high thermal stability; these properties lend MOFs to a wide range of applications including drug delivery, gas storage, and catalysis. The various structures in this study were formed by altering the solvent, template, and concentration of the starting materials. In addition, varying the rate of reaction (i.e. allowing the reactants to mix by slow diffusion versus actively mixing the reactants) also produced different structures. Our analysis of the data suggests that we have synthesized two metal-organic frameworks (MOFs) corresponding to the green and purple MOFs. The structures were characterized by infrared spectroscopy, thermogravimetric analysis, and X-ray crystallography. The infrared spectra and melting points of the crystals suggest the green crystals adopt a paddle wheel structure, while the purple exhibit a one-dimensional structure.

2013 Fiat Lux Abstracts

Name: Brewer, Portia

Major(s): Biology

Faculty Mentor(s): Gabriel Langford

Presentation Type: Oral **Presentation time:** 3:45 to 4:00

Room: CH 210

Title: A test of the 'dilution effect': Does biodiversity provide protection against parasitic infection in larval amphibians?

Abstract:

The 'dilution effect' is a recent hypothesis to explain a phenomenon observed in wild communities wherein an increase in biodiversity provides protection against parasitism. In other words, when species diversity is increased in a community, the risk of infection and disease attributed to parasitism decreases, but when species diversity is decreased the risk of infection increases. To better study this ecological interaction, we collected tadpoles of invasive Cuban Treefrogs and native Southern Toads and infected them with the intermediate stage of the parasite *Apharyngostrigea pipientis* (Platyhelminthes: Trematoda) in both controlled laboratory exposures and field mesocosms, with the following treatments: (a) toad only, (b) treefrog only, (c) toad + treefrog; then observed the survival of tadpoles, and prevalence and intensity of parasitic infections. In addition to elucidating a portion of the life cycle of *A. pipientis*, the results of this study provide some support for the 'dilution effect' in larval amphibians from central Florida. Specifically, higher diversity treatments (i.e., toad + treefrog) provided increased survivorship and lower indices of parasitism for native Southern Toads; however, increased biodiversity had little impact (positive or negative) on the invasive Cuban Treefrog. The implications of these results will be discussed.

Name: Brower, Chris

Major(s): Computer Science, Math, Religion, Philosophy

Faculty Mentor(s): Shawn Hedman

Presentation Type: Oral **Presentation time:** 10:30 to 10:45

Room: CH 210

Title: String Algorithms

Abstract:

Consider the problem of finding all occurrences of a given word in a large text. We will discuss various algorithms for this. We will look at the efficiency of the algorithms and how these algorithms can be used for data compression and other applications.

2013 Fiat Lux Abstracts

Name: Brown, Nicholas

Major(s): Biology

Faculty Mentor(s): Joseph Macedonia; Joseph Macedonia; Gabriel Langford; An-Phong Le

Presentation Type: Oral **Presentation time:** 4:00 to 4:15 **Room:** CH 210

Title: Impact of Leaf Destruction by Polka-Dot Wasp Moth (*Syntomeida epilais*) Larvae on Defensive Chemical Production in the Host Plant, *Nerium oleander*

Abstract:

In this study, the levels of the cardiac glycoside oleandrin were quantified in dried leaf samples both before and after predation using HPLC analysis. Spiked control samples allowed the time of the oleandrin peak to be located on a chromatograph; this was determined to happen at 53 minutes. Area under the curve analysis of samples before and after predation by *Syntomeida epilais* demonstrate that the moths show no initial preference for the levels of oleandrin in their host trees. However, the *Nerium oleander* tree, in response to predation, showed an increase by over 10% in the overall levels of oleandrin stored in its leaves.

Name: Buzzell, Olivia

Major(s): Mathematics

Faculty Mentor(s): Cindy Hardin

Co-author(s): Kaleb Carmack, Rob Bledsoe, Case Gard, Ben Merryday

Co-presenter(s): Rob Bledsoe

Presentation Type: Poster **Presentation time:** 1:45 to 3:30 **Room:** CH Lobby

Title: Florida Clean Indoor Air Act (FCIAA)

Abstract:

The Florida Clean Indoor Air Act (FCIAA) was created to protect the public from the health hazards of secondhand smoke. The purpose of our research was to examine the effects and implications of not only smoking inside, but outside as well and to decipher if FCIAA is constitutional. There has been sufficient research into the health impacts of smoking, and it is safe to state that there are inherent risks to having primary and secondary smoking in public areas. Secondhand smoke kills around 50,000 people a year and smoking can cause lung cancer, stomach cancer, bronchitis, and many other life threatening diseases. It is clear to conclude from our research, that the Florida Clean Indoor Air Act is legitimate and constitutional.

2013 Fiat Lux Abstracts

Name: Cardona, Juliana

Major(s): Political Science

Faculty Mentor(s): James Denham

Presentation Type: Oral **Presentation time:** 3:45 to 4:00

Room: CH 112

Title: Oral History: Colombia's Armed Conflict

Abstract:

I was born in Colombia, when I was nine my family was forced to migrate to United States because of the violence in my native city of Medellin. During the summer of 2012. I decided to headed to Colombia hoping gain a better understanding of the Colombian Armed conflict through a more human perspective. The first stage of the project consisted of researching books, journals, videos, museums and studies of the conflict. I annotated over 44 resources and three museums. The second stage of the project consisted of conducting oral histories with journalists, the General Director of the National Police, the former Secretary of State and other high ranking officials crucial to the oral history of the past 50 years of internal conflict. I then transcribed and translated them into 258 pages of oral histories. The final stage, of course, would be sharing with my peers and the world the reality of the violence in Colombia.

Name: Carson, David

Major(s): Business Administration

Faculty Mentor(s): Larry Ross; Terry Redman; Erica Bernheim

Presentation Type: Oral **Presentation time:** 5:00 to 5:15

Room: CH 210

Title: The Implications of Anonymity as a Moderating Variable in the Context of Game Theory

Abstract:

The objective of this experiment is to investigate, in an experimental setting, the relationship that exists between varying levels of anonymity between players and their subsequent choices in a stage game setting. I will use the experimental results to further enhance the theory behind the importance of the interpersonal relationship in real-life business decision-making. Existing literature states that deviation from the expected Nash-Equilibrium is likely to occur if the two competing players know one another. This study tests this hypothesis in an experimental setting using a control and non-control group of undergraduate business students. It is hypothesized that the experimental group, playing the game against one another, will show a statistically significant difference as compared to the control group, playing the game against an anonymous player 2. The experiment and data collection have been completed. Data analysis is underway and will be completed prior to interpretation and presentation of the results.

2013 Fiat Lux Abstracts

Name: Covello, Brian

Major(s): Biochemistry and Molecular Biology, Mathematics

Faculty Mentor(s): Emily Bradshaw

Presentation Type: Oral **Presentation time:** 10:45 to 11:00

Room: CH 210

Title: 1,25-Dihydroxyvitamin D3 and retinoic Acid in vitro modulation of PPAR-gamma and insulin resistance in diabetes mellitus II

Abstract:

1,25-Dihydroxyvitamin D3 (D3) and Retinoic Acid (RA) have previously been reported to down-regulate the master controller of adipogenesis, nuclear receptor PPAR γ (Yoshifumi, 1998). This receptor plays a significant role in understanding diabetes mellitus II, and a class of anti-diabetic drugs has been found to agonistically bind to PPAR γ . For the first time, this study seeks to combine the aforementioned metabolites together in one treatment scheme. This is a crucial component for creating a direct relation to in vivo studies, as only concentrations of these metabolites are found in human serum. We hypothesized that a combined treatment of D3 and RA will have a synergistic effect upon PPAR γ , causing novel protein changes when compared to individual treatments and leading to a greater down-regulation than previously reported (Yoshifumi, 1998). Through immunofluorescence microscopy and western blot, one is able to see localization of PPAR γ throughout all treatments compared to the positive control, indicating no mechanism of action for delocalization. Several protein band changes were noted for micromolar combination and nanomolar combination treatment. Further research seeks to understand the entirety of protein changes on a molecular and medicinal level.

Name: Dittmer, Sarah

Major(s): Computer Science, Mathematics

Faculty Mentor(s): Shawn Hedman

Presentation Type: Oral **Presentation time:** 1:45 to 2:00

Room: CH 210

Title: Gaussian Integers

Abstract:

A subset of the complex numbers, the Gaussian Integers prove to be a fascinating set with strong relations to rational integers. The notions of prime and divisibility may still be discussed, but these concepts must be revisited in order to understand how unique factorization can occur.

2013 Fiat Lux Abstracts

Name: Dittmer, Sarah

Major(s): Computer Science, Mathematics

Faculty Mentor(s): Nathaniel Stambaugh

Presentation Type: Oral **Presentation time:** 2:45 to 3:00

Room: CH 210

Title: Geometry of Singular Surfaces: The Cylinder

Abstract:

The concept of a triangle is well-studied over surfaces with smooth curvature (such as a plane or a sphere) and on singular surfaces with isolated cone points. We focus on other singular surfaces, like the surface of a cylinder, where singular points are not isolated, by using the notion of a triangle to discuss curvature over these surfaces. In an effort to develop a generalization of the Gauss-Bonnet Theorem, we find the relation between the interior angles of the triangle and the concentrated curvature of the surface.

Name: Ernest, Marah

Major(s): History

Faculty Mentor(s): Nick Steneck; James M. Denham

Presentation Type: Oral **Presentation time:** 4:45 to 5:00

Room: CH 112

Title: Gendering the Klan: Women in the KKK's Internal Politics in the 1920s

Abstract:

This paper examines women's role in the Klu Klux Klan (KKK) in the 1920s and the influence they exerted within. It focuses on Elizabeth Tyler, who by the mid-1920s was accused by men within the paternalistic, white-supremacist KKK of seizing and exercising (albeit only briefly) de facto leadership of the organization. Although Tayler's actual ability to shape debates about the Klan's leadership was, in fact, limited, this study suggests that members' concerns about her influence exemplify the larger debates about women's participation in public life that occurred in interwar U.S. society. A critical examination of the primary and secondary sources on which this paper is based demonstrates that Tayler's paradoxical presence in an organization dedicated to maintaining the political and social dominance of white males reveals much about the contradictions that existed in the interwar United States. Although by this time women had gained the right to vote, the extent to which suffrage meant actual power remained a contentious issue for men, who more often than not saw them merely as a convenient means to advance their own political agendas. The proposed paper is part of a capstone research project completed during the Fall 2012 semester for HIS 4999.

2013 Fiat Lux Abstracts

Name: Faison, Kristen

Major(s): Biology, Education

Faculty Mentor(s): Perry Castelli

Presentation Type: Oral **Presentation time:** 5:15 to 5:30

Room: CH 112

Title: Educational Theory and Practice: Practical Implications of Educational Research and Theory within the Classroom.

Abstract:

Albert Einstein stated, "In theory, theory and practice are the same. In practice they are not." Many believe that educational theory and practice are two separate entities, two separate things that have a very vital relationship in the classroom. The success of an educator is not measured by their knowledge of educational theory, nor is it measured by their hours spent in the classroom. One can spend the accepted ten thousand hours on one particular area to be deemed an expert, but we must ask ourselves does being an expert in the curriculum make someone a good educator? The truth is, it does not. The success of an educator is pushed forward by the integration of educational theory into practice within the classroom. Education has multiple theories that are critical to the advancement and success of curriculum. The presentation focuses on the integration of educational theory into practice, why theory and practice should not be separated, the consequences of the separation of theory and practice. The presentation also discusses the multiple educational theories and their distinct application in the classroom.

Name: Ferguson, Erin

Major(s): Communication- Advertising and Public Relations, Communication- Interpersonal and Organizational Communication

Faculty Mentor(s): Chris Fenner

Presentation Type: Oral **Presentation time:** 4:15 to 4:30

Room: CH 112

Title: Naked Business: How radical transparency impacts image, brand, and culture

Abstract:

As social media becomes more engrained into everyday tasks, companies are discovering that their business approach might need to evolve. Mishandled situations online, such as Applebee's poor handling of their online image, can have a tremendous impact on a brand's reputation and bottom line. To help prevent repercussions and take control of a brand's online presence, radical transparency has become a new alternative to a failing business plan. The concept behind radical transparency is that consumers will respect and favor a company that is open about its business practices, including, but not limited to, employees' salaries, product production, and prospective changes. This idea juxtaposes the common business culture of hiding faults and ignoring criticism. In order to understand how radical transparency affects companies, an overview of transparency in relation to social media is presented. From case studies of recent radical transparency campaigns, a model for maximum effectiveness of this approach is created. Implications of the research findings could assist researchers and business professionals further understand how radical transparency can improve business approaches.

2013 Fiat Lux Abstracts

Name: Fogle-Miller, Carlene

Major(s): Political Science

Faculty Mentor(s): R. Bruce Anderson

Co-author(s): Dr. Rhonda Wrezenski, Dr. R. Bruce Anderson

Presentation Type: Oral **Presentation time:** 4:30 to 4:45 **Room:** CH 112

Title: Do Female Legislators Win at the Same Rate? Examining the Dimensions of Candidate Success

Abstract:

This research looks at elections data across a broad array of states to determine the effect, if any, of variables such as incumbency, location, culture, competitiveness, percentage of women already elected, etc. on the success of women candidates in the primary elections.

Name: Funcheon, Peter

Major(s): Chemistry

Faculty Mentor(s): Jason Montgomery

Presentation Type: Oral **Presentation time:** 2:00 to 2:15 **Room:** CH 210

Title: Development of Graphical User Interface for Computational Nanophotonics Code

Abstract:

My collaborative research project involved the construction of a graphical user interface (GUI) for a Maxwell's equations modeling software. The software (referred to as JFDTD) is a C++ code based on the finite-difference time domain method and is used to calculate how light interacts with matter. The systems of interest in our research were composed of gold and silver nanostructures. While JFDTD is powerful, the code itself is not user friendly, especially if the user has little to no programming experience. Therefore, I constructed a GUI to allow easier user interactions and reduced errors when operating the JFDTD code. After several considerations, Java was selected as the programming language for the GUI, owing to Java's cross-platform support. The GUI was designed to take the user defined structures and parameters and create the input files necessary for JFDTD to compile. Once the input files have been constructed by the GUI, the code can be compiled and run, typically on the NERSC supercomputers. To test the GUI, we considered the interactions of light with small metallic nanorods with varying aspect ratios. Overall, the GUI has reduced the cost of modeling nanostructures' light interactions, whilst improving the usability of the JFDTD software, and will continue to do so for future students in the group.

2013 Fiat Lux Abstracts

Name: Gann, Shauna

Major(s): Business Administration

Faculty Mentor(s): Cindy Hardin

Co-author(s): Elizabeth Hart, Allysan Lieneck, Jake Weinzetl

Co-presenter(s): Elizabeth Hart, Allysan Lieneck, Jake Weinzetl

Presentation Type: Poster **Presentation time:** 1:45 to 3:30

Room: CH Lobby

Title: Ash the Trash

Abstract:

Trash the Ash is an academic look at the smoking bans that are in place across the country. The bans that are being focused on in this presentation are the ones in public parks, beaches and other public areas such as Time Square in New York. Looking at the environmental impacts of smoking, bans are in the best interest of the majority. Pollution, air and land, is reduced in these areas where the bans are already located. Potential for fires is less likely in these areas as well. A lot of fires are started by cigarettes either intentionally or by accident. However, there are some people, and groups, that think banning smoking in public places infringes on their constitutional rights even though there are some court cases that determine otherwise.

Name: Gennari, Elizabeth

Major(s): Psychology, English Literature

Faculty Mentor(s): Deah Quinlivan

Co-author(s): Katie Luecht

Presentation Type: Poster **Presentation time:** 11:45 to 1:30

Room: CH Lobby

Title: Keeping it Pretty; Keeping the Faith

Abstract:

Does attractiveness matter in the legal system? Jurors are more likely to convict a defendant when the victim is attractive than when the victim is unattractive (Kerr, 1978 & Thornton, 1977). Victim attributes, such as attractiveness and morality level, can influence jurors' decisions. The Just World Theory, which states that people believe good things happen to good people and bad things happen to bad people, explains this result (Hafer & Bogue, 2005). Pretrial publicity is one way jurors can learn of victims' characteristics. Until now, pretrial publicity research has focused only on the defendant as opposed to the victim. This study expands the literature to assess the effects pretrial publicity regarding the victim has on jurors' verdicts for a defendant. It was hypothesized that jurors would convict the defendant more often when the victim had positive, rather than negative, attributes. It was also hypothesized that extra juror instructions would mitigate the effect of the victim pretrial publicity had on the verdicts.

2013 Fiat Lux Abstracts

Name: Geras, Matthew

Faculty Mentor(s): Erica Bernheim; Carmen Gauthier

Co-presenter(s): Gamba Lizwelicha, Nicholas Medina

Presentation Type: Poster **Presentation time:** 9:45 to 11:30

Room: CH Lobby

Title: Analysis of Water in Urban Lakes

Name: Herres, Maritza

Major(s): Human Movement and Performance

Faculty Mentor(s): Nancy Cummings; John Hatten

Co-author(s): Taylor Maldonado

Co-presenter(s): Taylor Maldonado

Presentation Type: Poster **Presentation time:** 1:45 to 3:30

Room: CH Lobby

Title: The Effects of Concussions On Playing Performance In Division II Male Lacrosse Athletes

Abstract:

Concussions are a topic that seems to have on-going research, whether it's the future effects or a comparison of athletes that have concussions versus no concussions. We have a passion to research concussions, especially with athletes our own age. One day we are going to have a breakthrough that will save athletes and their careers. We will uncover the right research that will help coaches see them through a different pair of eyes as well. Coaches should be just as worried about concussions as the athletic trainers, strength coaches, and parents are. The sampling population is Division II male lacrosse athletes at Florida Southern College. Each participant will be put through five different drills, each measuring something different – varies between accuracy, concentration, missteps, balls dropped, etc. Other variables such as height, weight, age, and whether they visited a doctor or not post-concussion were also collected. Determining relationships between the number of concussions, age, the drills our subjects were put through, and symptoms post-concussion will also be analyzed.

2013 Fiat Lux Abstracts

Name: Hester, Sarah

Major(s): Psychology

Faculty Mentor(s): Patrick Smith; Leilani Goodmon

Presentation Type: Oral **Presentation time:** 4:15 to 4:30

Room: CH 210

Title: Putting Your Best Face Forward: Manipulation Effects on Aesthetic Appreciation

Abstract:

For my honors thesis, I decided to extend my honorization, which looked at how manipulating a photo affects people's perception. Last time I used landscapes, but this time, I used faces. I photographed each of my models with three different levels of makeup: no makeup, light makeup, and full makeup. After that, I showed a slideshow of the images to my participants, who were then asked to answer a few brief questions about each photo. I conducted a total of three experiments for this study. The first looked at overall ratings based strictly on pre-manipulation level (no makeup, light makeup, or full makeup); the second and third experiments added in the variable of post-manipulation (i.e., Photoshop) of color and clarity. The adjustments to the color and clarity were designed to simulate basic modifications the average person might make to his/her photos (e.g., removing color or adding a blurring filter to soften the image). I found that novel images were rated higher than images the participant had seen previously, which partially contradicted my research from last year. I also found that women rated my models significantly higher than men overall, but there were some interesting gender differences. Women showed no preference based on the level of makeup the model was wearing, but men rated the full makeup photos significantly higher than light makeup, which was significantly higher than natural. That's right, ladies--we now have scientific data that verifies men are more superficial than we are.

Name: Huffstutler, James

Major(s): Business Administration

Faculty Mentor(s): Cindy Hardin

Presentation Type: Poster **Presentation time:** 11:45 to 1:30

Room: CH Lobby

Title: Fracking - Hydraulic Fracturing: Its Effects on Natural, Business, and Legal Environments

Abstract:

Hydraulic fracturing (fracking) allows for extended production in older oil and natural gas fields. It also allows for the recovery of oil and natural gas from formations that geologists once believed were impossible to attain, such as gas in tight shale formations. The problem is that some believe fracking is harmful to the environment and can specifically cause contamination of groundwater, which is the main source of our drinking water. Many precautions are taken to prevent harm. Through research, we have concluded that fracking is overall beneficial as long as guidelines are enforced, and it is done responsibly.

2013 Fiat Lux Abstracts

Name: Kuzma, Todd

Major(s): Human Movement and Performance,

Faculty Mentor(s): John Hatten; Nancy Cummings

Presentation Type: Oral

Presentation time: 4:00 to 4:15

Room: Ch 112

Title: Perceived External Influences in Subjects with Marked Concern for Body Image

Abstract:

The purpose of this study was identify individuals with a marked concern with their body shape and then compare their results from external influence questions to determine if there was a significant correlation between them. A 43 question online questionnaire was used as the instrument in this study. This study was submitted to the IRB board at Florida Southern College on September 4th, 2012 and approved on October 7th, 2012. After IRB approval was received the survey was disseminated through social media, posters, and through the campus email at a small southeastern college. In lieu of an independent consent form, consent for each participant was obtained via a required question on the questionnaire. If the participant didn't answer the question, the information would not be submitted. All of the external influence categories tested showed statistical significance. Family was shown to have a statistically weak correlation in cases of marked body image while mass media and peer influence were shown to have a statistically moderate correlation in cases of marked body image.

Name: Kuzma, Todd

Major(s): Human Movement and Performance,

Faculty Mentor(s): Joseph "Mike" Tracy; Nancy Cummings, John Hatten

Co-author(s): Jim Denham, Edson Lima, Serena Liu

Presentation Type: Oral

Presentation time: 5:00 to 5:15

Room: Ch 112

Title: Prowess: Sports Performance Center

Abstract:

Prowess: Sports Performance Center is a new company that will provide quality service to our customers in the following categories: Posture, Motion, and Gait Analysis (to discover hidden weaknesses in an athlete's body that hinder performance) Video Analysis of Sport Techniques (to determine how form could be improved) Body Composition Testing via Bio-electrical Impedance (determining the percentage of fat, bone, and muscle in a body) Nutrition Evaluations Functional Strength and Movement Workouts Swimming and Golf Instruction (With plans to expand into more sports as qualified instructors become available.) What will set Prowess apart from the competition will be our dedication to a scientific approach to improving the athletic performance of our clients. The store will be managed and directed by Todd Kuzma. At the time of opening, Todd will hold a degree in Human Movement and Performance from Florida Southern College and will also have his Certified Strength and Conditioning Specialist (CSCS) Certification. Todd will serve as the company's manager, strength coach, video editor. Edson Lima will serve as the Swimming instructor. Jim Denham will serve as the golf instructor. Serena Liu will serve run the front desk, perform secretarial tasks, and manage the company's finances.

2013 Fiat Lux Abstracts

Name: Lamons, Margarete

Faculty Mentor(s): Erica Bernheim; Carmen Gauthier

Co-presenter(s): Kelsey Cums, Joseph Hendricks

Presentation Type: Poster **Presentation time:** 9:45 to 11:30

Room: CH Lobby

Title: Analysis of Water in Urban Lakes

Name: Lord, Chelsea

Major(s): Psychology

Faculty Mentor(s): Patrick Smith; Bruce Darby

Co-author(s): Sharla Dyess, Tavril Saint Jean

Co-presenter(s): Tavril Saint Jean, Sharla Dyess, Patrick Smith

Presentation Type: Poster **Presentation time:** 1:45 to 3:30

Room: CH Lobby

Title: Getting Graphic with the Brain: The Incorporation of Graphic Novelization into Neuroscience Pedagogy

Abstract: Our study attempted to explore the development of a new pedagogical graphic novel that illustrates the dynamic processes in neuroscience and how such a resource can enhance student performance. Sixty introductory-level students were randomly assigned to one of two groups that were instructed to analyze material about neuron development (either in text or graphic novel format). All participants were subsequently given questionnaires that measured a.) perceived level of interest for the material and b.) retention of the material. Participants in the graphic novel group showed significant differences across both measures, which suggests that further processes using graphic novelization should be explored.

Name: Lozano, Marcanthony

Major(s): Business Administration

Faculty Mentor(s): Cindy Hardin

Co-author(s): Jenna Capparello, Khaliah Brown, Taylor Maldonado

Co-presenter(s): Jenna Capparello, Khaliah Brown, Taylor Maldonado

Presentation Type: Poster **Presentation time:** 11:45 to 1:30

Room: CH Lobby

Title: Johnson and Johnson Green Journey

Abstract: Johnson and Johnson is a multinational American company who is a world leader in the medical and pharmaceutical healthcare industry. Johnson and Johnson has a reputation for being highly serviceable to the public while at the same time being an innovator in environmental sustainability. Leaders such as William Weldon (chief of the board) and Alex Gorsky (CEO) have made a huge commitment to comply with and help create government regulations and laws to help protect the environment and promote sustainable energy. Johnson and Johnson has completely emerged itself in every way imaginable where furthering environmental health and promoting sustainable energy is possible. This noble pursuit undertaken by J&J is being confronted in a long list of ways; facilities, transportation, air emissions, packaging, water consumption, biodiversity, waste management, electronic take back, PVC elimination, and environmental literacy. Johnson and Johnson has completed many innovations, created regulations, and abided by laws all for the greater good of the environment and energy. This presentation is to show Johnson and Johnson's impact on the environment as one of the leading companies in sustainability.

2013 Fiat Lux Abstracts

Name: Luecht, Katherine

Major(s): Psychology, Interpersonal and Organizational Communication

Faculty Mentor(s): Deah Quinlivan

Co-author(s): Caitlin Owen, Amanda Welch, Tavril Saint Jean

Co-presenter(s): Caitlin Owen, Amanda Welch, Tavril Saint Jean

Presentation Type: Poster **Presentation time:** 11:45 to 1:30

Room: CH Lobby

Title: Effects of Pre-admonition Suggestion on Eyewitnesses' Expectations, Choosing Rates, and Retrospective Judgments

Abstract:

Recommended identification procedures suggest that eyewitnesses receive an unbiased lineup admonition before the lineup (Technical Working Group, 1999). Using this admonition warns eyewitnesses that the perpetrator may not be in the lineup, which lowers incorrect identifications from target-absent lineups (Clark, 2005; Steblay, 1997; Wells & Quinlivan, 2009). However, it is possible that social interactions that occur before the unbiased lineup admonition might reduce the efficacy of the unbiased lineup admonition. To date, only one study has examined a social variable coined pre-admonition suggestion (Quinlivan et al., 2009). Pre-admonition suggestions include any interaction with an eyewitness before the official lineup procedures begin. Two experiments extended a previous study by separating components of a compound pre-admonition suggestion. The suggestion in that experiment ("I could really tell you were paying attention to the video; surely you will be able to pick the person out of the lineup") increased mistaken identifications. Experiment 1 examined how the original suggestion influenced participants' beliefs that they have enough information to make an identification decision and their expectations that the subsequent lineup will contain the perpetrator. Experiment 2 examined how the two components of the original compound suggestion affected participants' decisions to choose someone from a perpetrator-absent lineup.

Name: Madden, Kelly

Major(s): Computer Science, Mathematics

Faculty Mentor(s): Gwendolyn Walton

Presentation Type: Oral **Presentation time:** 2:15 to 2:30

Room: CH 210

Title: The Monty Hall Paradox and Applications in Computer Security

Abstract:

The Monty Hall Paradox is named after the original host of the television game show, 'Let's Make a Deal' which featured a game based upon three doors with a prize behind one door. After the player chooses a door, the host of the game reveals that one of the remaining doors has nothing behind it. At this point, the player is given the chance to switch doors or keep their original choice. For my thesis, I examined literature on the Monty Hall Paradox and wrote a computer program to simulate the game. I used the program to perform an experiment to demonstrate that the best strategy for winning the game is: "The player who switches doors will win twice as many times as the player who keeps his or her original door." My findings mirrored the published description of the statistical best strategy. Even though the Monty Hall Paradox is well known in the math world, the best strategy often confuses people. After investigating real world applications of the Monty Hall Paradox and the psychology of decision making, I considered how the Monty Hall Paradox might be applied to issues in computer security related to human decision making.

2013 Fiat Lux Abstracts

Name: Mader, Holly

Major(s): Biology

Faculty Mentor(s): Gabriel Langford

Presentation Type: Oral **Presentation time:** 9:45 to 10:00

Room: CH 210

Title: Coral Reefs: The Pharmacy of the Sea

Abstract:

Coral reefs are one of the most fragile, precious, and most diverse ecosystems present on this planet. In addition to providing shelter for a wide variety of marine life, they are also a valuable source of organisms for potential advances in medicine. Many species found in coral ecosystems are slow-moving and even stationary, producing chemical compounds as a defense mechanism. Many of these chemical compounds have been used to develop new medications that induce and ease labor; treat cancer, arthritis, asthma, ulcers, human bacterial infections, heart disease, viruses, and other diseases; as well as sources of nutritional supplements, enzymes, and cosmetics. However, with such a wealth of pharmaceutical breakthroughs comes a great responsibility. Such an increase in recent bio-prospecting, or searching for potential new pharmaceuticals, increases the need for both the regulation of the extraction of these compounds and the careful conservation of coral reefs.

Name: Manning, Katherine

Major(s): Biology

Faculty Mentor(s): Joseph Macedonia

Presentation Type: Oral **Presentation time:** 10:15 to 10:30

Room: CH 210

Title: A survey of self-perceived attractiveness and its influence on attractiveness perception in an undergraduate population

Abstract:

This study sought to provide more evidence for already existent understandings about human preferences for facial attractiveness. Previous research has shown that averageness and symmetry are very influential on preferences for certain faces, but additional studies have shown that other factors can contribute to these preferences as well, including masculinity and femininity, and value of investment over attractiveness. The aspects considered in this experiment included one's self-perceived facial attractiveness, personality, and parental investment. The study was conducted at Florida Southern College, with an undergraduate Animal Behavior class. An 11-question survey was issued to 17 students between the ages of 19 and 25. Attractiveness was rated on a 1-5 scale of agreement based on the provided statements. We found that those who find themselves attractive value attractiveness over personality, and that those who find themselves less attractive value parental investment over attractiveness.

2013 Fiat Lux Abstracts

Name: McCrimmon, Scott

Major(s): Psychology

Faculty Mentor(s): Leilani Goodmon

Co-author(s): Larry Mitchell

Co-presenter(s): Larry Mitchell

Presentation Type: Poster **Presentation time:** 9:45 to 11:30

Room: CH Lobby

Title: The Influence of Positive Affect on Hostile Conceptual Priming

Abstract:

The importance of understanding conceptual priming has a broad base. It ranges from promoting a positive work place environment, and promoting positive social interaction, to helping in the field of medical interventions. In this research it was hypothesized that participants receiving post positive prime would produce less hostile features in their drawings than the hostile only primed group. It was also hypothesized that the positive priming group would produce more novel creations than the hostile or control groups. Participants in our research were randomly assigned to one of six conditions (control-nothing, control- positive video clip, hostile alien drawings, hostile alien drawings-positive video clip, hostile sentence unscramble, hostile sentence unscramble-positive video clip), and then asked to create, within 10 minutes, novel drawings of space creatures to inhabit a currently uninhabited planet that was just like earth. Although the results did not support the hypothesis, there may be evidence of a constraining effect of examples shown on the participants' creativity.

Name: McCrimmon, Scott

Major(s): Psychology

Faculty Mentor(s): Cindy Hardin

Co-author(s): Virginia Matha, Monika Dunn

Co-presenter(s): Virginia Matha, Monika Dunn

Presentation Type: Poster **Presentation time:** 1:45 to 3:30

Room: CH Lobby

Title: Building Sustainable Coastal Environments in the Wake of Major Storms

Abstract:

In the wake of several major storm systems devastating coastal areas in the United States over the last several years, it has become evident that our coastal cities are highly susceptible to the catastrophic effects of storm surge, flooding, and wind damage. The problem exists because many of the densely populated cities established along the coast lines were built on flood plains, such was the case for many European cities as well. The rising ocean levels coupled with decaying defenses and infrastructure prompted this research to explore possible changes to existing coastal building codes, discover what is being proposed to protect not only lives, but also reduce the immense damage caused by major storm systems, thus reducing the enormous cost that impacts all Americans. There are cost effective measures that can be taken. Storm surge barriers can be emplaced in critical areas, as well as improving soft infrastructure. Soft infrastructure is the building of barrier islands, creating wetlands, and areas for the water to go that does not impact populated areas. The hardening of existing infrastructure would entail strengthening occupied structures, subway systems, and sewage systems.

2013 Fiat Lux Abstracts

Name: McNab, Sarah

Major(s): Communication- Broadcast, Print and Online Media

Faculty Mentor(s): Beth Bradford

Presentation Type: Oral

Presentation time: 11:00 to 11:15

Room: CH 210

Title: Students and the Media: The Impact News Knowledge has on Students' Success

Abstract:

Living in a democracy, American citizens need to have a strong knowledge of current events in order to make informed decisions during elections. It is the key to success in our country. This study aims to apply the same principle to college life. Could a greater knowledge of current events impact a student's success in college? The goal of this study is to examine the relationship between students and their knowledge of current events. I surveyed Florida Southern students about their news consumption habits, their academic success, and their knowledge of current events. After taking possible influencing factors like age, major, and intellectual curiosity into account, I looked for a correlation between a student's news knowledge and success in college. This study will show if there are added academic benefits to watching or reading the news.

Name: Miller, Amanda

Major(s): Psychology, Criminology

Faculty Mentor(s): Leilani Goodmon; Patrick Smith

Co-author(s): Trissa Dodson, Stephanie Elwell

Co-presenter(s): Trissa Dodson

Presentation Type: Poster

Presentation time: 1:45 to 3:30

Room: CH Lobby

Title: Children's Aesthetic Preferences and Recognition of Different Types of Landscapes

Abstract:

Previous research has shown that adults prefer natural compared to urban or Burtynsky landscapes (urban and natural elements combined) (Hester, 2012). The purpose of this study was to determine if this preference generalizes to children age three to five and whether preferences were also related to photo memory. Children provided likability ratings for the three aforementioned picture types and were then given a recognition test where the previously shown (old) pictures were intermixed with never seen before (new) pictures, and they had to decide whether the pictures were old or new. It was hypothesized that, like adults, children would like and have better memory for the natural compared to the urban or Burtynsky landscapes. The results partially supported the hypothesis. Participants liked the natural landscapes more, but there was no effect of photo type on memory. However, this lack of memory effect may be due to the fact that females were more likely to say yes to every photo and so exhibited a high number of hits and false alarms thereby artificially reducing the memory score. Results reveal that photo preferences may develop as young as age three; however more research is needed to determine if preferences influence memory.

2013 Fiat Lux Abstracts

Name: Miller, Cory

Faculty Mentor(s): Erica Bernheim; Carmen Gauthier

Co-presenter(s): Rubens Petit, Kenneth Sullivan

Presentation Type: Poster **Presentation time:** 9:45 to 11:30

Room: CH Lobby

Title: Analysis of Water in Urban Lakes

Name: Mukherjee, Indrajyoti

Major(s): Business Administration

Faculty Mentor(s): William L Rhey

Co-author(s): Dr. William L Rhey, Andrea Sugaski, Stella Piche

Co-presenter(s):

Presentation Type: Oral **Presentation time:** 2:00 to 2:15

Room: CH 112

Title: Benefits of Free Enterprise

Abstract:

Free enterprise is a competitive economic system in which individuals are free to own property, make their own economic choices and seek to make better lives for themselves, free from over restrictive government intervention and control. The outcome is improvement in quality of life for individuals and societies. This system has proven to be superior to other economic systems in the accomplishment of these ends. This paper and presentation will support the role of free enterprise in creating continuous improvements in quality of life around the world. Free enterprise systems imply consumer sovereignty and individual freedom. As first described by Adam Smith, a system in which individuals are free to make their own economic choices on what to buy and sell and where to work results in a higher quality of life for all. This paper and presentation will display the benefits of the free enterprise system through a brief historic lens and through select comparisons of free market economies with controlled economies. It will also demonstrate the power of free markets in the growth of select countries in recent times. The paper and presentation will conclude with an attempt to dispel some present day myths about the relative income tax contributions of the wealthy in the USA and other industrialized countries.

Name: Ortiz, Marina

Major(s): History

Faculty Mentor(s): James Denham

Presentation Type: Oral **Presentation time:** 9:45 to 10:00

Room: CH 112

Title: James A. Haley Archival Exploration

Abstract:

As a part of Dr. Denham's US post 1945 class; the students did a project exploring the congressional career of James A. Haley using the McKay archives for primary research. Using the information found in the archives, students were able to explore such topics in Florida's history such as the civil rights act, Brown V. Board of Educaion, women's right, etc.

2013 Fiat Lux Abstracts

Name: Petit, Ryan

Major(s): Chemistry, Biology

Faculty Mentor(s): Jason Montgomery

Presentation Type: Oral **Presentation time:** 2:30 to 2:45

Room: CH 210

Title: Versatile SERS substrates using period arrays of silver conical nano-frustums

Abstract:

Systems involving arrays of periodic metallic nanostructures have been the focus of much interest due to their ability to reliably enhance the intensity of an incident electric field through surface plasmon excitations. These excitations occur at resonant frequencies that are determined by a nanostructure's geometry (size, shape, and environment) and can be therefore tuned to a desired frequency.

Accordingly, periodic arrays of metallic nanoparticles can be used for surface enhanced Raman spectroscopy (SERS) applications, in which both the incident light and the Raman scattered light are enhanced. Typically, one aims to tune a surface plasmon resonance midway between the excitation wavelength and the emission wavelength of the analyte in order to adequately enhance both wavelengths, giving rise to the well known g_4 enhancement factor. In this paper, we describe a novel structure, composed of a periodic array of layered metallic nano-frustums (NFs) atop a thin silver film, intended to support multiple resonance frequencies that correspond to the excitation wavelength (λ_{ex}), the emission wavelength (λ_{em}), and midway between the two (λ_{mid}). Two and three dimensional finite-difference time-domain (FDTD) calculations were utilized to analyze possible structures and geometrical parameters and to ultimately optimize a NF structure capable of exciting at both $\lambda_{ex} = 785\text{nm}$, $\lambda_{mid} = 850\text{nm}$, and $\lambda_{em} = 850\text{nm}$ was designed. The structure exhibited maximum SERS enhancements on the order of 100x higher than previously studied nano-post arrays.

Name: Pietrasiuk, Stacey

Major(s): Psychology

Faculty Mentor(s): Leilani Goodmon; Deah Quinlivan

Co-author(s): Dr. Deah Quinlivan, Dr. Leilani Goodmon

Presentation Type: Poster **Presentation time:** 11:45 to 1:30

Room: CH Lobby

Title: Can Coursework Actually Make Students Happier? Positive Psychology and Well-being

Abstract: Positive psychology is the empirical exploration of what makes life worth living (Seligman, 2011) and extends into areas of application to create an evidence-based practice with the aim of "making people lastingly happier" (Seligman & Steen, 2005, p. 410). Seligman, Steen, Park, and Peterson (2005) found web-based interventions (e.g. "gratitude visit," "identifying signature strengths," "using signature strengths in a new way," "three good things," "you at your best," and identifying signature strengths") increased subjective measures of well-being and decreased depression for as long as six months. The purpose of this research was to determine if this well-being benefit generalizes to interventions administered as part of the coursework in a positive psychology course and if these interventions also improve coping and reduce stress and college maladjustment. Pre and post measures of well-being, depression, stress, and college maladjustment were compared between a positive psychology course and a social psychology course (control group). Compared to the control group, the positive psychology class exhibited higher levels of well-being and lower levels of stress, depression, and college maladjustment. These results support previous research (Seligman et. al, 2005) and show that these interventions can be implemented as part of coursework to improve students' happiness.

2013 Fiat Lux Abstracts

Name: Porasik, Cori

Major(s): Psychology

Faculty Mentor(s): Leilani Goodmon

Presentation Type: Poster **Presentation time:** 1:45 to 3:30

Room: CH Lobby

Title: The Facebook Connection: The Influence of Attractiveness, Gender, and Facial Expression on Willingness to Initiate Friendship

Abstract:

Since social media is an integral part of most of our daily lives, I examined how facial expressions and attractiveness influence online Facebook interaction, which includes “poking” or “friending” other people. I hypothesized that both women and men would be more likely to initiate friendship with an individual if that person expressed a more professional facial expression. I also hypothesized that both genders would be more likely to add an attractive individual as a friend on Facebook. The participants in my experiment saw models (an attractive male, an unattractive male, an attractive female, and an unattractive female) either making a professional (smiling) or non-professional (silly) facial expression and were asked a series of questions to determine “willingness to initiate friendship” (i.e. “poking” or writing on that persons wall). My findings suggest that being an attractive female and having a professional (smiling) facial expression may have a benefit in friendship initiation on Facebook.

Name: Porasik, Cori

Major(s): Psychology

Faculty Mentor(s): Patrick Smith

Presentation Type: Poster **Presentation time:** 1:45 to 3:30

Room: CH Lobby

Title: When you wish upon a star, does that label who you are? Relationships between Disney film appeal and mental health stigma

Abstract:

Stigmatization is a problem that affects how undergraduates view mental illness. Preconceived notions of mental illness have been attributed to many sources, and one of the more studied sources comes from characterization of the mentally ill in film. Surprisingly, one film genre that portrays characters with mental illness has been animated cinema, and one particular company, Walt Disney films, has reliably produced characters that fit clinically abnormal standards. These types of films are popular among adolescents, and are considered some of the most likely films to be viewed multiple times by undergraduates. If this is the case, then such films may be a potential source of preconceived mental health ideography prior to any undergraduate training. The authors attempted to explore the relationship between undergraduate exposure to Disney films and attitudes about mental illness. The data revealed that participants who watched selected Disney films at higher frequencies were more confident in their diagnoses of the case studies.

2013 Fiat Lux Abstracts

Name: Raiford, Alyssa

Major(s): Business Administration

Faculty Mentor(s): Cindy Hardin

Presentation Type: Oral **Presentation time:** 10:00 to 10:15

Room: CH 210

Title: Current Students' Thoughts and Perspectives

Abstract:

This project takes a look at why students chose to attend FSC, why they like or dislike being here, and what things students want to see improved. Primary data were gathered in the form of a survey given out to current students.

Name: Restall, Tamala

Major(s): History

Faculty Mentor(s): James Denham

Presentation Type: Oral **Presentation time:** 10:00 to 10:15

Room: CH 112

Title: James A. Haley Archival Exploration

Abstract:

As a part of Dr. Denham's US post 1945 class; the students did a project exploring the congressional career of James A. Haley using the McKay archives for primary research. Using the information found in the archives, students were able to explore such topics in Florida's history such as the civil rights act, Brown V. Board of Educaion, women's right, etc.

Name: Rosen, Scott

Major(s): Business Administration

Faculty Mentor(s): Cindy Hardin

Co-author(s): Ashley Myrberg, Capone Ryan

Co-presenter(s): Ashley Myrberg, Capone Ryan

Presentation Type: Poster **Presentation time:** 1:45 to 3:30

Room: CH Lobby

Title: Genetically Modified Organisms

Abstract:

Food prices have increased dramatically over the years and so has the demand. Due to these problems, scientists have been looking for alternative ways to increase the food supplies and decrease prices. One alternative has been the genetic modification of organisms (GMO's). GMO's encompass plants and animals that have been genetically modified using biotechnology. Today, GMOS's show up in approximately 70% of American food items and are made and researched by the same people who are profiting from them, making us question how they affect the environment and humanity. In addition, there are many laws that have been made to accompany the use of GMO's which may or may not be in the best interest of society or strict enough to protect our world. This project will look at the negative effects of GMO's on our bodies, our environment, and our wallets.

2013 Fiat Lux Abstracts

Name: Schoemaker, Rachel

Faculty Mentor(s): Erica Bernheim; Carmen Gauthier

Co-presenter(s): Samantha Hymson, Mary World

Presentation Type: Poster **Presentation time:** 9:45 to 11:30

Room: CH Lobby

Title: Analysis of Water in Urban Lakes

Name: Shields, Jeff

Major(s): Business Administration

Faculty Mentor(s): Cindy Hardin

Co-author(s): Kyle Rutkowski, Mike Rothstein

Co-presenter(s): Kyle Rutkowski, Mike Rothstein

Presentation Type: Poster **Presentation time:** 1:45 to 3:30

Room: CH Lobby

Title: Hydraulic Fracking and the Courts

Abstract:

Concern over groundwater contamination from hydraulic fracturing activities is of keen interest to both environmental professionals and the public. There are several dangers associated with hydraulic fracturing, the most of which is the cement casings installed around the well to protect surrounding soil/groundwater. These cement casings have a high failure rate, of which the oil industry recognizes, but chooses to do little about. When these casings fail, it allows for heavy contamination of the surrounding soil and groundwater supply. It has been difficult for courts to link contaminated water with fracking activity due to heavy objection from the oil industry. Therefore, there has been little court action against hydraulic fracturing.

Name: Shiner, Amanda

Major(s): Environmental Studies

Faculty Mentor(s): Joseph Macedonia

Presentation Type: Oral **Presentation time:** 11:00 to 11:15

Room: CH 112

Title: Whistle While You Work: A Review of Research on Vocal Development in Odontocetes

Abstract:

For decades, humans have been working closely with odontocetes (toothed whales) such as orcas and bottlenose dolphins. As in humans, vocal development is an important part of their social development. Studies to date have shown that some odontocete whistle repertoires are developed through learning stages similar to those found in songbirds and even humans. The learning process has been shown to extend into adulthood, where mature individuals have been documented learning the personalized signature whistles of their conspecifics, and in turn seem to use these whistles as a means of calling to these other individuals. In this presentation I will discuss some advantages and disadvantages of conducting research on odontocete vocal communication in a managed care (zoos and aquariums) context, versus studying natural vocal interactions in the wild. Last, I will describe some possible directions for future research on communication in toothed whales, particularly with respect to vocal development in calves.

2013 Fiat Lux Abstracts

Name: Simpson, Calley

Major(s): Psychology, Sociology

Faculty Mentor(s): Leilani Goodmon

Co-author(s): Tavril Saint Jean, Tenezee Gehndyu

Co-presenter(s): Tavril Saint Jean

Presentation Type: Poster **Presentation time:** 11:45 to 1:30

Room: CH Lobby

Title: Short Skirts, Parties, & First Dates: The Relationship between Greek Organization Membership and Victim Blaming

Abstract:

Being in a group has been found to correspond with higher levels of victim blaming (Anderson, Cooper, & Okamura, 1997; Foubert, Brosi & Bannon, 2011; Lambert & Raichle, 2000). The purpose of this research is to explore if there was a correlation of membership in Greek organizations and the likelihood to victim blame and how the nature of membership in these types of organizations is related to a person's reasoning for victim blaming. The participants were scored on various measures pertaining to victim blaming, followed by five rape scenarios where they had to read and assign blame to either the victim or perpetrator. Although there were significant differences in the levels of measures between Greeks and non-Greeks, there was insufficient evidence to suggest that Greek organization members blame the victim at higher rates than nonmembers. Research in this area may help to further develop educational programs focusing on reducing victim blaming.

Name: Smith, Sarah

Faculty Mentor(s): Erica Bernhein; Carmen Gauthier

Co-presenter(s): Louise Gammon, Rachel Belli

Presentation Type: Poster **Presentation time:** 9:45 to 11:30

Room: CH Lobby

Title: Analysis of Water in Urban Lakes

Name: Spiller, Kerrie

Faculty Mentor(s): Erica Bernheim, Carmen Gauthier

Co-presenter(s): Courtney Davis, Lacy Halford

Presentation Type: Poster **Presentation time:** 9:45 to 11:30

Room: CH Lobby

Title: Analysis of Water in Urban Lakes

Name: Stone, Chelsia

Major(s): History

Faculty Mentor(s): James Denham

Presentation Type: Oral **Presentation time:** 10:15 to 10:30

Room: CH 112

Title: James A. Haley Archival Exploration

Abstract:

As a part of Dr. Denham's US post 1945 class; the students did a project exploring the congressional career of James A. Haley using the McKay archives for primary research. Using the information found in the archives, students were able to explore such topics in Florida's history such as the civil rights act, Brown V. Board of Educaion, women's right, etc.

2013 Fiat Lux Abstracts

Name: Swygard, Destiny

Major(s): History

Faculty Mentor(s): James Denham

Presentation Type: Oral **Presentation time:** 10:30 to 10:45

Room: CH 112

Title: James A. Haley Archival Exploration

Abstract:

As a part of Dr. Denham's US post 1945 class; the students did a project exploring the congressional career of James A. Haley using the McKay archives for primary research. Using the information found in the archives, students were able to explore such topics in Florida's history such as the civil rights act, Brown V. Board of Educaion, women's right, etc

Name: Varnum, Mitch

Major(s): Biology, Horticultural and Biological Sciences (self-designed major)

Faculty Mentor(s): Nancy Morvillo; Malcolm Manners, Emily Bradshaw

Presentation Type: Oral **Presentation time:** 2:15 to 2:30

Room: CH 112

Title: Genetic Analysis of 'Pink Pet'

Abstract:

The ancestry of the rose variety 'Pink Pet' is unknown. While several theories persist among rosarians and horticulturalists, no genetic research has been performed to determine which species were involved in the breeding event that created the variety. The goal of this project is to determine what the parent species could be of 'Pink Pet' through the use of the genetic analysis procedure called RAPD-PCR. Using specimens found on campus and collected from the wild, DNA was extracted from leaf tissue and utilized in RAPD-PCR analysis, which multiplies the DNA. The DNA was then visualized with the use of Gel Electrophoresis, which uses electric currents to separate the DNA molecules through a gel. Each different species of rose will have a unique separation pattern. These unique patterns can be compared to determine genetic similarities. Visualization of RAPD-PCR results by Gel Electrophoresis allowed 'Pink Pet' to be compared with possible parents at a genetic level, further illuminating the genetic ancestry of the variety.

2013 Fiat Lux Abstracts

Name: Watts, Madeline

Major(s): Religion, Psychology

Faculty Mentor(s): Sara Harding

Presentation Type: Oral **Presentation time:** 1:45 to 2:00

Room: CH 112

Title: Christianity as a Means of Coping and Maintaining Well-Being

Abstract:

The difficulty of life is a universal experience to which anyone can relate. While the difficulty of life may be undisputed, variability occurs in the ways an individual copes with those difficulties. Personality, age, race, gender, and culture are all components of what Kenneth I. Pargament identifies as a general orienting system. In an effort to understand the process of coping, an analysis of an individual's general orienting system gives insight into how he or she may overcome adversity. Research shows that religion is often an outlet for many people who are coping with stressful life events, making it a primary component of their general orienting system. What does religion, specifically Christianity in the United States, provide that causes people to turn to it when coping with adversity? Analysis of scientific studies on coping and religion was applied to the role of God, prayer, worship, and community support in an effort to understand how these effect an individual's coping process. The examination of scientific studies on coping, and application of this research to religious constructs, shows that Christianity does provide tools necessary for an individual to cope with troubling circumstances in order to maintain long term positive affectivity and well-being

Name: Welch, Amanda

Major(s): Psychology

Faculty Mentor(s): Leilani Goodmon

Co-presenter(s): Elizabeth Gennari

Presentation Type: Poster **Presentation time:** 1:45 to 3:30

Room: CH Lobby

Title: Everybody Lies: The Relationship Between Personality, Peer Pressure, and Greek Membership On the Likelihood of Lying.

Abstract:

The relationship between peer pressure, personality, and Greek membership was examined. This study was based on research which reported a relationship between certain personality traits such as manipulateness and lying behavior (Gonza, Vrij & Bull 2001). However, because this research was based on self-report measures of lying, we designed this experiment to include a more valid, behavioral measure. Participants first completed the Big Five Personality questionnaire (openness, conscientiousness, neuroticism, extroversion, and agreeableness). They were told that they would receive extra credit if they found a "hidden" object in a puzzle in a certain amount of time. Unbeknownst to the participants, the puzzle did not contain the hidden object. Lying behavior was measured by the frequency that participants recorded a time that they "found" the object. Peer pressure was manipulated by exposing some to a confederate who claimed to write down a time even though he/she could not find the hidden object. There was no effect of peer pressure on lying behavior. However, more non-Greeks did not lie than lied, while there was no difference among Greeks. There was also a significant interaction between extroversion and the peer pressure condition, but no interaction between neuroticism and the peer pressure condition.

2013 Fiat Lux Abstracts

Name: Wheeler, Zack

Major(s): Business Administration

Faculty Mentor(s): Cindy Hardin

Co-author(s): Sabine Goge, Gabby Fernandez

Presentation Type: Poster **Presentation time:** 9:45 to 11:30

Room: CH Lobby

Title: Is Corned Beef Ethical?

Abstract:

In our research, we examined the effects the beef industry's practice of feeding corn to the raised cattle. We found that this is a cheaper way to make the cattle grow and mature quicker, but it also has lead to some health issues. Cattle do not normally eat corn or grain, but eat grass. This research also found that the oligopoly of beef producers lobbied extensively to congress to protect their interests even when it has been found that their interests go against safer solutions both ethically and legally.

Name: White, Jamie

Major(s): Business Administration

Faculty Mentor(s): Cindy Hardin

Co-author(s): Phil Lancaster, James Gillum

Co-presenter(s): Phil Lancaster

Presentation Type: Poster **Presentation time:** 11:45 to 1:30

Room: CH Lobby

Title: Solar Energy

Abstract:

The Sun provides approximately 100,000 terawatts of energy to the Earth. That is about 10,000 times more than the present rate of the world's current energy consumption. Photovoltaic cells are being increasingly used to tap into this huge resource and they will continue to play a key role in future sustainable energy systems. However, the cost of photovoltaic electricity production is still too high to be competitive with nuclear or fossil energy. The efficiency of solar cells is only about 22%. The rest of the sunlight that strikes the panel is wasted as heat. More efficient photovoltaic cells have been discovered but these are still in their experimental phase and are expensive to manufacture. It will likely take decades to discover new materials and methods of making solar panels less expensive. How long it takes depends on how much time and how many more billions of dollars are invested into research.

2013 Fiat Lux Abstracts

Name: Wood, Libby

Major(s): Communication- Advertising and Public Relations, Psychology

Faculty Mentor(s): Leilani Goodmon

Co-author(s): Madi Rae Harry

Presentation Type: Poster **Presentation time:** 11:45 to 1:30

Room: CH Lobby

Title: The Effect of Self-Awareness and Self-Esteem on Facial Assortative Mating

Abstract:

The theory of assortative mating explains the phenomenon that causes individuals to look like their partners. The purpose of this study was to examine the possible relationship between assortative mating and self-esteem, as mediated by self-consciousness. In order to evaluate assortative mating, participants were asked to evaluate their own features and create a face they found attractive. The features used in this face were compared to the features indicated in self-evaluation so that the researchers could determine percent overlap. These processes were counterbalanced in order to account for the effect of self-consciousness. The participants were then asked to complete the Rosenberg Self-Esteem Scale. The researchers expected to find result indicating that there is a positive correlating regarding assortative mating and self-esteem, which would be augmented by self-consciousness. No aspect of the hypothesis was statistically supported, but the results led to one unexpected finding. Relationship status may significantly influence a participant's self-esteem when they are made self-conscious.