

Sacred Heart University DigitalCommons@SHU

Senior Honors Presentations Abstracts

Thomas More Honors Program

2012

Senior Honors Presentations 2012

Honors Program
Thomas More Honors Program, Sacred Heart University, descheness@sacredheart.edu

Follow this and additional works at: http://digitalcommons.sacredheart.edu/tmhp__abs

Recommended Citation

 $Honors\ Program, "Senior\ Honors\ Presentations\ 2012"\ (2012).\ Senior\ Honors\ Presentations\ Abstracts.\ Paper\ 1.$ $http://digital commons.sacred heart.edu/tmhp_abs/1$

This Article is brought to you for free and open access by the Thomas More Honors Program at DigitalCommons@SHU. It has been accepted for inclusion in Senior Honors Presentations Abstracts by an authorized administrator of DigitalCommons@SHU. For more information, please contact ferribyp@sacredheart.edu.

2012 Senior Honors Presentations



Foreword

The Thomas More Honors Program is extremely proud to showcase our graduating students' talents through the abstracts on the following pages. The projects represented therein are the fruits of many hours of dedicated work on a capstone project or senior thesis required for the Honors minor. Some of our students have already presented their work at regional conferences, but most of them will be presenting their work in various forums here at Sacred Heart. We invite you to celebrate our students' achievements personally by attending their presentations in the coming days. The abstracts are presented in alphabetical format, and the time and place of their presentations are indicated below the presentation title. Enjoy!

- Suzanne M. Deschênes, Ph.D. Director, Thomas More Honors Program Name: Justine Ameye

Title of Presentation: Anabolic Steroid Usage in Race Horses

Presentation Forum: Senior Seminar Presentation, Sacred Heart Univ., April 2012

Abstract/Summary:

Anabolic steroids are popular performance enhancers used in thoroughbred racing to increase a horse's racing potential. Presently, anabolic steroids are popular for use on race horses due to their lenient regulations and the lack of a unified system of enforcement. Anabolic steroids are created using synthetic testosterone and can be used as a therapeutic drug to aid in recovery from an illness or injury. Steroids increase protein synthesis and therefore increase the growth of muscle in a horse's body. Steroids also have the effect of increasing the volume of red blood cells, which carry oxygen to the rest of the body. Once race horse trainers viewed what they considered positive physical gains to horses receiving steroids, the usage turned more towards being a performance enhancer. While no scientific evidence provides any sort of physical benefit from the use of steroids on healthy horses, trainers and veterinarians continue to use steroids on race horses with the hopes of creating a faster animal. Studies have shown that training, rather than steroid use, has shown to enhance a horse's race performance. There are many types of drugs being given that have non-medicinal uses, but in recent years anabolic steroids in particular have been under intense public scrutiny. Several reasons for this increased attention include a high number of track related deaths, knowledge of usage in major races, and the general hype that surrounds steroid use in all professional sports. All regulations are rather new, so there is no information on long term success or failures of enforcement. There are several loopholes in the present regulations that are currently being worked on to change under an all-encompassing federal rule. Because there are medical uses for anabolic steroids, trainers are currently able to claim therapeutic uses for a steroid regime even when the usage was performance driven. Until there is accurate drug testing as well as a unified regulation policy, there will be no way to completely regulate anabolic steroid usage and horses will continue to be given steroids as a performance enhancer. Further research is needed to determine the long term effects of anabolic steroids on both individual horses and the breed as a whole and to find the most precise way to regulate all anabolic steroid use.

Name: Kathryn Bellico

Title of Presentation: An Exploratory Review of How to Increase Nurse Retention and Decrease

Turnover Rate

Presentation Forum: Undergraduate Research Poster and Showcase Session, Sacred Heart Univ., April

27, 2012, University Commons, 12:15-3:15 pm

Abstract/Summary:

Through my capstone clinical experience on the Medical Intensive Care Unit at Yale New Haven Hospital, I have identified the importance of the relationship between a healthy work environment and overall nurse satisfaction. Though improving nurse retention rates is a hospital wide challenge, evidence based research has shown that nurse recognition, communication, and support on each unit can retain highly satisfied and engaged staff nurses. The capstone project included a presentation of the evidence on the importance of a health work environment and proposal of different strategies to improve the three aspects. The project was presented to the management staff and committee evaluating the issue on the unit. It is crucial for a successful implementation of the program to begin with the key stakeholders and then present to the staff the predetermined strategies that will be implemented.

Name: Kelley Bligh

Title of Presentation: The Chill Out Tent

Presentation Forum: Annual Honors Symposium, Sacred Heart University, April 28, 2012, UC 109, 10:30-

10:50 am

Abstract/Summary:

A brief summary of my screenplay: Based on The Hold Steady song, "The Chill Out Tent," it is the story of a guy and girl from two different backgrounds who both go to the same music festival to see their favorite band, The Hold Steady. They both have bad trips on their respective drugs and meet in a "chill out tent" at the concert while they recover. Despite their differences, they find comfort from the struggles of their everyday lives in each other. Scenes from my screenplay will be read.

Name: Benjamin Bradley

Title of Presentation: Outsiders and Outlaws: the Heroes of Northern European Epics and Sagas **Presentation Forum:** Annual Honors Symposium, Sacred Heart U., April 28, 2012, UC 113, 9:50-10:10 am **Abstract/Summary:**

Heroes are well-known for their position as embodiements of the ideals of a society. Achilles embodies the Greek ideal of *arête*. This paper explores a selection of Northern European epics and Sagas. Texts surveyed include: *Beowulf*, the *Kalevala*, the *Kalevipoeg*, the *Nibelungenlied*, the *Táin*, the Icelandic Outlaw Sagas, and *The Saga of the Volsungs*. Through the exploration of these texts, this paper discovers that heroes in the early Northern European literary tradition possess a dual role: the figures embody the highest ideals of a society yet remain distanced from their society or even fail to maintain other ideals of the society.

Name: Abbie Britton

Title of Presentation: Investigating Toxicological Effects on Gene Expression at Neural Synapses in response to Anandamide, a Marijuana-mimicking drug on *Danio rerio*

Presentation Forum: Undergraduate Research Poster and Showcase Session, Sacred Heart Univ., April 27, 2012, University Commons, 12:15-3:15 pm; Eastern Colleges Science Conference, William Paterson Univ., Wayne, NJ, April 14, 2012

Abstract/Summary:

Marijuana is a widely used recreational drug, but little is known about the consequences to the nervous system it may possess on a developing fetus, and therefore concerns have been raised regarding its use. To that end, *Danio rerio*, or zebrafish, was used to study the effects of Anandamide, a marijuanamimicking drug, on developing neural synapses during brain development. Zebrafish embryos were exposed to 50 nM Anandamide for 48, 72, and 96 hours and compared to control, non-treated siblings of the same age. While no morphological changes were observed between the two groups at any time points, RT-PCR analysis demonstrated that exposure to Anandamide caused glycine transporter gene expression to be down regulated in the experimental group for all time periods tested, with the most sever change occurring after 96 hours of exposure. This gene is mainly involved in recapturing glycine, which is a major inhibitor of the spinal cord and brainstem. 50nM Anandamide treated embryos had an average of 1.9 times higher heartbeat. Here we demonstrate using the zebrafish model, embryos exposed to Anandamide for short time windows demonstrate gene expression changes which could lead to later stage alterations of behavior.

Name: Lindsay Bublewicz

Title of Presentation: Chronic Ankle Instability and Posterior Ankle Impingement in a 15-year-old High

School Cheerleader

Presentation Forum: Sacred Heart University Athletic Training Senior Case Study Presentations, Pitt

Center Board Room, April 22, 2012, 3 pm

Abstract/Summary:

Objective: The objective of this case study was to examine a high school cheerleader who underwent open excision of an os trigonum as well as right ankle arthroscopic debridement and Brostom-Gould reconstruction surgery for chronic ankle instability. Background: A high school cheerleader presented with ongoing ankle difficulties for over a year after spraining her right ankle in a tumbling drill. She was treated first with conservative treatment and then with mini-open Brostrom procedure for her ongoing instability. Post-operatively, she continued to have anterolateral ankle pain and episodes of her ankle "giving way". She sought additional help for these issues from a different doctor, who after attempting conservative treatment, discovered a symptomatic os trigonum causing ankle impingement. After learning this, the student opted for surgical intervention. Treatment: On March 29, 2011, she underwent right ankle arthroscopic debridement and Brostrom-Gould lateral ligament reconstruction as well as open excision of her os trigonum. Uniqueness: acute ankle sprain leading to chronic ankle instability occurs in 10-20% of the population while painful os trigonum leading to posterior ankle impingement occurs in 1.7-7.7% of the population. Conclusions: Chronic ankle instability can lead to long term sequelae including posterior ankle impingement from an os trigonum. Failure of conservative treatment to relive pain and instability calls for surgical intervention. Numerous procedures have been done to correct chronic ankle instability, including the Brostrom anatomical repair, as well as the Gould and Evans modifications to the Brostrom procedure. In addition, painful os trigonum must be removed via either open or closed excision.

Name: Lauren Candee

Title of Presentation: Preimplantation Genetic Diagnosis: Should we Be Peeking Into the Womb **Presentation Forum:** Annual Honors Symposium, Sacred Heart University, April 28, 2012, UC 113, 10:30-

10:50 am

Abstract/Summary:

In my senior thesis paper, I will be discussing what pre-implantation genetic testing is, the process, common diseases that this type of testing is used for (and details of the process of PGD for each specific disease), and its place in our future. Because it is a controversial topic, I will also be discussing the benefits and possible dangers of this method of testing, as well as the ethical views on PGD. I'll be arguing for the benefits/widespread usage of this method of genetic testing.

Name: Samantha Cappelli

Title of Presentation: Special Purpose Entities: Shining a Positive Light on a Tarnished Practice

Presentation Forum: Annual Honors Symposium, Sacred Heart U., April 28, 2012, UC 113, 1:00-1:20 pm

Abstract/Summary:

Special Purpose Entities are important off-balance sheet items that affect Accounting procedures and their treatment compares to that of subsidiaries. These items have been around for a long time but have been popularized over the past few years, becoming a hot topic in the Accounting field. Since they were first created the rules or guidelines to which they must adhere to have evolves over time, as many accounting standards do. The Financial Accounting Standards Board plays and important role in setting these standards as well as providing detailed explanations of their use or requirements.

Unfortunately, the usage of Special Purpose Entities has received a negative association due to scandals with companies like Enron, Olympus, and MF Global. Those involved in the Accounting Profession must have knowledge of these misuses in order to create a more ethical environment. This presentation will explore the FASB Statements that relate to Special Purpose Entities as well their usage in the real business world. Also it will explore the scandals that have popularized this topic and the positive effect that SPEs can have when used effectively.

Name: Michelle Chiacchio

Title of Presentation: Reducing the Incidence of Pressure Ulcers in Hip Fracture Patients

Presentation Forum: Undergraduate Research Poster and Showcase Session, Sacred Heart Univ., April

27, 2012, University Commons, 12:15-3:15 pm

Abstract/Summary:

Patients with hip fractures are especially prone to developing pressure ulcers in the hospital setting due to their immobility. Pressure ulcers delay healing, increase the patient's risk of infection and cost the hospital money because Medicare doesn't pay for them if they are acquired in the hospital. The aim of this research was to identify risk factors among a population of hip fracture patients on an orthopedic surgical floor at Yale-New Haven Hospital as well as to provide an informative pamphlet to the RNs and medical staff. This pamphlet can be used as a reminder for staff because it provides current statistics regarding pressure ulcers and identifies best practice and current protocols for preventing their formation in these high-risk patients.

Name: David Choy

Title of Presentation: Neuroimaging: the Ethics of Reading Minds

Presentation Forum: Annual Honors Symposium, Sacred Heart University, April 28, 2012, UC 110, 11:10-

11:30 am

Abstract/Summary:

In Neuroscience and Psychology, the advancement and use of brain scanning equipment has allowed researchers to determine the exact functionality of multiple regions in the brain. This study of brain structure and functionality has been called neuroimaging. Using Neuroimaging, Scientists have been able to form models in order to diagnose mental conditions, act as lie detectors, and recreate image seen by their subjects. The routine use of these models has not yet been implemented because there are still many functions that scientist have not been able to determine its functionality. As these neuroimaging applications are developed, there are many ethical concerns that have to be addressed before allowing them to go public. A few of the questions addressed are: the ethics approach into someone personal thoughts? What are repercussions of neuroimaging on its respective fields? And what validates the further research of neuroimaging?

Name: Robert Cowan

Title of Presentation: What Has Happened to The Role Models?

Presentation Forum: Annual Honors Symposium, Sacred Heart U., April 28, 2012, UC 109, 2:00-2:20 pm

Abstract/Summary:

The theme of my paper is leadership. As a political science major I have over four years been taught about the various lives of some of the most famous leaders in history, from the founding fathers, to Abraham Lincoln, all the way to Martin Luther King Jr. Through these studies however I have found that the role models in politics have disappeared. What has happened to our strong political figures and why is it that we now look to figures in entertainment for leadership. Why is it that free countries tend to look away from their government when asked about great leaders when really they should be the best of us in theory?

Name: Christina Curran

Title of Presentation: Idiopathic Subclavian Vein Thrombosis and Thoracic Outlet Syndrome in a High

School Basketball Athlete

Presentation Forum: Undergraduate Research Poster and Showcase Session, Sacred Heart Univ., April

27, 2012, University Commons, 12:15-3:15 pm

Abstract/Summary:

Objective: To present a study of an 18 year old, male, basketball athlete who was diagnosed with a spontaneous subclavian vein thrombosis in the proximal upper right extremity which contributed to the development of thoracic outlet syndrome. This case study aims to discuss the diagnosis, treatment, and care of an athlete with this condition. Background: An idiopathic deep vein thrombosis is a rare pathology not commonly seen in the upper extremity. The patient reported with pain, swelling, and cyanosis in the right shoulder extending into the upper extremity. The patient was referred to the hospital for testing. Differential Diagnosis: Paget-Schroetter syndrome, idiopathic subclavian deep vein thrombosis, thoracic outlet syndrome. Treatment: A subclavian vein thrombosis was diagnosed through a duplex venous ultrasound. The patient was treated with Coumadin, a catheter directed thrombolysis and balloon angioplasty, first rib resection, and an anterior scalenectomy. Uniqueness: A young, healthy athlete with no predisposing conditions presented with a spontaneous right subclavian vein thrombosis. Just 76 days after the diagnosis, the athlete was able to return basketball with full range of motion and no pain or loss of function. Conclusions: Health care professionals should be educated on the signs and symptoms of a subclavian vein thrombosis and understand that this pathology can be spontaneous in etiology and can affect young, healthy individuals. A prompt referral, anticoagulant and mechanical thrombolytic therapy, and a first rib re-section are optimal in preventing possible complications or morbidity. Key Words: Paget-Schroetter syndrome, idiopathic subclavian deep vein thrombosis, thoracic outlet syndro

Name: William Eckert

Title of Presentation: Does Dope Live up to the Title

Presentation Forum: Annual Honors Symposium, Sacred Heart U., April 28, 2012, UC 113, 11:30-11:50

am

Abstract/Summary:

Essentially what I'm going to explain is a research summary of findings that I have come up with when trying to identify a correlation between alcohol consumption, marijuana use and collegiate grade point average. My findings are the results of a 93 student survey in which students were asked a variety of questions such as their high school gpa, weekly alcohol consumption, monthly marijuana use, SAT scores, etc and the results were put into a quantitative correlation finding program known as e-views. When I first came up with the survey I expected a negative relationship to exist between alcohol consumption and GPA and an insignificant effect of marijuana use on GPA. What I found was that both variables ended up being insignificant on collegiate GPA. This could be the result of a small sample size, or an inability to validate answers given by random students in the Sacred Heart and St John's community.

Name: D'Anna Farmer

Title of Presentation: Proofs by Counting

Presentation Forum: Undergraduate Research Poster and Showcase Session, Sacred Heart Univ., April

27, 2012, University Commons, 12:15-3:15 pm

Abstract/Summary:

In this paper, identities will be proved by using a counting method. This method will be explained indepth using two types of styles; answering a question with two answers, and setting up a correspondence between two different sets. These proofs will be represented by boards and bracelets that will be tiled by squares and dominoes. We will verify different types of identities such as Fibonacci identities, Lucas identities, and Binomial identities.

Name: Samantha Fasanello

Title of Presentation: Policy and Politics: An In Depth Look at the Laws and Influential Factors Affecting

Prosecutorial Convictions with an Emphasis on the State of New Jersey

Presentation Forum: Annual Honors Symposium, Sacred Heart U., April 28, 2012, UC 113, 1:20-1:40 pm

Abstract/Summary:

The judicial system of the United States of America is a multifaceted structure that was arranged with the intention of maintaining justice and protecting its citizens. After progressing through the criminal justice system, accused criminals conclude the judiciary process inside the courtroom. The final responsibility of obtaining a conviction and the subsequent punishment of a criminal falls upon the prosecutor assigned to the specific case. Crime rates and conviction rates vary widely throughout the United States. Not only do conviction rates vary from state to state, but they also vary within each state. The State of New Jersey specifically demonstrates a considerable variation of conviction rates among its twenty-one counties. Prosecutors in New Jersey have expressed feelings that conviction has become increasingly more difficult in recent years. There are several factors affecting conviction that may partially account for this alleged shift; the factors that seem to have the greatest effect on convictions in New Jersey include Constitutional conditions, witness compliance, economic factors, population, crime rates, and openness of jury members.

Name: Josephine Ferrantelli

Title of Presentation: Fun Demonstrations for Freshman Chemistry

Presentation Forum: Undergraduate Research Poster and Showcase Session, Sacred Heart Univ., April

27, 2012, University Commons, 12:15-3:15 pm

Abstract/Summary:

Common, key experiments utilized in various areas of Chemistry were adopted, and their methods and purposes were transformed into demos. Each demo was recreated in the lab, diagnosing the principal concepts inherent in its lab procedure that are crucial to the lecture in the respective areas. These demos were examined and critiqued to signify their relationship with fundamentals of Chemistry at the freshman level. The results of the project were: the Belousov-Zhabotinsky Reaction forming musical fractals; a Liver Enzyme-Assay detecting catalytic activity; and a separation through continuous extraction.

Name: Shannon Figueroa

Title of Presentation: Long Acting Beta Agonists: are they safe medications?

Presentation Forum: Annual Honors Symposium, Sacred Heart U., April 28, 2012, UC 109, 1:20-1:40 pm

Abstract/Summary:

Asthma is a respiratory disease that affects a large portion of the world's population. All of the medications used to treat this illness have not all been adequately tested. Long acting beta agonists have been shown to be affective at treating asthma symptoms but have a history of adverse side effects. Contrary to this some studies show that when being used with Inhaled Corticosteroids these adverse effects seem to lessen. I will present on both being treated with just LABA or in combinations of other medications assessing the safety of the LABA's in relation to their effectiveness at treating asthma symptoms. While further studies still need to be conducted it can be concluded that LABA work best when taken with ICS.

Name: Charles Fleck

Title of Presentation: Reflections on the Guillotine: The works of Albert Camus and Supreme Court

death penalty cases

Presentation Forum: Annual Honors Symposium, Sacred Heart U., April 28, 2012, UC 110, 9:10-9:30 am

Abstract/Summary:

Through an assessment of the history of the death penalty in the United States, and a critical look at the political writings of French philosopher Albert Camus, the piece tries to judge the efforts of the court across generations to be philosophically sound on the notion of the death penalty. Based on the essay "Reflections on the Guillotine" and the play "The Just Assassins," it assesses Camus' post-World War II shift in thinking and subsequent condemnation of atrocities such as the death penalty. These deductions are woven through the majority and dissenting opinions of some of the Supreme Court's most influential and divisive cases in an attempt to judge the Court on a higher ground than mere political affiliation. It is to be seen whether the Court is as high minded as we assume them to be.

Name: Danielle French

Title of Presentation: Myofacial Trigger Points Disguised as Thoracic Outlet Syndrome in a 21 year-old

Female Dual Sport Athlete

Presentation Forum: Sacred Heart University Athletic Training Senior Case Study Presentations, Pitt

Center Board Room, April 22, 2012, 3 pm

Abstract/Summary:

The objective of this case study was to investigate why a healthy athlete would begin suffering from severe neurological symptoms one year after a seeming successful rehabilitation from labral reconstruction surgery. This case is highly unique in that it could have been resolved months before it actually was. MDs tend to misdiagnosis myofacial pain syndrome (MPS) for a multitude of proposed reasons – the primary accepted reason is due to lack of education. ATCs tend to be slightly more versed on the diagnosis, yet still seem to be lacking knowledge on the proper and most effective treatment options. MPS may appear to present with symptoms similar to other diagnoses, which explains why it is commonly misdiagnosed. Upon further examination, however, MPS can be accurately diagnosed and treated if the clinician is properly educated on the topic. Once this athlete was properly diagnosed, the trigger points were treated and her symptoms have not yet returned.

Name: Francesca Furci

Title of Presentation: School Psychology Internship Overview

Presentation Forum: Annual Honors Symposium, Sacred Heart University, April 28, 2012, UC 109, 9:10-

9:30 am

Abstract/Summary:

Over the course of my last semester at Sacred Heart, I have held an internship position at Stratfield Elementary school. While shadowing the schools' psychologist, I was able to observe and assist in social skills groups, intelligence testing, Placement and Individualized Education Plan meetings, counseling sessions, classroom observations, and other situations involved in the school psychologist's day-to-day routine. As my capstone project for my psychology major, this opportunity allowed me to explore the ways that my psychology coursework will be relevant to my future career. I was able to expand my knowledge of psychology, learn countless valuable lessons about working with others, especially children, and get a fantastic preview of my life in the future.

Name: Alexandra Gatten

Title of Presentation: The Shadow and the Self

Presentation Forum: Annual Honors Symposium, Sacred Heart University, April 28, 2012, UC 113, 11:10-

11:30 am

Abstract/Summary:

The doppelgänger is a frightening image, uncanny in its contradictory familiarity and otherness. It is the dark twin, the evil brother, the distant self; it is fear manifested in one foreboding figure. Why does the doppelgänger inspire such disturbance in Gothic literature? The answer lies in the mirror. It does not lie nor shrink from revealing the truth—it is impartial in its criticism of the face's features. Though its reflective gaze may be helpful at times, it causes a strange dissonance in every person as they confront themselves wholly and truly. This is the key to the doppelgänger: it represents the shadow self-deep inside, the unacknowledged, the strange and perhaps the monstrous that lies within until the rational mind confronts it, willingly or unwillingly. It is not the other that makes humanity fear the doppelgänger, but the other within the self. Sigmund Freud's essay on the uncanny illuminates what inspires fear, which, in conjunction with Carl Jung's discussion of the unconscious and the shadow, shows how the doppelgänger represents the dark self. In American Gothic literature, characters encounter their uncanny, dark selves in a variety of ways. Short stories such as "The Yellow Wallpaper," "The Outsider," and "The Last Feast of Harlequin" all show the horrific, singular revelation of encountering this inner doppelgänger in reflections. In these moments of revelation, American Gothic literature displays how the uncomfortable truth of the doppelgänger can be encountered either by reflection or by a journey.

Name: Jeremiah German Title of Presentation:

Presentation Forum: Annual Honors Symposium, Sacred Heart U., April 28, 2012, UC 113, 2:00-2:20 pm

Anstract/Summary:

My presentation will deal with issues that have arisen in the realm of international accounting, specifically issues with convergence of US GAAP and IFRS. The presentation will tout the superiority of US GAAP and will examine issues with IFRS and why convergence is not a good idea.

Name: Melissa Gildersleeve

Title of Presentation: Educating Emergency Department Nurses on Maternity Care to Improve Staff's

Ability to Care for and Comfort the Pregnant Patient

Presentation Forum: Undergraduate Research Poster and Showcase Session, Sacred Heart Univ., April

27, 2012, University Commons, 12:15-3:15 pm

Abstract/Summary:

During my preceptorship experience in the adult emergency department at Yale-New Haven Hospital, it was often vocalized how uncomfortable the nurses are when encountering patients who are pregnant, especially further along in their pregnancy. Often pregnant patients are rushed up to the maternity floors, but I spoke to nurses in the ED who had to deliver babies, and deal with maternal emergencies when there wasn't enough time to transport them, even though that wasn't their specialty. I also experienced a young patient come in with cramping and bleeding, and was 6 weeks pregnant. The nurses were not comfortable with their knowledge set to explain to her what could be happening, and the patient vocalized to me that she felt really scared and just wanted somebody to tell her what was going on. Although ED nurses do not always have time to sit and have a conversation with their patients, they have to remember all nurses are advocates for their patients. Hopefully, providing them with basic information about the most common types of maternal emergencies will help them feel more confident and help the patients feel more comfortable. My project included a brochure to hand out to the staff explaining basic problems a pregnant patient would present to the ED for, common signs and symptoms, risk factors, diagnosis techniques, and treatment options. I also focused on resources to give the patient, either for grieving purposes, or to help prevent a recurrent visit.

Name: Amanda Grzyb

Presentation Forum: Graduated December, 2011

Name: Lindsay R. Guilmette

Title of Presentation: Maximum Flow in Networks

Presentation Forum: The Northeastern Section of the Mathematical Association of America: Fall 2011

Meeting; Connecticut College, New London, CT, November 18, 2011

Abstract/Summary:

In graph theory, networks are graphs whose edges have direction and magnitude and usually describe a flow. Applications of networks often involve optimization of flow. We will explore what conditions indicate a maximum flow as well as the properties of a maximum flow in any network, if it exists.

Name: Brian Harrison

Title of Presentation: Alexander the Great: Greek or Barbarian?

Presentation Forum: Annual Honors Symposium, Sacred Heart U., April 28, 2012, UC 110, 9:30-9:50 am

Abstract/Summary:

Alexander the Great is one of the greatest historical figure ever known, and has accomplished so much within a short period of time. During his brief reign as the King of Macedon between the years 336-323 BC, Alexander managed to conquer the Persian Empire, which was the most vast empire to date, and beyond. He spread Greek culture and ideals throughout the world, which is still seen within modern society. His influence upon the people that he interacted with, both friendly and hostile is significant in every way. His inspirational speeches and care for his men were surpassed only by his drive to succeed and claim honor and glory for his own namesake. In modern society, his actions and methodology about his campaign east get called into question because, as time goes on and the farther from home he moved, Alexander is seen as having gradually favored the customs of the "barbarians" and "uncivilized" people. While some may argue that Alexander's personality changed drastically over time, it is unquestionable that he achieved great and unmatched feats within such a short period of time, and that he should forever be known as an innovative and efficient general and king, and accomplished many of his goals in the name of Greek culture.

Name: Samantha Kee

Title of Presentation: Brief embryonic exposure to Prozac® is correlated with alterations in embryonic synaptic gene expression and larval behavioral changes in *Danio rerio*.

Presentation Forum: Annual Honors Symposium, Sacred Heart U., April 28, 2012, UC 109, 1:00-1:20 pm **Abstract/Summary:**

Prozac®, a widely-prescribed antidepressant of the selective serotonin reuptake inhibitor class, is used to treat a number of disorders, in addition to depression. Its widespread use raises concerns regarding the potentially harmful effects of embryonic exposure to the drug. A zebrafish model was used to study the effects of Prozac® on the developing nervous system. Here we focused on embryonic synaptic remodeling events and the later-staged adolescent behavioral changes resulting from a brief window of embryonic exposure to the drug. To that end, experimental embryos were exposed to Prozac® for 48, 72, and 96 hours and compared to control siblings of the same age. While no morphological differences between experimental and control embryos were observed, RT-PCR analysis indicated that at the molecular level, exposure to Prozac® induced changes in the expression of the genes for serotonin and dopamine transporters. To determine whether these gene expression changes resulted in later-staged adolescent behavioral effects, larval zebrafish behavior was analyzed using DanioVision ® tracking software. Zebrafish exposed to Prozac® for 72 hours after fertilization were released from drug treatment and raised under normal conditions in standard fish water until two weeks of age. Drugtreated fish showed significant changes in swimming behavior and learning response in a simple nonthreatening habituation assay. Using the zebrafish model, we demonstrate that a brief period of embryonic exposure to Prozac® alters the expression of genes involved in embryonic synaptic transmission and is associated with changes in later-staged adolescent behavior.

Name: Olivia Kiraly

Title of Presentation: Religiosity as a Determinant for Teen Pregnancy Rates per U.S. State

Presentation Forum: Annual Honors Symposium, Sacred Heart U., April 28, 2012, UC 110, 1:00-1:20 pm

Abstract/Summary:

After running multiple regressions on these variables, the findings of this study suggest that the original theory (increased state religiosity should have a positive effect on teen birth rate of a given state) is not valid, or at the very least inconclusive. It is likely that previous studies on similar topics have resulted in a positive correlation between teen birth rate and religiosity because the sample sizes used were small and the regressions was likely missing significant variables, which yielded higher coefficients, t-statistics, and probabilities of significance for the few variables included.

Name: Robert Lycoudes

Title of Presentation: The Field of Real Numbers

Presentation Forum: Annual Honors Symposium, Sacred Heart U., April 28, 2012, UC 110, 1:40-2:00 pm

Abstract/Summary:

In this presentation, we will develop the field of real numbers, \mathbb{R} , focusing on irrational and rational numbers. Using \mathbb{R} , the properties of hyperreal numbers will be described and will include applications to games, and even calculus. Throughout the course of the presentation, proofs will be demonstrated to give the reader a better insight as to why certain numbers are part of a particular set.

Name: Amanda Matra

Title of Presentation: The function of Sonic Hedgehog in frog limb development

Presentation Forum: Undergraduate Research Poster and Showcase Session, Sacred Heart Univ., April

27, 2012, University Commons, 12:15-3:15 pm

Abstract/Summary:

Sonic hedgehog (Shh) is a diffusible morphogen that is expressed in the posterior of tetrapod limbs and patterns the anterior-posterior axis of the limb. In most tetrapods, absence of Shh or blocking of its function causes severe reduction of development across the anterior-posterior axis, but has very little effect on outgrowth along the proximal-distal axis. Our previous research in one species of frog, *Xenopus tropicalis*, showed a complete loss of outgrowth in many limbs in response to the blocking of Shh signaling with the chemical cyclopamine. This role of Shh in limb outgrowth has never been observed in any other tetrapod species, and phylogenetic comparisons of the species in which Shh function has been studied suggest that this is a novel role for Shh in frogs. But it remains unclear to what extent this applies very narrowly to *Xenopus laevis*, if it applies to all frogs, or it applies to some clade of intermediate size. Here we use cyclopamine to investigate the effects of blocking Shh in, *Rana pipiens*, a species phylogenetically distant from *Xenopus tropicalis*, in hopes of narrowing down the evolutionary origin of this novel role for Shh in limb development.

Name: Breanna McLaughlin

Title of Presentation: The Mathematics of Blackjack

Presentation Forum: Annual Honors Symposium, Sacred Heart U., April 28, 2012, UC 113, 9:30-9:50 am

Abstract/Summary:

Blackjack is considered to be one of the most popular casino games in the United States today. In an attempt to master the game and leave with a large profit, playing and betting strategies are used. In this

paper, I will discuss a few of these strategies and the mathematics behind each.

Name: Katherine Nichols

Title of Presentation: Southern Struggles

Presentation Forum: Annual Honors Symposium, Sacred Heart U., April 28, 2012, UC 109, 9:30-9:50 am

Abstract/Summary:

Four participants presented this panel: Jihan Bok, Alex Gatten, Crystal Knappenberger and Andrew Todd. The papers were entitled: "A Failure to Awaken," "Stagnancy and the Self," ": A Study of the Misuse of Language in Kate Chopin's The Awakening," and "Inadequacy of "Unreliability": Faulkner's Quentin Compson." Most papers surrounded around literary criticism concentrating on Kate Chopin's *The Awakening*, however one paper regarded *The Sound and Fury* by William Faulkner.

Name: Brigid Paddock

Title of Presentation: The Effects of Aging on Self-Esteem

Presentation Forum: Annual Honors Symposium, Sacred Heart U., April 28, 2012, UC 110, 2:00-2:20 pm

Abstract/Summary:

Happiness can be measured in numerous ways. An individual's happiness can be seen through their overall self-esteem, their outlook on their current and past life, the impact they have made on others and themselves, and most importantly how satisfied they are with the person they have grown to be. Individuals grow as people with age and as they go through different stages of their life. The older we grow the more we look back on our life and reflect on who we have become and analyze to see if we are happy with the person we are becoming and satisfied with life thus far. Most individuals determine what they wish to improve on with themselves and with their lives in order to become more satisfied. However, sometimes the effects of aging can be devastating on an elder's self-esteem. The elderly community makes up 12.5% of the population in the world today. However, they also account for almost 16% of all suicides, depression being the leading cause of suicide among the elderly, which is often undiagnosed and untreated. It is important to determine what factors affect an elderly self-esteem and the necessary steps to try and reduce the depression and suicide rate amongst them.

Name: Erica Paiva

Title of Presentation: School Psychology Internship at Osborn Hill School

Presentation Forum: Annual Honors Symposium, Sacred Heart University, April 28, 2012, UC 110, 10:50-

11:10 am

Abstract/Summary:

An overview of what I experienced and learned through my internship placement at Osborn Hill School in Fairfield where I shadowed a School Psychologist. I will be sharing stories of my experience as well as explaining how I saw "psychology in action" in my placement. I will also explain two concepts taken from my capstone class in relation to my internship experience. Finally, I will conclude with the most important thing I learned from my internship.

Name: Cori Palermo

Title of Presentation: The effect of bilingualism on children's performance on cognitive tasks **Presentation Forum:** Undergraduate Research Poster and Showcase Session, Sacred Heart Univ., April 27, 2012, University Commons, 12:15-3:15 pm

Abstract/Summary:

Past research has shown that the cognitive abilities in bilingual children are significantly more advanced than their monolingual peers. Bilingual children are capable of switching back and forth between different languages when speaking and they must also select the correct language needed to communicate effectively with another person when they are engaged in conversations. This flexibility in thinking and appreciation of another person's knowledge during communication could account for their advanced cognitive abilities. The current study investigated this possibility by looking at two cognitive tasks: an appearance-reality task and a card-sorting task. The appearance-reality task required children to think about their own perspective as well as another person's to study the children's theory of mind abilities. The card-sorting task was used to examine if bilingual children also possessed improved executive functioning, which is the ability to be cognitively flexible when solving complex problems. Forty-five children, between the ages of three and five, participated in the study. On the card-sorting task, older children scored higher than younger children and bilingual children outperformed monolingual children. While there were significant age differences, no significant language differences were found on the false belief task. This data is consistent with previous research demonstrating that bilingual children are more mentally flexible on certain cognitive tasks, though we could not support the theory that bilingual children have more advanced theory of mind abilities compared to monolingual children.

Name: James Piazza

Title of Presentation: Freedom of Assembly and Petition

Presentation Forum: Annual Honors Symposium, Sacred Heart University, April 28, 2012, UC 109, 11:10-

11:30 am

Abstract/Summary:

Freedom of assembly is one of our unsung rights given to us by the First Amendment which has been used to greatly advance our nation's civil rights movements despite the ambiguity or ambivalence on its meaning. Many of our rights are expanded or compressed as the years go by based on laws, interpretations, etc. This fluctuation may take us away from the original intent of the founding fathers, which may or may not be a good thing depending on which side of the spectrum you lie. How about the Freedom, or Right of Assembly? How has that changed over time, if at all? How will it evolve in the future? Why does it exist in the first place? Now, more than ever, is an exciting time to look at this freedom and perhaps even exercise it!

Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.

Name: Alicia Provenzano

Title of Presentation: Business Policy Strategic Planning Capstone Game

Presentation Forum: Annual Honors Symposium, Sacred Heart U., April 28, 2012, UC 109, 11:30-11:50

am

Abstract/Summary:

In my BU301 business policy capstone course, we were divided into teams to sell a product (sensors) through an online game. Each team created a strategic plan consisting of about 14 pages discussing where we stood and why and where we plan to be and how. Currently my team is in first place. In my presentation I will be discussing my team's strategic plan and how we incorporated it into our decision making with the online game. I will be talking about our product, customer segments, and observations that made us make our decisions with R&D, marketing, production, and finance.

Name: Laura Quagliata

Title of Presentation: Hyperbolic Geometry

Presentation Forum: Annual Honors Symposium, Sacred Heart University, April 28, 2012, UC 113, 1:40-

2:00 pm

Abstract/Summary:

This presentation discusses hyperbolic geometry. In the study of geometry, we use metrics to measure the distances between points. We are used to studying Euclidean space that entails a certain set of points and a certain metric. Hyperbolic space differs in that it entails a different set of points and a different metric than we are used to. This presentation will explain hyperbolic space, the importance of hyperbolic space, and several ways in which it differs from Euclidean space.

Name: Heather Quevillon

Title of Presentation: Potential Breakup of the Big Four by the European Union: How U.S. Auditing May

oe Effected

Presentation Forum: Annual Honors Symposium, Sacred Heart U., April 28, 2012, UC 109, 9:50-10:10 am **Abstract/Summary:**

After the global financial crisis of 2007 into 2008, not only were banks and other responsible parties questioned for their part, but the auditors who gave them clean financial sheets as well. Now the European Union is discussing taking action by overhauling the auditing industry as well as the Big Four companies who have an oligopoly on the industry. These overhauls include not allowing a firm to audit a client for more than six years, unless dual auditing is used which extends the term to 9 years, and separating their auditing and consulting arms, among other things. The Big Four, all being global firms, will no doubt be affected in the United States if these regulations pass, the question is to what extent and if this is a positive thing. Potential consequences include higher audit costs to clients due to dual auditing and frequent rotation, changes may not prevent financial crises, and complicating the audit process further than necessary. Clearly some changes do need to be made in this industry, but it is uncertain if the extent of the changes the European Union is proposing will be more beneficial than consequential. The world and regulators outside of those working in the Big Four seem to be pushing for a change, and the real question is what event will finally trigger it.

Name: Aaron Rauth

Title of Presentation: Graphic Design Portfolio

Presentation Forum: Graphic Design Senior Portfolio Night, April 26th, Univ. Commons, 4:30pm

Abstract/Summary:

Graphic Design & Visual Arts at Sacred Heart University culminates in Graphic Design and Illustration Portfolio classes. These classes reach their climax with the annual Senior Portfolio Night, at which two to four hundred guests attend a formal presentation by graduating seniors. Each graduating senior presents an 18- to 24-page portfolio with a culmination of their best work from their time here at Sacred Heart University. Portfolios includes projects in package design, editorial lay out, interactive design for web and mobile devices, animation, advertising, corporate branding, Illustration, and more. In addition to the portfolio, each student completes his or her own personal brand, which includes a personal logo, business card, and resume design. Invited guests include the leading design, advertising, and marketing companies in Fairfield County, home to some of the most prestigious companies of this type in the nation.

Name: Annie Rouquie

Title of Presentation: Using Linear Algebra to Analyze Big East Football

Presentation Forum: The Northeastern Section of the Mathematical Association of America: Fall 2011

Meeting; Connecticut College, New London, CT, November 18, 2011

Abstract/Summary:

Being a devoted fan of football in today's era has become a common hobby of the average American. Avid supporters follow each season closely and check the conference rankings each week in hopes of seeing their favorite team prevail. Few people know that there are many other ways of ranking teams in a conference, rather than simply relying on a team's win/loss record. This paper will focus on the method of ranking football teams in the Big East conference based on the points that they have scored and given up throughout the season by using linear algebra, especially the theories of nonnegative and primitive matrices. These rankings will then be compared to the rankings generally accepted by the public.

Name: Claudia Sasso

Title of Presentation: The Sarbanes-Oxley Act of 2002

Presentation Forum: Annual Honors Symposium, Sacred Heart University, April 28, 2012, UC 113, 10:50-

11:10 am

Abstract/Summary:

In light of recent corporate scandals in the past decades, the Sarbanes-Oxley Act was passed by the United States Congress in 2002. Its purpose is "protect investors by improving the accuracy and reliability of corporate disclosures made pursuant to the securities laws, and for other purposes" as it is stated in the act itself. The act addresses nearly all aspects and participants in the United States' capital markets. The main objectives of the act include rebuilding confidence in the accounting profession, improving the implementation and enforcement of the Federal Securities laws, bettering "tone at the top" and executive responsibilities, improving financial reporting and disclosure, and ameliorating the performance of "gatekeepers" in the accounting profession. Companies like Enron, Worldcom, and Adelphia are listed as violators of the act before its enactment. The act has gotten positive and negative criticism since it was enacted. All of the aforementioned topics will be covered in this capstone project with the purpose of educating my fellow classmates, who will potentially become investors in Corporate America, about one of the governing laws in protecting and maintaining investor confidence in the exchange of securities in the United States of America.

Name: Brittany Sawyer

Title of Presentation: Free Speech in School: How Landmark Cases Effect Students' Rights Today **Presentation Forum:** Annual Honors Symposium, Sacred Heart U., April 28, 2012, UC 109, 1:40-2:00 pm **Abstract/Summary:**

Freedom of speech in schools has recently become a very controversial issue. Are schools taking away student's constitutional rights by limiting certain speech? There have been many cases throughout the Supreme Court's history that deal with this very issue. In its rulings regarding speech controversies in school the Supreme Court has been faithful to the concept of free speech to some extent, this is exemplified in the following cases: Tinker v. Des Moines Independent Community School District, West Virginia State Board of Education v. Barnette, Morse v. Frederick, Bethel School District No. 403 v. Fraser, and Island Trees School District v. Pico. These landmark cases have made a major impact on freedom of speech in school today. The rulings in these cases have affected the freedom of speech in school today.

Name: Michelle Simons

Title of Presentation: Psychology In Action at The Pilot House

Presentation Forum: Annual Honors Symposium, Sacred Heart U., April 28, 2012, UC 113, 9:10-9:30 am

Abstract/Summary:

The Pilot House is located in Fairfield, Connecticut and is a center that provides programs and resources for families raising children who have disabilities. They offer various forms of therapy and many interactive classes for children ranging from pre-school to high school age. Many concepts and theories of psychology can be seen at The Pilot House. From the modeling aspect of Albert Bandura's social learning theory, to Erik Erikson's psychosocial stages of development, to the concepts of separate and connected knowing and self-understanding, psychology is ever present at The Pilot House.

Name: Aubrey R. Solla

Title of Presentation: Guatemala's Economic Crisis and its Effects on Citizens

Presentation Forum: Undergraduate Research Poster and Showcase Session, Sacred Heart Univ., April

27, 2012, University Commons, 12:15-3:15 pm

Abstract/Summary:

My mission trip taught me, first and foremost, that we are born into our lives; we do not choose them for ourselves. The majority of people in Guatemala are born into a poverty-stricken country, and never know a life outside of it. These people are, perhaps, more aware than anyone in our community about what it means to be *human*, and fight for their rights as human beings every single day. One of the most important values they hold is their faith in God. Roman Catholicism is their dominant religion and I was able to see first-hand just how important faith is to their lives. It serves, not only as an outlet from their suffering, but also gives them hope for their future. Although they pray for salvation from the trials they face daily, their only hope at forging a just society can come from outside help for, and awareness of, their suffering. For this reason, I feel that Sacred Heart has an obligation and special bond with the peoples due to its Catholic beliefs. Throughout the Human Journey series I learned about faith and its purpose for the people who practice it in our *own society*. After undergoing this mission trip, I was able to see just how important it is to the lives of those within the *Guatemalan society*.

My mission trip to this country allowed me to take an active role in their journey to just society. Further help and awareness will give them a chance at individual opportunities, Democracy, and morality. I believe it is part of our *own humanity* to recognize these people and their need!"

Name: Allison Thurston

 $\textbf{Title of Presentation:} \ \ \text{Functional Characterization of Predicted Genes in the } \ A\beta_\text{mating-type locus in}$

Schizophyllum commune

Presentation Forum: Undergraduate Research Poster and Showcase Session, Sacred Heart Univ., April

27, 2012, University Commons, 12:15-3:15 pm

Abstract/Summary:

Sexual development in the basidiomycete fungus *Schizophyllum commune* is controlled in part by a complex system of interacting homeodomain proteins that function in non-self-combinations to regulate the initial events of sexual development. Two functionally redundant "A" mating type loci ($A\alpha$ and $A\beta$) encode these interacting proteins. While $A\alpha$ has been well characterized, little is known about the functional nature of the more complex $A\beta$ locus. The purpose of this investigation is to accomplish a functional characterization of the predicted homeodomain proteins encoded by the $A\beta$ locus. Predicted genes (abv6, abu6, abt6, abs6, abr6, and abq6) were amplified by PCR and cloned into the suitable transformation vectors. Transformants were analyzed for activation of A mating-type developmental events. Our results to date indicate that strains transformed with auv6 show evidence of abv6 specific developmental activity in the appropriate mating reactions and that abu6 transformants do not. Analysis of the remaining cloned genes is ongoing. Our initial results indicate that activation of sexual development by the homeodomain genes encoded in the $A\beta$ locus is likely to be complex and may be dependent on the mating-type identity of the transformed strain.

Name: Shushana Tracey

Title of Presentation: The Effect of Access to the Internet on a Government Regime

Presentation Forum: Annual Honors Symposium, Sacred Heart U., April 28, 2012, UC 110, 11:30-11:50

am

Abstract/Summary:

In today's society the internet plays a big role in our lives; people use it to gather information, share ideas, and as form of entertainment. In the United States access to the internet is taking for granted, and for most of United States citizens there access to internet is almost completed unfettered from government intervention. But this is not true for the rest of the world. My paper studied 3 countries; Egypt, Libya, and Cuba in particular and how limited access to the internet affect the government's ability to rule their people. In the cases of Egypt and Libya the citizens were originally granted access and as the government tried to tighten their control of the people the internet was shutdown, which eventually led to the people further revolting against their respective governments and eventually the governments in power were removed. In the case of Cuba, internet access was always restricted and the government was able to stay in power for decades. My conclusion was that it is best for a government when trying to maintain control to always have internet access restricted from the general population.

Student: Emily Underwood

Title of Presentation: Starting to See: Poems by Emily Underwood

Presentation Forum: Annual Honors Symposium, Sacred Heart U., April 28, 2012, UC 110, 1:20-1:40 pm;

Graduated December, 2011

Abstract/Summary

The word 'poet' comes from the Greek word for 'creator', but it would be foolish to direct the glory of any of this work to any but the true Creator. He Himself is the Word that has been since the beginning, and any bit of talent I have with words has come from the God who created me. The ten poems that I present here are representative of my own small understanding of Who He is and what He has taught me. These poems are worship and reflection, following themes from the Garden of Eden to the Resurrection of Christ, to the modern-day Christian's daily walk with God. They are intended to awaken and encourage each reader to know Christ on the level that He desires us to know Him. To God alone be the glory.

Student: Melissa Wolf

Title of Presentation: Animal Testing for Toxicology: Is it Necessary?

Presentation Forum: Annual Honors Symposium, Sacred Heart U., April 28, 2012, UC 110, 9:50-10:10 am

Abstract/Summary

This presentation reviews the use of animals in toxicology testing, and the main types of tests done, as well as possible alternatives available for each. Toxicology is the study of the adverse effects of chemicals on living things, and is used to test finished products, such as drugs, pesticides, and chemicals. Several in vitro and in silico (computer-based) systems are available to provide alternatives to animal testing, however, few of them are currently validated. In vitro methods often involve the development of human or animal-based cell models to determine toxicity. Halle's Registry of Cytotoxicity makes it possible to predict oral or intravenous acute toxicity (LD₅₀) from toxicity data obtained from mammalian cells. However, cells often have trouble maintaining their normal function in culture, which presents a challenge. Valerio and colleagues found that the in silico (Q)SAR analysis using a rodent carcinogenicity database is capable of identifying the rodent carcinogenic potential of naturally occurring chemicals found in the human diet with a high degree of accuracy. However, it cannot distinguish between target organs for carcinogenicity or extrapolate risk from rodent to human. In silico systems often have limited predictive capability, making them unpopular. Tiered strategies that test toxicity using combinations of in vitro and in silico assays are more likely to come about with increased research, however, limited animal testing is also likely to occur alongside it. Future research might cause animal testing to be nonexistent, however, for now, it is necessary.

Name: Alyssa Woronik

Title of Presentation: Landscape genetics of the salamanders *Eurycea lucifuga* and *Ambystoma californiense*: Designing and using molecular markers to assess gene flow of non-model organism. **Presentation Forum:** Annual Honors Symposium, Sacred Heart U, April 28, 2012, UC110, 10:30-10:50 am **Abstract/Summary:**

Landscape genetics investigates how habitat variation within landscapes affects the movement of individuals, and therefore the flow of genes among populations. Landscape genetics has become increasingly important because landscape-level understanding of patterns of genetic variation informs many other fields of study, including conservation biology and evolutionary ecology. Because conservation initiatives frequently involve non-model organisms, the development of appropriate genetic markers is the first step in landscape genetics.

Our work includes the preliminary stages of marker development for the cave salamander (*Eurycea lucifuga*) and the application of landscape genetic principles to the California tiger salamander (CTS; *Ambystoma californiense*). The objective of both projects includes an evaluation of the interaction between gene flow and habitat, but each project is at a different step in the process. We developed exon-primed intron crossing (or EPIC) markers for the cave salamander and used previously developed microsatellite markers for the CTS.

We successfully identified 21 potential cave salamander EPIC markers, but preliminary sequencing results indicate that it may be difficult to obtain reliable markers. Currently, we have genotyped 94 CTS individuals from 6 populations (10-20 per population) for four microsatellite markers. Our results indicate significant gene flow among populations with only slight structure. However, our power remains low until additional markers and populations have been screened.

Name: Kathleen Wysocki

Presentation Forum: Graduated December, 2011

Name: Taylor Zirpoli

Title of Presentation: The Gothic Tradition of Popular Culture

Presentation Forum: Annual Honors Symposium, Sacred Heart University, April 28, 2012, UC 109, 10:50-

11:10 am

Abstract/Summary:

Popular culture trends use the media as their main output of energy. Radio, television, magazines, the Internet, all of these fuel the world of popular culture and gather followers through advertisement. Social networking is the new fascination to the world of popular culture. If one were to sum up the last decade in two words, social networking would be a good choice. With websites such as Facebook and Twitter, Tumblr and YouTube, it is now possible for everyday Americans to broadcast their ideas all over the Internet. It is also possible to watch the every move of celebrities, friends, or girls next door. After all, America does have some sort of fascination with "reality". Social networking has become a part of western pop culture because Americans are curious. Almost fifty years before the pop culture trend of social networking, American Gothic writer, John Cheever, wrote about a radio with the ability to pick up other conversations had throughout the apartment building. Was Cheever predicting the future of social networks, or was it always human instinct to want to know the every move of everyone else around us?