

## Session 1

*Caring for the Humanity and World*

Rush 124

8:40-9:00

### **Joel Workman**

#### *Influence of Concentrated Animal Feeding Operations on Water Quality within the River Raisin Watershed*

**Mentor: Sarah Hanson**

Water samples were collected weekly from two locations along the River Raisin Watershed, Heritage Park (SB-1,) and 6 miles SE of Adrian, MI (SB-2). Sample SB-1 lies above the Concentrated Animal Feeding Operation (CAFO) and SB-2 is downstream. These water samples were analyzed for nitrate (NO<sub>3</sub>), phosphorous (PO<sub>4</sub>), PH, and Total Dissolved Solids in an effort to evaluate the effect of the CAFO on stream health. Nitrate ranged from 3.5-11.2 mg/L in SB-1 and from 6.8-12.9 mg/L in SB-2. Phosphate ranged from 0.19-1.18 mg/L in SB-1 and from 0.47-0.72 mg/L in SB-2. In general, water above the CAFO has lower nitrate and phosphorous levels, and is overall a cleaner water source. Thus, it is likely that the CAFO is having a minor effect on the cleanliness of the water. However, there was a significant spike in phosphorus content in SB-1 on October 19, 2010. This cannot be attributed to storm runoff as the weather during October was extremely dry suggesting an external loading source. Continued data collection will help determine the effect the CAFO is having on the River Raisin at these locations and will ultimately enable us to implement prevention and clean-up strategies for the River Raisin.

9:05-9:25

### **Krystin Stiefel**

#### *Dosimeters: A History of Detection for Radiation Protection*

**Mentor: Michael J. Claus**

When radiation was first discovered, no one knew the effects it would have on the human body. Marie Curie, pioneer in discovering radioactivity, died in 1934 from aplastic anemia, a bone marrow disease. Her death is almost certain to have been caused by her exposure to radiation. Curie's death and the other deaths of those exposed to radiation while working prompted action to develop a device to measure exposure. Dosimeters were developed to measure the exposure of an individual or object to ionizing radiation, including alpha rays, beta rays, gamma rays, and x-rays. Over time, technology has improved and better radiation detection has been developed. Dosimeters have come a long way from the old pocket dosimeter developed in 1937. Personal dosimeters have gotten smaller, more accurate, more precise, and more sensitive. In this study, the historical development of pocket dosimeters, film badges, thermoluminescent dosimeters (TLDs), and the more recent optically stimulated luminescence (OSL) dosimeters were explored.

## Session 2

*Thinking Critically*

Hickman Board Room

8:40-9:00

**Brianna Davis**

*Are Boys Better At Math*

**Mentor: Stacey Todero**

Stereotype threat is being at risk of confirming, as self-characteristic, a negative stereotype about one's group (Steele & Aronson, 1995). The goal of this study was to examine the extent to which self-esteem moderates the relationship between stereotype threat and performance on a standardized test of mathematical competence. It is hypothesized that self-esteem will moderate the relationship between stereotype threat and math performance, such that the effects of stereotype induction on performance will be lower for participants with high self-esteem, as compared to those with low self-esteem. Participants were given a self-esteem evaluation before taking a math test. The participants who had a higher self-esteem were to have the higher math score, and the same was to be true for participants who had a low self-esteem. The results of this study will provide insight as to how individual differences, such as self-esteem are related to stereotype threat.

9:00-9:25

**Anthony Spangler**

*Katharsis Revealed*

**Mentor: Antonis Coumoundouros**

In this proposed presentation I will give my interpretation of what katharsis is as it relates to the Aristotelian tragedy. Aristotle, in his book entitled *The Poetics*, discusses the idea of a kathartic process in response to the emotions pity and fear, felt during a tragedy. Because Aristotle is not clear as to what he means by the word katharsis the debate over its meaning has been ongoing for over two thousand years.

My plan is to present the two most common interpretations of katharsis. The first view is similar to that of what is commonly thought of as a cleansing or purification process. Here, an over abundance of pity and fear inside of a person is released by viewing a tragedy; thus relieving them. The second major view relates to the traditional Aristotelian idea of finding the Golden Mean. In this view, the karthartic process is training the viewer's emotions. The viewer learns about pity and fear from the tragedy thus giving them the ability to balance those emotions, resulting in a better person.

These two interpretations will be combined to create what I think is the best answer to what Aristotle meant by "katharsis." The answer I intend to provide will fly in the face of Jonathan Lear's widely accepted essay entitled "Katharsis." I will give both my proposed answer to the question while refuting Lear's widely accepted answers.

I firmly believe that this topic is worth exploring and that it will result in great conversation and thought about Aristotle's two thousand year old question.

## **Session 3**

### **Developing Creativity**

Knight Auditorium

8:40-9:00

### **Spencer Hickman**

#### *Abstract Industrialization*

**Mentor: Garin Horner**

The subject matter that interests me most is man-made objects. When making my photos I try to find interesting, unique perspectives and angles. Part of my study is to find new ways of seeing and presenting the forms of hand crafted objects. My vision is black and white, in other words I see compositions through my camera in terms of light, shadow, and form. Black and white is the language I study to explore the histories of objects and the way the content of the image can be interpreted differently from viewer to viewer.

9:05-9:25

### **Erica Graham**

#### *JC Penny Advertising Campaign*

**Mentor: Patrick Quinlan**

A national, fully integrated advertising campaign to be run from February 2012 to February 2013 has been developed for JC Penney in submission to the 2011 National Student Advertising Competition in April, sponsored by the American Advertising Federation.

Beginning with qualitative and quantitative research to develop consumer insight, the campaign includes original artwork and music as well as a comprehensive media plan. This also includes original commercials. The final campaign is the result of an effort that includes multiple majors and course work from across the campus. All research, media plan and artwork took much preparation from each team member.

## Session 4

### Thinking Critically

Peele 207

8:40-9:00

#### **Michelle Leman**

##### *Homoeroticism Analyzed in the Art of Andy Warhol*

**Mentor: Carissa Massey**

Andy Warhol was a Pop Artist during the 50s and 60s. He is known for his famous Campbell's Soup Can paintings. During his career as an artist he explored the world of silk screening, film, and painting. He was a progressive artist during his time, whose works challenged the effect of mass media and fame in culture. This research explores homoerotic subjects and functions in Warhol's works starting in the early 1950s up to the mid-1960s. Through the lens at which the subject matter he uses shows aspects of homoeroticism, which continue to be relevant in his early artwork as well as the late. These works analyze specific details that can lead to Warhol's identity as an artist, his gender and sexuality, and also the meanings and interpretations of his work.

9:05-9:25

#### **Stuart MacDonald**

##### *The Bloodthirsty Theatricals of the Grand Guignol*

**Mentor: Micheal Allen**

Stuart MacDonald's presentation was about the mystery behind a little known Parisian theatre that had a profound influence on modern entertainment, particularly the genre of horror. The name of the theatre was The Grand Guignol. The theatre company's intent was to show productions that depicted violence and horror as realistically as possible by adhering to French Naturalism. This little 260 seat theater, in the early part of the 1900's, was more popular than the Eiffel tower and dominated the theatre scene in Paris for 60 years.

The Grand Guignol theatre company invented 10 types of stage blood, originated the genre of horror and invented special effects make-up. One would think, with all these great accomplishments, the theatre might have a rightful place in history, however this isn't the case. The Grand Guignol is never mentioned or only given a small line or two that "it existed."

Stuart's lecture had a video presentation and demonstrations of some realistic effects invented by the Grand Guignol. He also gave a brief historical perspective of the theatre's influence on film, make-up, screen play writing and special effects.

## Session 5

Jones 204

Caring for the Humanity and World

8:40-9:00

**Kyle Buchoiz**

*The United Methodist Church's Official Response to Global Warming*

**Mentor: Melissa Stewart**

Relying on E.P.A. definitions and data, the United Methodist Church has officially called its congregants to fight global warming. How has this new position changed the United Methodist Church's thoughts on God and the human's relationship to God? I argue that an analysis of *The Book of Resolutions (2008)* of the Church reveals that the Church believes in a God who has limited power to help replenish the earth because humanity chose to be arrogant and irresponsible resulting in our current crisis. The Church calls its congregants to live sustainably. Creation has the ability to replenish itself, but human greed disallows the earth to keep up.

9:05-9:25

**Rachael Williams**

*Is German an angry Language? Perception of Vocal Affect across Languages*

**Mentor: Seth Knox**

Stereotypes are often studied in school or College and tagged with a negative connotation. One branch of stereotype not often thought about is the stereotypes associated with languages. Such prejudice possibly stretches from just hearing a foreign language spoken, to the perceptions of that speaker's nation. As a German major, I deal with many non-language students that think I am an angry person. When I ask them why this is so, they respond that German is an angry language. After investigating the stereotype associated with my major, I found that, according to students at Adrian College, Russian and Arabic are also angry languages. French is sexy, Japanese is smart, and Swedish is silly. I believe these opinions are wrong. To test my hypothesis, I conducted an experiment similar to Paul Eckman's of facial emotion with the South American tribesmen to determine if these stereotypes could be disproven when the language is anonymous. Multiple participants were surveyed with 6 sentence samples from 7 different languages each portraying an emotion: happy, angry, sad, content, fearful, and disgust. Subjects heard sentences in random order and selected from a multiple choice list which emotion they thought was being communicated.

## Session 6

### Thinking Critically

Rush

8:40-9:00

#### Holly Lowe

##### *The Decision to Drop the Second Atomic Bomb*

**Mentor: Terry Jackson**

The dropping of the second atomic bomb was not necessary in order to end the war with Japan. Japan had looked like someone took a bulldozer to it, it was simply was not given enough time to meet and accept a surrender. President Truman was informed of Japan's want to surrender yet still carried out the executive order to have the second bomb dropped, when instead he could have used other tactics to end the war. The Japanese tried to surrender many weeks before the atomic bombs were dropped. Some government officials thought the use of the bombs would send a message to the Russians, making them more cooperative in post war times. Others thought dropping the atomic bombs would save lives. Henry Stimson and President Truman firsthand accounts are both included, along with multiple historians and top secret stamped documents have been analyzed and have been used in forming my argument. My findings are important because they show that thousands of lives could have been saved, as well as billions of dollars that were spent helping Japan rebuild.

9:05-9:25

#### Cynthia Lasinskas

##### *Achieving the Right Balance: the Aromatic Effects of Ethanol in Wine*

**Mentor: Paul Rupert**

Harold McGee stated in his New York Times article (To Enhance Flavor, Just Add Water) add water and there's less alcohol to irritate and burn, and more aroma release. In other words, he proposes that diluting ethanol, the principle alcohol present in wines, will increase the sensory experience of drinking wines.

Because ethanol and aromatic molecules are volatile, they can be analyzed using a headspace analyzer, which studies the space above a liquid that contains the aroma molecules. In this research, multiple wines of various ethanol concentrations were analyzed to determine their aromatic behavior. Wines high in ethanol content were diluted to measure the effect of ethanol concentration on aromatic characteristic. In addition, ethanol was added to wines low in ethanol concentration to observe the differences in the aroma profiles.

## Session 7

### Thinking Critically

Rush 124

9:40-10:00

**Kandice Karll**

#### *Burden of Bacteria*

**Mentor: Jim Martin**

The Total Maximum Daily Load (TMDL) Pathogen Investigation of Evans Creek exposed problematic ethical practices on the part of the Environmental Protection Agency (USEPA). The objective of the study was to identify the level of nonpoint source pollutants of *Escherichia coli* and total coliform frequencies Evans Creek, a tributary of the Raisin River. This waterway surpassed all limits set by the USEPA during the 2010 recreation season (May 1, 2010 - September 30, 2010). This study confirmed that the Raisin River should remain on the Section 303(d) list of the federal Clean Water Act and the USEPA's Water Quality Planning and Management Regulations. What was realized is that there is disproportional burden on State and Local governments to maintain these water systems once they have been adjudicated by the EPA's clean water goals and mandates. It is my contention that the USEPA has created a series of unattainable, unreasonable clean water goals and mandates! This series of inflexible standards is completely unrealistic in light of current wide-spread management methods found in U.S. agro-urban systems.

10:05-10:25

**Timothy Storm**

#### *The State of Science Writing: The Foundation of Facts and How They Are Trusted*

**Mentor: Beth Myers**

The presentation will discuss the different styles of science writing, and show that non-scientist writers are capable of relaying difficult, scientific information without having a scientific background. The presentation will also include an analysis of the rhetorical structure used in science writing with excerpts from current science writing pieces. The Climate Research Unit Scandal, Climategate, will be discussed and used as tool to illustrate the way scientists gain credibility, and how that affects the credibility of science writers. The difference between fact and truth will be discussed, as well as the correct facts for the climate change debate and analyzed using the Toulmin Argument Model.

10:30-10:50

**Alisha Brink**

#### *Macbeth: How the King of Scotland Earned His Bad Reputation*

**Mentor: Annissa Morgensen-Lindsay**

The concept of the anti-hero is one commonly used in literature, television, film, and various other entertainment forms. The hero as the villain is not a new concept, and it is still attractive to writers and creators of all art forms. One of the most popular anti-heroes in history, though, would have to be the character of Macbeth, from William Shakespeare's masterpiece of the same name. He is the Scottish man who killed the kindly King Duncan for his throne. Eventually, he meets a dismal fate that is fitting of his crime. However, is this historically accurate? Sources claim that actually, Macbeth is more hero than anti. Why is it that this supposedly good king has one of the worst reputations in the history of Scotland, then? This presentation explores the true history of King Macbeth and how William Shakespeare sullied his honorable name, all for the sake of impressing King James I of England. Going from 11th century Scotland to 17th century England, we take a look into the evidence presented that suggests Macbeth's name was dirtied for wrong and for nothing.

## Session 8

Caring for the Humanity and World

Hickman Board Room

9:40-10:00

**Jennifer Miller**

*Beneath the Banner: The Truth Behind Japan's Ban-the-Bomb Movement*

**Mentor: Bryan Bott**

An analysis of Japan's post-WWII transition from war to peace and sociological inclination towards peace, pacifism, and anti-nuclear sentiment in response to the bombings of Hiroshima and Nagasaki, nuclear tests on Bikini Atoll and the Cold War. I conducted my research using the poetry from the survivors of the atomic bomb blast, book sources, television/radio broadcasts, and statistical data from petitions. The ideas of victimhood and responsibility, the active and inactive role of hibakusha (survivors of the atomic bomb) as activists, and the effects of political opposition against the Ban-the-Bomb movement were key issues in my research. As a result of my study I have concluded that responsibility played a key role in activism despite the myth of national victimhood as identity, that while some hibakusha did play an active role in the movement, many others remained hidden due to discrimination, and many more were abused and displayed as icons for the movement, lastly extreme political pressure from both Japanese leaders and United States politicians failed in silencing the movement or decreasing its impact on Japanese and global society.

10:05-10:25

**Emily Engel**

*In a Haitian's Shoes*

**Mentor: Marcia Boynton**

Although it may seem obvious that socioeconomic status impacts health in a person, family, or even a country, it's not always apparent how strong that impact is. When looked at a little closer, it becomes clear that poverty effects health in more ways than we can imagine. I traveled to Haiti in December 2010, and had the opportunity to view these effects up close and in person. With the tremendous earthquake, the hurricane that followed soon after, and the rapid spread of cholera throughout the country, the conditions in Haiti are desperate and heartbreaking. However, the root of the problem is nothing more than poverty itself, and I propose to reveal the various ways that this directly correlates to their health and wellness. I will use information from my experiences, through both observation and interviews with my team leaders. It will also consist of a slideshow of pictures that show firsthand what this country is enduring. It is very important for the Adrian College community, as blessed Americans, to have an open eye and heart to the world around us. I hope this presentation will serve as a tool to better understand the situation in Haiti, and to clarify the rumors and misunderstandings that some might have.

10:30-10:50

**Matt Thomas & Patrick Didonato**

*Dental and Oral hygiene in Nicaragua*

**Mentor: Marcia Boynton**

My colleague Patrick and I had explored the vast range of oral hygiene and care of individuals throughout Nicaragua using Decayed Missing Filled System (DMFS). Our goal was to use the DMFS procedure to observe and record the oral care of local individuals of all ages. In addition, we measured pocket depths, with the assistance of the licensed dentist down there, to record any gingivitis, acute periodontal disease, and severity of calculus and periodontal disease. We recorded panoramic charts, which allowed us to record what teeth (of the 32) displayed signs of acute decay, were missing, or had previous fillings. We obtained a substantial amount of data from observing around 100 patients both receiving dental and medical attention. By recording the data on charts we were able to categorize similarities in age, diet, and overall health. There have been studies conducted all over the United States as this system is one of the easiest and oldest used. Our goal was to conduct research that will be continued by other dental students



going on this same trip in the future. This way, students will be able to determine if, from our continued care each year, the oral hygiene and care has improved. If students continue to go to the same place annually, and providing service, there should show a decrease in severity over time.

## Session 9

### Thinking Critically

Knight Auditorium

9:40-10:00

### Jennifer Headly

#### *Is the United States an Empire or Hegemony?*

**Mentor: Phillip Howe**

For my Senior Research project, I determined whether or not the United States is an empire or a hegemony. I established the definitions of each term and compared them to the United States in different time periods. I looked at different instances in American History and determined what the United States was in those specific time periods. I concluded that the United States is both an empire and a hegemony. It just depends on the period of time that I looked at. It was once an empire and now it is more of a hegemonic power.

10:05-10:25

### Ken Warren

#### *Nietzsch's Synthesis of a Self-born Out of Destruction*

**Mentor: Tony Coumounndouros**

My task in Nietzsche's synthesis of a self born out of destruction is to bridge Nietzsche's later idea of the Overman with his early ideas of subjectivity in The Birth of Tragedy. In order to make these two ends meet I must conceive criteria that will highlight the similarities between The Birth of Tragedy and Nietzsche's Overman. I derive these criteria from Ken Gemes' article "Postmodernism's Use and Abuse of Nietzsche." Gemes establishes points that allow for a critical analysis of Nietzsche's Overman as an Apollonian derivation of subjectivity. Thus the criterion for Nietzschean subjectivity is born, allowing for a comparative analysis of the Overman and the Apollonian.

10:30-10:50

### Megan Kipp

#### *From Cotton to Kotex: The Commercialization of Feminine Hygiene Products*

**Mentor: Terry Jackson**

From Cotton to Kotex: The Commercialization of Feminine Hygiene Products studies the use of marketing and advertising in the revolution of menstrual management that initiated in the 1920 s. By analyzing the ways newly introduced feminine hygiene products were marketed and the resulting changes in menstrual belief, it can be concluded that the introduction of mass-produced, commercially advertised feminine hygiene products drastically changed the ways that women in the west thought about and treated menstruation. This study uncovers the ways menstruation was managed throughout history. It analyzes the perspectives other historians have had on the influence these commercial changes had on twentieth-century women. It draws from mainly various commercial advertisements taken from popular women s magazines. This research shines a light upon the relation between commercial products and shifts in science by comparing the chronology if different events in women s history.

## **Session 10**

### **Developing Creativity**

Peele 207

9:40-10:00

### **Garrett Beitelshies, Emily Hlavka, Kerri Ward, Aaron Armstrong, Matthew Zantop**

#### *Adrian College Love*

**Mentor: Oded Gur-Arie**

How do you get from a stack of post-it notes and a marker to a recruitment video for a college? As a result of being challenged to create value out of those two items, we did. After much brainstorming we developed the idea to find out what people loved about Adrian College and create a potential recruitment tool for our college. We will present how we got to our final goal and all that took place to make it happen. Asking the same question over and over again we built a library of answers on simple yellow sticky notes. While collecting this information we decided that the best way to “publicize” our findings was by using social media. By producing a video for YouTube, we could distribute it by Facebook and Twitter easily reaching people and allowing for the distribution to continue beyond us. In less than 9 hours we received almost 400 views leading up to our presentation. “Adrian College Love” continued to circulate; we were sought out by the Public Relations office and after a few meetings with them submitted the video for use by the school becoming part of the newly created Admissions “AC Video Vault.”

10:05-10:25

### **Kourtney Price**

#### *A Qualitative Study of a Ten-Week Adrian College Teen Mentoring Class: Do Perceptions of Mentoring Change for the Mentors?*

**Mentor: Idali Feliciano, William Tregea**

Over the past two years, a study has been conducted on the perceptions of mentoring at the Boys and Girls Clubs of Lenawee. These perceptions are answering the questions of why are volunteers not returning to assist the club, what is the mindset of the Adrian College mentors during the mentoring experience, and if the Adrian College mentors believe they made a difference in the lives of the teenagers they mentored. The results of these questions came from weekly journals, a survey before they are assigned a mentee and one on one interview with the Adrian College mentors. From these methods, the students stated that the teenagers were not in need of mentoring but did lack structure. The mentors believe that the club is laid back where it is difficult to impose structure on them. 78% of the mentors had a difficult time cooperating with their mentee and 46% of the mentees did not show to the club. Finally, 38% of the mentors believed they made a difference in the teenagers’ life. The notable data was the female mentors in the study showed that their mentee responded better compared to the male mentors and their mentee. Finally, the majority of the mentors felt they were not as helpful to the mentees at the club because of the lack of time they had with their mentee. Overall, the study did show that perceptions do change over time with the mentors at the Boys and Girls Club.

10:30-10:50

### **Sydney Wlodyka**

#### *Abstract Photography*

**Mentor: Garin Horner**

My focus in photography is on capturing and altering the moment that does not last. I see time as a string of moments that can be frozen and captured by the camera. I alter the presentation of these moments by representing scenes from an abstract perspective. Photographs are composed out of focus, with contrasting colors, movement, etc, and I highlight one of these key compositional techniques to distort the entire image. Typically I use movement with slow shutter speeds to create abstraction, but I also apply darkroom

techniques. I believe my approach in photography takes a common moment and transforms it into a more artistic representation.

## Session 11

Jones 204

### Caring for the Humanity and World

9:40-10:00 **Keri Ketring & Gwen Schroyer**

*Poetry: Inside, Out*

**Mentor: Donald Cellini**

This presentation will encompass two of the Ribbons of Excellence: "Developing Creativity" and "Learning Throughout a Lifetime." The two students involved in this presentation, seniors Keri Ketring and Gwen Schroyer, will demonstrate the creativity skills that they learned in their Advanced Creative Writing-Poetry class, by presenting poems that they have written since the conclusion of the class. The presentation will also include a guest performance by junior Chris Quinlan, who will be performing a musical interpretation of one of Keri Ketring's pieces of poetry.

10:05-10:25 **Lindsay Vreeland & Emma Donelson**

*Heterosexism in Material Culture*

**Mentor: Carissa Massey**

Heterosexism is the assumption that all people are straight, that sex is linked only to biological reproduction, and that all social and cultural systems may unproblematically perpetuate this view. Through the lens of Queer Theory which is the philosophical and sociological perspective that gender and sexuality are constructed and performed, a theory advanced by philosophers Judith Butler and Eve Kosofsky Sedgwick material culture is analyzed for heterosexist assumptions. This panel explores the habitual tendency of heterosexism in the media, its enforcers, and the exclusionary social hierarchies it constructs. Cultural constructs such as dyads, dualism, gender performance and performativity are studied in media examples such as literature, advertisements, songs, and films. For example, gender performance and performativity are examined in Shakespeare's *Twelfth Night* and sexual dualisms are analyzed in advertising for household products.

10:30-10:50 **Lindsey Bennett**

*Survey of Household Infection Control in Nicaragua*

**Mentor: Marcia Boynton**

During my trip to Nicaragua, December 27- January 8, I was able to communicate with the citizens and research the different types of household infection control used, for example handwashing, and find a correlation with the increased amounts of intestinal upset. I asked many of the citizens during multiple clinics how many times a day they washed their hands, as well as if handwashing was done before preparing a meal. I also was able to compare this to household infection control in the United States by surveying the same questions and examining the drastic differences.

## Session 12

Learning Throughout a Lifetime

Caring for the Humanity and World

Rush 124

11:05-11:25

### Krystin Steifel

*What I Learned in Nuclear Summer School*

**Mentor: Michael Claus**

Adrian College is promoting experimental learning for its students. I was offered a unique opportunity as one of 24 students selected for a program sponsored by the U.S. Department of Energy and developed for undergraduate students interested in nuclear chemistry. Over the summer of 2010, I participated in the Nuclear Chemistry Summer School in San Jose, California. The program presented a new learning experience over the course of six weeks. The short duration of the program required the class to stick to a rigorous and strict schedule. I will outline the schedule of the program, discuss the topics covered, and highlight unique experiences such as guest lecturers and tours of national research laboratories. The program introduced me to a non-traditional area of study: nuclear chemistry. Before attending the program, I was only somewhat interested in nuclear power. After the program, I have full intentions to pursue a career in the field of nuclear science. My experience shows the power that experiential learning programs can have on students.

11:30-11:50

### Dominique Fernandez

*Live life like the movies: Cinema's role in society*

**Mentor: Steve Shehan**

Each individual plays a role in society. More specifically, each individual is given a gender role which they are expected to maintain throughout their life. How have these expectations evolved? Where are these ideals accumulated and distributed amongst society? There are many factors that are involved within this belief of properly portraying this role within a specific societal category based on gender stereotypes. The media is a highly influential source that has been a pivotal aspect within the shaping of gender stereotypes. This research focuses on a popular worldwide attraction in the media known as film. Film has a heavy impact on it's viewers, and subconsciously alters our cultures beliefs on what it means to be feminine or masculine. I have constructed a survey asking, both males and females ranging in age, to list one film that portrays femininity, one film that portrays masculinity and one film that portrays counter-stereotypical behavior from a character. The 1983 film, 'Scarface' directed by Brian De Palma, ranked in the survey as the number one film to portray the epitome of masculinity. 2002's film, 'The Hot Chick' directed by Tom Brady, was seen as the number one film to portray the meaning of femininity. Finally, the film released in 1991, 'Thelma and Louise' directed by Ridley Scott, portrays the societal taboo of counter-stereotypical behavior. With this data I will be able to explain the dramatic impact that the cinema holds on society and their views on gender expectations based on the films that they have listed.

## Session 13

### Thinking Critically

Hickman Board Room

11:05-11:25

**Joanna Slisinger**

### *The Analytical Comparison of Cold Extracted Coffee to Hot Brewed Coffee*

**Mentor: Paul Rupert**

As technology continues to evolve in today's society, multiple procedures that provide the same product emerge. Todd Simpson took advantage of this concept and created the Toddy, a cold-brewing coffee system. The Toddy coffee system claimed to produce coffee with 67% less acidity. This experiment examined how the Toddy Company came up with their percentage through analytical testing. The pH, titratable acidity, and HPLC analysis of samples of Toddy coffee and samples of common hot extracted coffee were employed as the bases for evaluating their claim. Our investigation demonstrated a significant reduction in acid content associated with cold extraction in comparison to the same coffees generated by hot brewing. However, we were not able to reproduce the same figures that Toddy claims.

11:30-11:50

**Crystal Cieslak**

### *Past Victimization's Affect on Current Security Behaviors*

**Mentor: Janet Pietrowski**

In Maslow's hierarchy of needs, the need for safety follows the most basic physiological needs. We need to feel safe before we can focus on other things on our lives. The present research seeks to answer the following questions: Do people feel safe? Do people engage in security behaviors? If people do engage in security behaviors, what are these behaviors and how often do they engage in these security behaviors? People can live in neighborhoods where crime does not typically happen and still be fearful of crime. Why is that? In this study over 40 students were given a questionnaire that asked questions in the areas of personal safety, personal experience, and security behaviors. The analysis revealed that men engage in more security behaviors than women. Also, as the number of past victimizations increase the fear of victimization will increase, and as fear increases the number security behaviors will increase. This project also looked at person versus property crimes. The results suggest that the most frequently experienced type of victimization (either person or property) will not predict the number of security behaviors one engages in.

## Session 14

Caring for the Humanity and World

Knight Auditorium

11:05-11:25

**Sara Smither**

*Islamic Feminism and a Secular State*

**Mentor: Phillip Howe**

Islamic Feminism has its own definition, separate from the West's view. Understanding what the definition is will be the key to women's rights in the Arab Islamic Middle East. This project explains the feminism in the region, passages from the Quran, whether the West should be involved, and what may finally bring equality to women in the Arab world.

11:30-11:50

**Danielle Prielipp, Hanna Hubbard, Rebecca Machovec**

*Service Learning at York Cathedral Archives*

**Mentor: Robin Bott**

While studying abroad in England, we had the opportunity to participate in a service-learning project that partnered with the York Cathedral Archives. We researched and assembled ideas for the development of the 200th Anniversary Library and Archives Exhibition, in order to put together a display celebrating their rich history. We collected information about York Minster's history, the Library's history, and the various collections that resided in the Library. Our research focused on how the Minster's long-standing collection of manuscripts and other important books came to be, and how the physical buildings have changed throughout the years. We then sifted through our findings and took what we thought was interesting or noteworthy and presented it to our Collections Manager for the Minster. The purpose of this was to then showcase what we thought was interesting, from an outsider's perspective, on display for their 200<sup>th</sup> Exhibition. The work that we did while we there provided a very important service in that, by raising awareness of the importance and history of the Minster, we were able to help kindle an interest in its upkeep so that future generations will be able to explore all it has to offer.

11:05-11:25

**Katelyn Johnson**

*Automatic Gender Stereotyping and Gender Attitudes*

**Mentor: Stacey Todaro**

The purpose of this study was to examine the extent to which gender stereotypes associated with social roles were automatically activated during reading. A secondary goal was to assess whether preexisting gender attitudes influenced this activation.

Participants read a series of short stories on the computer screen one sentence at a time. In each story, the protagonist was identified via a social role that was either stereotypically male (e.g., police officer), or stereotypically female (e.g., cheerleader). The gender of the protagonist remained implicit until participants read the target sentence, where they saw a pronoun that was either consistent with the protagonist's social role (e.g., cheerleader/she), inconsistent (e.g., cheerleader/he), or neutral (e.g., cheerleader/cheerleader). Reading times for the target sentence were recorded. Participants were also instructed to indicate whether the character made the right choice about a decision. Response times for this task were recorded. Finally, participants completed the Attitude toward Women Scale which classified participants as having a traditional/conservative or egalitarian attitude toward gender.

The results indicated that reading and response times were significantly faster when the pronoun was consistent with the stereotyped social role than when it was inconsistent. The participants' preexisting gender attitudes did not have an effect on reading/response times.

11:30-11:50

**Brianna Davis**

*Why Did I Get Married*

**Mentor: Stephanie Jass**

Over the years the divorce rate has been increasing in society, and many want to know the reason behind this increase. In the African American community the divorce rate is very high and research has shown that African Americans are not only getting divorced at a higher rate, but are not getting married at the same rate as Caucasians. The purpose of this experiment was to survey the attitudes and perceptions that African Americans have on marriage. In this experiment participants were given a survey through the internet. The survey was to gauge the differences between African American and Caucasian students at Adrian College on their views and ideas of what marriage is and the stereotypes that people have about the marriage between African Americans and Caucasians. The results of the survey showed that the students who participated in the study had no significant differences on their views and ideas on marriages. The results also suggest that college students have a higher outlook on marriage regardless of race and ethnicity.

## Session 16

Caring for the Humanity and World

Jones 204

11:05-11:25

### Dominique Fernandez

*Live life like the movies: Cinema's role in society*

**Mentor: Steve Shehan**

Each individual plays a role in society. More specifically, each individual is given a gender role which they are expected to maintain throughout their life. How have these expectations evolved? Where are these ideals accumulated and distributed amongst society? There are many factors that are involved within this belief of properly portraying this role within a specific societal category based on gender stereotypes. The media is a highly influential source that has been a pivotal aspect within the shaping of gender stereotypes. This research focuses on a popular worldwide attraction in the media known as film. Film has a heavy impact on it's viewers, and subconsciously alters our cultures beliefs on what it means to be feminine or masculine. I have constructed a survey asking, both males and females ranging in age, to list one film that portrays femininity, one film that portrays masculinity and one film that portrays counter-stereotypical behavior from a character. The 1983 film, 'Scarface' directed by Brian De Palma, ranked in the survey as the number one film to portray the epitome of masculinity. 2002's film, 'The Hot Chick' directed by Tom Brady, was seen as the number one film to portray the meaning of femininity. Finally, the film released in 1991, 'Thelma and Louise' directed by Ridley Scott, portrays the societal taboo of counter-stereotypical behavior. With this data I will be able to explain the dramatic impact that the cinema holds on society and their views on gender expectations based on the films that they have listed.

## Session 17

Thinking Critically

Rush/Goldsmith

11:05-11:25

### Chris Reed

*Where does craft fit in?*

**Mentor: Greg Jones**

During the last century mediums in art have developed and given way to brand new ways of thinking about art. When including craft into the realm of fine art many considered it as inferior. Craft is at the root ceramics, metalsmithing, woodworking, glass making, and the wide array of materials that fall under textile arts. These are often seen as arts done by artisan and not artist. Over the years many artist have pushed the envelope of what is the function of craft in the fine arts setting, but still to this day craft is seen as an outcast in the fine arts world. As a graduating senior looking to establish a fine arts career from the knowledge I have obtain over the last four years, suddenly this dialog becomes crucial. In order for a fine artist trained in a craft medium to be successful, it is imperative that they are able to articulate exactly where they fit in to fine art. Through the research I have done I will present on where an artist primarily working in craft fits into this professional world.



11:30-11:50

**Amanda Dusquesnel**

*Spaghetti Westerns*

**Mentor: Sheri Bleam**

The genre of Spaghetti Western films is a revival of the Western genre that was so well loved by American and international audiences. The term Spaghetti Western refers to a series of highly stylized Westerns produced in Italy during the 1960's and 70's. Sergio Leone was the first director to shoot a film of this genre, and its success sparked a landslide of similar films, mostly because Leone redefined the Western. But what makes these films different from their predecessors? In order to better understand the popularity of these films, it is crucial to comprehend the context in which the genre was created. To further investigate this context, three components are analyzed: Leone's experiences, traits found in most of his westerns, and analysis of four of Leone's films in this genre. Each component helped to shape Leone's films into the classics they have become.

**Session 18**

Rush 124

*Crossing Boundaries and Disciplines*

1:30-1:50

**Thomas Zimnicki, Cameron McDaniel, Krystin Stiefel, Sarah Wass**

*What's really in your Adrian College Water?*

**Mentor: Laura Polchinski**

We set out to test, both chemically and micro-biologically, the cleanliness of drinking water in a series of buildings on the Adrian College campus. Water quality was judged by the standards laid out by the Environmental Protection Agency (EPA). In this research ten buildings were chosen, which would give an adequate representation of the new as well as the old buildings on campus. Micro-biologically, focus was placed on tests that would show the presence of *Staphylococcus aureus* and *Escherichia coli* on the surfaces of drinking fountains. Chemically, varieties of tests were performed including, pH, turbidity, and suspended solids. This combination of chemical and microbiological tests gave an effective overall picture of the quality of drinking water at Adrian College.

1:55-2:15

**Timothy Peoples**

## *Religious Tragedy*

**Mentor: Antonis Coumoundouros**

The Bible has been on the best selling list for many years not because of its narratives, dramas, and combined forms of art it displays but because of its religious value. Because of the religious foundation it holds many think that the Bible is not “artistic”. However by the definition of “art” given by Aristotle, the Bible is artistic. In the “Poetics” Aristotle presents the definition of “art” with much ambiguity, almost anything can be art as long as it is an imitation of something and different in means and objects. However, not just anything can be a form of art known as tragedy, since this entails specific features and guidelines. In this paper, I show that the Biblical story of the Sacrifice of Isaac (also known as the Akedah) seen in Genesis 22 qualifies as tragedy, as Aristotle defines it. When this Biblical account is read as tragedy, more pity and fear is purged out of the reader than when read in a faith aspect.

2:20-2:40

**Jessica Grubbs**

## *Psychosocial Issues in Athletic Training*

**Mentor: Stacey Todaro**

Within the field of athletic training, the treatment and referral of psychosocial conditions and illnesses fall under the domains of clinical evaluation and diagnosis and immediate care. While the mastery of these domains is standard of practice for any certified athletic trainer (ATC), many ATCs are not comfortable with their knowledge of psychosocial conditions and illnesses. Education should be altered so that entry-level ATCs are confident in their ability to handle these situations. In order to investigate current ATCs level of confidence with psychosocial issues, a survey evaluating these techniques and the confidence level of practitioners was distributed to practicing ATCs. The surveys were analyzed using SPSS software, and conclusions were drawn. I hypothesized that ATCs are not comfortable with the treatment and referral of psychosocial conditions upon certification however the level of confidence will grow with experience. While a growth of knowledge is expected and desired in any profession, ATCs have been shown to be very comfortable with their knowledge of other factors upon certification. This demonstrates the need for increased psychosocial education in the undergraduate athletic training education programs.

## **Session 19**

*Thinking Critically*

Hickman Board Room

1:30-1:50

**Ashley Snyder**

## *Fractals: A Closer Look*

**Mentor: Alia Kurram**

A fractal, as described by the French mathematician Benoit Mandelbrot- the father of the term, is an abstract shape composed of an intricate-looking set of curves. The definition is quite ambiguous, as a fractal does not retain to one visual shape like a circle or a square. Instead a fractal is any geometrical shape that can be split into parts, each of which is approximately a reduced-sized copy of the whole. Whilst fractals are not well known to the average person, they surround mankind. Examples of fractals can be found in snow-flakes, crystals, mountain ranges, lightning, river networks, cauliflower or broccoli, and the cardio vascular system of the human body. Computer generated fractals are used to create virtual backgrounds in movies and increase the efficiency of cellular phone satellites.

In this project we will look into the history of the fractal, some mathematics behind it, and its applications.

1:55-2:15

**Elizabeth Watts**

*Fairytales used as Propaganda during the Third Reich*

**Mentor: Seth Knox**

Propaganda, also known as psychological warfare, is used to raise support for a particular viewpoint. Fairytales have, throughout the ages, been popular with children. It is hardly surprising, then, to discover that the Third Reich combined propaganda and fairytales to reach out to children. A study by Ron Schlesinger found close to 30 fairytales that had been changed and recorded as videos. They included subtleties that would mold the minds of young children to ensure the continuation of sympathy and support for Nazi Germany.

Through studying the Nazi fairytales, the Grimm Brothers fairytales, and propaganda, I have been able to discern how such changes were made during the Third Reich. I have come up with two ideas that complement each other when used together.

To understand the first, one must take a linguist approach to the research. In the German language, several words have more than one meaning. The Nazis used this to their advantage in these films, turning a normal phrase into an anti-Semitic one by changing the emphasis on the words. The second technique was based off the desire for an audience to have action and a happy ending in a movie.

2:20-2:40

**Amy Dygert**

*Revenge and the Poetics: Comparing Elizabethan and Classical Tragedy in Relation to Aristotelian Standards*

**Mentor: Antonis Coumoundouros**

My purpose in this paper is to compare two dramatic works in relation to Aristotle's standards. I have selected a tragedy from both the Classical and Elizabethan periods, the plot of each revolving around the element of revenge. For the Classical period, I will discuss Aeschylus the Libation Bearers, the second play of his Orestias trilogy; while the Elizabethan period I have selected Thomas Kyd's The Spanish Tragedy. Throughout the essay, I will continually reference Aristotle's Poetics, analyzing how each playwright's incorporation of revenge alters the comprehensive work for better or worse according to Aristotle, and questioning whether Aristotle would have approved of Elizabethan revenge tragedy.

**Session 20**

*Crossing Boundaries and Disciplines*

Knight Auditorium

1:30-1:50

**Kelly Eberhardt**

*Ceramic to Ceramic Joining for the Fabrication of Complex Shaped Turbine Engine Components*

**Mentor: Janet Salzwedel**

To maximize efficiency and performance, SiC based ceramic materials are being incorporated into use as components in subsonic gas turbine engines because of their low weight and high temperature capability. These characteristics improve fuel efficiency and decrease emissions by allowing the system to operate at a higher temperature. Joining ceramics to form complex structures is an enabling technology in this process. In this work, SA-Tyrannohex ceramics were brazed and diffusion bonded using various metal foils and eutectic alloy pastes as an interlayer. Some examples of braze layers used are Si-Ti and Si-Cr eutectic pastes, Molybdenum foil, Titanium foil, and Palco foil combined with eutectic alloy pastes. After these joints were fabricated, the bond areas were characterized using optical and scanning electron microscopy. Joint

quality was evaluated by observing for the absence of microcracks, voids, and debonds. Microhardness testing was conducted to evaluate the hardness of the braze layers relative to the substrate which can contribute to stress and cracking of joints. The joining concepts that gave the best results will be discussed.

1:55-2:15

### **Eric Lindstrom**

#### *The Determination and Control of the trans-Resveratrol Content in Local Wine*

**Mentor: Paul Rupert**

Phytochemicals are chemical compounds found in plants that have disease-fighting properties. Resveratrol, a phytochemical produced by plants to resist fungal infection, is an excellent example. Recent research suggests that consumption of resveratrol may reduce the risk of certain cancers, heart disease, etc. Red wine, has been found to contain a significant amount of resveratrol. This project was to define an effective and efficient method for the analysis of resveratrol in red wines. The method described by Ratola *et al* in their research article "Analysis and Quantification of *trans*-Resveratrol in Wines from Alentejo Region (Portugal)" was applied to local wine, along with wine made in our laboratory.

2:20- 2:40

### **Cambray Sampson**

#### *Theodora and Reagan: The Struggle for Power*

**Mentor: Anissa Morgensen-Lindsay**

In the history of politics there have been two great leaders who were also actors. One was the Empress Theodora of the Byzantine Empire; the other Ronald Reagan. Empress Theodora is said to have been the most powerful actor until Ronald Reagan was elected president of the United States. But was Ronald Reagan really more powerful than the Empress Theodora? The meaning of power in the context of the reign of Theodora and Reagan are analyzed by looking at their ability to create laws, their influence on domestic and international policy, the public opinion resulting from this influence, and their ability to create and influence theater. The resulting conclusion argues against the notion that Reagan was more powerful than Theodora and therefore is at odds with many theater history textbooks.

## **Session 21**

Peele 207

### **Thinking Critically**

1:30-1:50

### **Jessica Saunders & Lauren Rehe**

#### *Xenopus laevis*

**Mentor: Marti Morales-Ensign**

Neuroinformatics aims to develop computational tools and queriable public datasets for the analysis and integration of data obtained from diverse studies of the nervous system (anatomy, physiology, gene expression, behavior, etc). Neuroanatomical information provides the essential foundation for such databases. Our laboratory is interested in observing and identifying anatomical structures present in the developmental staging of *Xenopus laevis* (X.l), the African clawed frog. Here, we will present preliminary results aimed at preparing an anatomical atlas of the mid- larval developmental stage (stage 47) of X.l. Samples were prepared using histological procedures of paraffin embedded sections and hematoxylin and eosin (cytoplasmic and nuclear) staining to help visualize tissue section morphology. Data was collected using light microscopy and digital imaging. This work presented here, will share, in part, our labs future

aim at sharing this anatomical data as an established queriable public domain website for other researchers and students alike to use.

1:55-2:15

**Skyler Lambert**

*The Impact of Feminism on Journalism 1960-2010*

**Mentor: Renee Collins**

The Impact of Feminism on Journalism: 1960 - 2010 examines the careers of some of the most influential women in print and broadcast journalism, including Helen Thomas, Barbara Walters, Peggy Noonan, Katie Couric, and Ellen Goodman, and a host of others. The presentation will trace the rise of women from 1960 to present day as journalists and recount some of their experiences breaking through the patristic barriers of their chosen careers. One area to be addressed is the changing attitudes toward women in journalism in light of the rise of feminism. This social movement has provided a gateway for women today in the field of communication, specifically journalism. Additionally, the presentation will weigh past attitudes with present practices to determine how effective feminism has been in this field.

2:20-2:40

**Creedence Hoffman**

*Aristotle's Poetics and Horror Cinema*

**Mentor: Antonis Coumoundouros**

By analyzing two classic horror movies according to Aristotle's principles in Poetics, can we see whether horror cinema can be good tragedy, as set out in chapter 6? In looking at the classic horror movies of Frankenstein and The Wolf Man, it is shown whether the effect abides by the definition of tragedy according to Aristotle

**Session 22**

[Crossing Boundaries and Disciplines](#)

Jones 204

1:30-1:50

**Michael Gniewek-Abernathy**

*High Heels and Hairbows*

**Mentor: Carissa Massey**

Hairbows and Heels is a critical look at gender performance in the terms of Clement Greenburg's theory of Avant-Garde and Kitsch. It looks at and dissects performances and gendered art works by the Baroness Else von Freytag-Loringhoven, Lady Gaga, Marcel Duchamp, and Sherri Vine. My presentation discusses the theories of Avant Garde Gender Performance and Kitsch Gender Performance. Avant Garde Gender Performance is a complex theory that describes a gender performer who lives their life as a total work of art, and present gender ideas that disregard gender norms of the period they performed in. Kitsch Gender Performance describes someone who takes a group of signifiers of common gender performances and re-presents them to define their performance. The focus of this presentation will be looking at Lady Gaga and her kitsch counterpart Sherri Vine in order to further illustrate these theories. For example I will use

Lady Gaga's video Alejandro and Sherri Vine's video You're a Homo to show that Lady Gaga presents a hyper feminine gender performance that is all her own, while Sherri Vine presents a gender performance that is defined by the performance that Lady Gaga presents, while also using common gender performances to define herself.

1:55-2:15

### **Michael Fisher**

#### ***Cost Analysis of a Small Scale Bio Diesel Reactor at Central Michigan University***

**Mentor: Michael Claus**

Central Michigan University is exploring the development of a bio diesel reactor plant for in site bio diesel generation. Determination of the feasibility of the plant and its operating parameters were analyzed. The parameters analyzed were energy consumption, input stream cost, labor, and equipment costs. The production cost was then compared to current diesel fuel prices. The analysis determined the break-even point of a small scale bio diesel reactor at Central Michigan University.

2:20-2:40

### **Megan Boelstler**

#### ***The Representation of Women in Latin America***

**Mentor: Donald Cellini**

This research began as an attempt to address the question, "How, in a region known as having a macho culture, have there been a relatively high number of female heads of state?" To begin explaining this paradox, I explored the representation of women in Latin America. The research examined the individual female presidents, measures of gender equality, political equality, educational equality, labor participation, GDP by country, and family distribution of income, female suffrage, gender quotas and electoral systems. While the first measures had some connections to equal representation and female presidents, what was found to have the strongest effect on representation was in the legal realm. Quota laws and electoral systems can have a great effect on the election of women into office at each level of representation. The details of quota laws and the percentage of representation they require are important, as well as the electoral system of the country and the district size. More specifically, proportional representation systems aid in equal representation and larger district sizes facilitate the inclusion of minorities.

## **Session 23**

**Developing Creativity**

Chapel

1:30-2:10

### **Lisa Tenney**

#### ***Senior Recital Excerpts***

**Mentor: Elizabeth Major**

This musical presentation will be a portion of my senior recital based on my exploration into the works of various composers such as Daugherty, Adamo, Wolf, Rachmaninov, Puccini, and others. The purpose of my recital is to prepare me for a career in music as well as enhance my musical experience here at Adrian College. This recital will be accompanied by detailed program notes which will reflect my research into the lives and musical views of each composer. These notes will provide a helpful context for the listener. These excerpts from my recital satisfy the "Developing Creativity" Ribbon of Excellence.

2:20-3:00

### **Christopher Fader**

## *Sondheim: A Revue*

**Mentor: Elizabeth Major**

This musical presentation will be a portion of my senior recital, based on my exploration into the works of the composer Stephen Sondheim, our most prolific and important creator of musical theatre works in this century. The intent of my research is to examine and experience different roles and situations from the following musical theatre works: *Company* (1970), and *Sweeney Todd* (1979) and *Into the Woods* (1985) and *A Little Night Music* (1973). In addition to solo work, there will be several staged scenes performed with other students. These scenes will be directed by me with particular attention to the intricate relationships and conflicts that exist in the characters of Sondheim's work. A description of scenario as well as the overall plot of the musical for context will accompany each song. I will also explain why I chose Sondheim over other composers as well as my song selections. For my presentation, I will require a space with a piano.

3:10-3:50

## **Jason Ransom**

*Reed and Take Notes: Musical Expertise Passed Down Through Improvisation*

**Mentor: Peter Ford**

For a student looking to deliver an improvisational jazz solo, it many times appears a mystery as to how to approach this act without prior experience. This is why many teachers of the jazz idiom recommend the use of musical jazz transcription, or the method of notating another's improvised solo on manuscript paper. Through the process of transcription, one can better ascertain how experienced musicians approach the art of jazz improvisation. In essence, the student can build enough musical vocabulary to make their own musical sentences. To demonstrate, and to better understand the art of transcription, I have transcribed a few recorded solos of Tim Ries, a renowned jazz saxophonist with local ties. By doing so, I have been able to accurately discover some approaches that Ries has taken in developing his solos. What is more appealing is that by comparing these transcriptions to a solo transcription of John Coltrane (arguably the greatest tenor saxophone player to date), I have noticed much similarity. This leads to belief that maybe the art of improvisation is not as mysterious as one might imagine.

## **Session 24**

MAL

*Caring for the Humanity and World*

3:00-5:00

**Mitchell Blose, Thomas Ciaverilla, Brian Dearing, William DeYoung, Justin Edmondson, Morgan Emanuel, Andrew Felder, Adam Hague, Mitchell Harris, Jennifer Headley, Madalyn Holyfeild, Perry Kuipers, Holly Lowe, Benjamin Lubrant, Sara Piotrowski, Eden Presland, Kevin Proshwitz, Megan Shawcross, Jordyn Shekell, Sara Smither, George Stauch, Holly Strover, Rachel Taylor, Peter Tomasek, Tara Trombley, Josiah Vincent, Joshua Wagner-Greene, Katlyn Westmaas, & Ashley Wrick**

*Adrian College Model Arab League*



### **Mentor: Phillip Howe**

This project involves a series of short student presentations about the Adrian College Model Arab League team's activities in 2010-2011. These include:

- A presentation by students who represented Bahrain, Libya, Oman and Palestine at the Michigan MAL, including: what issues were central to their deliberations; the strengths and weaknesses we displayed as a team; and specific awards won by AC team members.
- A presentation by students who represented Oman at the National University MAL (NUMAL), including the topics mentioned previously, as well as their experience visiting the Omani embassy in Washington, D.C.
- Both of these presentations will discuss how the activities of the MAL were affected by the "Jasmine Revolution" in Tunisia and related, ongoing political developments in Egypt and elsewhere in the Middle East.
- Sara Smither will give a presentation about her experiences interning with the National Council on U.S.-Arab Relations, as well as her experiences in Beirut during the recent collapse of the ruling coalition.
- Mitch Harris will give a presentation on the activities of A.C.A.D.E.M.I.C., the new diplomatic simulation club.

A major emphasis of this group presentation is the ways in which participation in Model Arab League helps undergraduates move towards their future academic and professional goals.

## **Session 25**

McNair

*Learning Throughout a Lifetime*

3:00-5:00

**Kandice Karll, Kourtney Price, Crystal Cieslak, Brianna Davis, & Anna Pasternak**

*Adrian College's McNair Scholars Senior Cohort*

**Mentor: Jim Martin**

The TRIO initiative was started in the 1960s; during President Lyndon Johnson's "War on Poverty" where he signed the Economic Opportunity Act. The Federal TRIO Programs are educational opportunity outreach programs designed to motivate and support students from diverse backgrounds achieve their dreams of a college education. The TRIO foundation now includes eight programs that specialize in disadvantaged students and veterans. In 1986, the Ronald E. McNair Post-Baccalaureate Achievement Program was the



fifth of the TRIO programs created. The goal of the McNair Program is to increase the number of doctoral degrees earned by students from underrepresented populations. The criteria for the Ronald E. McNair Program include minority status or financial need and membership of a family where neither parent obtained a Bachelor's degree. Additionally, the student must show high academic potential. This program prepares TRIO-eligible participants that are currently enrolled in higher learning institutions for doctoral studies by involving them in mentoring opportunities, internships, research, and other scholarly activities. The presentation will include how the senior cohort of Adrian College students has benefited from their experiences as McNair Scholars.

## **Session 26**

**Developing Creativity**

Downs Theater

3:00-5:00

**Kyle Burcholz**

*Unnecessary Farce*

**Mentor: Anissa Morgensen-Lyndsay**

My senior project for theatre is directing the Adrian College Theatre Department's presentation of the show *Unnecessary Farce*. This entails casting, blocking, meeting with designers all to put on a show that is up to the standards of a professional theatre like you would see in New York or Chicago. This project deals with creative skills and leadership skills that will benefit my future greatly.

## **Session 27**

**Developing Creativity**

Dawson Auditorium

3:00-5:00

**Michelle Leman**

*Self Portraits*

**Mentor: Garin Horner**

My artwork represents qualities in myself that I think are unique. For my photographs, I am my favorite model. It is all about self-exploration. I incorporate found materials and make them into creations on my body. These materials, like aluminum foil, become my clothing, jewelry, and representations of my state of mind. I try to come up with fun, dynamic, exciting poses that are humorous, unique, and sometimes revealing. All of these large black and white photos, with their poses and their scale, visually represent the many aspects of my personality.

3:00-5:00

**Rachael Williams**

Outside 110 South Madison Hair Studio

*Exploring Cephalopods*

**Mentor: Greg Jones**

Of all the students at a College, I believe that art students are the most misunderstood. We talk about color theory and dress to express ourselves. We have no use for math and have strong imaginations.

Cephalopods are like the art students of the sea to me. Octopi, Cuttlefish, Squids, and the Chambered Nautilus are all copper-blood based creatures, the only ones in the world. They live in every ocean and yet we know so little about them. These creatures have no bones except for a beak at the mouth or a cartilage-like structure in their middle. Muscle and suction cups make up these strange creatures.

In my art show, I have painted scenes of the Cephalopods' lives or completely imaginary expeditions. For example, I explore how cuttlefish communicate with one another using their bodies to express emotion through color and their tentacles to touch each other. I also explore other deep sea creatures such as the Angler fish and their mating habits. I am fascinated with biology and would love to teach others of the mysteries and imaginings of the poorly understood creatures of the sea.

**Session 28**

Peele Lounge

*Caring for the Humanity and World*

3:00-5:00

**Mary Molnar**

*We are only human.*

**Mentor: Greg Jones**

My goal in life is to understand myself, so that by understanding myself I am able to understand others. I believe people get caught up in time and the spaces in between and forget that there are people in those cars we pass every day and that within those individuals, is a life we are so ignorantly unaware of. It is easy to forget, but as soon as I look it does not take long to see myself in any given person. It becomes more and more apparent to me with each second of my small life that we are all the same in that we are all victims of the human condition. It is this fact that both terrifies, and comforts me. I create in order to better understand myself, and to produce something concrete out of the thoughts that occupy my mind. I believe

that it is within these seemingly trivial thoughts and emotions that the essence of humanity lays. My hope is that by putting these pieces of myself on display, others may be able to recognize a piece of themselves and maybe feel a little less alone, and a little more understanding of others. We are only human, after all.

3:00-5:00

**Christine Cranmer**

Dawson Auditorium

*Harmony*

**Mentor: Garin Horner**

My experience with photography has been a growing process for me. By taking on the role of a photographer, I think about the ways the camera has changed my perspective of the world around me. I see the world as objects, as framed compositions. Although I am still figuring out specifically what it is that I am most interesting in photographing, I do notice some patterns or trends in my images. I love to capture things or objects in a way that expresses emotion in the way I see it. I want to capture the moment where the light hits an object, such as a person's face. And in that moment I want to tell the story of that emotion that they were feeling. With my photographs I hope that others will be able to generate the emotions and the ideas I was feeling. My goal is for the audience or the viewer to see something from an expressive and unique perspective.

## **Session 29**

**Developing Creativity**

Senior Show Gallery

3:00-5:00

**Ashley Dixon**

*The Root to my Existence*

**Mentor: Greg Jones**

This will be an exhibition of my work that I have been working on over the course of the year. The base of this drawing is a paper marbling technique done with watercolor paints and shaving crème. The background technique creates a sense of chaos and is a representation of the chaos in my life/in my family. The different line designs over the base represent the different types of families that make up my family tree and each circle represents a person in my family.

Inspiration for this series is drawn from my own life. I lost my grandmother in May of 2010 and it made me realize just how much my family means to me and that I have made it as far as I have in life because of my

family no matter how chaotic my family can be at times. The base represents the chaos of my life and the line designs show the control that I have over that chaos.

3:00-5:00

## **Michael Gniewek-Abernathy**

Goldsmith Lounge

### *The Peep Show*

**Mentor: Garin Horner**

The Peep Show is about the necessary interaction between the viewer and the viewed. Every architectural space has windows and this is true, in miniature, of my pieces. The windows or peep holes encourage the viewer to share in the awkwardness of being a voyeur, through smaller than life ceramic architectural spaces and fiber dolls. Windows here are standing in for televisions to the viewer in that they create a separate view of what is really inside of each space. They encourage the viewer to be peeping toms on stuffed subjects. Each fiber doll or stuffed subject is in some way connected to the subversion of a norm, for example a very (width wise) large doll with tiny arms and legs are connected to the societal pressure to be thin. When the viewer is encouraged to peep into the architectural space of the large doll, they are faced with the awkward decision of whether to try to find a meaning relevant to them or to discontinue their gaze and move onto the next piece.

## **Session 30**

**Developing Creativity**

Jones Kitchen

3:00-5:00

## **Benjamin Coffman**

### *What's in your food?*

**Mentor: Pauleve Benio**

I want to show the cloud of misunderstanding surrounding processed food. My motivations for this project come from my interests in cooking and ceramics. I want to expose what is in processed food. I make functional pottery, mostly kitchenware in white stoneware. I will be putting the words (chemicals in processed food) on the pottery through a process called slip trailing. These terms can be found on most processed food and the chances of anyone knowing what they really are, is slim to none. I draw some influence from the Do-It-Yourself movement taking place in America today. I firmly believe learning to do something yourself can be so much more beneficial to you. For my presentation, I plan on creating an

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installation, a dining room setup. I will be creating a home, from floor to ceiling with curtains, wall art, a table, chairs and anything you would expect. I will be creating a place setting for an average family.

## Poster Session

3:00-5:00

**Jessica Saunders**

AT Room

*Caring for the Humanity and World*

*Beyond Pictures*

**Mentor: Marcia Boynton**

This project's objective was to connect art, photography, and journaling to convey emotions and experiences of the Nicaragua medical mission trip. Digital scrapbooking, which has been growing in popularity in recent years, was used. Items from the trip were added to the finished product to give an additional sense of dimension and culture. Combined with talking to others about the trip, the creation of two scrapbooks enabled the expression of the importance of such mission trips to underserved parts of the world.

3:00-5:00

## **Crystal Cieslak**

Thinking Critically

### *Gender's Effect on Advertising*

**Mentor: Hank Cetola**

The present research addresses whether consumers are more likely to purchase from female advertisements or male advertisements. The issue of gender in advertising has been a controversy that has been argued for many years. This study addresses the same problem. Are consumers more likely to purchase a product if it is sold by a man or by a woman? This study looks at whether a product being sold by a man or a woman is more likely to be purchased. Comparative versus non-comparative advertisements were also researched in this study. A comparative advertisement compares the product it is trying to sell to other comparable products. In this study 30 participants listened to one of four audio advertisements. The four different audio advertisements were comparative by a woman, non-comparative by a woman, comparative by a man, and non-comparative by a man. The participants were then asked if they would purchase the product and if gender played a role in their decision to purchase the product. This study will use an ANOVA to compare if gender played a role in purchase the product or not, and if gender played a role in preferring a comparative versus a non-comparative advertisement.

3:00-5:00

## **Emily Friess**

### *Effects of Question Type, Question Repetition, and Feedback Style on the Accuracy of Responses Given After Witnessing a Mock Crime*

**Mentor: Stacey Todaro**

In this experiment, the effects of question type, question repetition, and feedback style on the accuracy of responses during a forensic interview were examined. Participants watched a video of a crime taking place. Immediately following, participants answered a series of questions about the video. Half of the participants answered multiple-choice questions, whereas the other half answered open-ended questions. All participants were randomly selected to receive either positive, negative, or no feedback. The feedback given was granted upon completion of each question and did not take into consideration the true accuracy or inaccuracy of the participant s responses. In order to assess the effects of repeated questioning, two of the questions were repeated to each participant. Results revealed a main effect of question type, such that participants were more accurate when answering close-ended questions than when answering open-ended questions. Feedback did not have an effect on accuracy. In terms of repeated questioning, results indicated that there was a relationship between repeated questioning and feedback, such that participants receiving negative feedback were more likely to change their response when the question had been repeated a second time. The implications of these results are discussed in the context of eyewitness testimony and forensic interviewing.

3:00-5:00

## **Alyssa Allen**

### *8<sup>th</sup> Amendment- Death Penalty Issues*

**Mentor: Nathan Goetting**

Much controversy resides around capital punishment in the United States and whether or not it is consistent with the 8th amendment which prohibits cruel and unusual punishment. The 8th amendment is not the only portion of the United States Constitution that has been difficult to interpret. The interpretations of many amendments change throughout the years based upon the most recent judgment from the Supreme Court. The Constitution may either be interpreted by attempting to determine the intent that the originators had at the time of its formation, or with the belief that this document needs to change with the times. Time and time again, the court has ruled that the death penalty is constitutional, and yet heated controversy still exists. In this project I will be examining various other laws that have been interpreted using both the intent and change with the times method. I will point out similarities and

differences between these laws and the 8th amendment and draw a conclusion about whether or not this amendment is constitutional based upon the interpretation of other laws.

3:00-5:00

### **Kelly Behen & Kelly Babbles**

#### *Ballistic vs. Static: Which One Better Increases Ones Range of Motion*

**Mentor: Victor Liberi**

The Debate between ballistic and static stretching has sparked our interest in discovering which method most effectively improves Range of Motion (ROM). Ballistic stretching uses the body's own momentum to stretch muscle beyond its normal ROM, whereas static stretching involves holding the muscle at its furthest point of stretch. Ballistic stretching does not allow the muscle to relax, hence keeping it in a constant contraction. Static stretching however, is done while the muscle is relaxed which promotes a deeper stretch with less chance of injury. This study aims to increase our understanding of which form of stretching: ballistic or static increases one's range of motion.

3:00-5:00

### **Sam Costello**

#### *Learning Throughout a Lifetime*

#### *The Usefulness of Wine as a Tool for Undergraduate Studies of Analytical Chemistry*

**Mentor: Michael Claus**

Wine is an alcoholic beverage made from fermented grape juice, though other fruit juices can be used. The average person does not usually associate wine with analytical chemistry. However, from my experiences, I have found wine to be a very useful tool for studying analytical chemistry. There are several hundred chemical compounds that can be found in wine. These compounds can determine wine properties, such as color, taste, smoothness, sweetness, etc. There are numerous chemical tests that can be used to determine the content of such compounds. Some compounds have concentrations in parts per trillion, almost undetectable by many tests. These compounds, however, can be sensed by the human nose and taste buds. Analytical chemistry can be used to test for some common compounds, including ethanol, glucose, sucrose, fructose, and tartaric acid. These tests are not overly complicated to run, allowing students the opportunity to perform chemical analysis on a system that is more than just a made up unknown solution. These tests are run by commercial wineries, giving them real world value. This poster and report will provide a statistical analysis of students who have taken Quantitative Analysis, a class at Adrian College that focuses on analytical chemistry using wine. Students who are currently attending graduate school will be included in this study. Questions posed to students include did they enjoy the course, do they feel they learned from the experience, and (for those in graduate school) did it help prepare them for graduate level chemistry.

3:00-5:00

### **Eric Lindstrom**

#### *Crossing Boundaries and Disciplines*

#### *FTIR Quantitative Analysis of Wine*

**Mentor: Paul Rupert**

Wine making has always been an art, something with deep rooted tradition. In the more recent decades however, close monitoring of many chemical aspects has given rise to the ability of creating larger batches with tighter quality control. This has not only allowed wine makers to get the most out of their wines, but also prevents many potential losses of product such as cork taint. The majority of wine analysis is done through wet chemistry quantitative analysis, with use of Ultraviolet/Visible (UV/Vis) spectroscopy and High Performance Liquid Chromatography (HPLC) as a verification measure. Within the last few years, the Fourier Transform Infrared (FTIR) photospectrometer has been extensively tested, through the use of chemometrics, in the identification and quantification of compounds in wine. The advantage of FTIR is not only the speed with which analysis can be done,

but also the nondestructive nature of the analysis. This allows the maker to monitor the grapes as they go through the wine growing and wine making process. As a possible “end all” instrument, the FTIR has been shown to possess reliable reproducibility for a wide range of analyses.

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