

## Keynote Talks

### **Nyki Anderson**

Title of Project: Using Visualization Tools to Analyze Automated Flight Conflict Resolution Concepts

Type of Presentation: Keynote Presentation

Location: McKenzie Theatre

Presentation Time: 2:00 – 2:30 p.m.

*Faculty Sponsor: Amy Yielding*

**Abstract:** Air traffic is expected to increase in the coming years. Currently, air traffic controllers are responsible for maintaining a safe and efficient National Airspace System. However, it is unlikely that human cognitive abilities will be able to keep up with the continuous increase in traffic. In response, automated ground-based and airborne separation assurance algorithms have been developed. The safety of the NAS is of the utmost importance and therefore, meticulous evaluation of the algorithms is a crucial step in implementation of these concepts. Thus, it has become necessary to develop external visualization tools designed to verify, validate, and improve the existing algorithms by making them more robust. These visualization tools allow researchers perfecting the algorithms to run simulations without having to run entire programs or filter through vast amounts of data.

## Presentations

### **Jeffrey Alexander (Abstract under Julie Esquibel)**

#### **Molly Alexander and Mackenzie Trotter**

Title of Project: Happy Families and Menial Jobs: Memoirs that Discuss Place and Relationships

Type of Presentation: Performance

Location: Badgley Hall 146

Presentation Time: 9:00 - 9:50 a.m.

*Faculty Sponsor: Jodi Varon*

**Abstract:** In this performance, Molly Alexander and Mackenzie Trotter will explore how the memoir form allows writers to find deeper meaning behind family life and work. Alexander's "Crane Meadows" showed the impact that her close-knit LDS family had on the development of her current values, whereas Trotter's "Is that Everything?" was a sarcastic but honest evaluation of how working in a fast-food drive thru socially influenced her. Alexander found Stephanie Nielson's memoir Heaven Is Here to be a helpful model as Nielson writes about relationships and values within a family structure and LDS culture. Trotter's project was motivated stylistically as well as topically by David Sedaris' essay, "SantaLand Diaries." Using this essay, she emulated his signature witty tone in a commentary of coworkers in a menial job. Each author's memoir concluded that her upbringing and set of values subconsciously influenced her worldview. Both found that within a family unit or the workplace, she could maintain her values while also exploring beyond them to become a well-rounded person in society. After each author reads an excerpt from her respective piece, each will discuss her composition process as well as field questions from the audience.

#### **Molly Alexander (Abstract under Mackenzie Trotter)**

#### **Nyki Anderson (Abstract: See Keynote Presentation)**

#### **Mary Asker**

Title of Project: Discovering the Poor: Scholars' and Society's Approach to Understanding

Social Welfare

Type of Presentation: Panel Presentation

Location: Zabel Hall 108

Presentation Time: 11:30 - 12:20 p.m.

*Faculty Sponsor: Scott McConnell*

**Abstract:** The existence of social programs began in feudal Europe. As the market structure grew, so did the effects on the population of people living in poverty. Because of the linkage between economic growth and social welfare programs, many economists had evolving views about social programs throughout history. These opinions are explored along with mainstream society's opinion and treatment of the poor throughout the Middle Ages to the present day.

### **Kevin Attila**

Title of Project: Physical Activity with Basketball

Type of Presentation: Poster Presentation

Location: Pierce Library Lobby

Presentation Time: 10:00 - 10:50 a.m.

*Faculty Sponsor: Kelly Rice*

**Abstract:** Physical activity among youth is a key factor in health today. The National Health and Nutrition Examination Survey states that as much as 19% of school-age children and adolescents, ages 6 to 19 years, are obese and an additional 16% are overweight (Ogden, Carroll, Curtin, Lamb, & Flegal, 2010). With Union County being a rural area, physical activity and health is even more crucial to focus on, as a study suggests that children that live in rural areas are 25% more likely to be overweight or obese in relation to Urban areas (Lutfiyya, Lipsky, Wisdom- Behounek, & Inpanbutr-Martinkus, 2007). The project includes engaging youth basketball players throughout the spring as a means to increasing physical activity, as the area of Union County may lack the capabilities to provide free high quality teaching throughout an off-season. This form of physical activity will be promoted by emphasizing and further developing the skills necessary to be a successful basketball player. I will provide a detailed program as how to target specific skills of basketball. 10 basketball players will be surveyed on their most desired area of improvement, with the top 3 skills being the emphasis of an 8 week program to measure the success a detailed skill development plan revolved around specific areas of needed improvement as requested by the target population.

### **Corey Bennett (Abstract under Lacey Mesia)**

### **Amy Betts**

Title of Project: Research and Development of a New Logo and Branding Strategy for the Union Wallowa Baker Federal Credit Union

Type of Presentation: Talk

Location: Loso Hall 117

Presentation Time: 9:00 - 9:20 a.m.

*Faculty Sponsor: Mike Sell*

**Abstract:** The current branding and marketing strategy of the Union Wallowa Baker Federal Credit Union (UWBFCU) is outdated, and it does not meet industry standards. With the increasing emphasis on cohesive branding for businesses in general as a marketing strategy, it is imperative that the UWBFCU become current and relevant in their branding and marketing. With changes in leadership, it is an opportune time for the UWBFCU to update their branding and marketing strategies. The scope of my research included logo and branding comparisons with like businesses nation-wide, as well as input from the UWBFCU Board of Directors and employees. This research resulted in the creation of a new logo and a branding strategy.

**Annie Bluhm (Abstract under Jessica Clements)**

**Evan Bryan**

Title of Project: My Experience in Republican Politics

Type of Presentation: Talk

Location: Zabel Hall 108

Presentation Time: 10:00 - 10:20 a.m.

*Faculty Sponsor: Scott McConnell*

**Abstract:** This presentation will be based on my practicum experience. For my practicum I worked on John Turner's campaign for the Republican nomination for State Representative. The presentation will cover how I applied the knowledge I learned in the classroom to my practicum experience. I will present a general overview of the politics of Northeast Oregon as well as an overview of the election. This presentation will also be aimed at helping students and attendees learn how to apply their practicum experience to their academic work.

**Evan Bryan**

Title of Project: The Rise in Income Inequality in the United States

Type of Presentation: Panel Presentation

Location: Zabel Hall 108

Presentation Time: 11:30 a.m. - 12:20 p.m.

*Faculty Sponsor: Scott McConnell*

**Abstract:** The United States has seen a steady rise in income inequality over the last three decades. While the economy has seen growth, most of the wealth has stayed with only a selected group of people. This has created an obstacle to economic development, because economic growth is only benefiting a small percentage of the population. Two main factors likely contribute to this. The first is the lack of investment in public education. Over the last three decades the decline in funding for public education has coincided with a rise in income inequality. The second is the inflation of the dollar due to the United States not being on the Gold Standard. Both of these factors have contributed to the rise in income inequality in the United States and need to be addressed by policymakers.

**Cindy Burke, Lindi Murdock and Alix Miles and Jan Dinsmore**

Title of Project: Teaching: What They Don't Tell You,.. But We Found Out!

Type of Presentation: Panel Presentation

Location: Badgley Hall 146

Presentation Time: 10:00 - 10:50 a.m.

*Faculty Sponsor: Jan Dinsmore*

**Abstract:** This panel presentation of research projects encompasses three topics that impact teaching and learning, including The Effects of Poverty in the Classroom, Behavioral Problems in the Classroom: Refining Classroom Management, and The Impact of Music in the Classroom on Learning. The first paper describes the effects that poverty can have on classroom learning. A ten week observation of a first grader from very low socioeconomic background sheds light on how the effect of poverty can be manifested into learning challenges. Strategies to support learning of high poverty students are presented. The second research project illustrates the difficulties in working with behaviorally challenging students in the classroom. Interviews were conducted of three kindergarten teachers at varying stages of their career to offer tried and true methods, along with lessons learned about working with challenging students. The third paper describes the extended observation of a preschool class that uses music to enhance learning. The paper discusses how the integration of music into the classroom curriculum, in various ways, has shown to have a positive impact on student learning and may produce significant improvements in student performance, engagement, and behavior.

**James Burklund (Abstract under Emma Feldkamp)**  
**Kaitlin Chattin (Abstract under Emma Feldkamp)**  
**Kaitlin Chattin (Abstract under Mia Stoddard)**  
**R. Robert Christensen (Abstract under Emma Feldkamp)**  
**Trever Clark (Abstract under Mackenzie Trotter)**

**Jessica Clements, Annie Bluhm, Leslie Coonrod, and Anna Cavinato**

Title of Project: Development of a DNA aptamer sensor for rapid detection of bacteria

Type of Presentation: Poster Presentation

Location: Loso Hall Lobby

Presentation Time: 11:00 - 11:50 a.m.

*Faculty Sponsor: Anna Cavinato*

**Abstract:** Current tools for environmental assessment of fish pathogens have low sensitivity and require involved protocols. In the case of *Renibacterium salmoninarum* (Rs), the pathogen responsible for causing bacterial kidney disease (BKD) in salmonids, methods for its detection (ELISA, FAT and PCR) have focused primarily on tissues such as kidney or ovarian fluid, thus requiring that fish be sacrificed. Attempts to use ELISA or PCR to detect Rs in water samples have not been successful. In this study we report ongoing efforts to develop a sensor for detection of Rs in water based on DNA aptamers that show high binding affinity to p57 or Major Soluble Antigen (MSA), the principal antigenic protein found on the bacterium cell surface. Aptamers are currently being identified through SELEX (Systematic Evolution of Ligands by EXponential amplification) and will eventually be immobilized to gold nanoparticles to construct a colorimetric sensor.

**Leslie Coonrod (Abstract under Jessica Clements)**  
**Danielle Correa (Abstract under Devan Noblit)**

**Steven Cramer**

Title of Project: Mountain Meadows Massacre; the Massacre worth Arguing Over

Type of Presentation: Talk

Location: Loso Hall 115

Presentation Time: 9:00 - 9:20 a.m.

*Faculty Sponsor: Ryan Dearing*

**Abstract:** In my presentation, I will be discussing the Mountain Meadows Massacre which took place in Southern Utah in 1857. I will not be simply discussing the event however, but rather the various academic arguments which have surrounded the controversial topic since the event took place almost one and half centuries ago. The order by which I will discuss the various arguments will be following a linear, time related pattern in terms of when various works on the Massacre were published. I will discuss the various questions that scholars have asked regarding the event and how they differ. I will also discuss how these questions have changed and the evidence regarding the what occurred in the Massacre that has come to light in increasing value. The event itself of course revolves around the Utah War and local LDS leaders who conducted a Massacre of the Fancher emigrant party. That radical action was in response to the heightened hysteria in LDS communities in the Utah Territory following the Advancement of Federal troops into Utah in order to remove Brigham Young from office as the Territorial Governor. The questions regarding the event largely surround the involvement of LDS leaders and Native Americans in the event; however the questions themselves evolved over time in order to better address new evidence that arose regarding the Massacre.

**Tony Eackles Jr.**

Title of Project: The Mountie Documentary

Type of Presentation: Talk  
Location: Zabel Hall 108  
Presentation Time: 9:00 - 9:20 a.m.  
*Faculty Sponsor: April Curtis*

**Abstract:** My presentation, The Mountie Documentary, will take a look at the days in my life leading up to 2014 Mountie Awards, in which I am hosting. The Awards show is a yearly event put on by Eastern's Athletic Department that honors its athletes' achievements throughout the past year. This will be my second year hosting the ceremony and I am looking to make it even better than it was last year and years prior. I have spent numerous hours in the Athletic Department office the last few months working for Travis Rae (Sports Information Director) and this will put a crown on all my hard work. In my quest to prepare for the event, I will try to become the "Ultimate Athlete" by performing/ practicing all the sports that Eastern has to offer. My presentation will highlight my preparation physically and mentally for the Mountie Awards and it will leave you with an anticipation of the award show which will be exactly one week after the Spring Symposium on May 28, 2014 in McKenzie Theatre. I look forward to seeing you all at both events, Mount Up!

**Julie Esquibel, Jeffrey Alexander, Dillon Lutcher and Adam Gener**

Title of Project: Senior Capstone Premiere  
Type of Presentation: Panel Presentation  
Location: Loso Hall 115  
Presentation Time: 10:00 - 10:50 a.m.  
*Faculty Sponsor: Kevin Roy*

**Abstract:** The four senior film students in the film program will present the filmmaking process and show the work that has been created over the past year. Our presentation will consist of pre-production, the development of writing a script and putting together a film crew. Then we will show the film production process where we bring our films to life on screen. The last process we will present is the post production process which is the editing and final stage for a movie. We will each introduce our films, and give a description before the premiere. Finally, there will also be a Q and A after each premiere with every director.

**Emma L. Feldkamp, Lauren E. Steiger, James I. Burklund, M. Samonne Palazo, Tel W. Winegar, Allison K. Rodgers, Logan A. Loennig, Katherine E. Savee, Kaitlin C. Chattin, and R. Robert Christensen**

Title of Project: Structural Elucidation and Comparison of Pyrrolizidine Alkaloids in *Arnoglossum* and *Yermo*  
Type of Presentation: Poster Presentation  
Location: Pierce Library Lobby  
Presentation Time: 9:00 - 9:50 a.m.  
*Faculty Sponsor: Ron Kelley*

**Abstract:** Pyrrolizidine alkaloids (PA's) are potentially toxic, naturally occurring secondary products, typically found in the plant family Asteraceae. As members of the family, the genera *Yermo* and *Arnoglossum* are expected to contain PA's. We are performing analysis of *A. plantagineum* and *Y. xanthocephalus* to establish PA profiles for these two species. Examination of the GC-MS data has shown that the major alkaloids in both species are otonecine based seco-PA's which is consistent with a published analysis of *A. floridana*. The major PA's found in the published work were otosenine, florosene, and floridanine. Preliminary analysis of *A. plantagineum* has demonstrated that floridanine appears to be the major alkaloid in the PA mixture. Previous work has shown the PA profile for closely related *Y. xanthocephalus* suggests that the major compounds are also otonecine based PA's, such as floridanine, and the uncommon chlorinated PA's doronine and desacetyldoronine (previously called yermo-

tine). Additionally, a minor amount of senkirine and trace amounts of senecionine, otosenine and onetine were found. Alkaloids were separated using thin layer chromatography (TLC) in conjunction with analysis by 1D and 2D NMR experiments, which elucidated the identity of the alkaloids present in both species.

**Kassandra Freeman, Stefani Sorensen, Kurt Langworthy and Anna Cavinato**

Title of Project: The role of pH in controlling size and distribution of gold nanoparticles

Type of Presentation: Poster Presentation

Location: Pierce Library Lobby

Presentation Time: 10:00 - 10:50 a.m.

*Faculty Sponsor: Anna Cavinato*

**Abstract:** Gold nanoparticles are increasingly being used as a practical platform for the development of absorption-based colorimetric sensing of any target analyte that can trigger the aggregation or redispersion of the particles. For particles of diameters larger than 3.5 nm, aggregation induces a change of color from red to blue due to interparticle surface plasmon resonance. Controlling the size and the size distribution is therefore important for consistent detection of the analyte. One of the most common routes to gold nanoparticle synthesis is the reduction of auric acid by sodium citrate in boiling water. In this study a systematic investigation was conducted to determine the role that pH plays on the size and size distribution of particles synthesized at different ratios of citrate to auric acid. The size variation was verified using transmission electron microscopy.

**Justin Fuller**

Title of Project: Eastern Oregon Faculty and Staff Fitness Program

Type of Presentation: Poster Presentation

Location: Badgley Hall Simmons Gallery

Presentation Time: 11:00 - 11:50 a.m.

*Faculty Sponsor: Kelly Rice*

**Abstract:** Obesity and cardiovascular disease are a serious problem among the American population. One of the most common factors influencing the disease is a lack of physical activity. The 2007 BRFFS found that 42% of Union county was overweight or obese. Workplace wellness programs are an increasingly common way for employers to keep their employees healthy and increase productivity. As a result it can be argued there is a need for workplace wellness programs here at EOU. In order to effectively implement wellness programs it is necessary to perform a needs assessment of the target population to ensure there is sufficient backing. This needs assessment was done during the spring of 2013 by students in the program planning and design class at EOU. The assessment was done via survey that was sent out through EOU info line along with surveys completed by hand. **PURPOSE:** to assess overall interest in a Faculty fitness program at EOU. **RESULTS:** data showed that of the 102 individual's surveyed, 60% were interested in participating in a fitness program. Classes attracting the most attention were Circuit weights, Yoga and Zumba (60%, 50% and 42% interest respectively). As a result the Faculty and Staff Fitness Program was developed.

**Adam Gener (Abstract under Julie Esquibel)**

**Teresa Gluth-Hampton (Abstract under Mia Stoddard)**

**Mauriana Gonzalez**

Title of Project: Run Girl Run

Type of Presentation: Poster Presentation

Location: Pierce Library Lobby

Presentation Time: 10:00 - 10:50 a.m.

*Faculty Sponsor: Kelly Rice*

**Abstract:** During adolescence, girls are at an increased risk of inactive lifestyles when compared to other youth, and this can result in low confidence and self-esteem levels. Research has shown that environmental surroundings can play a large part in whether adolescents will engage in physical activity. Studies show that providing children with after school based programs is a community based approach that works toward decreasing inactivity. In order to address these issues, an all-girls running program is being implemented at the La Grande Central Elementary School. The purpose of the program is to increase fitness and confidence levels of twelve, fourth and fifth grade girls within a group setting. The end goal for the participants at the end of program includes a 5K run through motivation based techniques, teamwork, and weekly running regiments. Results will be collected through direct observation from volunteers working one-on-one with participants throughout the duration of the program.

### **Zack Grammon (Abstract under Mark McDonald)**

#### **Deborah “Krystal” Green**

Title of Project: Fur Balls: Adventures of the United Hamster Militia

Type of Presentation: Talk

Location: Zabel Hall 108

Presentation Time: 9:30 - 9:50 a.m.

*Faculty Sponsor: Richard Croft*

**Abstract:** This demonstration will show the pre-production process required to produce a professional “pitch package” for an animated sitcom as a sales presentation to a producer of broadcast or streaming media such as Netflix. The process, which has taken several years in and out of class through the Media Arts program, includes the initial idea development through rough sketches, storyboards, and handwritten background material to the finished pilot screenplay, storyboards, graphic arts elements as found in a printed pitch “bible” and an animated pencil test / animatic to run for about two to three minutes. The pitch “bible” will include graphic character sheets introducing the characters and situations, pitch and synopsis for the pilot episode, and an outline for the first 13 episodes (season one). A talk will be given explaining the process followed by the sales pitch and projected animation. A Question and Answer session immediately afterwards is welcome. The topic and show is for the zany animated pet shop sitcom entitled “Fur Balls: Adventures of the United Hamster Militia.”

### **Luke Guerin (Abstract under Luke Maxwell)**

#### **Alyssa Gurney and Saraya Wise**

Title of Project: The Effect of Technology on Children’s Ability to Complete Learning Tasks

Type of Presentation: Poster Presentation

Location: Badgley Hall Simmons Gallery

Presentation Time: 9:00 - 9:50 a.m.

*Faculty Sponsor: Marie Balaban*

**Abstract:** The use of technology for educating children has been a major topic for research in the last decade. Computers, cell phones, and tablets can all be used for educational and entertainment purposes. Children tend to be exposed to technology early in life and they are capable of navigating through these devices with ease. Observations with children as early as two years of age show that the use of computer-based technology can be self-taught and used for educational value. For this study, technology was examined through child participants completing learning tasks on a form of computer-based technology (a tablet). Participants also

completed learning tasks using pencil and paper and hands-on tasks to analyze data. The scores were based on the amount of accurately answered questions for both verbal and mathematical tasks. It was hypothesized that the use of technology would have an effect on the participants' completion of the learning tasks. There were no significant findings that supported this hypothesis; however a pattern was found that indicated that the children all improved in scores from the traditional pencil and paper tasks to the technology and hands-on tasks.

**Theresa Hamman (Abstract under Mackenzie Trotter)**

**Laura Hansen**

Title of Project: Practical and Ethical Solutions to Municipal Solid Waste Management

Type of Presentation: Remote Presentation

Location: Zabel Hall 108

Presentation Time: 10:00 - 10:20 a.m.

*Faculty Sponsor: Scott McConnell*

**Abstract:** As of 2011, there were 1,908 municipal solid waste landfills operating in the United States, serving virtually every community nationwide (Municipal Solid Waste Generation, 2012). Managing this amount of waste poses many practical and moral challenges. The environmental problems of soil, water and air pollution are urgent in nature, as they impact public health and safety as well as natural ecosystems. Secondary problems such as funding for landfill technology and the interstate transport of waste also need to be addressed. The largest division between proposed solutions is whether we must alter consumption patterns to produce less waste to begin with, or focus on regulating and reusing the garbage we are bound to create. The first calls for a dramatic shift in normative values, while the latter relies on incremental changes within the existing system. This presentation will offer a balance between both of these views. In the long run, a shift in environmental consciousness will be necessary for our well-being as a species. However, short-term solutions need to be manageable enough for everyday citizens to participate.

**Mary Hawman**

Title of Project: The Great Depression and the U.S. Agriculture Industry

Type of Presentation: Panel Presentation

Location: Zabel Hall 108

Presentation Time: 11:30 a.m. - 12:20 p.m.

*Faculty Sponsor: Scott McConnell*

**Abstract:** The impact The Great Depression of the 1930's had on the United States Agriculture industry is vast. Many farms were terminated, prices were volatile, and at times supply was down. These disadvantages were brought about by (1) the poor economic and (2) the past and current farming conditions. The Great Depression of the 1930's had a negative impact on the United States Agriculture Industry and without special accommodations, this industry may have not been able to sustain itself and grow to where it is today. This presentation will examine the impact the Great Depression of the 1930's had on the United States Agriculture Industry. It will provide information pertaining to the events that led up to the Great Depression and how American agriculture survived during those years. It also discusses accommodations that were made in order to help the industry, during and after the Great Depression; the positive and negative aspects of these and how the United States agriculture industry is today.

**Jane Hayes (Abstract under Mia Stoddard)**

**Christopher Hill**

Title of Project: The Uncanny Valley in the digital media field

Type of Presentation: Talk

Location: Loso Hall 130

Presentation Time: 10:00 - 10:20 a.m.

*Faculty Sponsor: Mike Sell*

**Abstract:** I will be talking about the ways the Uncanny Valley (a term that talks about the comfort level people have with images as they reach different levels or realistic), can change how they work on their digital projects to reach different levels of comfort for their audience.

**Anthony Hilyard**

Title of Project: Stampede: The Making of a Mobile App

Type of Presentation: Talk

Location: Loso Hall 130

Presentation Time: 10:30 - 10:50 a.m.

*Faculty Sponsor: Richard Croft*

**Abstract:** Mobile apps are becoming more and more pervasive every year. They are a \$25 billion industry, and it shows no signs of slowing down. In this session, I intend to give an overview of the process of creating a mobile app, and then give a detailed analysis of the process I went through to create Stampede, a mobile game. I will end the session by showing a demo of the completed game. Through this session, I hope to give an appreciation for the process, and perhaps inspire others to give mobile app development a try.

**Desiree Jacobs**

Title of Project: The inter-workings of a commercial radio station

Type of Presentation: Talk

Location: Badgley Hall 117

Presentation Time: 9:00 - 9:20 a.m.

*Faculty Sponsor: April Curtis*

**Abstract:** Based off of my internship that I have been working on for three terms I will present what I have learned and what tasks were performed while interning at the Pacific Empire Radio Station. This 15-20 minute talk will include a power point that presents everyday responsibilities as an intern as well as the experience as a whole. I will take my listeners into the world of an intern at Pacific Empire Radio and display some voice work along with a clip of my final production at the radio station. The final production will be a 15 minute mock show that I will personally assemble, edit, voice, and produce in order to show most of the tasks I have learned compiled into one production.

**Cole Johnson, Devan Noblit and Joseph Corsini**

Title of Project: Characterization of Coliform DNA

Type of Presentation: Poster Presentation

Location: Loso Hall Lobby

Presentation Time: 10:00 - 10:50 a.m.

*Faculty Sponsor: Joe Corsini*

**Abstract:** Coliform bacteria from vertebrate intestines are indicators of fecal contamination of waterways. These bacteria have been found during baseline studies in the ponds at the End Creek Restoration Area. One of the bacteria we have frequently found is *Escherichia coli*, which is a large complex of subspecies with many pathogenic representatives. The eventual goal of this project is to collect samples of the coliform at End Creek and create genetic profiles to determine their animal sources. To attain this goal, we are optimizing methods for

gathering and analyzing DNA from the dead bacteria. This approach includes extracting DNA and analyzing it with a technique called polymerase chain reaction (PCR). Preliminary results show that we can efficiently collect the DNA, and future work is aimed at optimizing PCR techniques to generate genetic profiles of E. coli isolates.

**Kiah Jones**

Title of Project: Health Literacy in the Clinic

Type of Presentation: Poster Presentation

Location: Pierce Library Lobby

Presentation Time: 10:00 - 10:50 a.m.

*Faculty Sponsor: Kelly Rice*

**Abstract:** Health literacy is the degree to which someone is able to obtain, process and understand basic health information needed to make appropriate health decisions to prevent or treat illnesses. The health literacy for the average clinic patient is about 6th grade level. The goal of this project is to improve overall communication between the patient and doctor by simplifying health materials and speech during visits. Winding Waters Clinic in Enterprise, OR has received a grant to assess health literacy among its patients. Surveys were given to patients who were feeling well enough to take it. Surveys were just six questions, all pertaining to a food label that is provided. Questions were read aloud to simulate how the doctor usually gives information to an individual during appointments. Scores were between 0-6, six being the highest score and zero be the lowest. Ultimately every single patient will be assessed, however that will not be possible given the duration of available time. This project will assess the health literacy scores between diabetic patients and regular clinic patients. The information will provide the clinic with a baseline for all the patients so they know how to describe things when talking about the patients' health.

**Kuzivakwashe Kambasha Abstract under Mia Stoddard)**

**Katie Keeney and Quincy Moore**

Title of Project: Encoding Specificity Principle

Type of Presentation: Poster Presentation

Location: Badgley Hall Simmons Gallery

Presentation Time: 9:00 - 9:50 a.m.

*Faculty Sponsor: Marie Balaban*

**Abstract:** Different contexts were examined to determine if there was an effect on recall probability. Previous research had demonstrated that salient context specific cues facilitate higher recall. Tulving and Thomson (1973) predicted that encoding specificity was primary for storage and retrieval of information in episodic memory. Cued recall had been found to have higher retrieval probability than free recall. The current study determined whether there was a main effect when to-be learned words were recalled in a different setting, whether given an associative word at the time of learning and recall increased recall rates, and whether there was an interaction between room change and cued word encoding. Participants were asked to count the number of vowels in the to-be-learned words for all experimental groups. Experimental group 1 was presented with to-be-learned words without any context (room change and cued words) at the time of learning and recall sessions. The experimental groups were either presented with a cued word at the time of learning, or no cued word was presented with the learning session. Participants were either moved to a new room for the recall session or they returned to the previous room. That was dependent upon which experimental group they were in. Participants were also asked to complete a recognition task to compare to the

effectiveness of cued and free recall. Primacy and recency effects were considered to help promote effective recall.

**Kyle Kerfoot (Abstract under Aimee Kidrick)**

**Aimee Kidrick and Kyle Kerfoot**

Title of Project: Writing Creative Fiction: From the Eighties to the End of the World

Type of Presentation: Performance

Location: Loso Hall 117

Presentation Time: 10:00 - 10:50 a.m.

*Faculty Sponsor: Jodi Varon*

**Abstract:** Although works of creative fiction can heavily differ from one another in content and structure, the work put into writing them is extremely similar. Our presentation will focus on the creative processes involved with writing various works of fiction, specifically our capstones. Kyle Kerfoot's sci-fi story, "Burning Candles," is a representation of the atrocities facing the Jewish people during WWII and the courageous rebellion of the American Revolution combined and depicted on a distant planet called Olympus. Aimee Kidrick's story, "Game Children," is a more modern piece of fiction that focuses on the lives of two children in the 80s, who help each other mature in an atmosphere full of video games, bullies, and dysfunctional parents. Both projects required researching historic events as well as exploring and observing the human psyche. Ultimately, the presentation will show how two completely different stories can not only have a similar creative process, but convey similar messages.

**Aimee Kidrick (Abstract under Mackenzie Trotter)**

**Jordan Kurina (Abstract under Lacey Mesia)**

**Jacob Kuwahara**

Title of Project: Liberty Theatre Foundation Public Education

Type of Presentation: Talk

Location: Loso Hall 117

Presentation Time: 9:30 - 9:50 a.m.

*Faculty Sponsor: April Curtis*

**Abstract:** The Liberty Theatre Foundation has been working towards the complete rebuilding of the original Liberty Theatre. In so doing, a lot of rumors have accrued about what is happening at the theatre. There have been questions such as "is it true that there will be bowling lanes in the basement?" and many people think that the Stage Door Theatre is the final product of the Foundations labors. This is far from true. I will present a short video that I helped shoot and edit educating the public about the truths of what will be happening to the Liberty Theatre within the next few years. This will show the culmination of my practicum and time spent with the Foundation. I will also be presenting this same video to the Board of Directors of the Foundation to see if they will want to use it in their public awareness campaign.

**Mack Lageson (Abstract under Mackenzie Trotter)**

**Kurt Langworthy (Abstract under Cassandra Freeman)**

**Senora Lankert**

Title of Project: ACL Tears in the Knee of Non-Contact Soccer Injuries

Type of Presentation: Poster Presentation

Location: Pierce Library Lobby

Presentation Time: 9:00 - 9:50 a.m.

*Faculty Sponsor: Darren Dutto*

**Abstract:** In soccer, kicking the ball is essential to game play, and puts stress on the leg similar to that of the sprints (like cutting) in basketball. Movement occurs within the leg at the acetabular femoral joint (hip), tibiofemoral joint (knee), and the talocrural joint (ankle), and combines flexion/extension at each joint to provide a wide range of motion. The most common injury that occurs in soccer players is an anterior cruciate ligament (ACL) tear. The injury occurs primarily in non-contact situations such as the supporting leg during a soccer kick. ACL tears occur in soccer and basketball mainly because of the high occurrences of twisting, decelerating, and cutting. These types of movements can result in ACL tears due to decelerating when the knee is in a high internal extension position. Adding to these mechanisms that cause ACL tears there are also intrinsic and extrinsic risk factors that increase the likelihood of injuries. The purpose of this presentation is to provide an analysis of the actions that occur during ACL tears in soccer players and the common ways to prevent them by improving muscular strength and health. Different approaches toward a soccer ball during a kick will also be shown to provide an understanding of how the knee twists during a soccer kick.

**Cameron Livermore (Abstract under Mackenzie Trotter)**

**Logan Loennig (Abstract under Emma Feldkamp)**

**Logan Loennig and Sashka Zungul**

Title of Project: Characterization of protein-binding DNA aptamers for bacterial detection

Type of Presentation: Poster Presentation

Location: Loso Hall Lobby

Presentation Time: 11:00 - 11:50 a.m.

*Faculty Sponsor: Anna Cavinato*

**Abstract:** In this study we characterize specific DNA aptamers (single stranded 96-mer oligonucleotides) that bind to p57 also known as Major Soluble Antigen (MSA), the principal antigenic protein found on the cell surface of the Rs bacterium, responsible for causing bacterial kidney disease (BKD) in salmonids. Six sub constructs were constructed from the full length MSA protein based on three selected regions. Aptamers were identified from a very large, random pool through a process called Systematic Evolution of Ligands by EXponential amplification (SELEX). SELEX was performed on two of the sub constructs from region 2 which contains a putative DNA-binding domain (R2A and R2C) and therefore are believed to be good binding site for aptamers. Nine rounds of SELEX were successfully completed on R2A and R2C and the resulting DNA pools were sequenced. The ongoing study will continue with binding assays and SELEX on other sub constructs and on the full length protein.

**Eric Lougee**

Title of Project: Bilingual Education and Indigenous Rights in Mexico

Type of Presentation: Panel Presentation (given in Spanish)

Location: Loso Hall 130

Presentation Time: 12:00 - 12:50 p.m.

*Faculty Sponsor: Jill Gibian*

**Abstract:** Since the conquest of Mexico by Spain, the indigenous people have been subject to much discrimination and repression of language and culture. This presentation examines issues of indigenous rights, language and bilingual education in Mexico through a historical context and twentieth century literature focusing on the indigenous people of the state of Chiapas in southern Mexico.

**Dillon Lutcher (Abstract under Julie Esquibel)**

**Stephanie Maestretti and Jamarkus Springfield**

Title of Project: New Classroom Model Based On Standardized Testing

Type of Presentation: Panel Presentation

Location: Badgley Hall 148

Presentation Time: 10:00 - 10:50 a.m.

*Faculty Sponsor: Jodi Varon*

**Abstract:** Our panel presentation will focus on the current state of education and the lack of a classroom structure that is conducive to student learning and achievement. After the presentation of our projects, there will be a time for questions from the audience after the presentation. Maestretti's presentation focuses on standardized test questions from both the California Standardized Testing and Reporting (STAR) test as well as the Oregon Assessment of Knowledge and Skills (OAKS) tests, and shows that these questions in their current written state are inadequate to truly assess students' success and their ability to perform within an academic setting. Springfield's Make a Choice model for classroom management applies the three ways that motivate students to be successful within a classroom. The model combines concrete rules, consequences and immediate expectations from the assertive discipline classroom model; it also contains incentive-based learning and choices, within limits, adopted from Love & Logic. Both projects address the Bloom's taxonomy triangle and how the current mode of standardized testing only allows students to work within the bottom three levels (Remembering, Understanding, and Applying) whereas the MAC model allows students to work within all levels of learning (Remembering, Understanding, Applying, Analyzing, Evaluating, and Creating).

**Jacob Malone, Amanda Strong and Krissy VonPressentin**

Title of Project: Influence of Annealing Conditions on the Structure of COPO4 Thin Films

Prepared by Prompt Condensation

Type of Presentation: Poster Presentation

Location: Pierce Library Lobby

Presentation Time: 9:00 - 9:50 a.m.

*Faculty Sponsor: Colby Heideman*

**Abstract:** The structural evolution of Cobalt Phosphate thin films were examined as a function of annealing conditions. Several identical Cobalt Phosphate thin films were prepared by spin coating aqueous cobalt phosphate solutions onto silicon substrates. Films were annealed under systematically varying annealing conditions, and the structural evolution of the films were monitored using x-ray diffraction and reflectivity. This was performed for films with multiple initial thicknesses to examine the influence of film thickness on the structure of the film.

**Jacob W. Malone**

Title of Project: Chemistry and the Dynamic Rock Climbing Rope.

Type of Presentation: Talk

Location: Zabel Hall 108

Presentation Time: 11:00 - 11:20 p.m.

*Faculty Sponsor: Jeremy Riggle*

**Abstract:** Chemistry and the Dynamic Rock Climbing Rope will be looking into the safety and how the rope has improved over the years. Through the advancement of chemical compounds such as the Nylon 6 polymer and various Teflon derivatives; PTFE TE-3875 and PTFE TE-3876 the ropes have increased in strength and safety.

**Jacob W. Malone**

Title of Project: The Secret Ratios of Musical Perfection

Type of Presentation: Talk

Location: Badgley Hall 117  
Presentation Time: 12:00 - 12:20 p.m.

*Faculty Sponsor: Matt Cooper*

**Abstract:** This presentation will focus on the various systems with which cultures throughout the world organize and generate harmonic content. Although most, if not everyone uses the “octave” as the foundation of their harmonic organization, the intervals that divide up the octave vary from Western to Eastern cultures. Using mathematical concepts and auditory illustrations, the similarities and differences between these various tuning systems will be demonstrated.

**Alicia Marlow (Abstract under Jacob Thompson)**

**Alexis Martinez**

Title of Project: Articulating Someone Else's Message

Type of Presentation: Talk

Location: Loso Hall 130

Presentation Time: 11:00 - 11:20 a.m.

*Faculty Sponsor: April Curtis*

**Abstract:** A culmination project in the realm of Communications should consist of the following three elements, research, presentation and practical application. The time allotted for this project was used to create a unifying message that encompassed the purpose behind the Methodist ministries residing in Union County. When asked what the function of the video should be, Methodist Pastor Steve Wolff stated that it should communicate the idea that although small, the churches scattered throughout the county have become spiritually stronger by becoming unified and centralized around his cornerstone ministry in La Grande. My culmination project will take the form of a mediated message that will serve as a tangible product for Wolff's ministry. When I accepted this project I did so knowing that it would be a challenge to project a message that I do not accept or agree with, given the distance that I put between myself and any kind of religious organizations in my personal life. Trying to create a strong, persuasive, mediated message for an organization that rests on the opposite end of the spectrum in regard to one's personal beliefs is something that can be observed in the professional arena of public relations, advertising, external relations and other multimedia related fields.

**Luke Maxwell and Luke Guerin**

Title of Project: Natural Aquatic Macroinvertebrate and Avian Predators of Mosquitoes

Type of Presentation: Poster Presentation

Location: Badgley Hall Simmons Gallery

Presentation Time: 9:00 - 9:50 a.m.

*Faculty Sponsor: Karen Antell*

**Abstract:** The Ladd Marsh wetlands provide habitat for breeding of many aquatic insects, including mosquitoes. Concerns about mosquito-borne illness have resulted in pressure to use chemical insecticides in and around the marsh. In order to help inform management decisions about vector control on the marsh, EOU is partnering with Oregon Department of Fish and Wildlife to assess the role of natural predators on mosquito control. In April 2014, we will use D-frame nets to collect samples of aquatic macroinvertebrates from ponds in three locations on Ladd Marsh. We will determine the types and abundance of each species of invertebrate found. In May 2014, we will conduct field counts of avian predators on flying insects, primarily swallows, in and around the three pond locations. These data will provide important baseline information about the potential effectiveness of natural predators for controlling mosquito populations.

**Mark McDonald, Nam Nguyen and Zack Grammon**

Title of Project: Discrete Simulation of Efficiency and Safety of Lane Changing Models

Type of Presentation: Poster Presentation

Location: Badgley Hall Simmons Gallery

Presentation Time: 11:00 - 11:50 a.m.

*Faculty Sponsor: Anthony Tovar*

**Abstract:** Most real-world traffic flow environments can be divided up in to two overarching rules: the “Keep-Right-Except-To-Pass” and “Keep-Left-Except-To-Pass” rules. While such rules are the most commonly utilized, the question remains as to whether these rules are the best choices for efficiency and safety. We attempted to create an effective, yet simple model to simulate these traffic rules, as well as alternative rules.

**Lacey Mesia, Corey Bennett, and Jordan Kurina**

Title of Project: COMAP-Coach of the Century

Type of Presentation: Poster Presentation

Location: Loso Hall Lobby

Presentation Time: 10:00 - 10:50 a.m.

*Faculty Sponsor: Anthony Tovar*

**Abstract:** The Consortium for Mathematics and Its Applications holds the Mathematical Contest in Modelling every year in February. We chose the Coach of the Century problem from this contest which asks participants to choose the top coaches in any three sports based on predetermined parameters. We show our approach and the results of our work.

**Alix Miles (Abstract under Cindy Burke)**

**Courtney Millsap**

Title of Project: Hershey’s, Big Hunk, and Jujubes: An Analysis of Candy Wrappers from the Historic Rivoli Theater

Type of Presentation: Talk

Location: Loso Hall 130

Presentation Time: 11:30 - 11:50 a.m.

*Faculty Sponsor: Rory Becker*

**Abstract:** A wide variety of candy wrappers were discovered during debris clean-up beneath the seating area of the historic Rivoli Theater, in Pendleton, Oregon. These candy wrappers provide a glimpse into daily life, especially related to entertainment and leisure activities for people in northeast Oregon. Specifically, the data provided from the analysis of these old candy wrappers informs our understanding about the time frame of theater operation and the consumption choices of the theater patrons. Authors: Courtney Millsap and Mary Kolb.

**Shelby Moody (Abstract under Jessica Sosnowski)**

**Quincy Moore (Abstract under Katie Keeney)**

**Michelle Mudder**

Title of Project: Cottonwood Canyon Summer Institute (CCSI)

Type of Presentation: Talk

Location: Badgley Hall 117

Presentation Time: 12:30 - 12:50 p.m.

*Faculty Sponsor: April Curtis*

**Abstract:** Throughout this school year I have been interning at the Regional Solutions Center (RES) in Badgley Hall where I have upheld multiple responsibilities and brought my knowledge from the classroom to real working experiences. During my time with the RES team I

have had the opportunity to job shadow, attend meetings, recruit interns and observed people in a business setting. In addition I have traveled and explored the second largest state park in Oregon, Cottonwood Canyon. My practicum and capstone has been focused on creating and producing a short video for a summer institute at Cottonwood Canyon State Park. I have used my experiences from Communication courses to enhance the outcome of this video and make it unique. There has been an abundance amount of tasks to complete before the filming process could occur. I compiled a list of questions to ask the interviewees, wrote a persuasive paper about CCSI and filtered through to pick the most valuable people who contributed to this project. The purpose of this video is to persuade and inform the audience about the Cottonwood Canyon Summer Institute (CCSI). This internship has taught me to adapt to change and to keep moving forward despite minor setbacks.

**Lindi Murdock (Abstract under Cindy Burke)**

**Jennifer Neilsen**

Title of Project: The Representation of the United States Through Mexican Art and Literature

Type of Presentation: Panel Presentation (given in Spanish)

Location: Loso Hall 130

Presentation Time: 12:00 - 12:50 p.m.

*Faculty Sponsor: Jill Gibian*

**Abstract:** This presentation will explore the representation of the United States through Mexican art and literature throughout the twentieth century. In addition, it will explore how this representation or perception influences immigration in the United States.

**Nam Nguyen (Abstract under Mark McDonald)**

**Devan Noblit (Abstract under Cole Johnson)**

**Devan Noblit and Danielle Correa**

Title of Project: Macroinvertebrates of the Grande Ronde River

Type of Presentation: Poster Presentation

Location: Badgley Hall Simmons Gallery

Presentation Time: 9:00 - 9:50 a.m.

*Faculty Sponsor: Karen Antell*

**Abstract:** Aquatic macroinvertebrates were collected from the Grande Ronde River in fall 2013. All invertebrates collected were identified and photographed. We compiled the photographs into an informational poster for use by students in future biology classes. The poster includes information about habitat needs and water quality sensitivity. This resource will be a valuable tool for students who are learning to identify aquatic macroinvertebrates for riparian stream assessments in the Grande Ronde Valley.

**Andrew Okerman**

Title of Project: Effects of Workplace Wellness Programs

Type of Presentation: Poster Presentation

Location: Badgley Hall Simmons Gallery

Presentation Time: 11:00 - 11:50 a.m.

*Faculty Sponsor: Kelly Rice*

**Abstract:** With health care costs consistently on the rise, there is increasing interest in workplace-based disease prevention and health promotion as a means of improving health while lowering costs. I will conduct a critical meta-analysis of the literature on costs, savings, absenteeism, and effects on job satisfaction associated with participation in such programs, focusing on studies with particularly rigorous methods and examining effects on health care

costs and absenteeism. I have found that medical costs and absentee day costs fall over \$2.00 for every dollar spent on each. Job satisfaction is also increased when participating in these programs This average return on investment suggests that the wider adoption of such programs could prove beneficial for budgets and productivity as well as health outcomes.

**Jacob Olsen and Tyler Rollins**

Title of Project: Making a Game

Type of Presentation: Talk

Location: Badgley Hall 117

Presentation Time: 9:30 - 9:50 a.m.

*Faculty Sponsor: Mike Sell*

**Abstract:** We set out to create our own video game at the beginning of this term. Along the way we had to learn how to make a game and how to program it. We also managed to teach ourselves what goes into making a video game.

**M. Samonne Palazzo (Abstract Under Emma Feldkamp)**

**Kodi Riebling**

Title of Project: EOU on the Go!

Type of Presentation: Talk

Location: Badgley Hall 117

Presentation Time: 10:00 - 10:20 a.m.

*Faculty Sponsor: Mike Sell*

**Abstract:** You are on the go and rely on your tablet or smartphone to keep you up-to-speed. This application will keep you updated on what is happening at Eastern Oregon University. Are you new to the campus? No worries, this app will help you find your classes, order books, and even streamline your class schedule with any calendar app you use! Want to know when the next basketball game, bus arrival, or club event will be held? Find a full list events and times in one location. Do you just want to admire the campus? This app will have an up-to-date map of all the buildings and features EOU has to offer! Are you thinking of attending Eastern Oregon University? Apply effortlessly through the easy to use interface right from your smartphone or tablet. Having troubles getting in touch with someone to help? Chat directly to the admissions team within the app itself and much more. The innovative design can access all the features EOU has to offer with seamless precision and accuracy.

**Allison Rodgers (Abstract under Emma Feldkamp)**

**Ashley Raven Rodriguez**

Title of Project: My Promotion and Facilitation of an On-Campus Diversity Conference: CEAD Conference 2014

Type of Presentation: Talk

Location: Loso Hall 115

Presentation Time: 12:00 - 12:20 p.m.

*Faculty Sponsor: April Curtis*

**Abstract:** This presentation reflects the implementation of effective communication through interpersonal relationships and social media that achieved a successful event, the 2014 CEAD (Celebrate Educate and Appreciate Diversity) Conference, through effective networking, organization, promotion and facilitation.

**Nadia Rodriguez**

Title of Project: The Complexities of Anger's Impact on Sports Performance

Type of Presentation: Poster Presentation

Location: Badgley Hall Simmons Gallery

Presentation Time: 11:00 - 11:50 a.m.

*Faculty Sponsor: Brian Sather*

**Abstract:** This presentation sources five studies that investigate the relationship between anger and sport performance. All of the referenced studies find that anger, in some capacity, has the ability to be utilized to positively facilitate athletic performance. While the correlation between anger and athletic performance is positive, the relationship is not found to be categorical, and rather dependent on additional emotional variables. This poster will demonstrate the correlations between anger, athletic performance, cognitive motivational relational theory, the constructs of extroversion versus introversion, depression compounded with anger, anxiety compounded with anger, and metacognition.

#### **Tyler Rollins (Abstract under Jacob Olsen)**

##### **Belinda Sanchez and Austin Saunders**

Title of Project: Micro-Aggressions in Everyday Life

Type of Presentation: Talk

Location: Badgley Hall 117

Presentation Time: 10:30 - 10:50 a.m.

*Faculty Sponsor: Susan Whitelock*

**Abstract:** In this presentation, students, staff, and faculty will learn how small gestures or comments that seem innocent--what we call micro-aggressions--can be just as hurtful as intentional racism. This can apply to all races, not just a certain group. This presentation can help make people more aware of how racism can be unconscious or unintended.

#### **Austin Saunders (Abstract under Belinda Sanchez)**

##### **Jody Saunders**

Title of Project: Physical Activity For Childhood Obesity

Type of Presentation: Poster Presentation

Location: Loso Hall Lobby

Presentation Time: 11:00 - 11:50 a.m.

*Faculty Sponsor: Kelly Rice*

**Abstract:** Childhood obesity has become a popular health topic over the last few years. Physically inactive lifestyles are a primary factor for this epidemic. It is estimated that 21 percent of children ages 2 to 5 are overweight or obese. Childhood obesity drastically increases the risk of adult obesity and other harmful diseases such as cardiovascular disease. Obese children often have a lower quality of life as they encounter teasing and bullying from peers. Reported needs assessments in La Grande show that parents perceive lack of recreational places and money as two prime barriers for children not getting recommended amount of daily physical activity. This has prompted the development of a physical activity program which infuses the needs of local community with tactics that optimize a child's chance at living a healthy disease free life. The fundamental premise of this program is to actively incorporate low cost and or household items, along with parent inclusion to produce fun and exciting activities and games such as modified disc golf, obstacle courses, etc. that can be done anywhere. This program offers parents the opportunity to participate in activities with their children and learn how to create family fun physical activities.

#### **Katherine Savee (Abstract under Emma Feldkamp)**

#### **Katherine Savee (Abstract under Mia Stoddard)**

**Thomas Sheehy**

Title of Project: Mountain Valley Warriors  
Type of Presentation: Poster Presentation  
Location: Loso Hall Lobby  
Presentation Time: 11:00 - 11:50 a.m.

*Faculty Sponsor: Kelly Rice*

**Abstract:** Available funds within the educational system have slowly diminished over the years leading to the event that physical education have been reduced and/or cut from the school curriculum completely. According to studies, about 22 million children under the age of five years are overweight. By removing P.E. from the school system we will only contribute to this number. I have developed a program geared towards 3rd-6th grade children that will teach them the importance of physical activity to maintain a healthy lifestyle in a safe setting with children their own age. My capstone project will focus on my studies at EOU in the Physical Activity and Health major. The purpose of this program is to promote a healthy fitness lifestyle for children. Including, but not limited to the development of one's physical and mental fortitude, the building of friendships and understanding the importance of teamwork, moral integrity, and understanding of fairness. My program, titled Mountain Valley Warriors has been designed and proposed to the owners of Mountain Valley Therapy and approved to move forward as my capstone project. Next, equipment needs purchased and advertising commenced to begin enrollment to the program. Initiation of program begins as soon as possible.

**Russell Smith**

Title of Project: Veterans access at E.O.U.  
Type of Presentation: Talk  
Location: Badgley Hall 117  
Presentation Time: 11:00 - 11:20 a.m.

*Faculty Sponsor: April Curtis*

**Abstract:** Being a combat veteran, piloting in the Afghanistan War, I was unprepared for the unique needs I would face when returning from combat. I have had a hard transition from the military culture to the college culture. I suffer from mental and emotionally injuries of P.T.S.D. to problems of coping with loss ... a loss of a career, a marriage, loss of friends but most of all, the loss of self-identity. "Who am I now?" This lost added greatly to the struggle to be normal and successful once again in society. In my journey towards graduation this June and entering the work force as a productive citizen, I have faced many challenges, struggles, and failures. I would like to share today what I have learned, to inform you of the challenges faced. I also like to lay out a plan for other veterans, family members, and friends of veterans to follow here at E.O.U. to achieve success while in transition. This talk is from my interviews and capstone project on Veterans access.

**Stefani Sorensen (Abstract under Cassandra Freeman)****Jessica Sosnowski and Shelby Moody**

Title of Project: Effects of Exercise on Short-Term Memory through Video Game Play  
Type of Presentation: Poster Presentation  
Location: Loso Hall Lobby  
Presentation Time: 10:00 - 10:50 a.m.

*Faculty Sponsor: Marie Balaban*

**Abstract:** The present study evaluated whether or not exercise had an impact on short-term memory through video game play (exercise vs. no-exercise). Thirty-two undergraduate students were assigned to either an exercise condition or a no-exercise condition. The exercise

condition utilized the Xbox Kinect gaming system, while the no-exercise condition utilized the Playstation 2 console. Short-term memory recall was assessed by using two Digit Span Recall tasks created by the experimenters. Students participated in the recall task before and after they completed 15 minutes of video game play. It was our prediction that participants in the exercise condition ( $M = -2.94$ ,  $SD = 3.56$ ) would show an improvement in short-term memory performance compared to the control condition ( $M = -1.50$ ,  $SD = 3.68$ ), but results indicated a decrease in memory recall for both conditions  $F(1,30) = 3.40$ ,  $p = .076$ . Perceived mental and physical effort were rated by participants on a Likert 7-point difficulty scale. There was a significant difference for mental effort in the no-exercise condition  $t(30) = -3.96$ ,  $p = 0.0004$ , indicating that participants in the no-exercise condition had a higher perceived mental effort than participants in the exercise condition.

**Jamarkus Springfield (Abstract under Stephanie Maestretti)**

**Jamarkus Springfield (Abstract under Mackenzie Trotter)**

**Darren Joseph Starks**

Title of Project: Social disorganization Theory: The media's influence on Juvenile delinquency in urban areas

Type of Presentation: Talk

Location: Loso Hall 115

Presentation Time: 9:30 - 9:50 a.m.

*Faculty Sponsor: April Curtis*

**Abstract:** This study is a focus on american urban areas experiencing rapid changes in their social and economic structure, or the "zones of transition." In particular, they looked to neighborhoods that were low in socio-economic status and High socioeconomic status to debunk the myth of the cycle of violence within these communities. While there is considerable empirical evidence that social disorganization is positively associated with crime rates in urban areas, the empirical literature on social disorganization and crime faces three crucial limitations: inconsistent results, reliance on official crime statistics and the failure to test the full model..socially disorganized neighborhoods tend to produce "criminal traditions" that could be passed to successive generations of youths, and through media influence, This system of pro-delinquency attitudes could be easily learned by youths through their daily contact with Media, and juvenile peer pressure. Thus, a neighborhood characterized by social disorganization provides fertile soil for crime and delinquency in two ways: through a lack of behavioral control mechanisms and through the cultural transmission of delinquent values.

**Lauren E. Steiger (Abstract under Emma Feldkamp)**

**Taylor Stewart**

Title of Project: WeRecruitNW

Type of Presentation: Talk

Location: Badgley Hall 117

Presentation Time: 11:30 - 11:50 a.m.

*Faculty Sponsor: Mike Sell*

**Abstract:** I will be presenting a high school athlete recruiting business that I have developed over the past two terms. This business that I created on my own called WeRecruitNW, is for high school athletes located in the Northwest that wish to further their career in collegiate sports, and that would most likely come play for EOU. My presentation will include my business website that I created in which I will describe all the aspects and services of my company. Once I have outlined the aspects of the company, I will then provide examples of a business package that my potential clients would be interested in purchasing. The package

will include: video, flyer, and player profile in which I have all designed myself. The research I have exhibited for this project included interviewing the athletic staff of EOU, spending much time on the internet, and checking out other recruiting businesses around the country.

**Mia Stoddard, Kuzivakwashe Kambasha, and John Rinehart**

Title of Project: Size Similarity of Microsatellite Markers among *Dendroctonus pseudotsugae* and *D. micans* Bark Beetles (Coleoptera: Curculionidae: Scolytinae)

Type of Presentation: Poster Presentation

Location: Badgley Hall Simmons Gallery

Presentation Time: 9:00 - 9:50 a.m.

*Faculty Sponsor: John Rinehart*

**Abstract:** Bark beetles of the genus *Dendroctonus* are specialized tree pests that have been destroying coniferous trees. Previous studies of this genus have revealed an isolation-by-distance model that explains most of the genetic variation within the species, but no studies had been done to determine how closely related *D. pseudotsugae* and *D. micans* are. These two species are fairly far apart in terms of geographical distance with *D. micans* being located in Europe while *D. pseudotsugae* is located in the western United States. This study tested the hypothesis that *D. pseudotsugae* microsatellites could also be amplified in *D. micans* despite a large geographical barrier because they are of the same genus, *Dendroctonus*. All six of the microsatellites that we tested were able to amplify in *D. micans* suggesting that *D. micans* and *D. pseudotsugae* are closely related. However, more research needs to be done to determine the specifics of their relations.

**Mia Stoddard, Katie Savee, Kaitlin Chattin, Teresa Gluth-Hampton, Jane Hayes, and John Rinehart**

Title of Project: Investigation of Northwestern North American Populations of the Dougle-Fir Beetle, *Dendroctonus pseudotsugae* Hopkins (Curculionidae: Scolytinae) Using New and Existing Microsatellite Markers

Type of Presentation: Poster Presentation

Location: Loso Hall Lobby

Presentation Time: 10:00 - 10:50 a.m.

*Faculty Sponsor: John Rinehart*

**Abstract:** Bark beetles of the genus *Dendroctonus* are well-documented major pests of conifers, with the Douglas-fir beetle, *D. pseudotsugae* (DFB) being especially destructive to its sole host, Douglas-fir. Prior studies on the population structure of DFB utilizing mitochondrial sequences have revealed an isolation-by-distance model that explains most of the genetic variation in the species. Fine-grained studies utilizing microsatellites have further refined the model, showing a clear separation between populations in the Pacific Northwest US, the northern Rocky Mountains, and Canada versus those found in the southern US, with some suggestion of reduced gene flow in populations in eastern Oregon. This study tested the hypothesis of reduced gene flow utilizing additional microsatellite markers and additional populations, and found a clear demarcation between populations in the far Pacific Northwest US, those in eastern Oregon and the northern Rocky Mountains into Canada, and those from the central Rocky Mountains. However, similarities between an outbreak population in eastern Oregon and those in western Oregon and Washington were also found, suggesting gene flow into the outbreak region from eastern Washington by way of the coastal populations in Oregon and Washington.

**Brooke Stout**

Title of Project: Man and Machine

Type of Presentation: Panel Presentation

Location: Zabel Hall 108

Presentation Time: 11:30 - 12:20 p.m.

*Faculty Sponsor: Scott McConnell*

**Abstract:** Since the creation of machinery, people have been opposed. They are opposed to the change, opposed to the thought of being replaced, and opposed to the impersonalization of the finished product. Ranging from the Luddites to the present, there has been opposition to machinery, or the idea of investment. Countless economists have pondered the idea of investment in machinery and the laborer. Will the laborer be replaced? How will the invention of new machinery impact the role of the laborer in society? The exploration of these questions has been answered by many economists, each in a different way. It is staggering the amount of insight some of these economists, including Adam Smith, David Ricardo, John Stuart Mill, Alfred Marshall, and Thorstein Veblen had in regard to man versus machine. The true question lies in whether society should view investment as “man versus machine” or “man and machine.” This presentation will discuss the findings of the aforementioned economists, debate the differing views, and come to a conclusion on whether man and machine truly work together or in opposition.

**Amanda Strong (Abstract under Jacob Malone)**

**Nicole Terrill**

Title of Project: Arranging the Entertainment of the President's Gala

Type of Presentation: Talk

Location: Loso Hall 115

Presentation Time: 11:30 - 11:50 a.m.

*Faculty Sponsor: April Curtis*

**Abstract:** As a theatre and communications major, I knew that I wanted to combine aspects of both for my communications capstone. In winter term I was an intern at the University Advancement office as part of my practicum and found out that they were in need of someone to organize the entertainment for the 50th President's Gala on May 2nd. It was suggested that we organize a selection of songs to be performed from the upcoming EOU production of Les Miserables. As a member of the theatre department, I decided to take on the planning of the entertainment and use it as my senior capstone for my communications degree. When I broached the subject to Kenn Wheeler, the director of Les Miserables, he agreed that it would not only be a good experience for me but would also promote the upcoming show. Since then I have attended rehearsals, decided on the songs, and attended the President's Gala meetings. Organizing this project has given me more respect for event planners and provided valuable insight into the process. Since this is what I would like to do when I graduate, it has been great to get a feel for the process.

**Jacob Thompson and Alicia Marlow**

Title of Project: The Rhetoric of Literature

Type of Presentation: Talk

Location: Loso Hall 115

Presentation Time: 11:00 - 11:20 a.m.

*Faculty Sponsor: Jodi Varon*

**Abstract:** Alicia Marlow and Jacob Thompson will present a pair of short lectures examining how literature reflects and affects the rhetoric of public culture and discourse. Alicia's project weighs depictions of pedophilia in Vladimir Nabokov's *Lolita* and Tom Robbins' *Fierce Invalids Home From Hot Climates* against contemporary and current conceptions, explaining how these divergent takes on the subject shapes readers' understanding of pedophilia. Jacob analyzes Guy Fawkes as a historical and literary symbol in Alan Moore's *V for Vendetta*, its

film adaptation, and Fawkes' symbolic reemergence in public discourse through Occupy Wall Street and other anarchistic protest groups. Both students explore different facets of the potential and realized impact of literature upon how we collaboratively make meaning in public spheres. There will be a short question and answer session for both presenters following the second presentation.

**James Thompson and Joseph Corsini**

Title of Project: Piecing Together the Mysteries of a Fossil Tortoise

Type of Presentation: Poster Presentation

Location: Loso Hall Lobby

Presentation Time: 10:00 - 10:50 a.m.

*Faculty Sponsor: Joe Corsini*

**Abstract:** As part of ongoing studies in the Corsini lab, the goal of this project was to increase knowledge about the evolution of extinct fossil tortoises in the early Oligocene period (about 30 Mya) of North America. The specimen in this study was recovered from Toadstool Park Geologic Area in Nebraska. The rock at Toadstool Park consists of massive volcaniclastic mudstones and siltstones representing a span of 4 million years. Our work on this project occurred in two stages. The specimen was first removed from the stone matrix and assembled in stage 1. Then in stage 2 it was illustrated for use in future phylogenetic studies. Preliminary analysis of several shell characters suggests that this turtle is most likely in the genus *Stylomys*.

**Dale Tovar**

Title of Project: Tonal Problem Analysis in an Atonal Context: A Narrative Analysis of Berg's Opus 3 String Quartet First Movement

Type of Presentation: Talk

Location: Zabel Hall 108

Presentation Time: 10:30 - 10:50 a.m.

*Faculty Sponsor: Anthony Tovar*

**Abstract:** Alban Berg's Op. 3 String Quartet first movement presents multiple problems relating to form, harmony, and rhythm. The piece was composed in 1910 as his first atonal work. The piece was also the largest atonal work yet written from either of the other atonal composers of Vienna, his colleagues Anton Webern and Arnold Schoenberg. The other early atonal works from his colleagues were characteristically short. Berg employed classical forms such as what resembles a sonata form in the first movement and rondo form in the second movement to achieve the desired length. With some unusual features relating to form in the first movement, it is plausible that, like Beethoven in some of his sonata form movements, Berg may use a "tonal problem" that he introduces early in the piece that may account for some of the problematic features of the piece. To apply this theory in an atonal setting it is necessary to first develop an understanding of the foreground material so as to determine the problem. After addressing the criteria for how to identify a tonal problem in an atonal context, this analysis will show the atonal problem and the effects it has on the rest of the piece.

**Mackenzie Trotter, Molly Alexander, Theresa Hamman, Aimee Kidrick, Jamarkus Springfield, Mack Lageson, Trevor Clark, and Cameron Livermore**

Title of Project: Oregon East Presents

Type of Presentation: Panel Presentation

Location: Badgley Hall 148

Presentation Time: 11:00 - 11:50 a.m.

*Faculty Sponsor: Jodi Varon*

**Abstract:** Presenting EOU's outstanding student writers! Students will read from their own

original poetry and prose accepted into the upcoming issue of Oregon East. The presenters will read a brief excerpt from their works, describe their personal creative processes involved in composition, and then field questions from the audience.

**Mackenzie Trotter (Abstract under Molly Alexander)**

**Shelby Tucker**

Title of Project: Title IX

Type of Presentation: Poster Presentation

Location: Pierce Library Lobby

Presentation Time: 9:00 - 9:50 a.m.

*Faculty Sponsor: Mark Platts*

**Abstract:** My project focuses on the effects that Title IX has on Eastern Oregon University (EOU). I want to know how much of the student body is aware of Title IX and if they would like to see a sport added to the current list of EOU athletic teams. My research includes reading numerous scholarly journals and research papers which gave me background on Title IX. I conducted interviews with; former athletic director Rob Cashell and the President of EOU, Bob Davies. I sent out a survey to understand what the students know about Title IX and to find out which sport they would like to see added to EOU athletics. The outcome among the student surveys showed that students know of Title IX but not much. Students also want more programs added to EOU. Through my interviews I learned about EOU's past experiences with Title IX and the process of adding another team. The results of my research have identified a need to educate students about the laws of Title IX. To fulfill this need I would like to make a poster explaining the significance of this study. That would be comprised of; how Title IX affects the decisions made by President Davies, the number of criteria the school has to meet when analyzing the existing and/or future athletic programs at EOU, and a means of educating the students on Title IX.

**Krissy VonPressentin (Abstract under Jacob Malone)**

**Shoshoni Walker**

Title of Project: Needs Analysis: Klamath Tribes Diabetes Prevention

Type of Presentation: Poster Presentation

Location: Badgley Hall Simmons Gallery

Presentation Time: 11:00 - 11:50 a.m.

*Faculty Sponsor: Kelly Rice*

**Abstract:** I will be creating a poster presenting my needs analysis for physical activity of tribal members who have completed the Klamath Tribes Special Diabetes Program for Indians (SDPI). Native Americans have a higher rate of diabetes than most ethnicities in the United States. We know there is a problem, but how do we fix the problem? A physical activity program needs to be designed to assist the members who have gone through the SDPI program. Out of the 53 members only 3 are younger than 40 years of age. The main source of physical activity for them is walking. In order for a physical activity program to be successful I need to figure out what kinds of physical activities they would want to participate in. My needs analysis will consist of a survey that the members will complete to figure out the best course of action for a physical activity program. My spring symposium poster would outline the steps I have taken with my needs analysis to create a physical activity program.

**Bill Walters**

Title of Project: Patient Education Materials Assessment Tool (PEMAT) Use to Assess Health Literacy Assessment in Wallowa County

Type of Presentation: Poster Presentation

Location: Pierce Library Lobby

Presentation Time: 10:00 - 10:50 a.m.

*Faculty Sponsor: Kelly Rice*

**Abstract:** Introduction- The Patient Education Materials Assessment Tool (PEMAT) was a tool developed by the U.S. Department of Health and Human Services as a systematic means of evaluating the understandability and actionability of both printable and audiovisual materials. The study will focus on the criteria used for printable materials. Method- Materials will be collected from a variety of health agencies and clinics in Wallowa County (6 total agencies). All materials will go through a systematic review using the PEMAT criteria. The rating and feedback will be given to contacts at each agency. If revisions are made the materials will be rated again to assure adequate revisions. Results- Currently the results are not complete, but will be reported in two manners. The first will be the initial materials provided and their associated PEMAT scores. The second will be PEMAT scores of those that were revised to display the effectiveness of their revisions. Conclusion- The results of this study have direct implications for health application in Wallowa County. Based on individual health literacy assessment, this PEMAT can be used to tailor the printable materials to match health literacy of the individual to provide a more effective means of communication.

**Tyler Watson (Abstract Under Jeff Wilder)**

**Jeff Wilder, Tyler Watson and Darren Dutto**

Title of Project: Lower Extremity Joint Angle Comparisons Between Male and Female Collegiate Sprinters

Type of Presentation: Poster Presentation

Location: Pierce Library Lobby

Presentation Time: 9:00 - 9:50 a.m.

*Faculty Sponsor: Darren Dutto*

**Abstract:** Morphological differences in males and females due to physical development imposed by gender specific hormones will influence athletic performance for many sports. Sprinting in particular is a high power output activity that relies on a combination of muscle power and coordination for optimal performance. Since males tend to have a greater muscle volume, they have greater muscle power capability, but this may also lead to technique (running pattern) differences when compared to female athletes. The purpose of this study was to compare the joint angles of the hip, knee, and ankle between 5 male and 8 female sprinters on Eastern Oregon University's track and field team. Sprinters were recorded with digital video over a distance of 10 meters after attaining their maximum sprint speed. The sagittal view allowed investigators to observe identified joint angles over two consecutive strides. Final results will be presented.

**Tel Winegar (Abstract under Emma Feldkamp)**

**Saraya Wise (Abstract under Alyssa Gurney)**

**Sashka Zungul (Abstract under Logan Loennig)**