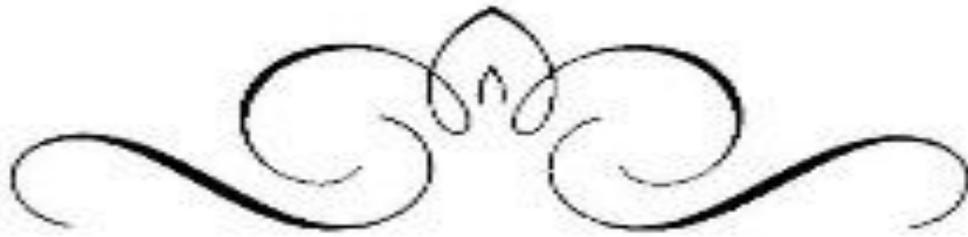


Spring
Symposium
2017



Wednesday, May 24, 2017

Eastern Oregon University

presents the Eighteenth Annual

Spring Symposium

"A celebration of undergraduate achievement in research and creative activities"



Spring Symposium 2017

Events Schedule

Wednesday, May 24, 2017

Please see pages 2 through 27 for extended descriptions and presenter names of each session

NOTE: This online program’s page references may differ slightly from printed version

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Wednesday, May 24, 2017

- 8:00 to 9:00 a.m. Participant registration / Continental breakfast.....Lobby of Loso Hall
- 9:15 to 10:15 a.m. Welcome & Keynote Presentations McKenzie Theatre
- Dr. Kyle Pfaffenbach, Chair
 - Thomas A. Insko, President of Eastern Oregon University
 - Keynote Presentations
- 10:30 a.m. to 2:30 p.m. Classroom talks, remote (online) presentations, panel/group presentations and poster presentations will occur in locations as noted within program details.
- 12:00 p.m. to 12:50 p.m. Special musical presentation McKenzie Theatre
Featuring EOU’s **45th Parallel Ensemble** and **Chamber Choir**
(open to all Symposium participants and supporters)

This year’s event includes high school junior and senior exhibitors. An invitation to participate was accepted for poster presentations of research by students from Hermiston High School, McLoughlin High School (Milton Freewater), Pendleton High School, Umatilla High School and Vale High School. These five schools are participating in Oregon Teacher Pathway in collaboration with EOU’s College of Education. Their projects will be displayed in Simmons Gallery, first floor of Badgley Hall. We welcome these students, their faculty and families to Spring Symposium 2017 at Eastern Oregon University.

The abstract descriptions and titles on the following pages are *as submitted* by the presenters and sponsoring faculty. Many thanks to our faculty sponsors: Colin Andrew, Le Bailey, Marie Balaban, Cori Brewster, Anna Cavinato, Alysia Cohen, April Curtis, Ryan Dearing, Darren Dutto, Bill Grigsby, Rebecca Hartman, Ron Kelley, Nancy Knowles, Tawnya Lubbes, Cory Peeke, Kyle Pfaffenbach, Jennifer Puentes, Kelly Rice, Jeremy Riggle, John Rinehart, Brian Sather, Steve Tanner, Jodi Varon and Amy Yielding.

The following students were selected by faculty to present this year's keynote presentations:

Keynote Presenter: ALONDRA ESQUIVEL

Alondra is a senior seeking a Bachelor of Arts degree in Anthropology/Sociology with Concentration in Social Welfare

Project Title: Pro-Environmental Behavior: Do We Care About the Environment?

Location: McKenzie Theatre, Loso Hall

Keynote Presentation: 9:25 a.m. to 9:45 a.m.

Faculty Sponsor: Bill Grigsby

Phi Kappa Phi Honor Society welcomes Alondra Esquivel.

Abstract: This study examined how people felt about the natural environment, why they felt that way, and what behaviors they exhibited because of it. In an effort to understand the concept of caring about nature and the actions and attitudes influenced by this sentiment, the study aimed to answer the research question: What leads students at Eastern Oregon University to care about the environment? A quantitative approach of basic research will generalize findings to add to the field of Environmental Sociology. For the study, an online survey was administered to EOU students enrolled in at least one on-campus course during Spring term of 2016. I focused on college students because I hoped to better understand the influences of socialization while in a formative point in life with a population that can recall memories that influenced their current behavioral choices. At this time, data analysis, interpretation, and future studies are ongoing and will be discussed at the 2017 Spring Symposium. *Professors Rosemary Powers and Bill Grigsby are acknowledged for research assistance.*

Also presenting during poster session, 10:30 a.m. to 11:20 a.m., in Lobby of Loso Hall

Keynote Presenter: EVAN RUMMERFIELD

Evan is a senior seeking a Bachelor of Arts degree in English/Writing with Minor in ESOL

Project Title: Our Stories

Location: McKenzie Theatre, Loso Hall

Keynote Presentation: 9:45 a.m. to 10:05 a.m.

Faculty Sponsors: Nancy Knowles and Cori Brewster

Abstract: We all have our passions that drive us through life, and through our passions, stories emerge-- stories worth sharing. Stories are what shape reality, and, in turn, stories are shaped by reality. For Evan Rummerfield, this is quite literal. Rummerfield will be reading aloud short excerpts from his manuscript length, fantasy-adventure novel, *Flames of War*. Stories are the backbone to humanity, and it allows us, as a society, to continue on because ideas are passed down. Spring Symposium is the medium in which we, Eastern Oregon University scholars, pass our stories, our passions, down.

Also presenting in panel presentations at 10:30 a.m. in Loso Hall 126 & at 12:30 p.m. in Loso 115

We invite all visitors to Spring Symposium 2017 to attend the following presentations by our EOU students and guest presenters from regional high schools participating in Oregon Teacher Pathway in collaboration with EOU's College of Education.

Presentations by Location

Location / Time	Format	Presenters	Faculty Sponsor
Art Studio – Senior Exhibit			
11:00 a.m. to 2:00 p.m. [Next to Gilbert Event Center]	Exhibit	Crystal Rainwater, Jacob Gunnels, Peter Maley, Lara Welford, Sarah Anderson & Jasmine Brookshire	<i>Cory Peeke</i>
Loso Hall, Room 115			
<i>Hosted by Phi Kappa Phi Honor Society</i>			
10:30 a.m. to 10:55 a.m.	Talk	Lauren Mills	<i>Ryan Dearing</i>
11:00 am to 11:25 a.m.	Talk	Sidronio Rangel	<i>Tawnya Lubbes</i>
11:30 a.m. to 11:55 a.m.	Talk	Alexa Shoemaker	<i>April Curtis</i>
12:00 p.m. to 12:25 p.m.	Talk	Gabrielle Stringfellow	<i>April Curtis</i>
12:30 p.m. to 1:20 p.m.	Panel	Haley Stammen, Evan Rummerfield & Neil Hetrick	<i>Cori Brewster</i>
1:30 p.m. to 1:55 p.m.	Remote (Online)	Rosemary Kinch	<i>Nancy Knowles</i>
2:00 p.m. to 2:25 p.m.	Talk	Nathan Zoon	<i>Ryan Dearing</i>
Loso Hall, Room 116			
10:30 a.m. to 10:55 a.m.	Talk	Taylor Rhoton & Mico Murphy	<i>Amy Yielding</i>
11:00 am to 11:25 a.m.	Talk	Ryan Blanchard, Mico Murphy & An Dinh	<i>Steve Tanner</i>
11:30 a.m. to 11:55 a.m.	Talk	Ryan Blanchard & Joel Jacobs	<i>Amy Yielding</i>
12:00 p.m. to 12:25 p.m.	Talk	Rachel Bock	<i>Ryan Dearing</i>
12:30 p.m. to 12:55 p.m.	Talk	Jasmine Brookshire	<i>Ryan Dearing</i>
1:00 p.m. to 1:25 p.m.	Talk	Samuel DeVore	<i>Ryan Dearing</i>
1:30 p.m. to 1:55 p.m.	Talk	Taylor Nelson	<i>Ryan Dearing</i>
Loso Hall, Room 117			
11:30 a.m. to 12:20 p.m.	Panel	Neil Hetrick plus a variety of Oregon East Contributors	<i>Jodi Varon</i>
12:30 pm to 12:55 p.m.	Talk	Rikki Griffin	<i>Jennifer Puentes</i>
1:00 p.m. to 1:25 p.m.	Talk	Matthew Booher	<i>April Curtis</i>
1:30 p.m. to 1:55 p.m.	Talk	Phath Chab	<i>Ryan Dearing</i>
Loso Hall, Room 126			
10:30 a.m. to 11:20 a.m.	Panel	Evan Rummerfield & Austin Strock	<i>Nancy Knowles</i>
11:30 a.m. to 11:55 a.m.	Talk	MeeMee Crossler-Laird, Reece Bauer & Maya Ah You-Dias	<i>Marie Balaban</i>
12:00 p.m. to 12:25 p.m.	Talk	Johnny Fulfer	<i>Rebecca Hartman</i>
12:30 p.m. to 12:55 p.m.	Talk	Mitchell Baker	<i>Ryan Dearing</i>
McKenzie Theatre			
9:25 a.m. to 9:45 a.m.	Keynote	Alondra Esquivel	<i>Bill Grigsby</i>
9:45 a.m. to 10:05 a.m.	Keynote	Evan Rummerfield	<i>Nancy Knowles</i>
10:30 a.m. to 11:20 a.m.	Panel	Rikki Stutheit, Trenten Anteau, Andrew Howe, Cassidy Watkins, Jake Chamberlain & Thomas Morrell	<i>Brian Sather</i>
12:00 p.m. to 12:50 p.m.	Music Event	(See page 25 for details)	<i>Music faculty</i>

Poster sessions are provided on next page

Presentations by Location

(continued)

Location/ Time of Poster Sessions	Presenters	Faculty Sponsor
Lobby of Loso Hall--10:30 a.m. to 11:20 a.m. Poster Sessions		
	Jessica Carter & Haley Breen	<i>Anna Cavinato</i>
	Tylo Colflesh & Maya Ah You-Dias	<i>Marie Balaban</i>
	Kendall Current	<i>Kelly Rice</i>
	Alondra Esquivel	<i>Bill Grigsby</i>
	Brian Mandella	<i>Anna Cavinato</i>
	Jessica Moore & Katherine Hood	<i>John Rinehart</i>
	Jessica Moore, Kaitlyn Reynolds & Cheyenne Camara	<i>John Rinehart</i>
	Madissen Ostergaard	<i>Kyle Pfaffenbach</i>
	Donovan Spikerman	<i>Jeremy Riggle</i>
	Rachael Stone, Alexa Peters & Emily Spears	<i>Kyle Pfaffenbach</i>
Lobby of Loso Hall--11:30 a.m. to 12:20 p.m. Poster Sessions		
	Kevin Clark	<i>Kelly Rice</i>
	Jordan Hillmick & Christopher Gianandrea	<i>Alysia Cohen</i>
	Ryan Hunt, Caitlyn Newkirk & Marie Gaylord	<i>Jeremy Riggle</i>
	Katelyn Ridder	<i>Kelly Rice</i>
	Myra Shanahan	<i>Jeremy Riggle</i>
	Baylee L. Shelton	<i>Darren Dutto</i>
	Kai Turner, Colin Deyarmin & Mariah Swanson	<i>Kyle Pfaffenbach</i>
Lobby of Loso Hall--12:30 p.m. to 1:20 p.m. Poster Sessions		
	Hayden Albrecht	<i>Kelly Rice</i>
	Jasmine Dixon	<i>Le Bailey</i>
	Darian Gasseling	<i>Kelly Rice</i>
	Crystal Mitchell, Callie Norman, Brianna Mees, Jenny Vardanega & Daysi Bedolla	<i>Colin Andrew</i>
	Payton Parrish	<i>Kelly Rice</i>
	Rikki Stutheit	<i>Kelly Rice</i>
Lobby of Loso Hall--1:30 p.m. to 2:20 p.m. Poster Sessions		
	Elizabeth Ayers	<i>Darren Dutto</i>
	Caitlynn Barton, Madeline Lease, Joel Jacobs, Bri Stavaas, Olivia Starks & Michael Hillman	<i>Ron Kelley</i>
	Daysi Bedolla & Myra Shanahan	<i>Anna Cavinato</i>
	Charlette Burghard, Lena Johnson & Piper Cantrell	<i>Ron Kelley</i>
	Miles Loupe	<i>Brian Sather</i>
	Dillon Lytsell & Osvaldo Martinez	<i>Kyle Pfaffenbach</i>
	Krystal Schadwald	<i>Kyle Pfaffenbach</i>
	Christina Wakinyan & Leah Harris	<i>Kyle Pfaffenbach</i>

Presentation Abstracts

(in Alphabetical order by last name)

Maya AH YOU-DIAS

[See abstract listed under Tylo Colflesh]

Maya AH YOU-DIAS

[See abstract listed under MeeMee Crossler-Laird]

Hayden ALBRECHT

Project Title: Effects of participation in after school program on perceived psychological stress in middle school youths

Type of Presentation: Poster

Location: Lobby of Loso Hall

Presentation Time: 12:30 p.m. to 1:20 p.m.

Faculty Sponsor: Kelly Rice

Abstract: INTRODUCTION: A physically active lifestyle generates many health benefits. One known benefit of regular physical activity is stress reduction. The purpose of this study is to assess the effects of attending an outdoor activity based after-school program (GO-ASAP) on perceived stress in middle school youths. METHODS: Students completed the Perceived Stress Scale(PSS) survey. The PSS assesses an individual's perception of psychological stress during the past month. Scores ranging from 0-13 are considered low stress. Scores ranging from 14-26 are considered moderate stress. Scores ranging from 27-40 are considered high stress. The PSS was administered at the beginning of the program and week 10. GO-ASAP was conducted for 18 weeks (2 X wk/150-180 mins) and included attendance monitoring and reinforcement, health and prevention curriculum lectures, and outdoor recreational programming. Nineteen students (male=10, female=9) completed the post-assessment while only eight students (male=3, female=5) completed the pre-assessment. RESULTS: Assessed perceptions of stress prior to program implementation had a mean and standard deviation score of 20.34 ± 5.6 while the mid-test had a mean of 17.32 ± 8.12 . CONCLUSION: Analyses provides evidence of a relation between reduction in stress levels and participation in GO-ASAP.

Sarah ANDERSON

[See abstract listed under Crystal Rainwater]

Trenten ANTEAU

[See abstract listed under Rikki Stutheit]

Elizabeth AYERS

Project Title: Comparing the effectiveness of high quality to lower quality running shoe

Type of Presentation: Poster

Location: Lobby of Loso Hall

Presentation Time: 1:30 p.m. to 2:20 p.m.

Faculty Sponsor: Darren Dutto

Abstract: Several studies have been conducted which examine running styles and proper running technique. Running shoes should help prevent injuries while improving performance. Hip and knee overuse injuries are common amongst runners and are frequently caused by improper running technique. The purpose of this study is to determine if a higher quality running shoe gives a significant advantage in training than a lower quality running shoe. The shoes that were tested were the Adidas Springblade and Powerblaze running shoes. Subjects participated in three tests three different times; running barefoot, with the Springblade, and with the Powerblaze shoes. The three tests observed running kinematics of the lower body which was tracked using reflectors and cameras in the sagittal and frontal planes, amount of force generated while running using a force plate, and the amount of oxygen consumed while running at a sub-maximal pace using a metabolic cart. Data analyses are in process. *Darren Dutto is acknowledged for research assistance.*

Mitchell BAKER

Project Title: The Impact of Country Music in Society

Type of Presentation: Talk

Location: Loso Hall 126

Presentation Time: 12:30 p.m. to 12:55 p.m.

Faculty Sponsor: Ryan Dearing

Abstract: Country music is one of the most popular styles of music that exist for people today. Historically speaking, country music has had a unique impact on important issues in American society, including race, class, and gender. Many people enjoy listening to and watching country music either on the radio, in concert, or on television. Country singers and songwriters have discussed race, class and gender in their songs, which has provided a creative, if controversial, way to communicate these very crucial issues to the broader society. There are also many important people associated with the country music industry who have helped create the elements which have carried the industry today. This historiography examines the history of country music and follows that history into the present day. This historiography also looks at how country music has produced a problematic commentary on important American social issues since 1975.

Caitlynn BARTON with Madeline M. Lease, Joel D. Jacobs, Bri L. Stavaas, Olivia E. Starks and Michael E. Hillman

Project Title: Analysis of Pyrrolizidine Alkaloids in *Cryptantha maritima*

Type of Presentation: Poster

Location: Lobby of Loso Hall

Presentation Time: 1:30 p.m. to 2:20 p.m.

Faculty Sponsor: Ron Kelley

Abstract: Pyrrolizidine alkaloids (PA's) are potentially toxic, naturally occurring secondary products, typically found in the plant family Boraginaceae. As a part of an alkaloid analysis of the Boraginaceae family, *Cryptantha maritima* from the Mojave and Sonoran Deserts of southern California was analyzed to establish a GC-MS PA profile. A preliminary analysis of the initial sample showed over fifteen resolved PA's. Most alkaloids appear to be retronecine based compounds. The major compounds are consistent with the open 7,9-diester structures where the 7-position is principally esterified with derivatives of angelic acid. Five previously examined North American annual *Cryptantha* species have displayed a diverse array of PA diester structures, especially in regards to the esterifying carboxylic acids. However, *C. maritima* appears to be primarily esterified at the 9-position with latifolic acid instead of trachelanthic acid. This is the first reported PA analysis of the common desert annual *C. maritima*.

Reece BAUER

[See abstract listed under MeeMee Crossler-Laird]

Daysi BEDOLLA with Myra A. Shanahan

Project Title: Analysis of Polyphenols in Beer

Type of Presentation: Poster

Location: Lobby of Loso Hall

Presentation Time: 1:30 p.m. to 2:20 p.m.

Faculty Sponsor: Anna Cavinato

Abstract: Beer is one of the oldest alcoholic beverages known to mankind and it is widely consumed across the world. An important class of compounds found in beer is polyphenols which are phenolic compounds with known antioxidant activity. Polyphenols come from main ingredients in beer such as barley and hops. They contribute to the flavor and quality of beer. Particularly, they may affect the bitterness and clarity of the product. We present a study that was conducted within the Instrumental Analysis Course, which aimed at analyzing the content of three specific polyphenols, caffeic, ferulic, and p-coumaric acids using high performance liquid chromatography and UV-VIS spectrophotometry. The study was conducted by measuring total polyphenolic content as well as the content of the three specific acids in four commercially available products. *Anna G. Cavinato is acknowledged for research assistance.*

Daysi BEDOLLA

[See abstract listed under Crystal Mitchell]

Ryan BLANCHARD with Mico Murphy and An Dinh

Project Title: Secret Codes of the Red River Gang (Kryptos)

Type of Presentation: Talk

Location: Loso Hall 116

Presentation Time: 11:00 p.m to 11:25 a.m.

Faculty Sponsor: Steve Tanner

Abstract: Kryptos, is a contest open to any and all undergraduate students. The theme of the contest is centered around breaking (or cryptanalysis) of ciphers (secret writing). Each challenge presents contestants with a brief scenario together with some ciphertext (encoded message). The goal is to discover the original English plaintext message. Each contest includes three challenges to solve through various techniques in cryptanalysis such as frequency analysis and pattern recognition. The challenges this year revolved around the "Red River Gang" who dealt in black market weaponry, and our task was to determine some of their meeting locations as well as the happenings within the organization. The contest began on April 13th at 4:00 pm, and the codes were available until April 17th, 4:00 pm. This year's Eastern Oregon University team completed all three challenges within 24 hours and placed 6th overall in the international competition.

Ryan BLANCHARD with Joel Jacobs

Project Title: Clique-Galaxy Quest

Type of Presentation: Talk

Location: Loso Hall 116

Presentation Time: 11:30 a.m. to 11:55 a.m.

Faculty Sponsor: Amy Yielding

Abstract: In this talk, we construct the inertia tables for a family of graphs we call Clique-Galaxies. The inertia table of a graph is the set of points that represent all possible amounts positive and negative eigenvalues of its corresponding adjacency matrix. This research was completed through the Mathematics Undergraduate Research Group at EOU. *Mico Murphy, Taylor Rhoton, and Amy Yielding are acknowledged for research assistance.*

Rachel BOCK

Project Title: The Chicano Movement and its Impact on Education Opportunities for Mexican-American Students

Type of Presentation: Talk

Location: Loso Hall 116

Presentation Time: 12:00 p.m. to 12:25 p.m.

Faculty Sponsor: Ryan Dearing

Abstract: With tensions growing surrounding human rights and the rights of those deemed un-American, a closer look at the Chicano movement that took place throughout the 1960s and 1970s provides a better understanding of the current educational climate for students affected by these tensions. This presentation explores a variety of activist strategies and beliefs, as well as their outcomes with a focus on the educational inequalities that Mexican American students faced. This capstone discusses the impact the Chicano movement had on educational rights and opportunities for Mexican Americans. Through the use of primary sources such as newspaper articles, an epic poem, and court cases, this teaching unit engages students with material that educated and fueled the Chicano movement. The ultimate goal of this set of lessons is to encourage students to see ethnic empowerment through the impact on educational rights earned by Chicano activists.

Matthew BOOHER

Project Title: Leadership and Logistics: The Communication Necessities of a Cadet Executive Officer

Type of Presentation: Talk

Location: Loso Hall 117

Presentation Time: 1:00 p.m. to 1:25 p.m.

Faculty Sponsor: April Curtis

Abstract: With my academic major being Communications, and my minor being Military Science I have learned first-hand what it takes to lead a team as well as how to communicate effectively. During my tenure as the Cadet XO (Executive Officer) in the EOU ROTC program this last year, I have had to use both of these skills every day. This last year I have had to organize the logistics of a three-day field training exercise, the movement of our supply room, the gear issue to all our cadets, and a formal military dining out, all while taking 20+ credits per term, and serving as a military police officer in the Oregon National Guard. The goal of

my project is to describe how being both an effective leader and communicator not only made my responsibilities easier, but how they were also essential to successfully complete them.

Haley BREEN

[See abstract listed under Jessica Carter]

Jasmine BROOKSHIRE

[See abstract listed under Crystal Rainwater]

Jasmine BROOKSHIRE

Project Title: The Devouring: Romani Genocide of the Holocaust

Type of Presentation: Talk

Location: Loso Hall 116

Presentation Time: 12:30 p.m. to 12:55 p.m.

Faculty Sponsor: Ryan Dearing

Abstract: This project examines how historians have examined the Roma, commonly referred to by the derogatory term "Gypsy," genocide of World War II and traces the scholarship through the 1990s. This scholarship has suffered from a lack of primary sources or recorded history of the Roma people. Nazi Party descriptions of the Roma people in Europe as nomadic and "biologically criminal" played a role in early historians who covered the victims of the Holocaust. Historians have, however, explored the aversion to the Roma people in Europe, with emphasis in the Third Reich during WWII, as they became a target for the National Socialist party in order to keep "racial purity." Scholars have often expressed a curiosity as to racial motivations for genocide. Examinations of the overall social status and stigma of Roma people led for historians to shift from questioning whether or not it was genocide to the complicated racial and ethnic facets of the Holocaust, or "The Devouring," as it is called by the Roma. While Germany acknowledges that the Roma were victims of the Nazi Party during the Holocaust and restitutions were later paid, the debate continues for historians on the racial component of the systematic genocide.

Charlette BURGHARD with Lena Johnson and Piper Cantrell

Project Title: NMR Analysis of Pyrrolizidine Alkaloid Monoesters from the Plant Family Boraginaceae

Type of Presentation: Poster

Location: Lobby of Loso Hall

Presentation Time: 1:30 p.m. to 2:20 p.m.

Faculty Sponsor: Ron Kelley

Phi Kappa Phi Honor Society welcomes Charlette Burghard.

Abstract: Pyrrolizidine alkaloids (PA's) are potentially toxic, naturally occurring secondary products typically found in the plant family Boraginaceae. Previous work has allowed the elucidation of unsaturated PA 9-monoesters stereoisomers, such as lycopsamine, echinatine, intermedine, and indicine. As part of a continuing alkaloid analysis of the family Boraginaceae, plant samples were collected and subsequently analyzed by nuclear magnetic resonance spectroscopy (NMR). Spectroscopic comparisons of these known unsaturated PA 9-monoesters to the novel 9-monoesters isolated last year will allow us to predict preliminary assignments of stereochemical configurations at the chiral 7, 8, 2', and 3' positions. This research will further establish the structural elucidation of PA's in our lab. *Dr. Ron Kelley is acknowledged for research assistance.*

Cheyenne CAMARA

[See abstract listed under Jessica Moore]

Piper CANTRELL

[See abstract listed under Charlette Burghard]

Jessica CARTER with Haley Breen

Project Title: Aptamer selection assisted by graphene oxide

Type of Presentation: Poster

Location: Lobby of Loso Hall

Presentation Time: 10:30 a.m. to 11:20 a.m.

Faculty Sponsor: Anna Cavinato

Abstract: Our research efforts focus on the development of diagnostic sensors for bacterial detection. The

sensor is based on DNA aptamers which are artificial, single-stranded DNA molecules shorter than 100 nucleotides. Aptamers continue to be widely used for diagnostic applications as they display the ability to bind and identify specific target molecules with high selectivity. We aim at isolating aptamers with high affinity to p57 or Major Soluble Antigen (MSA), the principal antigenic protein found on the surface of *Renibacterium salmoninarum* responsible for bacterial kidney disease in salmonids. Aptamers are identified from a large, random pool through a process called Systematic Evolution of Ligands by EXponential amplification (SELEX). We are targeting the R2a and R2c sub constructs from region 2 which contains a putative DNA-binding domain that is believed to be a good binding site for aptamers. The current SELEX method incorporates graphene oxide. This approach is based on recent findings that ssDNA can interact strongly with graphene oxide, making it an excellent tool to help enrich pools of DNA. The method eliminates the use of affinity chromatography to immobilize the target; therefore, the entire process is much simpler, rapid and cost effective. *Gabriella Rodriguez, Brian Mandella, Donovan Spikerman and Dr. Anna Cavinato are acknowledged for research assistance.*

Phath CHAB

Project Title: Paradigms in the Origin of the Gay Civil Rights Movement

Type of Presentation: Talk

Location: Loso Hall 117

Presentation Time: 1:30 p.m. to 1:55 p.m.

Faculty Sponsor: Ryan Dearing

Abstract: This research project is on the origins of the gay civil rights movement in the mid twentieth century. It covers post-prohibition anti-gay legislation, homosexual music and film, and most importantly the Stonewall Inn riots in 1969. There were struggles and victories in this era. From an historical analysis, this study suggests that more information provided about this topic will grant further scholarship in the field of humanities of people and society's behavior. An inclusive society enhances cultural sensitivity pertaining to gay men and lesbians. Historical evidence illustrates that forces were created to provide direction for the gay civil rights movement. This presentation focuses primarily on America and offers an in-depth interpretation of Oregon's historical gay culture. It attempts to uncover the lives of the openly, out of the closet gay public, also known as the invisible people, and how they fought for justice, their community, careers, love, family, and friendship.

Jake CHAMBERLAIN

[See abstract listed under Rikki Stutheit]

Kevin CLARK

Project Title: Building Intrinsic Motivation in Adolescents through GO-ASAP

Type of Presentation: Poster

Location: Lobby of Loso Hall

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

Faculty Sponsor: Kelly Rice

Abstract: INTRODUCTION: Exposure to non-competitive outdoor activities during adolescence may influence individual intrinsic motivation through autonomy, competence, and relatedness. PURPOSE: The purpose of this study is to investigate if exposure to outdoor activity increases intrinsic motivation. Methods: Subjects (m=9, f=9) participated in the Get Outside After School Activity Program (GO-ASAP). GO-ASAP is a 20 wk (2 X/WK for 2.5 hrs/session) program to introduce students to outdoor activities. A 45 item survey, 'Intrinsic Motivation Index' (IMI), was administered during wks 1, 10, and 20. The survey consists of seven categories that report changes in Interest, Effort, Pressure, Value, Relatedness and Perceived Competence/Choice. Questions on the IMI were rated from a 1 to 7 scale. RESULTS: Significant mean \pm SD changes were noted in IMI sub-scales Perceived Competence (Pre: Mean=3.7, SD=0.41, Mid=4.5, SD=0.56), Perceived Choice (Pre: Mean=5.1, SD=0.92, Mid:Mean=5.8, SD=1.59), and Pressure/Tension (Pre: Mean=3.2, SD=0.99. Mid: Mean= 2.6, SD=1.44). CONCLUSION: No change greater than 1 point was reported in the seven sub-scale categories of the IMI due to a small sample size.

Tylo COLFLESH with Maya Ah You-Dias

Project Title: Effects of Learning Styles and Complimentary Instruction on Academic Achievement

Type of Presentation: Poster
Location: Lobby of Loso Hall
Presentation Time: 10:30 a.m. to 11:20 a.m.

Faculty Sponsor: Marie Balaban

Phi Kappa Phi Honor Society welcomes Tylo Colflesh.

Abstract: The present experiment examined the effects of preferred learning styles and complementary instruction on the completion of the Tower of Hanoi task. A learning style inventory assessment was used to identify individual learning styles. Participants then were assigned to either a preferred or nonpreferred instruction condition. Those in the preferred condition received instruction that matched their learning style, and those in the nonpreferred condition received instruction that did not match their learning style. They were then given three, three minute attempts to solve the Tower of Hanoi task. Based on their performance subjects were given an overall score where the lower the score, the more successful they completed the task. It was hypothesized that those in the preferred condition should perform the task at a more successful rate than those in the nonpreferred condition. Contrary to the hypothesis, subjects in the preferred condition did not significantly complete the task more successfully than those in the nonpreferred condition. Based on these findings, it was concluded that instruction does not need to be catered to individual learning styles in order for optimal learning to occur.

MeeMee CROSSLER-LAIRD with Reece Bauer and Maya Ah You-Dias

Project Title: Can you learn the rule? Examining executive function in preschool-aged children

Type of Presentation: Talk

Location: Loso Hall 126

Presentation Time: 11:30 a.m. to 11:55 a.m.

Faculty Sponsor: Marie Balaban

Phi Kappa Phi Honor Society welcomes YunMee (MeeMee) Crossler-Laird.

Abstract: Past studies of young children's ability to learn and switch rules in the Dimensional Change Card Sort task indicate that learning the first rule is easy but switching to a new rule is a challenge. The current study was based on a simplified variation of the task. Children between 3 and 5 years of age were presented with pairs of cards with drawings of blue or red trucks or boats. They were reinforced for selecting a particular dimensional category (e.g., truck shape). After successfully learning that rule, they were told the rule was changing and it changed either intradimensionally (change to boat), or interdimensionally (change to red). Younger children found the switch more challenging than older children did, and the interdimensional switch was more difficult than the intradimensional switch. Results are discussed in terms of the emergence of executive control functions in early childhood. *Marie Balaban and the EOU Foundation are acknowledged for research assistance.*

Kendall CURRENT

Project Title: Comparisons of an outdoor after school activity program and physical education on self-efficacy and MVPA in adolescents

Type of Presentation: Poster

Location: Lobby of Loso Hall

Presentation Time: 10:30 a.m. to 11:20 a.m.

Faculty Sponsor: Kelly Rice

Abstract: INTRODUCTION: After school outdoor activities programs have been found to increase feelings of self-efficacy, self-confidence, and improve physical fitness. PURPOSE: The purpose of the study was to measure self-efficacy regarding physical activity and moderate-to-vigorous physical activity (MVPA) levels in both physical education (PE) class and Get Outside-After School Activity Program (GO-ASAP). METHOD: A Self-Efficacy survey scale was given to each student on week 10 of a 20-week program, to assess student's self-efficacy, and enjoyment of physical activity in GO-ASAP and PE. Additionally, accelerometers, were used to assess MVPA in both PE and GO-ASAP. RESULTS: There was a statistically significant increase in MVPA for time spent in PE (14.21%) versus time spent in GO-ASAP (29.95%) ($p=.0002$). Enjoyment of the two programs indicated on a 5 point likert-scale reported an average of 3.7 for PE, and 4.6 for GO-ASAP ($p=0.03$). There was a slight decrease in self-efficacy in GO-ASAP compared to PE, but it is not statistically significant (3.83-3.62, $p=.506$). CONCLUSION: GO-ASAP participants have higher self efficacy and MVPA than a traditional physical

education class, if that is the case, this information could guide curricula for future PE classes and outdoor programs. *Kelly Rice, Emily Elsner, Katelyn Ridder, Hayden Albrecht, Kevin Clark, Karin Hefington and Zane Smith are acknowledged for research assistance.*

Samuel DeVORE

Project Title: Britain's Medical Revolution and the First World War

Type of Presentation: Talk

Location: Loso Hall 116

Presentation Time: 1:00 p.m. to 1:25 p.m.

Faculty Sponsor: Ryan Dearing

Abstract: This thesis will explore how the First World War directly influenced the advancement of modern medicine in Britain. The infrastructure of the British Army had to adapt to the massive number of casualties by revamping their military medical practices. This pressure to save as many lives as possible brought about some of humanity's most important advances in medicine, from improved x-ray technology to blood transfusions. The methodology for this research has been to look at primary source documents, such as Dr. Harvey Cushing's writings in his book, *From a Surgeon's Journal*, as well as essays written during the period on the ethics and evolving nature of medicine. This research reveals that many of the world's most prolific and lifesaving advances in medicine came as a direct result of the war. Thus, the industrialized nature of the First World War not only shaped the politics and geography of the early twentieth century, but also the world of modern medicine today.

Colin DEYARMIN

[See abstract listed under Kai Turner]

An DINH

[See abstract listed under Ryan Blanchard]

Jasmine DIXON

Project Title: Gender and Sexuality Resource Center

Type of Presentation: Poster

Location: Lobby of Loso Hall

Presentation Time: 12:30 p.m. to 1:20 p.m.

Faculty Sponsor: Le Bailey

Abstract: This presentation will display the research and work that went into developing the Gender and Sexuality Resource Center (GSRC), which is to provide a safe space in which gender and sexuality resources are available for checkout to any individual who wants such access. Additionally, this space allows for individuals to openly discuss gender and sexuality related matters.

Johnny FULFER

Project Title: The Rhetoric of Economic Science: Dollar Diplomacy and the Universal Nature of American Economic Imperialism.

Type of Presentation: Talk

Location: Loso Hall 126

Presentation Time: 12:00 p.m. to 12:25 p.m.

Faculty Sponsor: Rebecca Hartman

Abstract: This paper examines the history of US involvement in the Philippines and Caribbean during the early twentieth century. After the Spanish-American War, US foreign policy focused on economic intervention in these and other nations in an effort to align developing nations with an American vision of social and economic progress. Specifically, my paper analyzes the role of financial experts and economic advisors in the emergence of what has been termed 'dollar diplomacy,' arguing that American involvement in these nations was framed by the new economic science, which grew out of a larger cultural perspective that viewed science generally, as the pursuit of universal laws in nature. This concept of universality was a rhetorical structure that privileged the advice of American economic & financial advisors, often designed to benefit the US, by cloaking it in the mantle of natural law and the advancement of civilization.

Darian GASSELING

Project Title: The preliminary findings of a four-year outdoor program intervention to increase physical activity in 4th and 5th grade girls through running activities.

Type of Presentation: Poster

Location: Lobby of Loso Hall

Presentation Time: 12:30 p.m. to 1:20 p.m.

Faculty Sponsor: Kelly Rice

Abstract: INTRODUCTION: Identifying changes of physical activity and physical fitness in pre-adolescent girls through the outdoor Run Girl Run Program. Run Girl Run is an outdoor physical activity program for 4th and 5th grade girls to keep them physically active and reduce risks for depression, anxiety, and obesity. METHODS: Run Girl Run is a 11-week (2X wk/180 mins) program Throughout the program a physical activity questionnaire that measures the physical activity the girls participated in the past seven days, will be filled out by the girls (3x; week 2 , week 6, week 11). A timed 400 meter will also be recorded during each of those weeks and comparisons will be made to see if increased physical activity results in increased physical fitness. RESULTS: The program currently consists of 17 participants. Their ages range from 9-12. The girls have ran their baseline 400 meter and had an average of 2:05. They also have taken the first physical activity questionnaire. Conclusion: Run Girl Run will help evaluate if increased physical activity results in increased physical activity results in increased physical fitness in 4th and 5th grade girls. *Robin Maille is acknowledged for research assistance.*

Marie GAYLORD

[See abstract listed under Ryan Hunt]

Christopher GIANANDREA

[See abstract listed under Jordan Hillmick]

Rikki GRIFFIN

Project Title: Perceptions of Beauty in Rodeo Queens

Type of Presentation: Talk

Location: Loso Hall 117

Presentation Time: 12:30 pm to 12:55 p.m.

Faculty Sponsor: Jennifer Puentes

Abstract: How do women's perceptions of beauty shape their expressions of self? I explore these questions and others in a review of the literature examining how women engage with beauty norms in a rural setting. While numerous studies have been conducted about beauty and cosmetics, virtually all of these studies have focused on women living in urban environments and few studies examine women's engagement with beauty norms in rodeo setting, especially with Rodeo Queens, little research has explored this stylized version of beauty. This session will tie reviews of literature to Rodeo Queens by looking at beauty perceptions in a rodeo setting. It will explore the impacts that beauty norms have in a small rural setting.

Jacob GUNNELS

[See abstract listed under Crystal Rainwater]

Leah HARRIS

[See abstract listed under Christina Wakinyan]

Neil HETRICK with a variety of Oregon East contributors.

Project Title: Oregon East

Type of Presentation: Panel Presentation

Location: Loso Hall 117

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

Faculty Sponsor: Jodi Varon

Phi Kappa Phi Honor Society welcomes Neil Hetrick.

Abstract: Oregon East is EOU's student-run and student funded literary and art Journal. Our panel presentation is a preview of the 2017 edition of the magazine spotlighting EOU's amazing student writers and artists! Students will read from their works of Poetry and prose accepted for publication. Students will also describe the creative process from their first idea to final piece. There will be a Q&A session after the presentation.

Neil HETRICK [See abstract listed under Haley Stammen]

Phi Kappa Phi Honor Society welcomes Neil Hetrick.

Michael HILLMAN [See abstract listed under Caitlynn Barton]

Phi Kappa Phi Honor Society welcomes Michael Hillman.

Jordan HILLMICK with Christopher Gianandrea

Project Title: Physical Activity Through Organized Sport

Type of Presentation: Poster

Location: Lobby of Loso Hall

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

Faculty Sponsor: Alysia Cohen

Abstract: Adult overweight and obesity is a state-wide health concern. Compared to urban communities, rural geographic locations pose unique barriers to physical activity and maintenance of healthy body weight. To address the gap and the growing health concern associated with physical inactivity, an adult co-ed soccer program was delivered in Union County. The program emphasized physical activity, social health, and increase awareness, knowledge, and skills of soccer for participants and procedural planning and implementation for recreational program organizers. A program manual was developed to support ongoing efforts in sustaining the program. The need for continuation of the program is by our findings from research methodologies completed in conjunction with the program delivery. Results suggest a need for community adult recreational sports to support personal fitness and health goals, enjoyment of sport participation, engage in new activities, and participate in activity in group/team settings. It is recommended the program continue under the direction of the community recreational department or other community sponsors. It is recommended the program continue under the direction of the community recreational department or other community sponsors in concerted effort to improve physical activity behavior and associated health risks in Union County. *Alysia Cohen is acknowledged for research assistance.*

Katherine HOOD [See abstract listed under Jessica Moore]

Ryan HUNT with Caitlyn Newkirk and Marie Gaylord

Project Title: Quantification of Cd, Cr, Pb, and Zn in Local Recreational Cannabis Flowers by Atomic Absorption Spectroscopy

Type of Presentation: Poster

Location: Lobby of Loso Hall

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

Faculty Sponsor: Jeremy Riggle

Abstract: Following the legalization of recreational cannabis, the state of Oregon has been developing quality control standards in the interest of protecting public health. Despite including potency, pesticides, microbial and residual solvents, the state has not mandated testing for metals. The objective of this project was that of quantifying specific metals in locally cultivated cannabis flowers. Samples were collected and analyzed for the presence of Cd, Cr, Pb, and Zn. Samples were dried for 24 hours at 100°C, then subject to both microwave-assisted and chemical digestion. Following digestion, samples were filtered, diluted and analyzed with atomic absorption spectroscopy to quantify the metals. All of the flower samples were found to contain measurable amounts of Zn which is expected considering it is an essential element to over 300 plant enzymes. Cd, Cr, and Pb, which are well known toxic metals, were also found in trace amounts in certain cannabis flowers. These findings are consistent with the data suggesting cannabis plants bioaccumulate certain metals. *Jeremy Riggle is acknowledged for research assistance.*

Joel JACOBS [See abstract listed under Ryan Blanchard]

Joel JACOBS [See abstract listed under Caitlynn Barton]

Lena JOHNSON [See abstract listed under Charlette Burghard]

Phi Kappa Phi Honor Society welcomes Lena Johnson.

Rosemary KINCH

Project Title: Report on Incident Management Communications and the Results on Local Communities.

Type of Presentation: Remote Presentation (Online)

Location: Loso 115

Presentation Time: 1:30 p.m. to 1:55 p.m.

Faculty Sponsor: Nancy Knowles

Phi Kappa Phi Honor Society welcomes Rosemary Kinch.

Abstract: Increasing natural disasters require alternatives to government incident-management policies. Currently, the Federal Emergency Management Agency (FEMA) administrates the Incident Management System (IMS), using its "Concept of Response" for implementing its strategies, controlling responses, and assigning responsibility to local units. Non-collaborative government communication practices amplify incidents' negative outcomes. This report argues for integration of neighborhood PTA leaders in transparent, collaborative communication with local responders to support positive outcomes for communities facing disasters. It uses primary and secondary research methods, including eyewitness accounts, personal interviews, scholarly research, and analysis. The scope is limited to failures of federal communication during hurricanes with both local and NGO responders and victims. Victims expect trusted local leaders to help them recover, necessitating communication transparency and collaboration with incident management. This report concludes that FEMA's position as the foremost authority distorts and restricts its communications with other responders. Recommendations of transparent and collaborative communication include a proposal to the Mecklenburg Advocacy Council to solicit leadership candidates from the Parent Teacher Association Auxiliary Board. These leaders have comprehensive knowledge and trusted relationships within their local communities, making them effective liaisons during disasters. *Dr. Nancy Knowles is acknowledged for research assistance.*

Madeline LEASE

[See abstract listed under Caitlynn Barton]

Miles LOUPE

Project Title: Proposal: Add Sports Management Masters and Undergraduate Degree Programs to the Eastern Oregon University campus

Type of Presentation: Poster

Location: Lobby of Loso Hall

Presentation Time: 1:30 p.m. to 2:20 p.m.

Faculty Sponsor: Brian Sather

Abstract: Sport management is "the coordination of resources, technologies, processes, personnel, and situational contingencies for the efficient production and exchange of sport services" (Chelladurai, 1994). It has been proposed that EOU implement a sports management degree program to promote the growth of all students. The implementation of these degree plans will have a dramatic impact not only for on-campus and online recruitment and retention of students, but also mutually-beneficial improvements in local and regional sport and recreation programs. These degrees will allow current and potential students to diversify their studies and grow in an area with many possibilities. The immediate proposal is to start a Master's degree and in later years, a phased in approach to adding undergraduate degree programs. In addition to these, potential careers in sport management and current students survey data are also explored and analyzed. The addition of these programs to EOU will help students apply their knowledge in a hands-on environment, expand their professional marketability, and enhance career opportunities. *Brain Sather, Anji Weissenfluh, Sean Dahlin, Ph.D. candidate, The Ohio State University & Howard Gauthier, Professor at Idaho State University (Meridian Campus) are acknowledged for research assistance.*

Dillon LYTSELL with Osvaldo Martinez

Project Title: Multifaceted Overview on Concussions in Sport and Player Safety

Type of Presentation: Poster

Location: Lobby of Loso Hall

Presentation Time: 1:30 p.m. to 2:20 p.m.

Faculty Sponsor: Kyle Pfaffenbach

Abstract: Approximately 300 000 sport-related concussions occur annually in the United States, however, there is no standardized concussion protocol which is shared amongst all organizations, such as colleges and professional sporting leagues. This study will compare the different concussion protocols of various collegiate institutes. In addition to this, this study will look at the background and certification requirements of those in positions to oversee the athletes who are at risk for head injuries. Compare these findings to those of commonly recognized deficits in reported head injuries and head injury risks. This study will consist of interviewing athletic trainers, coaches, and athletes of every institution that participates in the Cascade Collegiate Conference (CCC), which consists of 11 different colleges across Oregon, Washington, and Idaho. It will compare the backgrounds of the coaches to those of the protocols described by the athletic trainers, as well as the self report of the athletes. These, in conjunction with the varying concussion protocols will help give a broad view of what can be improved upon and implemented for a standard concussion protocol. *Kyle Pfaffenbach is acknowledged for research assistance.*

Peter MALEY

[See abstract listed under Crystal Rainwater]

Brian MANDELLA

Project Title: Fixed-time kinetic spectrophotometric determination of biotinylated aptamers

Type of Presentation: Poster

Location: Lobby of Loso Hall

Presentation Time: 10:30 a.m. to 11:20 a.m.

Faculty Sponsor: Anna Cavinato

Abstract: Detecting nucleic acids is vital to the emerging demand for molecular sensors. One of the more recent advancements in molecular diagnostics revealed short and single-stranded oligonucleotides, called aptamers, capable of binding to a target molecule or protein with high affinity and specificity. Aptamers are selected through multiple rounds of systematic evolution of ligands via exponential enrichment (SELEX). Many of the popular detection methods such as fluorescence resonance energy transfer (FRET), fluorescence polarization, localized surface plasmon resonance (LSPR), and surface enhanced Raman scattering (SERS) require expensive and radioactive reagents in addition to costly instrumentation. The goal of this experiment is to determine a more suitable, cost efficient detection method for aptamers using UV-Visible spectroscopy. The method is based on the decrease of absorbance of triiodide formed by the reduction of iodine to iodide by sodium azide. This reaction is slow without a catalyst, however, in presence of biotin, it can be rapidly observed. Because biotin can be attached to DNA by polymerase chain reaction (PCR), one can follow the decrease in triiodide absorbance and correlate it to the amount of 5'-biotinylated-DNA. The method will be used to quantitatively determine 5'-biotinylated DNA concentrations and potentially incorporated in binding assays. *Donovan Spikerman, and Anna Cavinato are acknowledged for research assistance.*

Oswaldo MARTINEZ

[See abstract listed under Dillon Lytsell]

Brianna MEES

[See abstract listed under Crystal Mitchell]

Lauren MILLS

Project Title: "The Times They Are A-Changin'": A Teaching Unit on The History of The Sixties

Type of Presentation: Talk

Location: Loso 115

Presentation Time: 10:30 a.m. to 10:55 a.m.

Faculty Sponsor: Ryan Dearing

Phi Kappa Phi Honor Society welcomes Lauren Mills.

Abstract: This history capstone is a two-week teaching unit with a secondary level curriculum that takes into consideration the Oregon state standards. By analyzing the tumultuous and revolutionary decade of the 1960s with a focus on race and gender, students will examine the conflicts that have characterized this period in American history. The overarching question for the unit asks the students to consider the ways that race and gender have shaped the pursuit of liberty and equality for Americans. Through a critical analysis of primary and secondary sources, students will become historians and work to shape more accurate

interpretations of the past. Students will investigate conflicting opinions on the Civil Rights and Women's Movements, and in doing so, will build upon their skills as critical thinkers and informed citizens. A goal of this teaching unit is to have students practice skills in research, writing, and speaking. Through discovery and intellectual challenge, this course will ultimately provide students with the opportunity to enhance essential skills and develop academically.

Crystal MITCHELL with Callie J. Norman, Brianna N. Mees, Jenny E. Vardanega and Daysi Bedolla

Project Title: Novel Heme-Anion Complexes of Cytochrome c'

Type of Presentation: Poster

Location: Lobby of Loso Hall

Presentation Time: 12:30 p.m. to 1:20 p.m.

Faculty Sponsor: Colin Andrew

Abstract: Cytochrome c' from the denitrifying bacterium, *Alcaligenes xylosoxidans* is a heme protein (termed AXCP) that binds the toxic nitric oxide (NO) intermediate produced during denitrification. Although AXCP contains an empty distal Fe coordination site, its crowded and hydrophobic heme pocket lowers the affinity for NO, while excluding the binding of anionic nitrogen oxides such as nitrite and nitrate. Using spectroscopic techniques, we show that replacement of the distal Leu16 residue of AXCP with smaller residues increases the affinity for distal ligands and in some cases allows anions to bind with affinities comparable or higher than in other heme proteins. Our results shed light on molecular recognition in AXCP, and highlight a useful system for studying the properties of heme-anion complexes. *Zachary N. Nilsson and Brian L. Mandella are acknowledged for research assistance.*

Jessica MOORE with Kaitlyn Reynolds and Cheyenne Camara

Project Title: Identification of Coleoptera on Ladd Marsh Using DNA Barcoding

Type of Presentation: Poster

Location: Lobby of Loso Hall

Presentation Time: 10:30 a.m. to 11:20 a.m.

Faculty Sponsor: John Rinehart

Abstract: DNA barcoding is a molecular genetic technique in which a short, universal sequence of mitochondrial DNA encoding the Cytochrome Oxidase Subunit I (COI) protein is elucidated. The method uses flanking universal or taxon-specific primers and Polymerase Chain Reaction (PCR) to amplify this region in a specimen. Subsequent Cycle Sequencing using fluorescently-tagged dideoxynucleotides allows for comparison of the specimen sequence to a database of known records. During the course of a mosquito-trapping study on Ladd Marsh, Union County, Oregon, beetle bycatch was collected from LED light traps. Many of the specimens are very small, precluding accurate taxonomic identification. We sought to determine whether DNA barcode sequence analysis would provide a viable method for identification. Furthermore, we wished to discover to what taxonomic levels we might expect existing on-line databases to provide specimen matches for. We found confident matches for all specimens to Family and varying degrees of success to genus and species. We ascertained both advantages and shortfalls of applying this technique to Coleopteran identification on a local level. We also have gained experience necessary to begin work toward building a COI protein sequence database for NE Oregon Coleoptera. *Karen Antell and John Rinehart are acknowledged for research assistance.*

Jessica MOORE with Katherine Hood

Project Title: Confirming Taxonomic Identification of Mosquitoes on Ladd Marsh Using DNA Barcoding

Type of Presentation: Poster

Location: Lobby of Loso Hall

Presentation Time: 10:30 a.m. to 11:20 a.m.

Faculty Sponsor: John Rinehart

Abstract: Recent expansion of wetlands in the Grande Ronde Valley, Union County, Oregon, utilizing wastewater from the city of La Grande, has raised community concern about possibility of increased mosquito populations and a heightened risk of public health threats from mosquito-borne illness. In 2014, we began a systematic assessment of mosquito species present in both wastewater and natural groundwater systems on the Ladd Marsh Wildlife Area. We have collected mosquito samples for three consecutive years

and identified them to species utilizing morphological keys. Recently, we have employed DNA barcoding techniques in order to confirm our specimen identifications. DNA barcoding, a molecular genetic technique in which a short, universal sequence of mitochondrial DNA encoding the Cytochrome Oxidase Subunit I (COI) protein is amplified by PCR and subsequently sequenced. This allows for comparison of the specimen to a database, or for a vouchered specimen's sequence to be submitted to GenBank. We performed barcoding on 24 mosquitoes from a sample collected in 2015 and will present a comparison of the accuracy of barcoding with our taxonomic identifications. *Karen Antell and John Rinehart are acknowledged for research assistance.*

Thomas MORRELL [See abstract listed under Rikki Stutheit]

Mico MURPHY [See abstract listed under Taylor Rhoton]

Mico MURPHY [See abstract listed under Ryan Blanchard]

Taylor NELSON

Project Title: McCarthyism: An Organized Crime

Type of Presentation: Talk

Location: Loso Hall 116

Presentation Time: 1:30 p.m. to 1:55 p.m.

Faculty Sponsor: Ryan Dearing

Abstract: The public usually understands McCarthyism as a four-year period in which McCarthy had direct control over the McCarthy hearings, in particular the HUAC hearings involving the "Hollywood Ten." Yet a complex history shaped what came to be called McCarthyism, and it occurred long before the senator declared that there were communists in the State Department. The purpose of this project is to examine that history by studying entities connected to McCarthyism, such as Harry J. Anslinger's Federal Bureau of Narcotics, the Immigration and Naturalization Service, the Department of the Interior, and the Federal Bureau of Investigation. Many of these entities disrupted or permanently ended the progress of progressive organizations, including the Los Angeles Committee for the Protection of the Foreign Born, the National Association for the Advancement of Colored People, and the Joint Anti Fascist Refugee Committee. There is also a more personal history that involved judges, law enforcement, university staff, school boards, professors, workers, teachers, or anyone else who was either suspected to be a member of a designated subversive organization and harassed or damaged in some way, or someone who helped McCarthyism become a nationally prevalent and organized crime.

Caitlyn NEWKIRK [See abstract listed under Ryan Hunt]

Callie NORMAN [See abstract listed under Crystal Mitchell]

Phi Kappa Phi Honor Society welcomes Callie Norman.

Madissen OSTERGAARD

Project Title: Comprehensive Evaluation of Eastern Oregon Women's Soccer Winter Conditioning Program

Type of Presentation: Poster

Location: Lobby of Loso Hall

Presentation Time: 10:30 a.m. to 11:20 a.m.

Faculty Sponsor: Kyle Pfaffenbach

Phi Kappa Phi Honor Society welcomes Madissen Ostergaard.

Abstract: The purpose of this study is to evaluate the effectiveness of the Eastern Oregon Women's Soccer winter conditioning program. Examining their winter training program in regards to fitness gains, as well as monitoring the possibility and occurrence of declines in fitness and over training in response to the conditioning program. In a team environment at the college setting we are often given one specific program that every athlete on that team is required to follow. Uniform programs may be challenging for athletes different roles in sports where their physiological factors vary depending on position and individual differences. An example is that a keeper and field player have different needs regarding cardiovascular demands and explosive power indicating their training should differ from one another. Our project was an

attempt to better understand individual differences between athletes and follow their response to winter conditioning by using objective tracking and analysis. The major benefit presented to subjects participating in this study will provide subjects insight of how they may respond differently and in certain ways to the training that is required for their sport. The data collected could prove useful to help the athletes and coaching staff to establish what areas athletes need to work on to enhance their athletic performance. *Annie Konrad, Jessica Parker and Anna Roslander are acknowledged for research assistance.*

Payton PARRISH

Project Title: Preliminary findings of a four-year outdoor program invention to increase the physical activity enjoyment and educate 4th and 5th grade girls about creating a healthier lifestyle.

Type of Presentation: Poster

Location: Lobby of Loso Hall

Presentation Time: 12:30 p.m. to 1:20 p.m.

Faculty Sponsor: Kelly Rice

Abstract: INTRODUCTION: After school programs play an essential role in the advancement of physical activity (PA). Enjoyment of PA is vital to the sustainability of lifetime activity. Research suggests that inspiring girls to be joyful, healthy and confident using a fun, experienced-based curriculum will increase PA compared to traditional physical education (PE) classes. PURPOSE: This programs purpose was to identify enjoyment levels of students involved in the Run Girl Run (RGR) compared to the level of enjoyment students experience during PE courses. METHOD: An 11-week program took place for 90 minutes, 2X/WK. During week 5, two surveys were handed out to all 17 girls. The first survey distributed to the girls was "Enjoyment of Physical Activity." This survey asked seven questions relating to enjoyment levels during PE. I then altered the title to "Enjoyment Levels of Run Girl Run" and handed out the second survey that asked the same seven questions but relating to enjoyment levels during RGR. Both of these surveys have a likert scale of 1 to 5. We worked with 17 girls that had an average age of 10.642 and an average grade level of 4.785. RESULTS: Comparisons will be assessed at the end of week 5. CONCLUSION: The differences in PE and the RGR program will help design implementation of future PE courses. *Robin Maille is acknowledged for research assistance.*

Alexa PETERS

[See abstract listed under Rachael Stone]

Crystal RAINWATER with Jacob Gunnels, Peter Maley, Lara Welford, Sarah Anderson and Jasmine Brookshire

Project Title: Art Senior Open Studios

Type of Presentation: Exhibit

Location: Senior Art Studio (next to Gilbert Event Center)

Presentation Time: 11:00 a.m. to 2:00 p.m.

Faculty Sponsor: Cory Peeke

Phi Kappa Phi Honor Society welcomes Crystal Rainwater.

Abstract: Six senior Art majors will be working in their studio spaces providing studio visitors with the ability to see how each artist produces their work as well as engage directly with the artists within the rarely seen environment in which the work is created. Jacob Gunnels' photographic prints engage with ideas of loss and the effects of his military service, Peter Maley's ceramic-based sculptures explore aspects of history and archaeology and questions what role the physical object actually plays in our process of imagining, Lara Welford's "spirit paintings" are born out of the moments of play that have inspired her to dream the dream of motherhood, Sarah Anderson's creates re-imagined mythic creatures as sculptural puppets to bring new life their stories, Jasmine Brookshire's drawings explore the process of inventing one's sense of self, and Crystal Rainwater's self-portrait photography examines contemporary standards of physical beauty and the nude female form in relation to her own discovery of self-worth. Each of these artists' conceptually driven works provide attendees an opportunity for both aesthetic as well as scholarly engagement.

Sidronio RANGEL

Project Title: Crossing Frontiers: The Marvelous Journey of a Collegiate Brazilian Bilingual Basketball Player in La Grande, Oregon

Type of Presentation: Talk

Location: Loso 115

Presentation Time: 11:00 a.m. to 11:25 a.m.

Faculty Sponsor: Tawnya Lubbes

Phi Kappa Phi Honor Society welcomes Sidronio Rangel.

Abstract: The purpose of this case study is help future educators analyze several influences and capabilities of learning a second language, recommendations for further language learning, and insights into English language acquisition. Further, the methods used for the case study included the selection of the participant as well as the procedures used. Family and school influences along with technological advances were identified that either helped or hindered the individual learn and acquire a second language. The significance of the study is very impactful in a multitude of ways because future and current teachers could benefit from relevant research based surveys and important terms that identify and define the struggles that most English language learners (ELLs) experience. *Larissa Quintana is acknowledged for research assistance.*

Kaitlyn REYNOLDS

[See abstract listed under Jessica Moore]

Taylor RHOTON with Mico Murphy

Project Title: Inertia Table for Two: The Clique-Galaxy Grille

Type of Presentation: Talk

Location: Loso Hall 116

Presentation Time: 10:30 a.m. to 10:55 a.m.

Faculty Sponsor: Amy Yielding

Abstract: In this talk we introduce inertia tables, inertia sets, and the T notation for describing such sets. We discuss results in the areas of zero-forcing sets, minimum rank, and known inertia tables to provide motivation for the study of inertia tables for clique-galaxies. This research was completed through the Mathematics Undergraduate Research Group at EOU. *Ryan Blanchard, Joel Jacobs and Amy Yielding are acknowledged for research assistance.*

Katelyn RIDDER

Project Title: Ecowellness and Self-efficacy among Junior High Students

Type of Presentation: Poster

Location: Lobby of Loso Hall

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

Faculty Sponsor: Kelly Rice

Phi Kappa Phi Honor Society welcomes Katelyn Ridder.

Abstract: INTRODUCTION: Participation in nature is associated with better mood, reduction of stress, better concentration, and a higher quality of life. To maintain holistic health, participation in nature and ecowellness is essential. Ecowellness is a term meaning, the extent to which one's connection to nature impacts wellness. PURPOSE: To examine the level of ecowellness in the Get Outside-After School Adventure Program (GO-ASAP) participants and to observe its relationship with physical activity self-efficacy scores. METHODS: In a 20 week after school program, junior high students take part in outdoor recreation. A modified version of Reese's Ecowellness Inventory (REI) was used and answered via 5-point likert scale survey at mid-point (week 13). A validated Social Cognitive Theory (SCT) survey was also administered on the first day and at mid-point (week 10). Participants range from ages 12-14 years, grades 7-9. RESULTS: 8 SCT surveys were obtained pre, 17 SCT at mid-point. 17 modified REI surveys were obtained at mid-point. High REI scores were positively correlated with better self-efficacy among the group. CONCLUSION: Ecowellness is an important factor for junior high students and could be used to cultivate more self-efficacious young people into the future.

Evan RUMMERFIELD with Austin Strock

Project Title: Puzzle Pieces in Fiction

Type of Presentation: Panel

Location: Loso Hall 126

Presentation Time: 10:30 a.m. to 11:20 a.m.

Faculty Sponsor: Nancy Knowles

Abstract: Writing fiction is like giving a reader pieces to a puzzle one piece at a time. Readers make meaning from the puzzle pieces that a writer provides but never to its full extent until the writer has provided all of the pieces. In Evan Rummerfield's novel-length fantasy adventure manuscript, "Flames of War," a world of diverse peoples and cultures clash but quickly learn that they are being used as pawns in someone else's game. "Flames of War" is a work of fiction that provides puzzle pieces gradually; it is up to the reader to keep reading, in order to put it all together. Austin Strock's "Teen Years" is a modern day short story that deals with an anxiety filled situation regarding a young teen who loses his mother at the mall that can strike home to any reader. This panel will consist of two 15 minute readings followed by a Q and A session.

Evan RUMMERFIELD

[See abstract listed under Haley Stammen]

Krystal SCHADWALD

Project Title: Physical Activity Effects on Behavior and Mood in Students with Disabilities

Type of Presentation: Poster

Location: Lobby of Loso Hall

Presentation Time: 1:30 p.m. to 2:20 p.m.

Faculty Sponsor: Kyle Pfaffenbach

Abstract: Research and Observations on the impacts of Adaptive Physical Education on Behavior and Attitudes in a Special Needs Population: Individual, contextual and environmental barriers to physical activity decrease the opportunities for physical fitness in special needs populations. This can result in decreased physical activity time, an increased sedentariness, and is a likely contributor to the comparatively higher rates of overweight and obesity observed in special needs populations. In Oregon, the Department of Education requires K-5 to receive 150 minutes of physical education and to participate in at least 50% of the physical education class time, participating in moderate to vigorous physical activity. Physical activity contributes to positive behaviors and overall mood in both life skills and the general education classroom. Little research has been conducted in the area of physical activity involving populations with special needs and the benefits it has on behavior and overall attitude in the classroom. Thus, the purpose of this project was to examine the effect of adaptive physical education on classroom behavior at the primary education level. We collected behavioral observation data before, during, and after physical activity in students with disabilities.

Myra SHANAHAN

[See abstract listed under Daysi Bedolla]

Myra SHANAHAN

Project Title: Cannabinoid Therapy

Type of Presentation: Poster

Location: Lobby of Loso Hall

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

Faculty Sponsor: Jeremy Riggle

Abstract: Accurate information on the potential health benefits and associated risks of cannabinoid therapy are often hard to find and confusing. This poster utilizes the most current peer-reviewed research articles from clinical-based cannabis studies carried out in the US and abroad in the attempt to synthesize this information. In addition, other important chemical compounds present within cannabis, their synergistic effects, and how they interact with cells in the human body will be presented. The objective is to provide accurate and current information to the public and to dispel misinformation on the topic of cannabis for medical use. *Jeremy Riggle is acknowledged for research assistance.*

Baylee SHELTON

Project Title: Electromyographic and Kinematic Comparison of the Back Squat and Two-handed Kettlebell Swing

Type of Presentation: Poster

Location: Lobby of Loso Hall

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

Faculty Sponsor: Darren Dutto

Abstract: Several studies have been conducted examining the EMG activation during a back squat and a kettlebell swing separately, but to our knowledge the two exercises have not been directly compared. The purpose of this within-subject, crossover design research study was to determine and compare the muscle activation during a kettlebell swing and a weighted back squat via EMG analysis, in female collegiate athletes to determine whether similar muscle activation can be achieved between the exercises. Results may influence training programs designed for female collegiate athletes to provide alternative dynamic exercises for specific muscle groups. Athletes performed a supervised 1 repetition back squat max (1RM). Within one week of determining each subjects 1RM, subjects presented for testing. Surface EMG electrodes were placed on the athlete's dominant side gluteus maximus, vastus lateralis, erector spinae, biceps femoris, and rectus femoris from which muscle activity could be recorded during exercise. After maximum voluntary muscle contractions were completed, participants performed a series of six lifts: 1) 20kg back squat, 2) Back squat at 40% 1RM, 3) Back squat at 75% 1RM, 4) 8kg kettlebell swing, 5) 12kg kettlebell swing, and 6) 20kg kettlebell swing. Data analyses are in process. *Elizabeth Ayers is acknowledged for research assistance.*

Alexa SHOEMAKER

Project Title: Hello, Goodbye: The Communication of a Traveler

Type of Presentation: Talk

Location: Loso 115

Presentation Time: 11:30 a.m. to 11:55 a.m.

Faculty Sponsor: April Curtis

Phi Kappa Phi Honor Society welcomes Alexa Shoemaker.

Abstract: Cultural communication has been stressed in many courses over my past two years in EOU's Communication Studies program. The severity of its importance never truly struck me until I spent a term studying in Barcelona, Spain. Over the course of my five months in Europe, I was able to travel to a total of five countries: Spain, France, Portugal, Germany, and the U.K. During these travels, my eyes were opened to the differences between a tourist and a traveler. One of my Dutch friends made the statement: "To be a traveler, you must be characteristically humble." We went on to discuss the various distinct communication qualities of both travelers and tourists. After this conversation, it was easy to pick out the tourists from the travelers both on the street and in conversation. The goal of this project is to explore the communication differences between a tourist and a traveler based upon my personal observations and experiences.

Emily SPEARS

[See abstract listed under Rachael Stone]

Donovan SPIKERMAN

Project Title: Quantitation and Characterization of Anthocyanins in Medicinalcannabis Flowers Cultivated in Eastern Oregon

Type of Presentation: Poster

Location: Lobby of Loso Hall

Presentation Time: 10:30 a.m. to 11:20 a.m.

Faculty Sponsor: Jeremy Riggle

Phi Kappa Phi Honor Society welcomes Donovan Spikerman.

Abstract: Anthocyanins are a class of water-soluble polyphenolic flavonoids that are widely used in the food, pharmaceutical and cosmetic industries. These polyphenolic species are ubiquitous throughout nature with individual species of plants displaying a unique anthocyanin profile. Anthocyanins are responsible for the red, blue and purple colors observed in berries and fruit bearing plants. Along with their use as potential food colorants, anthocyanins are well known phytochemical antioxidants that help to prevent neuronal and cardiovascular diseases as well as cancer and diabetes. For this experiment, we quantitated the anthocyanins in Cannabis sativa and Cannabis indica flowers grown in Eastern Oregon using the pH differential method. This quantitation and characterization is warranted due to increasing medicinal and academic interests in the Cannabis plant species. Our objective was that of determining a relationship between anthocyanin concentration and specific cannabis strain. *Brian Mandella and Ryan Hunt are acknowledged for research assistance.*

Haley STAMMEN with Evan Rummerfield and Neil Hetrick

Project Title: Rhetorical Platforms for Social Change

Type of Presentation: Panel

Location: Loso 115

Presentation Time: 12:30 p.m. to 1:20 p.m.

Faculty Sponsor: Cori Brewster

Abstract: "Rhetorical Platforms for Social Change" considers how issues of power, race, sexuality, and gender are represented in a variety of popular media. The panel uses various rhetorical approaches to discuss music and visual media, stand-up comedy, and implications for curriculum. Haley Stammen's feminist and cultural criticism of Beyonce's Lemonade examines how Beyonce uses her platform to confront issues of race and gender. Stammen argues that Beyonce's use of a failing marriage as a metaphor for the ongoing battle for racial equality represents a cross-generational, collaborative effort to bring all people into one narrative to inspire social change. Evan Rummerfield uses psychoanalytic criticism of Jerry Seinfeld's "I'm Telling You for the Last Time" to determine what makes stand-up comedy effective in delivering a message. Rummerfield explores whether the same comedic traits can be applied to controversial topics in the public sphere. Neil Hetrick's "The Peaceful Inclusion: Utilizing LGBTQ Texts in the Classroom to Good Effect" focuses on how LGBTQ texts are incorporated into high school and college classrooms today. The presentation focuses on types and frequency, inherent limits in current offerings, and advantages to discussing queer issues in the classroom.

Olivia STARKS

[See abstract listed under Caitlynn Barton]

Bri STAVAAS

[See abstract listed under Caitlynn Barton]

Rachael STONE with Alexa Peters and Emily Spears

Project Title: Umatilla Morrow County Head Start Physical Activity and Wellness Program

Type of Presentation: Poster

Location: Lobby of Loso Hall

Presentation Time: 10:30 a.m. to 11:20 a.m.

Faculty Sponsor: Kyle Pfaffenbach

Abstract: The purpose of this project is to implement a workplace wellness program to help the employees at Head Start create healthier lifestyle habits. We are proposing different ideas for what they want to see implemented in their office based on what they believe needs the most attention in their life. The overall objective is to educate the employees on ways to increase their motivation, self efficacy, and confidence towards becoming an overall healthier individual.

Gabrielle STRINGFELLOW

Project Title: Alumni Relations Intern Learnings and Reflections

Type of Presentation: Talk

Location: Loso 115

Presentation Time: 12:00 p.m. to 12:25 p.m.

Faculty Sponsor: April Curtis

Phi Kappa Phi Honor Society welcomes Gabrielle Stringfellow.

Abstract: In my spring symposium PowerPoint presentation, I will introduce and share my adventures through my internship in the Eastern Oregon University Alumni Relations. Throughout Winter and Spring term of this year, I volunteered my time for this organization; this position has been months full of discoveries and explorations. While working for the Alumni Relations, I experienced many accomplishments which are highlighted in my presentation. I was fortunate to meet many mentors who have helped me along the way. I appreciated the practical learning aspect in which this will help me apply to positions in the future. I look forward to providing my personal recommendations, thoughts, and opinions for anyone who wishes to become an intern one day. Lastly, I will provide my own thoughts and beliefs on how this internship has shaped me into becoming a better candidate for future jobs and careers.

Austin STROCK

[See abstract listed under Evan Rummerfield]

Rikki STUTHEIT with Trenten Anteau, Andrew Howe, Cassidy Watkins, Jake Chamberlain and Thomas Morrell

Project Title: Expert Coaches Illustrate the Best Coaching Practices to Promote Group Cohesion

Type of Presentation: Panel

Location: McKenzie Theatre

Presentation Time: 10:30 a.m. to 11:20 a.m.

Faculty Sponsor: Brian Sather

Abstract: The purpose of this panel interview is to address how successful high school and college coaches implement group cohesion and team chemistry. Group cohesion is defined as, "A dynamic process reflected in the tendency for a group to stick together and remain united in the pursuit of its instrumental objective and/or for the satisfaction of member affective needs (Carron, Brawn, & Widmeyer, 1998). Research states that the more cohesive sports teams are as a whole, the more successful they are during competition. However, more research is needed to identify the best team building technique or activity out there. The reason for this study is because every coach has their own personal theory on what they think works and what does not work. By interviewing successful college and high school level coaches, we can identify some common practices among the coaches. The research that will be carried out is selecting a panel of expert coaches to talk about what they do to build group cohesion, and then let members of the audience ask them questions as well. Based on the discussion, we will develop themes on best practices for group cohesion within athletics.

Rikki STUTHEIT

Project Title: Physical Activity to Increase the Self-Esteem of Early Adolescent Females

Type of Presentation: Poster

Location: Lobby of Loso Hall

Presentation Time: 12:30 p.m. to 1:20 p.m.

Faculty Sponsor: Kelly Rice

Abstract: INTRODUCTION: Physical activity can directly impact self-esteem (SE). Positive SE is important for good psychological health. PURPOSE: The purpose of this program is to see how SE levels improve during Run Girl Run (RGR), a nine week after school exercise program. METHOD: Fourteen girls, in grades 4-6, volunteered for the RGR for 9 wks, 2X/WK for 1 hr. subjects 9-12 yrs of age average height of 5.64 meters and the average weight was 41.03 kilograms. SE was measured during the week 2 and 8 of the program using the Rosenberg SE scale. This SE scale is based on a 30 point scale. Scores 1-15 = low SE, 15-30 = high SE. RESULTS: The data from the week 2 assessment showed that 4 of the subjects tested with low SE (9,12,14,14), and 4 subjects tested with high SE (19, 23, 24, 24, 25, 27). None of the subjects tests with the highest level of SE. Comparisons will be made between the second week SE assessment and the assessment during the eighth week. CONCLUSION: The data gathered from this program can help more after school physical activity programs be implemented into school districts.

Mariah SWANSON

[See abstract listed under Kai Turner]

Kai TURNER with Colin Deyarmin and Mariah Swanson

Project Title: The Effect of a Caffeine Supplement on Performance of Collegiate Football Players During a Series of 6-Play Drives in a Game-Like Setting

Type of Presentation: Poster

Location: Lobby of Loso Hall

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

Faculty Sponsor: Kyle Pfaffenbach

Abstract: Research on caffeine supplementation has shown that it can lead to improved performance in football players when performing straight-line sprinting drills such as the 40-yard dash. Caffeine products of different sorts have been utilized by athletes across many different sports. The research on caffeine supplementation by football players suggests that when applied in drills, such as the 40-yard dash, it can help increase performance. The research lacks in the sense that there weren't any experiments done to simulate game-like situations under a caffeinated condition. This capstone project sets out to explore the effects of

caffeine on performance of college football players in a game-like setting. 12 collegiate football players participated in a single-blind study with two experimental conditions, one where subjects ingested a caffeine-infused supplement and one where they consumed a non-caffeinated placebo. The experimental conditions have been separated by at least 7 days. We set out to measure the subjects ability to maintain a high level of performance over a simulated football game by looking at data given to us by the GPSports units, such as top speed and acceleration. This will give us an idea of each athlete's ability to maintain performance over a simulated game.

Jenny VARDANEGA [See abstract listed under Crystal Mitchell]

Phi Kappa Phi Honor Society welcomes Jenny Vardanega.

Christina WAKINYAN with Leah Harris

Project Title: The Effect of Exercise on Executive Function

Type of Presentation: Poster

Location: Lobby of Loso Hall

Presentation Time: 1:30 p.m. to 2:20 p.m.

Faculty Sponsor: Kyle Pfaffenbach

Abstract: The current study will examine how exercise influences reaction time among participants. Participants in both the conditions will take a baseline Stroop test that will be presented on the laptop computer. The instructions will state that participants need to say the ink color as quickly and accurately as possible. For the wingate test weight will be taken in kilograms, and multiplied by 0.05. That number will be the amount of weight that is added to the hanging weight rack on the bike. Following the baseline test participants in the experimental group will be led to a stationary bike. Participants will be told to cycle for two minutes followed by a thirty second all out wingate cycle, two minute cycle and last another thirty second all out wingate cycle. Resistance will be slowly added to the stationary bike just before the participant begins the thirty second all out cycle. In the control group, participants will be brought over to a table where they will be presented with a laptop. The participant will sit for 6 minutes and watch a short Planet Earth video. After either cycling or watching Planet Earth documentary the participants will be given a second Stroop test. *Dr. Kyle Pfaffenbach is acknowledged for research assistance.*

Cassidy WATKINS [See abstract listed under Rikki Stutheit]

Lara WELFORD [See abstract listed under Crystal Rainwater]

Nathan ZOON

Project Title: A New Modernity: A Teaching Unit on the French Revolution

Type of Presentation: Talk

Location: Loso 115

Presentation Time: 2:00 p.m. to 2:25 p.m.

Faculty Sponsor: Ryan Dearing

Phi Kappa Phi Honor Society welcomes Nathan Zoon.

Abstract: Much of the great civil unrest that took place in nineteenth-century Europe and the Americas was rooted directly in the French Revolution of 1789. This makes this revolution an imperative part of history to understand, as its significance is vital to the modern political and economic system that exists today. This project is a demonstration of how this historical event may be taught in a way that will bring to life what it can teach us about human behaviors, desires, and values. Taught through the setting of a two-week high school course, this project will demonstrate the French Revolution's importance to history as well as the tangibly relevant impact that it can have on modern worldviews and perspectives. This will be approached through analyzing primary source documents and images from the time period, newspapers and government documents created during the upheaval, as well as contemporary anecdotes. The ultimate goal of this project is to spark a genuine interest in history within the students which will follow them for the rest of their lives — an interest that can change both them and those around them.

**Music Program for Spring Symposium
McKenzie Theatre, Loso Hall
12:00 p.m. to 12:50 p.m.**

Chamber Choir

Let My Love Be Heard by Jake Runestad
Ndikhokhele Bawo - arr. Michael Bennett
Unclouded Day - arr. Shawn Kirchner

Individual Performances by EOU Students

Prelude in D Major, from the Well-Tempered Clavier Vol. I--J.S. Bach
Joc Cu Bata (from Rumanian Folk Dances)--Bela Bartok
Daniel Durrell, piano

EOU Vocal Studio

Heidi Gerlach--One Hundred Easy Ways to Lose a Man
Sam Shown--Where Was I When They Passed Out the Luck
Avalon Bloodgood--I Want to Live Out Loud
Jason Lineback--Lost in the Wilderness
Accompanied by Mio Aoike

45th Parallel Ensemble

Brainville
They Call It Love—original tune by EOU Student Anita Harris
Feeling Good
All of Me

Spring Symposium thanks the faculty of our EOU Music Program:

Matt Cooper
John McKinnon
Peter Wordelman
Mio Aoike
Jamie Jacobson
Luke McKern

Presentations by Scheduled Time

10:30 a.m. to 10:55 a.m.

Location/Format: Loso Hall 115, **Talk**

Presenter: Lauren Mills

Project Title: "The Times They Are A-Changin'": A Teaching Unit on The History of the Sixties

Faculty Sponsor: *Ryan Dearinger*

Location/Format: Loso Hall 116, **Talk**

Presenters: Taylor Rhoton & Mico Murphy

Project Title: Inertia Table for Two: The Clique-Galaxy Grille

Faculty Sponsor: *Amy Yielding*

10:30 a.m. to 11:20 a.m.

Location/Format: McKenzie Theatre, **Panel**

Presentation

Presenters: Rikki Stutheit, Trenten Anteau, Andrew Howe, Cassidy Watkins, Jake Chamberlain & Thomas Morrell

Project Title: Expert Coaches Illustrate the Best Coaching Practices to Promote Group Cohesion

Faculty Sponsor: *Brian Sather*

Location/Format: Loso Hall 126, **Panel**

Presentation

Presenters: Evan Rummerfield & Austin Stroock

Project Title: Puzzle Pieces in Fiction

Faculty Sponsor: *Nancy Knowles*

10:30 a.m. to 11:20 a.m.

Poster Sessions in Lobby of Loso Hall

Presenters: Jessica Carter & Haley Breen

Project Title: Aptamer selection assisted by graphene oxide

Faculty Sponsor: *Anna Cavinato*

Presenters: Tylo Colflesh & Maya Ah You-Dias

Project Title: Effects of Learning Styles and Complimentary Instruction on Academic Achievement

Faculty Sponsor: *Marie Balaban*

Presenters: Kendall Current

Project Title: Comparisons of an outdoor after school activity program and physical education on self-efficacy and MVPA in adolescents

Faculty Sponsor: *Kelly Rice*

Presenters: Brian Mandella

Project Title: Fixed-time kinetic spectrophotometric determination of biotinylated aptamers

Faculty Sponsor: *Anna Cavinato*

Presenters: Jessica Moore & Katherine Hood

Project Title: Confirming Taxonomic Identification of Mosquitoes on Ladd Marsh Using DNA Barcoding

Faculty Sponsor: *John Rinehart*

Presenters: Jessica Moore, Kaitlyn Reynolds & Cheyenne Camara

Project Title: Identification of Coleoptera on Ladd Marsh Using DNA Barcoding

Faculty Sponsor: *John Rinehart*

Presenters: Madissen Ostergaard

Project Title: Comprehensive Evaluation of Eastern Oregon Women's Soccer Winter Conditioning Program

Faculty Sponsor: *Kyle Pfaffenbach*

Presenters: Donovan Spikerman

Project Title: Quantitation and Characterization of Anthocyanins in Medicinal Cannabis Flowers Cultivated in Eastern Oregon

Faculty Sponsor: *Jeremy Riggie*

Presenters: Rachael Stone, Alexa Peters & Emily Spears

Project Title: Umatilla Morrow County Head Start Physical Activity and Wellness Program

Faculty Sponsor: *Kyle Pfaffenbach*

10:15 am to 11:15 a.m.

Oregon Teacher Pathway Poster Presentations

Location: Simmons Gallery in Badgley Hall

Presenters: Students from Pendleton and Umatilla High Schools - Sponsored by EOU College of Education

11:00 am to 11:25 a.m.

Location/Format: Loso 115, **Talk**

Presenters: Sidronio Rangel

Project Title: Crossing Frontiers: The Marvelous Journey of a Collegiate Brazilian Bilingual Basketball Player in La Grande, Oregon

Faculty Sponsor: *Tawnya Lubbes*

Location/Format: Loso Hall 116, **Talk**

Presenters: Ryan Blanchard, Mico Murphy & An Dinh

Project Title: Secret Codes of the Red River Gang (Kryptos)

Faculty Sponsor: *Steve Tanner*

11:00 a.m. to 2:00 p.m.:

Location: Senior Art Studio **Exhibit**, near Gilbert Center

Presenters: Crystal Rainwater, Jacob Gunnels, Peter Maley, Lara Welford, Sarah Anderson & Jasmine Brookshire

Project Title: Art Senior Open Studios

Faculty Sponsor: *Cory Peeke*

11:15 am to 12:15 p.m.

Oregon Teacher Pathway Poster Presentations

Location: Simmons Gallery in Badgley Hall

Presenters: Students from Hermiston, (McLoughlin) Milton Freewater and Vale High Schools

Sponsored by EOU College of Education

11:30 a.m. to 11:55 a.m.

Location/Format: Loso 115, **Talk**

Presenter: Alexa Shoemaker

Project Title: Hello, Goodbye: The Communication of a Traveler

Faculty Sponsor: *April Curtis*

11:30 a.m. to 11:55 a.m. (Continued)

Location/Format: Loso Hall 116, **Talk**

Presenters: Ryan Blanchard & Joel Jacobs

Project Title: Clique-Galaxy Quest

Faculty Sponsor: Amy Yielding

Location/Format: Loso Hall 126, **Talk**

Presenters: MeeMee Crossler-Laird, Reece Bauer and Maya Ah You-Dias

Project Title: Can you learn the rule? Examining executive function in preschool-aged children

Faculty Sponsor: Marie Balaban

11:30 a.m. to 12:20 p.m.

Location/Format: Loso Hall 117, **Panel Presentation**

Presentation

Presenters: Neil Hetrick plus a variety of Oregon East contributors.

Project Title: Oregon East

Faculty Sponsor: Jodie Varon

11:30 a.m. to 12:20 p.m.

Poster Sessions in Lobby of Loso Hall

Presenter: Kevin Clark

Project Title: Building Intrinsic Motivation in Adolescents through GO-ASAP

Faculty Sponsor: Kelly Rice

Presenters: Alondra Esquivel

Project Title: Pro-Environmental Behavior: Do We Care About the Environment?

Faculty Sponsor: Bill Grigsby

Presenters: Jordan Hillmick & Christopher Gianandrea

Project Title: Physical Activity Through Organized Sport

Faculty Sponsor: Alysia Cohen

Presenters: Ryan Hunt, Caitlyn Newkirk & Marie Gaylord

Project Title: Quantification of Cd, Cr, Pb, and Zn in Local Recreational Cannabis Flowers by Atomic Absorption Spectroscopy

Faculty Sponsor: Jeremy Riggle

Presenter: Katelyn Ridder

Project Title: Ecowellness and Self-efficacy among Junior High Students

Faculty Sponsor: Kelly Rice

Presenters: Myra Shanahan

Project Title: Cannabinoid Therapy

Faculty Sponsor: Jeremy Riggle

Presenters: Baylee L. Shelton

Project Title: Electromyographic and Kinematic Comparison of the Back Squat and Two-handed Kettlebell Swing

Faculty Sponsor: Darren Dutto

Presenters: Kai Turner, Colin Deyarmin & Mariah Swanson

Project Title: The Effect of a Caffeine Supplement on Performance of Collegiate Football Players During a Series of 6-Play Drives in a Game-Like Setting

Faculty Sponsor: Kyle Pfaffenbach

12:00 p.m. to 12:25 p.m.

Location/Format: Loso 115, **Talk**

Presenters: Gabrielle Stringfellow

Project Title: Alumni Relations Intern Learnings and Reflections

Faculty Sponsor: April Curtis

Location/Format: Loso Hall 116, **Talk**

Presenters: Rachel Bock

Project Title: The Chicano Movement and its Impact on Education Opportunities for Mexican-American Students

Faculty Sponsor: Ryan Dearing

Location/Format: Loso Hall 126, **Talk**

Presenters: Johnny Fulfer

Project Title: The Rhetoric of Economic Science: Dollar Diplomacy and the Universal Nature of American Economic Imperialism.

Faculty Sponsor: Rebecca Hartman

12:30 p.m. to 12:55 p.m.

Location/Format: Loso Hall 116, **Talk**

Presenters: Jasmine Brookshire

Project Title: The Devouring: Romani Genocide of the Holocaust

Faculty Sponsor: Ryan Dearing

Location/Format: Loso Hall 117, **Talk**

Presenters: Rikki Griffin

Project Title: Perceptions of Beauty in Rodeo Queens

Faculty Sponsor: Jennifer Puentes

Location/Format: Loso Hall 126, **Talk**

Presenters: Mitchell Baker

Project Title: The Impact of Country Music in Society

Faculty Sponsor: Ryan Dearing

12:30 p.m. to 1:20 p.m.

Location/Format: Loso 115, **Panel Presentation**

Presenters: Haley Stammen, Evan Rummerfield & Neil Hetrick

Project Title: Rhetorical Platforms for Social Change

Faculty Sponsor: Cori Brewster

12:30 p.m. to 1:20 p.m.

Poster Sessions in Lobby of Loso Hall

Presenters: Hayden Albrecht

Project Title: Effects of participation in after school program on perceived psychological stress in middle school youths

Faculty Sponsor: Kelly Rice

Presenters: Jasmine Dixon

Project Title: Gender and Sexuality Resource Center

Faculty Sponsor: Le Bailey

Presenters: Darian Gasseling

Project Title: The preliminary findings of a four-year outdoor program intervention to increase physical activity in 4th and 5th grade girls through running activities.

Faculty Sponsor: Kelly Rice

12:30 p.m. to 1:20 p.m.

Poster Sessions in Lobby of Loso Hall (Continued)

Presenters: Crystal A. Mitchell, Callie J. Norman, Brianna N. Mees, Jenny E. Vardanega & Daysi Bedolla

Project Title: Novel Heme-Anion Complexes of Cytochrome c'

Faculty Sponsor: Colin Andrew

Presenters: Payton Parrish

Project Title: Preliminary findings of a four-year outdoor program invention to increase the physical activity enjoyment and educate 4th and 5th grade girls about creating a healthier lifestyle.

Faculty Sponsor: Kelly Rice

Presenters: Rikki Stutheit

Project Title: Physical Activity to Increase the Self-Esteem of Early Adolescent Females

Faculty Sponsor: Kelly Rice

1:00 p.m. to 1:25 p.m.

Location/Format: Loso Hall 116, **Talk**

Presenters: Samuel DeVore

Project Title: Britain's Medical Revolution and the First World War

Faculty Sponsor: Ryan Dearinger

Location/Format: Loso Hall 117, **Talk**

Presenters: Matthew Booher

Project Title: Leadership and Logistics: The Communication Necessities of a Cadet Executive Officer

Faculty Sponsor: April Curtis

1:30 p.m. to 1:55 p.m.

Location/Format: Loso 115, **Remote** (Online Presentation)

Presenters: Rosemary Kinch

Project Title: Report on Incident Management Communications and the Results on Local Communities.

Faculty Sponsor: Nancy Knowles

Location/Format: Loso Hall 116, **Talk**

Presenters: Taylor Nelson

Project Title: McCarthyism: An Organized Crime

Faculty Sponsor: Ryan Dearinger

Location/Format: Loso Hall 117, **Talk**

Presenters: Phath Chab

Project Title: Paradigms in the Origin of the Gay Civil Rights Movement

Faculty Sponsor: Ryan Dearinger

1:30 p.m. to 2:20 p.m.

Poster Sessions in Lobby of Loso Hall

Presenters: Elizabeth Ayers

Project Title: Comparing the effectiveness of high quality to lower quality running shoe

Faculty Sponsor: Darren Dutto

Presenters: Caitlynn R. Barton, Madeline M. Lease, Joel D. Jacobs, Bri L. Stavaas, Olivia E. Starks & Michael E. Hillman

Project Title: Analysis of Pyrrolizidine Alkaloids in *Cryptantha maritima*

Faculty Sponsor: Ron Kelley

Presenters: Daysi Bedolla & Myra A. Shanahan

Project Title: Analysis of Polyphenols in Beer

Faculty Sponsor: Anna Cavinato

Presenters: Charlette Burghard, Lena Johnson & Piper Cantrell

Project Title: NMR Analysis of Pyrrolizidine Alkaloid Monoesters from the Plant Family Boraginaceae

Faculty Sponsor: Ron Kelley

Presenters: Miles Loupe

Project Title: Proposal: Add Sports Management Masters and Undergraduate Degree Programs to the Eastern Oregon University campus

Faculty Sponsor: Brian Sather

Presenters: Dillon Lytsell & Osvaldo Martinez

Project Title: Multifaceted Overview on Concussions in Sport and Player Safety

Faculty Sponsor: Kyle Pfaffenbach

Presenters: Krystal Schadwald

Project Title: Physical Activity Effects on Behavior and Mood in Students with Disabilities

Faculty Sponsor: Kyle Pfaffenbach

Presenters: Christina Wakinyan, Leah Harris

Project Title: The Effect of Exercise on Executive Function

Faculty Sponsor: Kyle Pfaffenbach

2:00 p.m. to 2:25 p.m.

Location/Format: Loso 115

Presenters: Nathan Zoon

Format: **Talk**

Project Title: A New Modernity: A Teaching Unit on the French Revolution

Faculty Sponsor: Ryan Dearinger



Presenters

Presenter's Name	Time	Format	Location	Faculty Sponsor
AH YOU-Dias, Maya <i>(second presentation)</i>	10:30 a.m. to 11:20 a.m.	Poster	Lobby of Loso Hall	Marie Balaban
	11:30 a.m. to 11:55 a.m.	Talk	Loso Hall 126	Marie Balaban
ALBRECHT, Hayden	12:30 p.m. to 1:20 p.m.	Poster	Lobby of Loso Hall	Kelly Rice
ANDERSON, Sarah	11:00 a.m. to 2:00 p.m.	Exhibit	Senior Art Studio	Cory Peeke
ANTEAU, Trenten	10:30 a.m. to 11:20 a.m.	Panel	McKenzie Theatre	Brian Sather
AYERS, Elizabeth	1:30 p.m. to 2:20 p.m.	Poster	Lobby of Loso Hall	Darren Dutto
BAKER, Mitchell	12:30 p.m. to 12:55 p.m.	Talk	Loso Hall 126	Ryan Dearing
BARTON, Caitlynn	1:30 p.m. to 2:20 p.m.	Poster	Lobby of Loso Hall	Ron Kelley
BAUER, Reece	11:30 a.m. to 11:55 a.m.	Talk	Loso Hall 126	Marie Balaban
BEDOLLA, Daysi <i>(second presentation)</i>	12:30 p.m. to 1:20 p.m.	Poster	Lobby of Loso Hall	Colin Andrew
	1:30 p.m. to 2:20 p.m.	Poster	Lobby of Loso Hall	Anna Cavinato
BLANCHARD, Ryan <i>(second presentation)</i>	11:00 am to 11:25 a.m.	Talk	Loso Hall 116	Steve Tanner
	11:30 a.m. to 11:55 a.m.	Talk	Loso Hall 116	Amy Yielding
BOCK, Rachel	12:00 pm to 12:25 p.m.	Talk	Loso Hall 116	Ryan Dearing
BOOHER, Matthew	1:00 p.m. to 1:25 p.m.	Talk	Loso Hall 117	April Curtis
BREEN, Haley	10:30 a.m. to 11:20 a.m.	Poster	Lobby of Loso Hall	Anna Cavinato
BROOKSHIRE, Jasmine <i>(second presentation)</i>	11:00 a.m. to 2:00 p.m.	Exhibit	Senior Art Studio	Cory Peeke
	12:30 p.m. to 12:55 p.m.	Talk	Loso Hall 116	Ryan Dearing
BURGHARD, Charlette	1:30 p.m. to 2:20 p.m.	Poster	Lobby of Loso Hall	Ron Kelley
CAMARA, Cheyenne	10:30 a.m. to 11:20 a.m.	Poster	Lobby of Loso Hall	John Rinehart
CANTRELL, Piper	1:30 p.m. to 2:20 p.m.	Poster	Lobby of Loso Hall	Ron Kelley
CARTER, Jessica	10:30 a.m. to 11:20 a.m.	Poster	Lobby of Loso Hall	Anna Cavinato
CHAB, Phath	1:30 p.m. to 1:55 p.m.	Talk	Loso Hall 117	Ryan Dearing
CHAMBERLAIN, Jake	10:30 a.m. to 11:20 a.m.	Panel	McKenzie Theatre	Brian Sather
CLARK, Kevin	11:30 a.m. to 12:20 p.m.	Poster	Lobby of Loso Hall	Kelly Rice
COLFLESH, Tylo	10:30 a.m. to 11:20 a.m.	Poster	Lobby of Loso Hall	Marie Balaban
CROSSLER-LAIRD, MeeMee	11:30 a.m. to 11:55 a.m.	Talk	Loso Hall 126	Marie Balaban
CURRENT, Kendall	10:30 a.m. to 11:20 a.m.	Poster	Lobby of Loso Hall	Kelly Rice
DeVORE, Samuel	1:00 p.m. to 1:25 p.m.	Talk	Loso Hall 116	Ryan Dearing
DEYARMIN, Colin	11:30 a.m. to 12:20 p.m.	Poster	Lobby of Loso Hall	Kyle Pfaffenbach
DINH, An	11:00 am to 11:25 a.m.	Talk	Loso Hall 116	Steve Tanner
DIXON, Jasmine	12:30 p.m. to 1:20 p.m.	Poster	Lobby of Loso Hall	Le Bailey
ESQUIVEL, Alondra <i>(second presentation)</i>	9:25 a.m. to 9:45 a.m.	Keynote	McKenzie Theatre	Bill Grigsby
	10:30 a.m. to 11:20 a.m.	Poster	Lobby of Loso Hall	Bill Grigsby
FULFER, Johnny	12:00 p.m. to 12:25 p.m.	Talk	Loso Hall 126	Rebecca Hartman
GASSELING, Darian	12:30 p.m. to 1:20 p.m.	Poster	Lobby of Loso Hall	Kelly Rice
GAYLORD, Marie	11:30 a.m. to 12:20 p.m.	Poster	Lobby of Loso Hall	Jeremy Riggle
GIANANDREA, Christopher	11:30 a.m. to 12:20 p.m.	Poster	Lobby of Loso Hall	Alysia Cohen
GRIFFIN, Rikki	12:30 pm to 12:55 p.m.	Talk	Loso Hall 117	Jennifer Puentes
GUNNELS, Jacob	11:00 a.m. to 2:00 p.m.	Exhibit	Senior Art Studio	Cory Peeke
HARRIS, Leah	1:30 p.m. to 2:20 p.m.	Poster	Lobby of Loso Hall	Kyle Pfaffenbach
HETRICK, Neil <i>(second presentation)</i>	11:30 a.m. to 12:20 p.m.	Panel	Loso Hall 117	Jodi Varon
	12:30 p.m. to 1:20 p.m.	Panel	Loso 115	Cori Brewster
HILLMAN, Michael	1:30 p.m. to 2:20 p.m.	Poster	Lobby of Loso Hall	Ron Kelley
HILLMICK, Jordan	11:30 a.m. to 12:20 p.m.	Poster	Lobby of Loso Hall	Alysia Cohen
HOOD, Katherine	10:30 a.m. to 11:20 a.m.	Poster	Lobby of Loso Hall	John Rinehart
HOWE, Andrew	10:30 a.m. to 11:20 a.m.	Panel	McKenzie Theatre	Brian Sather
HUNT, Ryan	11:30 a.m. to 12:20 p.m.	Poster	Lobby of Loso Hall	Jeremy Riggle
JACOBS, Joel <i>(second presentation)</i>	11:30 a.m. to 11:55 a.m.	Talk	Loso Hall 116	Amy Yielding
	1:30 p.m. to 2:20 p.m.	Poster	Lobby of Loso Hall	Ron Kelley
JOHNSON, Lena	1:30 p.m. to 2:20 p.m.	Poster	Lobby of Loso Hall	Ron Kelley

Presenters *(Continued)*

Presenter's Name	Time	Format	Location	Faculty Sponsor
KINCH, Rosemary	1:30 p.m. to 1:55 p.m.	Remote/Online	Loso 115	Nancy Knowles
LEASE, Madeline	1:30 p.m. to 2:20 p.m.	Poster	Lobby of Loso Hall	Ron Kelley
LOUPE, Miles	1:30 p.m. to 2:20 p.m.	Poster	Lobby of Loso Hall	Brian Sather
LYTSELL, Dillon	1:30 p.m. to 2:20 p.m.	Poster	Lobby of Loso Hall	Kyle Pfaffenbach
MALEY, Peter	11:00 a.m. to 2:00 p.m.	Exhibit	Senior Art Studio	Cory Peeke
MANDELLA, Brian	10:30 a.m. to 11:20 a.m.	Poster	Lobby of Loso Hall	Anna Cavinato
MARTINEZ, Osvaldo	1:30 p.m. to 2:20 p.m.	Poster	Lobby of Loso Hall	Kyle Pfaffenbach
MEES, Brianna	12:30 p.m. to 1:20 p.m.	Poster	Lobby of Loso Hall	Colin Andrew
MILLS, Lauren	10:30 a.m. to 10:55 a.m.	Talk	Loso 115	Ryan Dearing
MITCHELL, Crystal	12:30 p.m. to 1:20 p.m.	Poster	Lobby of Loso Hall	Colin Andrew
MOORE, Jessica	10:30 a.m. to 11:20 a.m.	Poster	Lobby of Loso Hall	John Rinehart
<i>(second presentation)</i>	10:30 a.m. to 11:20 a.m.	Poster	Lobby of Loso Hall	John Rinehart
MORRELL, Thomas	10:30 a.m. to 11:20 a.m.	Panel	McKenzie Theatre	Brian Sather
MURPHY, Mico	10:30 a.m. to 10:55 a.m.	Talk	Loso Hall 116	Amy Yielding
<i>(second presentation)</i>	11:00 am to 11:25 a.m.	Talk	Loso Hall 116	Steve Tanner
NELSON, Taylor	1:30 p.m. to 1:55 p.m.	Talk	Loso Hall 116	Ryan Dearing
NEWKIRK, Caitlyn	11:30 a.m. to 12:20 p.m.	Poster	Lobby of Loso Hall	Jeremy Riggle
NORMAN, Callie	12:30 p.m. to 1:20 p.m.	Poster	Lobby of Loso Hall	Colin Andrew
OSTERGAARD, Madissen	10:30 a.m. to 11:20 a.m.	Poster	Lobby of Loso Hall	Kyle Pfaffenbach
PARRISH, Payton	12:30 p.m. to 1:20 p.m.	Poster	Lobby of Loso Hall	Kelly Rice
PETERS, Alexa	10:30 a.m. to 11:20 a.m.	Poster	Lobby of Loso Hall	Kyle Pfaffenbach
RAINWATER, Crystal	11:00 a.m. to 2:00 p.m.	Exhibit	Senior Art Studio	Cory Peeke
RANGEL, Sidronio	11:00 am to 11:25 a.m.	Talk	Loso 115	Tawnya Lubbes
REYNOLDS, Kaitlyn	10:30 a.m. to 11:20 a.m.	Poster	Lobby of Loso Hall	John Rinehart
RHOTON, Taylor	10:30 a.m. to 10:55 a.m.	Talk	Loso Hall 116	Amy Yielding
RIDDER, Katelyn	11:30 a.m. to 12:20 p.m.	Poster	Lobby of Loso Hall	Kelly Rice
RUMMERFIELD, Evan	9:45 a.m. to 10:05 a.m.	Keynote	McKenzie Theatre	Nancy Knowles
<i>(second presentation)</i>	10:30 a.m. to 11:20 a.m.	Panel	Loso Hall 126	Nancy Knowles
<i>(third presentation)</i>	12:30 p.m. to 1:20 p.m.	Panel	Loso 115	Cori Brewster
SCHADWALD, Krystal	1:30 p.m. to 2:20 p.m.	Poster	Lobby of Loso Hall	Kyle Pfaffenbach
SHANAHAN, Myra	11:30 a.m. to 12:20 p.m.	Poster	Lobby of Loso Hall	Jeremy Riggle
<i>(second presentation)</i>	1:30 p.m. to 2:20 p.m.	Poster	Lobby of Loso Hall	Anna Cavinato
SHELTON, Baylee	11:30 a.m. to 12:20 p.m.	Poster	Lobby of Loso Hall	Darren Dutto
SHOEMAKER, Alexa	11:30 a.m. to 11:55 a.m.	Talk	Loso 115	April Curtis
SPEARS, Emily	10:30 a.m. to 11:20 a.m.	Poster	Lobby of Loso Hall	Kyle Pfaffenbach
SPIKERMAN, Donovan	10:30 a.m. to 11:20 a.m.	Poster	Lobby of Loso Hall	Jeremy Riggle
STAMMEN, Haley	12:30 p.m. to 1:20 p.m.	Panel	Loso 115	Cori Brewster
STARKS, Olivia	1:30 p.m. to 2:20 p.m.	Poster	Lobby of Loso Hall	Ron Kelley
STAVAAS, Bri	1:30 p.m. to 2:20 p.m.	Poster	Lobby of Loso Hall	Ron Kelley
STONE, Rachael	10:30 a.m. to 11:20 a.m.	Poster	Lobby of Loso Hall	Kyle Pfaffenbach
STRINGFELLOW, Gabrielle	12:00 p.m. to 12:25 p.m.	Talk	Loso 115	April Curtis
STROCK, Austin	10:30 a.m. to 11:20 a.m.	Panel	Loso Hall 126	Nancy Knowles
STUTHEIT, Rikki	10:30 a.m. to 11:20 a.m.	Panel	McKenzie Theatre	Brian Sather
<i>(second presentation)</i>	12:30 p.m. to 1:20 p.m.	Poster	Lobby of Loso Hall	Kelly Rice
SWANSON, Mariah	11:30 a.m. to 12:20 p.m.	Poster	Lobby of Loso Hall	Kyle Pfaffenbach
TURNER, Kai	11:30 a.m. to 12:20 p.m.	Poster	Lobby of Loso Hall	Kyle Pfaffenbach
VARDANEGA, Jenny	12:30 p.m. to 1:20 p.m.	Poster	Lobby of Loso Hall	Colin Andrew
WAKINYAN, Christina	1:30 p.m. to 2:20 p.m.	Poster	Lobby of Loso Hall	Kyle Pfaffenbach
WATKINS, Cassidy	10:30 a.m. to 11:20 a.m.	Panel	McKenzie Theatre	Brian Sather
WELFORD, Lara	11:00 a.m. to 2:00 p.m.	Exhibit	Senior Art Studio	Cory Peeke
ZOON, Nathan	2:00 p.m. to 2:25 p.m.	Talk	Loso 115	Ryan Dearing

**Eastern Oregon University, College of Education and Oregon Teacher Pathway
High School Student Poster Presentations
Tawnya Lubbes, Director, Oregon Teacher Pathway
Simmons Gallery, first floor of Badgley Hall, 10:15 a.m. to 12:15 p.m.**

Hermiston High School (11:15 a.m. to 12:15 p.m.)

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| <ul style="list-style-type: none"> • Isabel BARTLEY • Paola CARMONA • Alexis MERCADO • Hayden MEYERS • Haylie RAHM • Morgan WILSON | <p>How does music affect academic performance?
How does technology affect student performance in school?
How does GPA requirement affect student athletes?
How does extra-curricular activities affect academic achievement?
What time should start based on how much sleep teenagers need?
How does standardized testing affect academic achievement?</p> |
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McLoughlin High School, Milton Freewater (11:15 a.m. to 12:15 p.m.)

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| <ul style="list-style-type: none"> • Emily CALDWELL • Guillermo CASTILLO • James HAGAR • Chelsey HOLFORD • Delaney KARRELS | <p>Mental Illness's Effect on Academic Attendance
Fine Arts in the Classroom
Transgender Rights in Oregon Schools
Life Beyond the Special Education Classroom
Academics and Athletics</p> |
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Pendleton High School (10:15 a.m. to 11:15 a.m.)

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| <ul style="list-style-type: none"> • Dyllon BAUM with Zoe JONES • Hayley BRADLEY with Madison PARKER • Hayley BURCHARD with Annalise OERTWICH • Katelen JOHNSON with Kerrie McCULLEY • Justine McDUGALL with Cheyenne WEESE • Lindsey RUSSELL • Joseph SAVAGE with Jazmin SILVA | <p>First Amendment rights in public schools
Teacher retention/turnover in SPED
IEP's and how they affect student treatment
How does foster care affect a child's academics?
How does cyberbullying affect a child's academics?
How teenage pregnancy affects academics and future college plans
How marijuana effects school attendance</p> |
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Umatilla High School (10:15 a.m. to 11:15 a.m.)

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| <ul style="list-style-type: none"> • Alexander ARBOGAST • Jeria CARRILLO • Anthony CONTRERAS • Trey DOHMAN • Madison FINCK • Yesenia DeLaCERDA-FLORES • Esteisy LEON • Ana MALDONADO • Paola MARTINEZ MONCADA • Paige MATLACK • Brenda MENDOZA-RODRIGUEZ • Ayana REYES • Araceli SANGUINO | <p>A Review of Student-Targeted Substance Abuse Prevention Programs
Parent Involvement Affects Student Achievement
The Consumption and Effects of Caffeine in Children and Teens
Effective Strategies for Students Learning English as a Nonnative Language
How ADHD affects students and success in school and testing
An Assessment of Creative Thinking Methods in Classrooms
How Bullying affects student achievement
The Impacts of Immigration on Students and their Families
Causes of and Mitigation of Tardiness to Class.
How does depression affect adolescents
Challenges of the Immigrant students
Should High School Start Later in the Day?
How cyberbullying affects student achievement</p> |
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Vale High School (11:15 a.m. to 12:15 p.m.)

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| <ul style="list-style-type: none"> • Bo BOURASA • Jacob DeLONG • Angela GARCIA • Taylie KING • Jacob MILLESON • Grace REEVER • Shady VILLEGAS | <p>How does Dylsexia Education improve student success?
Does Physical Education have a positive effect on adolescence?
How does race effect your education in the US?
How do early education programs effect elementary school success?
In what ways does personal finance education at the secondary level assist future financial outcomes?
How has Title IX affected the public school system since the 1970's
Does social media have a positive effect on student success?</p> |
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Symposium Planning Committee 2017:

Dr. Kyle Pfaffenbach, Chair
Dr. Alysia Cohen, Co-Chair
Ms. Molly Burke, Coordinator
Ms. Lori Baird, Co-Coordinator
Dr. Kelly Rice
Dr. Colby Heideman
Dr. Nancy Knowles
Mr. Michael Sell
Dr. Amy Yielding

The Symposium Planning Committee thanks the following for their valuable contributions of time and energy to this event:

Dr. Sarah Witte, Provost
Tawnya Lubbes, Director OTP
Ms. Karyl Kramer
Ms. Kris Martens
Ms. MJ Heather
Ms. Khris Wilson
Mr. Jace Wheeler
Ms. Pat Hinton
Ron Wheeler & the Sodexo Catering Staff

The committee appreciates all the effort and support of the faculty sponsors, and all those that promote excellence in scholarly activities that extend beyond the classroom.