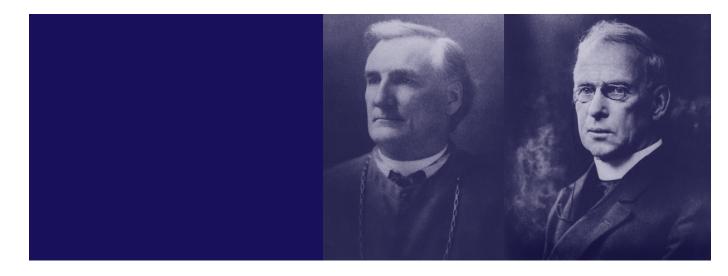
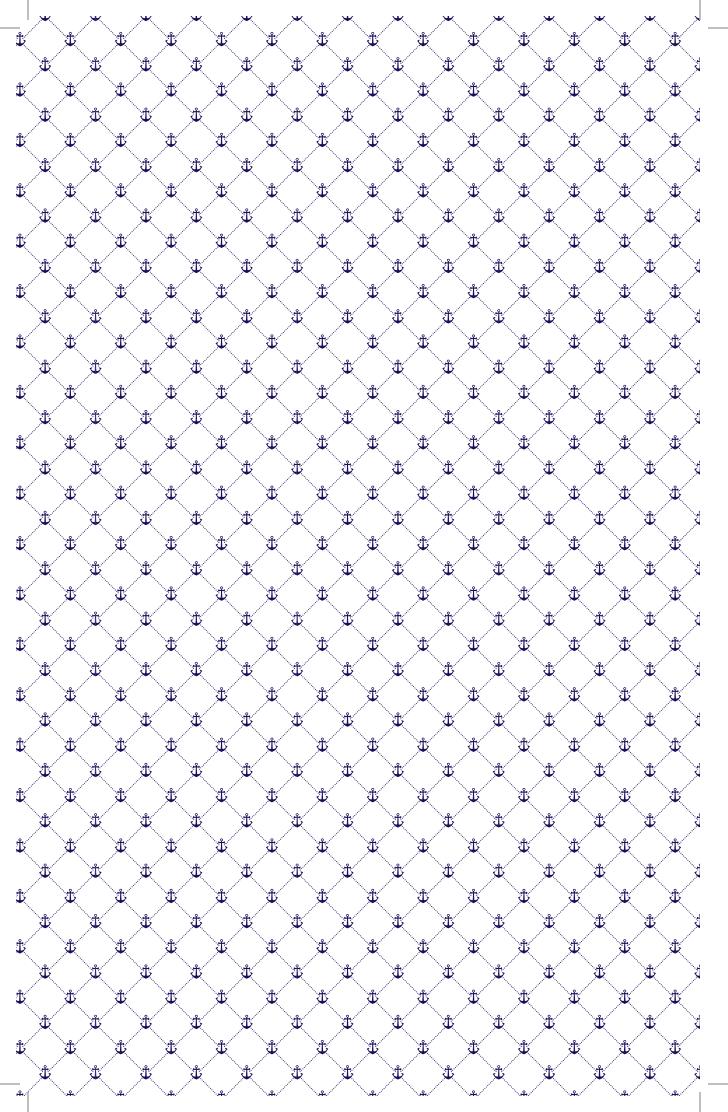


# SCHEDULE OF PORTLAND FOUNDERS' DAY

TUESDAY, APRIL 10, 2018





Founders' Day is when the University of Portland pauses to celebrate its rich past and its promising future: the past as we honor the bold leaders — Archbishop Alexander Christie and Father John Zahm — who dared to dream of a Catholic university overlooking the Willamette River; the future as we learn from our most outstanding students whose research as undergraduates portends great things for the future. In recognition of the importance of both the past and the future, the University holds no classes on a Tuesday in April and instead opens its doors to all to learn from our best and brightest students.

Founders' Day was first celebrated in the spring of 1902 following the completion of the first academic year in recognition of Archbishop Christie and Fr. Zahm's vision and determination. It quickly became a tradition. Archbishop Christie would ride his horse, Dandy, to campus from Portland each spring in order to give a lecture to the young men composing the student body. And then based on his authority as the Archbishop, he would cancel classes for the remainder of the day. With his death in 1925, the tradition also ended.

Founders' Day was revitalized in 2001 as a part of the University's centennial celebration. It has continued to grow since then and now is kicked off with an awards breakfast for graduating seniors, followed by senior presentations, undergraduate research, panel discussions, recitals, and the Scholarship Luncheon, where students who receive financial aid from scholarships meet the benefactors whose generosity has helped them attend the University. Classes scheduled to begin after 4 p.m. meet at their regularly scheduled times.

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# **Presentations**

- **3-9** Session I ...... 10:15 11:05 a.m.
- **9-15** Session II..... 11:15 a.m. 12:05 p.m.
- **15-20** Session III...... 2:15 3:05 p.m.

## **Poster Sessions**

Students will be by their posters during the noted poster presentation session, but the posters will remain up all day.

23 10:15 - 11:05 a.m.
23-26 11:15 a.m. - 12:05 p.m.
26-27 2:15 - 3:05 p.m.
27-29 3:15 - 4:05 p.m.

# **Post-Founders' Day Evening Events**

4:10 - 4:30 p.m.	Founders' Day Vespers, Chapel of Christ the Teacher
4:30 - 5:15 p.m.	Annual CAS Senior Toast, St. Mary's Lounge
6:30 - 8:00 p.m.	Writers magazine launch party, all invited, Campus Bookstore

# up.edu/foundersday

#### College of Arts and Sciences | Biology

"Hostility Attitude & Prevalent Diabetes Among Black Adults: The Jackson Heart Study."

Hostility and diabetes mellitus share common determinants such as obesity, tobacco use, and physical inactivity. Thus, we investigated the unstudied relationship between hostility and diabetes mellitus at baseline among Black adults in the Jackson Heart Study, a group with high rates of diabetes mellitus.

Presented By: Tsikata Apenyo

Faculty Sponsor: Kyle Flann

Buckley Center 111

**Buckley Center 310** 

#### College of Arts and Sciences | Chemistry

"Coordination Chemistry of 1,2-Bis(phosphino)-4,5-dimethoxy-benzene Towards Ni(II) Sources."

Transition metal complexes based on chelating diphosphine ligands represent a rather common structural motif seen in catalyst design. During the last 5-7 years our research group has been working on syntheses of several such phosphines. Coordination chemistry of Ni(II) towards one of these compounds, 1,2-bis(phosphino)-4,5-dimethoxy-benzene, will be presented and discussed.

Presented By: Shivam Swamy

Faculty Sponsor: Eugene Urnezius

"Syntheses and Properties of Substituted p-Quinones Bearing Amino and Phosphoryl Substituents."

Quinones represent an important group of organic compounds that continue to fascinate researchers across a number of scientific disciplines. They are well known to undergo reactions involving electron and proton transfers, as well as serve as photo-active units in various dyes. Recently we have uncovered a new synthetic pathway to new highly substituted quinones that are presented herein.

Presented By: Connor McLoughlin

Faculty Sponsor: Eugene Urnezius

"Intraperitoneal Nanotherapy for Metastatic Ovarian Cancer Based on siRNA-Mediated Suppression of DJ-1 Protein Combined with a Low Dose of Cisplatin."

We report an efficient combinatorial therapy for metastatic ovarian cancer based on siRNA-mediated suppression of DJ-1 protein combined with a low dose of cisplatin. Three cycles of siRNA-mediated DJ-1 therapy in combination with a low dose of cisplatin completely eradicated ovarian cancer tumors from the mice with no cancer recurrence detected for the duration of the study, which lasted 35 weeks.

Presented By: Canan Schumann, Stephanie Chan, Jess Millar, Yuliya Bortnyak, Katherine Carey, Alex Fedchyk, Leon Wong, Tetiana Korzun, Abraham Moses, Anna Lorenz, Delany Shea, Olena Taratula, Oleh Khalimonchuk, and Oleh Taratula

Faculty Sponsor: Sr. Angela Hoffman O.S.B.

College of Arts and Sciences | Communication Studies

"Embodying and Reimagining the Female Healthcare Experience for Young Adults."

This qualitative study examines the healthcare experience of young adult females by analyzing embodied patient and provider perspectives. I conducted eight interviews with patients and providers to assess the structural impact of healthcare systems and organizations in the U.S. as well as social identity factors on the quality of care and the patient-provider context.

Presented By: Mara Midiere

Faculty Sponsor: Alexa Dare

Franz Hall 006

#### "Intimacy in NGO Mass Communication: A Pentadic Analysis."

International NGOs rely on awareness garnered through mass communication to fund their missions. Such communication is imperative to broad humanitarian advocacy. This essay employs Kenneth Burke's pentadic criticism to examine how NGOs create intimacy using scene, agent, and agency-centered rhetoric.

Presented By: Molly McSweyn

Faculty Sponsor: Alexa Dare

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#### College of Arts and Sciences | Communication Studies

#### "CHAOS: A Study of Emergency Room Culture."

This study analyzes the organizational culture in a Northwest Emergency Department. Using qualitative methods and guided by the Coordinated Management of Meaning, the study identified five features of the culture; Compassion, Heavy, Adaptable, Obscure, and Synergy. Appropriately labeled CHAOS, these themes highlight the ways that emergency nurses manage stress and identity at work.

Presented By: Bethany Quist Faculty Sponsor: Alexa Dare

#### College of Arts and Sciences | English

"It Matters, It's Not Just Life."

This presentation will focus on finding utility and growth in purposefully reflecting upon moments of growth through the construction of a personal narrative.

Presented By: M. Brett Adams

#### "Travel Through Time and Space."

Throughout this presentation, you will travel with me to China, hear my native language and culture, see my cultural barriers, know my personal story. You will witness how different language represents different social relations. Time to buckle up!

Presented By: Tinglei Huang

**"Science in Literature: the Conflation of Empathy and Language of the Romantic Period."** This paper will focus on the work of Romantic poets, including William Wordsworth, in relation to Romantic period scientific ideologies surrounding human empathy and morality.

Presented By: Christina Beningfield

Faculty Sponsor: Molly Hiro

Franz Hall 026

Franz Hall 018

Faculty Sponsor: Molly Hiro

Faculty Sponsor: Molly Hiro

#### "It's Time to Get Information: the History of Social Reform in Beyoncé's Lemonade."

An analysis of how Beyoncé Knowles Carter breaks the concept of linear progress in time by asserting that liberation doesn't move in a singular direction — it is multi-generational and circular, with time existing all at once. Presented By: Elizabeth Barker Faculty Sponsor: Molly Hiro

#### College of Arts and Sciences | Environmental Science

"Arctic National Wildlife Refuge."

An analysis of changes in 2017 in regulation and legal status of the Arctic National Wildlife Refuge. Presented By: Carter Aebi, Rhys Coffee, and Andrew Novotney *Faculty Sponsor: Steven Kolmes and Russell Butkus* 

#### "Pebble Mine Proposal in BristolBay Watershed, Alaska."

An analysis of environmental, economic, and social impacts of the Proposed Pebble Mine in Alaska. Presented By: Grace Brennan, Victoria Avalos, Kevin Yuskaitis, and Tristan Rowley *Faculty Sponsor: Steven Kolmes and Russell Butkus* 

"National Monuments in Jeopardy."

An analysis of proposed changes in our National Monuments since 2017.

Presented By: Rachael Aber, Isabella Neuzil, Annmarie Morach, and Robbie Sosin

Faculty Sponsor: Steven Kolmes and Russell Butkus

College of Arts and Sciences | International Language and Cultures

# "Expand Your World: Combining Language Studies with a Second Major."

Students will speak to the benefits of majoring in an International Language and secondary discipline. They will share the ways in which language study has enhanced their university studies, widened opportunities for their future career paths and enriched their personal lives.

Presented By: Caroline Holyoak, Andrea Theriau, Maria Edwards, Joey Bacon, and Madeline Otto *Faculty Sponsor: Andrea Castanette* 

Franz Hall 006

#### College of Arts and Sciences | Mathematics

#### "Modeling Suicide Risk and Assessing Preventative Measures in American Veterans."

An average of 22 veterans commit suicide every day. Veteran suicide is a national crisis that requires prevention efforts that go beyond statistical analysis. Here we discuss our development and analysis of a mechanistic mathematical model of veteran suicide risk that incorporates relationships among key dynamic factors known to influence the well-being of veterans.

Presented By: Sarah Dale, Emily McClung, Alexa McQuiston, and Jack Padon *Faculty Sponsor: Hannah Highlander* 

"Aptitude Assessment with a Computer Adaptive Testing Algorithm."

Computer Adaptive Testing (CAT) is reinventing the way assessment is given. Instead of assessments that are the same for every student, CAT uses the power of computers to create individualized assessments based on each student's aptitude, as determined by the testing algorithm. Here we discuss an algorithm we have developed to run a model Computer Adaptive Test.

Presented By: Meghan Childs, Sebastian Gracia, and Thomas Ryan Faculty Sponsor: Hannah Highlander

"Food Webs from a Topological Perspective."

In ecology, a food web is an interconnected network of food chains in an ecosystem. Current methods				
engender limitations regarding analytic tools for ecologists. Our work seeks to explore new methods of				
evaluation by investigating graphs of food webs through a more sophisticated topological approach.				
Presented By: Kennedy Courtney and Jennifer Richey	Faculty Sponsor: Christopher Lee			
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College of Arts and Sciences   Philosophy	Franz Hall 223
"Epistemology of Ignorance and Sexual Education."	
Presented By: Hayley Miller	Faculty Sponsor: Lara Trout
"Phenomenology in Race and Religion Through the Lenses of Gla Enrique Dussel."	oria Anzald`a and
Presented By: Gabriel Ruiz	Faculty Sponsor: Lara Trout
<ul> <li>College of Arts and Sciences   Political Science</li> </ul>	Franz Hall 231
"U.S. Engagement with International Institutions Post-WWII."	Trail Phane 291
Presented By: Micaela Snashall	Faculty Sponsor: Jeffrey Meiser
"A Predictive Analysis on the Future of Space Governance."	
Presented By: Quade MacDonald	Faculty Sponsor: Jeffrey Meiser
"Global Warring: Climate change and Warfare."	
Presented By: Andrew Cousins	Faculty Sponsor: Jeffrey Meiser
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#### College of Arts and Sciences | Psychology

#### Shiley Hall 123

**Buckley Center 112** 

"Does Dopamine Signaling Change in a Brain with Huntington's Disease? Measures of Tyrosine Hydroxylase in the Mesolimbic-Cortical Circuit of a Transgenic Mouse Model."

This study aims to look at the neuronal changes that are occurring in a brain with Huntington's disease in a mouse model. The regions of the brain that are associated with the personality changes that are occurring in Huntington's disease include the Nucleus Accumbens and Anterior Cingulate Cortex, both regions which receive dopamine signaling. Therefore, dopamine intensity will be measured.

Presented By: Ruby Perez

Faculty Sponsor: Mark Pitzer and Zach Simmons

#### College of Arts and Sciences | Psychology

"Mental Health Implications of Meaning in Life."

The two components of Meaning in Life, the presence of meaning and the search for meaning (pMIL:sMIL), exhibit differing trends in relation to mental health. pMIL indicates favorable mental health outcomes while sMIL indicates more adverse outcomes. An experimental paradigm shows that increases in sMIL in response to moral elevation were related to positive mental health outcomes.

Presented By: Vandric Castro

Faculty Sponsor: Zach Simmons and Sarina Saturn

# "Relationships Between Self-Compassion and the Pro-Social Emotional State of Moral Elevation."

This study examined the relationship between self-compassion-being mindful, self-kind, and sensing<br/>common humanity-and its relationship to experiences of moral elevation and prosociality. Study 1 showed<br/>relationships between these constructs, while study 2 used an experimental design to explore causality.Presented By: Michelle SpanglerFaculty Sponsor: Zach Simmons and Sarina Saturn

#### "Effects of Rhesus Macaque Rearing on Infant-Maternal Relationship."

In rhesus macaques, there are rare cases in which infants may be fostered by another female. It is assumed that the maternal care towards fostered infants is identical to biological infants, but there is little evidence to support this theory. This study seeks to address this deficit in the literature. The data show fostered infants were groomed and retrieved by their mothers more often.

Presented By: Paige Reohr

#### College of Arts and Sciences | Social Work

"Accessing Culturally Appropriate Food: Barriers for Refugees in Portland."

This research project examines what barriers refugees who have been resettled in Portland face when trying to access culturally-specific foods as an alternative to the standard American diet. Using person-inenvironment theory, we will discuss the importance of accessing culturally-appropriate food, and what obstacles currently exist to hinder that process.

Presented By: Megan Cornwell and Carol Lee

"Effects of Mentorship on Displaced Youth."

This qualitative study looks at ways in which mentors work with and impact displaced youth. Using Trauma Theory, we will assess two matched-pairs from two youth-serving community organizations through in-depth interviews. This study aims to understand how these relationships have led to improved functioning and social adaptability.

Presented By: Abigail Brown and Sarah Peterson

#### "Elder Isolation in the New Age: Examining the Mental and Physical Impacts of Isolation on Older Adults' Wellbeing."

This research project will shed light on the various impacts of social isolation on older adults. By using Systems Theory and observing how forces at the micro, mezzo, and macro levels of society influence the lives of older adults, we will look at the ways in which isolation plays out in emotional and physical ways.

Presented By: Cassidy Christopher, Danyelle Dwyer, and Marissa Torres Faculty Sponsor: Kevin Jones

#### College of Arts and Sciences | Sociology

"Student Loan Debt and its Relationship to Depression, Anxiety, and Academic Performance."

Using high quality data from UCLA's Higher Education Research Institute, the presentation examines whether debt affects GPA, likelihood of achieving a degree, depression, or anxiety.

Presented By: Lauren Jones

Faculty Sponsor: Martin Monto

Buckley Center 103

Faculty Sponsor: Zach Simmons

Faculty Sponsor: Kevin Jones

Faculty Sponsor: Kevin Jones

Shiley Hall 123

## College of Arts and Sciences | Sociology

"A Shifting Faith: Why College-Aged Adults want to Join the Catholic Church."

Ten college-aged students who have completed or were currently participating in the RCIA program at the University of Portland were interviewed to find out why college-aged students want to join the Catholic Church. Respondents indicated that high school influences, the community at UP, and learning more about the Eucharist were the main reasons why they wanted to join the Catholic Church.

Presented By: Regan Murphy

"Is Sugar as Sweet as They Say?"

A look into women's perspective of their experience in nontraditional relationships with older men, otherwise known as sugaring relationships. Popular media has recently placed an emphasis on highlighting sugar daddy-sugar baby dating relationships.

Presented By: Nina Sackett

# "Impact of Cultural Competence on the Own-Race Bias."

The Own-Race Bias (ORB; being able to better distinguish own-race faces than other-race faces) is a large factor in cross-racial misidentifications. Cultural competence (being sensitive to group differences) has not been explored in relation to the ORB, but has improved one's work in nursing and social work. This study aimed to determine if the Own-Race Bias persists across testing designs.

Presented By: Victoria Weber

# College of Arts and Sciences | Theology

"Should the Catholic Church Pray for the Jews?"

Centered on the documents of Vatican II, this paper seeks to offer a reasoned defense of Pope Benedict XVI's 2008 revision of the Good Friday Prayer for the Jews used in the Traditional Latin liturgy, which expresses the hope that "they recognize Jesus Christ, the Savior of all mankind."

Presented By: Koa Bartsch

# "Refusing Isolation: A Liturgical and Spiritual Approach."

Suffering may evoke isolation-an isolation from oneself, others, and God. Although suffering cannot be controlled, individuals and communities have the ability to control their reaction to how suffering is experienced. The sacrament of anointing of the sick and Ignatian spirituality complementarily work together to transform suffering into an experience that allows an individual to recognize God. Presented By: Ally Liedtke

Faculty Sponsor: David Turnbloom

Faculty Sponsor: Teri Grimmer and Ellen Lippman

Faculty Sponsor: David Turnbloom

# Pamplin School of Business

# "Crime or Compassion: Pink Collar Crime."

Pink-collar crime is fraud committed by females in lower level positions who steal money from their employers. Such crime excels in industries with weak internal controls. This talk analyzes identifying traits that make pink-collar crime unique from other white-collar crimes and considers whether a bias exists when a man is employed rather than a woman, enabling the incidence of pink-collar crime.

Presented By: Mckenzie Ervin 

# Pamplin School of Business

# "Choosing a College: Influential Factors, Satisfaction, and Recruitment Optimization."

A market research deep-dive to better understand which factors are most critical to students when deciding where to attend college, as well as which factors prove most correlated with student satisfaction. Using quantitative survey responses from 160 students across 39 universities, our team poses recommendations for the Office of Admissions to better capture its prospective student market.

Presented By: Kaitlin Flanigan, Maddie Hansen, Brooke Hintze, and Danielle Yao Faculty Sponsor: Ian Parkman

#### Buckley Center 110

#### Franz Hall 034

**Buckley Center 104** 

Faculty Sponsor: Martin Monto

Franz Hall 214

Faculty Sponsor: Martin Monto

Faculty Sponsor: Martin Monto

#### School of Education

"Understanding the Complexities of Literacy: Developing Effective Practices."

Literacy is a complex and dynamic concept that is interpreted and defined in multiple ways (EFA Global Monitoring Report Team, 2006). This presentation describes a study of teachers in various positions in K-12 schools across the U.S. Findings verify an emphasis on academic learning as opposed to social, emotional, or ethical learning (Cohen, 2006), but also reveal unique practices.

Presented By: Elise Pepe

Shiley School of Engineering

#### "Voice-Controlled Motorized Wheelchair."

The Transnavigators' Voice Controlled Wheelchair will increase people's independence by autonomously navigating them to their destination using voice commands. It is a platform to which users can attach their existing wheelchair, allowing them to continue using their favorite chair while enjoying the benefits of an autonomous wheelchair.

Presented By: Matthew Yuen, Jarren Takaki, Courtney Otani, and Anthony Donaldson Faculty Sponsor: Robert Albright and Jen Symons, Industry Advisor: Ryan Jefferis

"Harry Potter Chess Set."

Team checkmate designed an automated chess set that allows users to play the game of chess without touching any of the pieces. All moves will be made using voice commands and the pieces will move on their own.

Presented By: Jacob Bryant, Noah Davis, Jun Tiliwebug, and Nathan Tibbets Faculty Sponsor: Rajaa Alqudah 

#### Shiley School of Engineering | Computer Science

#### "Trade with Tricia."

Trade with Tricia is an app for buying and selling textbooks that has an important twist: you communicate with Tricia entirely using text messages. Thus, no special app need be installed. The program understands your requests and helps connect you with other buyers and sellers.

Presented By: Michael Larios-Grave, Jared Madison, Avaya Bhattarai, Nathan Camacho, and Charles Rayner Faculty Sponsor: Steve Vegdahl, Industry Advisor: Devin Pentecost

#### "Bon App App."

Ready to skip the line at the commons? This app allows you to order food with your phone and pick it up at a scheduled time.

Presented By: Briahna Santillana, Giselle Marston, Abhinav Mulgada, and Goutham Sundaram Faculty Sponsor: Andrew Nuxoll, Industry Advisor: Matt Delaney .....

#### Shiley School of Engineering | Civil Engineering

#### "Shiley Green Roof."

This team spent the year evaluating/redesigning the Shiley Hall green roof. This roof is underutilized for research and has been overtaken by non-native species. Redesign will improve its usability for research by UP faculty and students, and improve operation and maintenance. The team developed a detail and drawing set, landscape design, and an operation and maintenance schedule for redesign.

Presented By: Katie Conkle, Jenna Kube, Sadie Schroeter, and Carson Tangonan Faculty Sponsor: Niki Schulz, Industry Advisor: Matt Burlin

#### "Bioretention Test Bed Design."

The bioretention test bed team is designing a series of planters for Dr. Poor's stormwater treatment research on UP's River Campus. The design involves recommended location, pipe sizing, test ports, soil and plants. The end purpose of the test beds is to conduct experiments on different soil mixes for their effectiveness in contaminant removal.

Presented By: Lloyd Filbert, Tristen Rowley, Sam Schwisow, and Erin Yamamoto Faculty Sponsor: Cara Poor, Industry Advisor: Anne MacDonald

Shiley Hall 101

Shiley Hall 124

Shiley Hall 319

Faculty Sponsor: Kim Ilosvay

#### Shiley School of Engineering | Mechanical Engineering

#### Shiley Hall 301

"Briquette Press."

The Briquette Press team designed and tested an apparatus to form and press charcoal briquettes. This press is intended for future use in Haiti, utilizing bio-char to address deforestation.

Presented By: Connor Cronin, Collin Pierce, Matthew Linhart, Tyler Cuff, and Sage Guttes Faculty Sponsor: Shazib Vijlee, Industry Advisor: Fred Heavens

#### "Biomass Kiln."

This team designed a biomass kiln that converts a renewable plant material into charcoal responding to a need for renewable charcoal production in Haiti. Haiti has unsustainably reduced local forests to produce charcoal made from wood. The kiln allows the study of a heating process that creates charcoal and what renewable alternatives to wood may be used for charcoal production.

Presented By: Nick Edwards, Alek Fredericksen, Chad Kon, and Weslyn Nishimura Faculty Sponsor: Shazib Vijlee, Industry Advisor: David Auxier

#### School of Nursing

#### Buckley Center Auditorium

"Inclusion of Latina Women in Qualitative Health Research: Lessons Learned about Recruitment."

Student researchers sought to understand the prenatal care experiences of Latina-American women through qualitative interviews. After attempting multiple recruitment strategies, the students were unable to access this vulnerable population. The students reflected on lessons learned from this experience and designed a conceptual model of best practice for future recruitment in this population.

Presented By: Emma Kuehl, Lauren O'Brien, and Stacey Van Dyke Faculty Sponsor: Laura Mood and Kaye Wilson-Anderson

"Impact of Interview Testimonials of Long-Term Smokers on Youth Tobacco Use."

This study explores the engagement of a vulnerable student population with candid testimonial and panel style anti-tobacco education. Panelists have the opportunity to share their experiences in hopes that students can identify stressors that increase their risk for using tobacco. This project is funded by the American Lung Association's Youth Tobacco Elimination Project.

Presented By: Emily Christensen, Katie Fonk, Laura Manning, John Nguyen, Rachel Punzalan, and Joseph Schymeinsky

Faculty Sponsor: Erica Bailey

Session II 11:15 a.m. - 12:05 p.m.

#### College of Arts and Sciences | Biology

#### "Science and Ethics of Immunotherapy Clinical Research with Adults and Children."

We delve into the intersection of ethics and science in human research that aims to use the immune system to fight cancer. We explain the science of these cutting edge immunotherapies and how researchers are forced to navigate through often unclear ethics of using adults and children in research while also pushing their research to yield maximum benefit.

Presented By: Erin Faloon and Michael Gallagher

#### "Biomolecular Target Identification of a Nerve Specific Fluorophore Using Novel Proteomics Methods for Nerve Sparing Radical Prostatectomy."

Prostate cancer is highly prevalent in men, with approximately 60% of patients experiencing complications due to nerve damage. Oxazine 4, a small molecule fluorophore, is nerve specific and thus provides a viable structure for developing near infrared probes. As a result, it is useful for nerve visualization, and sparing, during fluorescence-image-guided nerve-sparing radical prostatectomies.

Presented By: Broderick House

Faculty Sponsor: Susan Murray

Faculty Sponsor: Susan Murray

## Buckley Center 310

#### College of Arts and Sciences | English

"Reading into Personhood: The Act of Storytelling in Mary Shelley's Frankenstein."

Through the depiction of reading as doubly transformative-as both a visual acquisition of language and as a visual perception and informed inference of a person's identity, behavior, and emotions-Shelley champions the act of reading and storytelling as the catalyst for human connection and the antidote to otherness. Faculty Sponsor: Molly Hiro

Presented By: Sasha (Alexandria) Foley

"'From the Most Unlikely Materials': The Domestic Art of Subversion in The Scarlet Letter and The Minister's Wooina."

In their nineteenth-century novels The Scarlet Letter and The Minister's Wooing, Nathaniel Hawthorne and Harriet Beecher Stowe both explore the relationship between women and materiality, as the objects that women create-via sewing, quilting, embroidery, and other domestic arts-become emblematic of their feminine power.

Presented By: Laura Misch

Faculty Sponsor: Molly Hiro

#### "Body Politics Explored: The Intersection of Place and Self."

In this essay, I analyze the novels Cogewea by Mourning Dove and Quicksand by Nella Larsen by addressing their "being-in-the-world" states and how each protagonist relates to the world, their bodies, and their place within both to better understand their contrasting conclusions.

Faculty Sponsor: John Orr
Faculty sponsor

College of Arts and Sciences | Environmental Science

"Cap and Trade in the Western U.S."

An analysis of developments since 2017 in Cap and Trade in the Western U.S. Presented By: Mara Midiere, Matthew Egan, Abigail Kessi, and Ximena Cuevas Faculty Sponsor: Steven Kolmes and Russell Butkus

"Chlorpyrifos: Evaluation of Recent Regulatory Changes and Uses in Oregon & California."

An evaluation of recent regulatory changes pertaining to Chlorpyrifos in Oregon and California since 2017. Presented By: Carla Cerda, Joshua Colasurdo, Summer Grandy, and Sam Margheim Faculty Sponsor: Steven Kolmes and Russell Butkus

"Climate Change Impacts & Policy Implications in the Western U.S."

An analysis of developments since 2017 in Climate Change Impacts & Policy Implications in the Western U.S. Presented By: Parker Devine, Logan Simpson, Joe Walker, and Robin Witter Faculty Sponsor: Steven Kolmes and Russell Butkus

College of Arts and Sciences   History	Franz Hall 214		
"Capturing Prejudice: Representations and Misrepresentation Women in Captivity Narratives"	ons of Native American		
Presented By: Ana Hurley	Faculty Sponsor: Blair Woodard		
"Reels of Israel: Cinematic Portrayals of the Relationship between Arabs, Americans, and Jews."			
Presented By: Zoe Haenggi Wattenberg	Faculty Sponsor: Blair Woodard		
"Beer Goggles: Looking at Colorado's Cultural, Economic, and Social Developments in the Late Twentieth Century through the Lens of its Brewing Industry."			
Presented By: Mary Sullivan	Faculty Sponsor: Blair Woodard		

#### Franz Hall 206

#### College of Arts and Sciences | International Language and Cultures

"Research Opportunities in German Studies."

Three upper-division German majors engaged in research projects of various types will introduce listeners to their projects and reflect on the experience. They will discuss how their research projects are related to and build on their classroom experiences, and how they connect to other majors or fields of interest.

Presented By: Emily McClung, Annemarie Morach, and Emma Scheve Faculty Sponsor: Alexandra Hill

#### College of Arts and Sciences | Mathematics

"Investigating the Feasibility of Replicating Private Investment Returns with Public **Market Securities.**"

We will discuss our efforts to utilize the Bloomberg Lab here at the University of Portland in order to gather data on carefully chosen, publicly listed US companies in order to develop an investment approach that can potentially yield similar returns to that of private investments.

Presented By: Aaron Berger, Stacie Lillis, Mark Bruschwein, and Shawn Strickland Faculty Sponsor: Hannah Highlander

#### "A Random Data Generator to Aid in Software Testing."

In order to test software, companies need to be able to produce synthetic data randomly and discretely to fit user specified weights and input values. We will demonstrate how Vose's Alias Algorithm can do this at constant speed to handle large quantities of data and show how we have implemented this algorithm for the purpose of industrial software testing.

Presented By: Bryce Amato, Alyssa Arnaud, Adrian Low, and Shayna Noone *Faculty Sponsor: Hannah Highlander* 

#### • College of Arts and Sciences | Performing and Fine Arts

Mago Hunt Recital Hall

Buckley Center 111

Shiley Hall 123

"Music Program Honors Recital."

The Music Program presents its annual Honors Recital, showcasing some of the most talented music students at UP. This year's participants are Maranda Hamilton (cello), Alissa Henderson (voice), Catherine Jacobs (voice), David Rogers (bassoon), and Maddie Tran (voice).

Presented By: Maranda Hamilton, Alissa Henderson, Catherine Jacobs, David Rogers, and Maddie Tran Faculty Sponsor: Patrick Murphy

#### College of Arts and Sciences | Political Science

"Model United Nations Simulation: Negotiating humanitarian assistance in Syria."

In the Fall 2017, the UP Model UN Program became an official club on campus. Student members of the club will be giving a presentation of the Model UN experience by showcasing a simulation of negotiations about trying to provide humanitarian relief to civilians caught up in the civil war in Syria. Multiple countries and their positions will be represented.

Presented By: Members of the Model UN Club


College of Arts and Sciences | Psychology

#### "Bystander Intervention in Sexual Harassment: The Effect of Anonymity and Situational **Ambiguity.**"

The present study considered the effect of anonymity and situational ambiguity on the participants selfreport of their likelihood to intervene in a sexual harassment scenario. The biggest predictor of intent to intervene was anonymity, those who were not anonymous reported a greater likelihood of intervention regardless of the scenario, as well as a feeling of responsibility.

Presented By: Madison Perry

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Faculty Sponsor: Zach Simmons

Faculty Sponsor: Anne Santiago

#### Franz Hall 231

#### College of Arts and Sciences | Psychology

"Factors Affecting Bystander Intervention within a Sexual Harassment Conflict."

The present study explored how the gender of the victim, and the participant, along with three varying severities of harassment would affect the likelihood of bystander intervention within sexual harassment scenarios. Reports of intervention were influenced the most by the gender of the victim and the severity of a scenario. Feelings of social norms were also measured within the study.

Presented By: Jordan Winczewski

"The Effect of Neuroticism on Threat Perception."

Using fear manipulations from previous studies on the elicitation of fear, and a threat-detection task, this explores whether or not levels of neuroticism can be affected through fearful video clips, and, if individuals with higher levels of neuroticism will be able to perceive threats more quickly than those with lower levels of neuroticism. Presented By: Ariel Haynes Faculty Sponsor: Zach Simmons

#### "Self-Esteem as a Risk Factor for Interpersonal Dating Violence."

The aim of this study was to explore the link between interpersonal dating violence acceptability and selfesteem. Participants were presented a subliminal self-esteem manipulation, the Rosenberg Self-Esteem Scale, and the Attitudes Towards IDV Scales. Though the self-esteem task did not have the intended influence, the manipulation may still have impacted acceptability in subtle ways.

Presented By: Kimberly Hubbard

#### College of Arts and Sciences | Social Work

"Dismantling Domestic Violence: Examining the provision of services to intimate partner violence survivors in Multnomah County."

This research project explores the requests for assistance presented by intimate partner violence survivors in Multnomah County, as well as the services that are provided to address said needs. An examination of the history of domestic violence in Oregon and a person-centered analysis of participant data from the Gateway Center for Domestic Violence Services provide the basis of this project.

Presented By: Sarah Cook

"Moving Toward Health Equity in Health Systems: Development Strategies for a Culturally **Diverse Workforce.**"

This presentation will highlight the significance of health care systems addressing health equity within the realm of workforce development. Key informant interviews were conducted and analyzed through a health equity framework and systems theory to better comprehend how health systems can better recruit, retain, and support a culturally diverse workforce.

Presented By: Anaceli Mejia

"Abuse Does Not Always End After Leaving an Abuser: Long Term Effects of Domestic Violence on Survivors Using the Biopsychosocial Approach."

This presentation examines how domestic abuse affects survivors permanently and how escaping their abusers is not the end point to their abuse. Using the biosychosocial perspective, I discuss the impact that intimate partner violence has on survivors on a biological, psychological and social level. Findings are considered in the context of other domestic violence research on trauma and coping.

Presented By: Kyriel Butler

College of Arts and Sciences | Social Work

"A Comparison of Sanctuary Cities Across the Nation and Multiple Immigrant Perspectives in Portland."

Through conflict and contingency theory this project examines and compares the policies of 6 sanctuary cities across the nation including Portland, Oakland, Los Angeles, New York City, Miami, and Phoenix. Interviews with members of immigrant communities were conducted to acknowledge and include their perspectives on the understanding of sanctuary cities.

Presented By: Danielle Dillard, Jacob Tressel, and Brandon Cruz

Faculty Sponsor: Kevin Jones

Faculty Sponsor: Kevin Jones

#### Franz Hall 018

Faculty Sponsor: Zach Simmons

Shiley Hall 123

Faculty Sponsor: Zach Simmons

Faculty Sponsor: Kevin Jones

Faculty Sponsor: Kevin Jones

#### College of Arts and Sciences | Social Work

"Hope and Purpose: A Review of Garden Therapy Programs in the Portland Area."

Garden therapy programs recognize the connection between humans and the natural environment. This research project is aiming to look at multiple garden therapy programs throughout the greater Portland area and discover what key components of the programs are similar/dissimilar, as well as what components make these programs effective in achieving their goals.

"A look at	<b>Childhood</b>	Trauma	and its	Long-term	<b>Effects</b>	on Survivors."

This study is a review of numerous studies that highlight relationships between childhood trauma and outcomes in homeless adults through the lens of Piaget's Theory of Cognitive Development. We believe that there may be strong correlations between these experiences of trauma and particular outcomes such as drug and alcohol dependence, criminal activity, mental illness, and abusive behavior.

College of Arts and Sciences | Theology

#### "Growing in Relationship with God's Self-Emptying Love."

God created humanity as an act of love. As a way to show appreciation for such a selfless act, humans should maintain a relationship with God through others, nature, and Godself.

Presented By: Alyx Cardenas

Presented By: Hayley Reed

"Capital Punishment: The Moral Dilemma."

Capital punishment is still widely used in the United States. Using a theological view, the justification of capital punishment was analyzed under Scripture, Church writings, theologians, and moral vision. Has the role of capital punishment grown absolute?

#### Pamplin School of Business

"Mazama Mugs Marketing Research."

A group of three students in marketing research conducted research on the industry of mugs and specifically on the price points, location, and buying power of consumers in this niche market.

Presented By: Ali Cable, Brenda Hernandez Gonzalez, and Etain O'Longaigh Faculty Sponsor: Ian Parkman

#### Pamplin School of Business

"Adidas Young Athletes Online Retail Habits."

15 kids aged 8-12 (4th - 6th grade) were asked several interview questions regarding tech ownership, usage, and shopping behaviors. The results identified patterns in both in-store and online retail habits of children, creating three distinct groups of shoppers.

Presented By: Rafael Sales

#### School of Education

"Differentiating Learning using Technological Tools."

Student teachers don't have control over what technology they have access to in the classroom - they must adapt to the environment in which they're placed. Being able to use the available technology in the classroom to differentiate learning for students is something all student teachers should learn how to do. This presentation introduces tools and methods for differentiating with technology.

Presented By: Jennifer Richey, Sundey Christen, Brett Adams, and Sunshine Huang *Faculty Sponsor: Tisha Morrell* 

Franz Hall 223

Faculty Sponsor: Kathleen McManus

Buckley Center 103

Faculty Sponsor: Ian Parkman

**Buckley Center 104** 

Franz Hall 006



Faculty Sponsor: Kevin Jones

#### School of Education

"Keep it Positive: Equity through Social Emotional Learning."

This presentation will cover growth mindset, mindfulness strategies and instructional resources. Personal experiences will be used to show how these topics can be accessed by all students. Classrooms today have a variety of social, economic and cultural backgrounds, but the topics in this presentation will show the connection between social emotional learning and equal access to the instruction.

Presented By: Keala Prietto, Emily Collins, Madison Hughes, and Georgia Arnautou *Faculty Sponsor: Hillary Merk* 

#### Shiley School of Engineering

#### "Transportation Planning and Design for Jackson School Road."

This project focuses on the planning and design of NE Jackson School Road in Hillsboro to provide safe, efficient and economical travel for motorists, cyclists, transit and pedestrians.

Presented By: Muath Alfayez, Nicolas Angoco, Madeline Burke, Drake Fukushima, and Trey Shigezawa Faculty Sponsor: Mojtaba Takallou and Mehmet Inan, Industry Advisor: Joey Banson

#### "UV Water Cleaning with Solar Backup."

The UV Water Cleaning with Solar Backup Project or team "SOL(UV" designed and built a sustainable water disinfection system intended for use in developing countries without access to clean water or a power grid. The system utilizes two disinfection methods (natural solar disinfection and a UV reactor) to create potable water and is powered by a solar charged battery.

Presented By: Jocelle Tade, Eric Domek, Parker Liebe, Delaney Ralph, Austin Pato, and DJ Werner Faculty Sponsor: Cara Poor and Heather Dillon, Industry Advisor: Mark Heath

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#### Shiley School of Engineering | Computer Science

#### "ReAntics."

The Antics environment is used in the CS421 Artificial Intelligence course at UP. This project will revise and improve the app, and create example agents for students to compete against.

Presented By: Christian Rodriguez, Logan Orndorf, Sara Perkins, and Brendan Thomas Faculty Sponsor: Andrew Nuxoll, Industry Advisor: Adam Kauth

#### "Bad Drug Interactions."

The Bad Drug Interactions project worked to design an app to make it easy for patients to monitor their prescriptions for potentially dangerous drug interactions.

Presented By: David Watanabe, Linnea Bair, and Luke Mcmanamon Faculty Sponsor: Ben Tribelhorn, Industry Advisor: Taylor Nightingale

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#### Shiley School of Engineering | Electrical Engineering

"Arduino Controller Tester."

"Team Cockatiel" designed an Arduino Uno microcontroller functionality tester. These Arduinos are heavily used in the Freshman Design Projects, and it is important to make sure that they are working before distributing them among the students. This device will test the functionality of the input/output pins and then will display the result via LED to the user.

Presented By: Markus Perry, Jacob Arakawa, Joshua Thompson, and Liz Mukai Faculty Sponsor: Peter Osterberg, Industry Advisor: Larry Mukai

#### "Digital Binary Clock."

The Digital Binary Clock is a device that will display time using 7-segment displays in both binary and digital formats. Both clocks display twelve-hour time and will keep time using the same real-time clock. The project's purpose is to clearly show both formats next to each other to help incoming engineers learn how to read numbers in binary, as well as its main purpose of keeping track of time.

Presented By: Michael Boshears, Mohammed Al Hussain, Abdullah Emsalim, and Brandon Delplanche Faculty Sponsor: Peter Osterberg

Shiley Hall 101

Shiley Hall 319

Shiley Hall 124

#### Shiley School of Engineering | Mechanical Engineering

#### "Fire Sprinkler Heat Element Design."

The Fire Sprinkler Heat Element Design project aims to redesign the common 155° F rated fire sprinkler to make it more durable and cost effective than the typical glass bulb model that is commonly used nationwide.

Presented By: Douglas Fish, Brody White, Sean Hitchcock, Stuart Smith, and Taylor Ellensohn Faculty Sponsor: Ken Lulay, Industry Advisor: Ken Fish and Jimmy Twining

#### "Mechanical Heart."

The mechanical model of the heart is a project that is focused on replicating the functionality of the heart with a mechanical system. This model not only allows for a better understanding of physiological and anatomical features of the heart, but can be utilized for cardiac device testing.

Presented By: Raelynn Webb, Lauren LaRocco, Dakota Scruggs, and Jonathan Donkers Faculty Sponsor: V.D. Murty, Industry Advisor: Jeremy Glynn

# Session III 2:15 - 3:05 p.m.

#### College of Arts and Sciences | Biology

"The Impact of Human Cadaver Dissection on the Undergraduate Study of Human Anatomy."

The students in the Advanced Human Anatomy course have the unique opportunity to dissect a human cadaver as part of the course. They will share their experiences in a presentation that will include a brief history of dissection, a review of the many different cultural views on human dissection, and the impact of human dissection on their learning experience.

Presented By: George Apreotesi, Alina Bogachuk, Yen Bui, Erin Faloon, Natalie Fulton, Anthony Guitierrez, Nora Hendricks, Sarah Huang, Thomas McLaughlin, Goshina Meman, Alicia Romero, Madison Taitano, and Dylan White

Faculty Sponsor: John White

#### College of Arts and Sciences | Chemistry

"An Artful Look Into a 15th Century Altarpiece: Pigment Analysis Using Microscopy and Raman and XRF Spectroscopy."

In summer 2017, UP faculty and student research teams joined a University of Barcelona archaeological expedition to explore the Roman city of Pollentia in Alcúdia, Mallorca, Spain. A spectroscopic analysis of pigments in a medieval painting at the Sant Jaume Church Museum was performed using Raman and XRF spectroscopy as well as UV/IR microscopy to identify pigments in the painting.

Presented By: Cesar Cornejo and Triona Matheson Faculty Sponsor: Ronda Bard and Valerie Walters

# College of Arts and Sciences | History Franz Hall 206 "Debating the Flat Earth." Presented By: Alex York "Ho'olohe i Nā Mele, Alualu Ka Mana'o: Evaluating the Role of Mele Hawai'i in the Second Hawaiian Renaissance."

Presented By: Kale Kanaeholo Faculty Sponsor: Mark Eifler

#### College of Arts and Sciences | International Language and Cultures

#### "Language Learner Strategies and a Diary Study of Their Use."

A French major, a Spanish major, and an non-major Spanish learner discuss language learner strategies and their diary studies on how they used strategies to improve their language learning and use. This project was part of their Language Learner Strategies course in the fall of 2017.

Presented By: Alexa Gris, Sasha Foley, and Jacob Tressel

Franz Hall 217

#### Shiley Hall 301

#### Shiley Hall 123

#### College of Arts and Sciences | International Language and Cultures

"Using International Languages and Cultures in Your Profession."

Six students with majors in Spanish, German and French will answer questions, explain job opportunities that a second and/or third language has opened for them, and share their unique perspective and motivation to apply different languages and cultures in their professional endeavors, in the medical, translation & interpretation, teaching education and other fields.

Presented By: Ellen O'Dell, Riley Patterson, Hannah Matthew, Justin Dingman, Taryn Carroll,

and Andrea Thompson-Guiza

Faculty Sponsor: Marcela Cinta

College of Arts and Sciences | Political Science

"Application of Vertical Farming Technology to Supplement Federal and State Funded **Nutrition Programs.**"

Presented By: Kathryn Murdock

#### College of Arts and Sciences | Political Science

"UP Mock Trial Team presents: State v. Hendricks."

A torrid extramarital affair resulting in attempted murder? The defendant, Dylan Hendricks, has been charged with the attempted murder of his/her lover's spouse. Hendricks met Carmen Bell-Leon through Tender, a dating app, and started a romantic affair. Authorities believe that Hendricks eventually attempted to kill Kerry Bell-Leon, Carmen's spouse. Guilty as charged?

Presented By: UP Mock Trial Team Faculty Sponsor: Bill Curtis and Katya Acuna

#### College of Arts and Sciences | Psychology

"The Effects of Environmental Control on Individual and Group Outcomes."

This study investigated whether giving groups control over the layout and design of the space where they work impacts group performance, cohesiveness, and collaboration. Though environmental control did not influence performance, results suggest that it may have facilitated consensus-building among participants. Presented By: Sarah Golder Faculty Sponsor: Zach Simmons

"Crime and Mental Illness in News Media: Perceptions of Fear, Danger, and Blame."

Research suggests media portrayals of violent criminals as suffering from mental illness may contribute to greater stigmatization of such individuals. This study investigated whether discussion of mental illness in coverage of violent crimes caused perpetrators to be viewed as more dangerous, more fear-inducing and more blameworthy.

#### Presented By: Payton Bushaw

#### "Impact of Interracial Contact on the Own-Race Bias."

The Own-Race Bias (ORB) has been implicated as a primary driver of cross-racial misidentifications. This study employed an experimental design to determine if the ORB was present and examined whether interracial contact mediated the magnitude of the ORB. The ORB was present, but only a marginally significant relationship was found between interracial contact and the ORB.

Presented By: Victoria Weber

"Using Fear to Persuade: An Examination of the Efficacy of Fear Appeals."

Fear appeals are a type of persuasion technique designed to exploit the target's fear in the service of changing their behavior. This study explores whether the efficacy of fear appeals are influenced by certain individual and external factors including one's level of prior information, one's need for cognition and ones level of authoritarianism, conservatism, and traditionalism.

Presented By: Randall Olson

Faculty Sponsor: Zach Simmons and Deana Julka

Faculty Sponsor: Zach Simmons

Faculty Sponsor: Zach Simmons

**Buckley Center 104** 

Faculty Sponsor: Gary Malecha

**Buckley Center 110** 

Franz Hall 034

#### College of Arts and Sciences | Social Work

"How Different Environments Affect a Child's Attachment."

This presentation aims to examine and analyze a child's attachment as a result of their prominent environments, using Bronfenbrenner's Ecological Systems Theory and Ainsworth's Attachment Theory. Using this research, we aim to equip parents with the tools necessary to develop strong and secure attachments with their children, in hopes that they will be ready to transition smoothly into school.

Presented By: Catie Cameron and Stephanie Chavoya

"Representation Matters: The importance of culturally specific practices and curriculum in education."

This research project examines the importance of culturally specific practices and curriculum in elementary schools within Portland, Oregon. Using social learning theory and empowerment theory, the significance, impacts, and future outcomes of culturally specific practices and curriculum will be explored.

Presented By: Kelli Oylear

Faculty Sponsor: Kevin Jones

Faculty Sponsor: Kevin Jones

"Restorative Justice through the perspective of Juvenile Court Counselors: What do the professionals who work directly with youth think of Restorative Dialogue?"

This project explores the perspectives of justice system professionals who work in Restorative Justice programs. Data were collected regarding Restorative Dialogue processes, implementation, and impact. Using a person-centered, strengths based perspective, a thematic analysis was completed to explore possible improvements to Restorative Dialogue interventions provided by existing programs.

Presented By: Brianne Santos Faculty Sponsor: Kevin Jones

#### College of Arts and Sciences | Social Work

"We Rise: A model for collective empowerment through healing and implications for campus communities."

Interviews with past cohort members of the We Rise program were conducted to analyze the effectiveness of the program, and what aspects of community are crucial to support inclusivity and liberation. The application of a theoretical framework based on empowerment and race may provide implications for creating and improving campus communities.

Presented By: Reis Kilohana Haitsuka and Emma Martinez

"Seven Senses: The Use of Sensory Tools in the Development of Lagging Skills."

This project examines the potential usage of sensory systems and targeted sensory tools in aiding children in the development of lagging skills. Using the Collaborative Problem Solving framework, this project focuses on the assessment of sensory related behavior, continued psychoeducation, one-on-one sessions with clients, and the development of personalized plans.

Presented By: Emma Laird, Amanda Sultan, and Jezeth Zaragoza

"Developing visual narrative: exploring the dynamics of community and individual experience through Photovoice."

This Photovoice exploratory project examines the experiences of youths that are moving into a new Habitat for Humanity home and will ask them to share their ideas, experiences, emotions, and responses to a set of questions about community through photography and group dialogue.

Presented By: Cora Griffin Faculty Sponsor: Kevin Jones

College of Arts and Sciences | Theology

"Humans and Nature: The Call to Creative Solidarity."

This paper will discuss the need to view ourselves as part of creation in order to better take care of the planet.Presented By: Vincent KennedyFaculty Sponsor: Russell Butkus

"James and Lewis: A Journey of Self Discovery."

This is a presentation on the work *The Varieties of Religious Experience* by William James and it's application to the life of C. S. Lewis.

Presented By: Niko Strom

Faculty Sponsor: Rachel Wheeler

Faculty Sponsor: Kevin Jones

Franz Hall 026

Faculty Sponsor: Kevin Jones

Buckley Center 103

Buckley Center 111

#### Pamplin School of Business

Through our research, we wanted to determine what intramural athletes at UP desire in their ideal basketball shoe. With Nike, Inc. losing the position of top-selling sneaker for the first time in over a decade, our team researched the preferred factors of basketball shoes worn by intramural players at UP and made recommendations to Nike, Inc. on how to create the ideal shoe to fit these needs.

Presented By: Nicole Edwards and Alejandro Moreno-Vega Faculty Sponsor: Ian Parkman

#### Pamplin School of Business

"Increasing Membership Value for The Portland Japanese Garden."

The focus was to increase the value of memberships at the Japanese Garden to appeal to Portland residents. In the 2015 annual report, the Japanese Garden declared that membership dues made up only 9% of operating revenues. As a common figure for garden attractions, if the Japanese Garden was able to pinpoint precise ways to appeal to a broader demographic, there would be potential for growth.

Presented By: Harrison Horblit and Brandon Lenzi Faculty Sponsor: Ian Parkman

#### School of Education

#### "The Effect of Mindfulness Education on Pro-Social Behavior in the Classroom."

Research shows that mindfulness education reduces student stress, improves behavior, and provides skills for managing emotions, but there is little research on the possible connection between mindfulness education and pro-social behavior. This project implemented a mindfulness curriculum in a 5th grade classroom and measured the impact on pro-social behavior.

Presented By: Madison Caley	Faculty Sponsor: Rich Christen

#### School of Education

#### "Valuing Students' Cultural Backpacks."

This presentation will discuss the role of culturally responsive teaching in the general education classroom as it relates to equity and valuing the experiences of every student and their unique backgrounds.

Presented By: Mckenzie Zerr, Ma	ureen Pappin, and Corinne Foley	Faculty Sponsor: Hillary Merk

#### Shiley School of Engineering

"Focal Point."

A combination of mechanical and electronic components keep a device (e.g., a camera) focused on a specified "point of interest" through self-adjustment and feedback. Using infrared light, the "sense data" reflected back from the "point of interest" is processed through a microcontroller; an actuator will control the movement of the device to ensure it remains focused.

Presented By: Jackson Brooke, Evan Smith, Chris Manderson, Keoki Massad, and Daniel Rothschilds Faculty Sponsor: Peter Osterberg

#### "Energy Efficient Building Occupant Game."

Team Aspire worked on a web-based app that provides users with a way of accounting for their personal energy usage and environmental impact. Users will convert from a base energy unit to alternative metrics such as dollars, gallons of gas, acres of forest, etc. The app will help users modify their behavior and recognize new opportunities to be more energy efficient and environmentally conscious.

Presented By: Matthew Shimizu, Regan Townsend, Ryan Henness, Christian Schweizer, Koby Craig, and Liam Cassidy

Faculty Sponsor: Heather Dillon, Industry Advisor: Chris Galati

Franz Hall 223

#### Shiley Hall 319

Franz Hall 231

Franz Hall 018

## Shiley School of Engineering | Civil Engineering

"Structural Design of Apartment Building, Pearl District, Portland, OR."

The Structural Design of Apartment Building team completed the structural design for a four-story commercial and residential building composed of steel and concrete in the Pearl District of Portland, Oregon. Presented By: Kyle Kadomoto, Dustin Kokubun, Matthew Murayama, Shirley Shen, and Cici Suehiro *Faculty Sponsor: Matthew Kuhn, Industry Advisor: Alexandra Stroud* 

# "Noise Abatement, Apartment Building, Pearl District, Portland, OR."

A noise abatement program is being designed for a four-story apartment building in a high-density neighborhood of downtown Portland.

Presented By: Stefan Winkler and Florian Feichtinger Faculty Sponsor: Matthew Kuhn, Industry Advisor: Alexandra Stroud

## Shiley School of Engineering | Electrical Engineering

"The LED Sketch Pad."

Modeled after The Etch-A-Sketch, the LED Sketch Pad brings LED drawings to life. This modernization will include overall improvements of control, a multicolored LED display, as well as a new method for clearing the display.

Presented By: April-Joy McCann, Christian Miles, Trenton Langer, and Ali Al Saif Faculty Sponsor: Nazanine Mansouri, Industry Advisor: Aaron Taylor

## "Lockbox for Package Delivery: Team Fourtress."

Inspired to keep the world's packages safe, this project is about designing and building a lockbox that will send a message to the owner when a package is delivered. Using an Arduino Uno, analog sensors, and a Wi-fi module, the lockbox aims to prevent package theft while notifying the owner when they receive packages.

Presented By: McKenzie Wilde, Jean Paul Mugisha, Emmanuel Sion, and Louie Amurao Faculty Sponsor: Joseph Hoffbeck, Industry Advisor: Jim Yoder

## Shiley School of Engineering | Mechanical Engineering

"Home Sawmill."

The purpose of the Home Sawmill project is to create a sawmill for the hobbyist woodworker that is competitive with current market options. The sawmill will be safe, precise, transportable, and produced in accordance with the requests of a simulated client.

Presented By: Ryan Hedrick, Samuel Stucki, Drew Scott, Anders Pedersen, and Steven Olvera Faculty Sponsor: Jordan Farina, Industry Advisor: Will Rossi

## "Solar Thermal Organic Rankine Cycle."

Given the increasing need for green energy, this team is working to develop a power system which will use energy from the sun to produce electricity on a small scale. The team is pushing green energy technology boundaries using experimental techniques to engineer efficient small-scale turbines and heat exchangers for the Rankine cycle that will be an educational and research tool for future MEs.

Presented By: Jonathan Simpson, Victoria Ericksen, Christopher Hampel, and Ben Kallen Faculty Sponsor: Heather Dillon, Industry Advisor: Jill King

## School of Nursing

#### Buckley Center Auditorium

Faculty Sponsor: Lindsay Benes

**During Cardiac or Respiratory Arrest.**" During cardiac or respiratory arrest, clinicians manually sustain ventilation using a bag valve mask (BVM). User variability with a standard BVM can increase patient morbidity and mortality. Our study ran simulated codes with 142 practicing clinicians to test a new medical device, the Goldilocks® BVM. We assessed its adherence to AHA standards and compared its performance to the standard BVM.

"Validation of the Goldilocks<sup>®</sup> Bag Valve Mask: Regulating Oxygenation & Ventilation

Presented By: Omar Silva

Shiley Hall 101

Shiley Hall 301

#### School of Nursing

#### Buckley Center Auditorium

Shiley Hall 123

Shiley Hall 124

"Does Where You Die Impact Those You Love? A Qualitative Journey Exploring Place of Death and the Impact on Family."

The topic of death is an uncomfortable but pressing issue in our society. Additionally, the setting of death carries a lasting impact on loved ones long after the death. Join us to find out how the healthcare versus home setting at end of life impacts the experience of family members of dying persons.

Presented By: Zachary Crown, Hannah Foreman, and Carley St George Faculty Sponsor: Briana Rotter and Amber Vermeesch

# Session IV 3:15 - 4:05 p.m.

#### College of Arts and Sciences | Biology

"Design and Validation of a CRISPR Gene Editing Strategy in a Sheep Model Variant of GM1 Gangliosidosis."

A protocol using CRISPR, Clustered Regularly Interspaced Short Palindromic Repeats, gene editing was designed to alter the ovine GLB1 gene that codes for beta-gal, a lysosomal enzyme. The strategy will be used to introduce the suspected disease-causing GLB1 gene mutation, a G to T transversion, into cultured normal sheep fibroblasts to see if the abnormal GM1 phenotype can be induced.

Presented By: Halle Brady

Faculty Sponsor: David Wynne and Amelia Ahern-Rindell

"Excavated Human Remains Give Insight in to Geographical Origins."

Analyzing DNA found in ancient human bones is a valuable tool for determining ancestry. We applied ancient DNA analysis techniques using Y-chromosome STR sites to evaluate three male individuals' bones from Mallorca, Spain in order to identify their place of origin. This project has also incorporated a preliminary study with modern DNA and a Dundon-Berchtold applied ethics investigation.

Presented By: Raluca Gosman Faculty Sponsor: Amelia Ahern-Rindell

#### College of Arts and Sciences | Environmental Science

#### "Forecasting Air Pollution Using K-Nearest Neighbor and Genetic Machine Learning Algorithms."

This explores a statistical approach using a K-Nearest neighbor (KNN) supervised machine-learning algorithm to recognize patterns in meteorological conditions that are predictive of a particular air quality class, which are air pollution occurrences and non-occurrences. Leave-one-out cross-validation demonstrated the methods developed by this study to be effective in forecasting air pollution.

Presented By: Joseph Walker

#### Faculty Sponsor: Ted Eckmann

#### "Long-Term Bioretention."

Nine vegetated mesocosms were built and populated with Carex stipata, a native sedge with endomycorrhizal associativity. Three of the columns were constructed using City of Portland soil, three were constructed using the City of Portland soil and inoculated roots, and the final three columns were constructed with a proprietary bioretention soil mix from SunMark. Ten tests were run over 14 months.

Presented By: Jenna Kube, Katie Conkle, Sadie Schroeter, and Mustaf Mohamed *Faculty Sponsor: Ted Eckmann and Cara Poor* 

# "Spatiotemporal Patterns in Agricultural Greenhouse Gas Emissions in the United States."

This study investigated spatial and temporal patterns in greenhouse gas emissions from agriculture in the US, using GIS and temporal statistics. Our analyses could be applied to 1) understand and account for spatiotemporal variations in emissions from agriculture, and 2) reduce those emissions through identifying the best policies for doing so while still meeting food supply needs.

Presented By: Taylor Corris, Kate Cronin, and Theresa Valdez

# Session IV 3:15 - 4:05 p.m.

"UP Mock Trial Team presents: State vs Hendricks."	9
A torrid extramarital affair resulting in attempted murder? The with the attempted murder of his/her lover's spouse. Hendrick dating app, and started a romantic affair. Authorities believe H Leon, Carmen's spouse by strangulation. Guilty as charged?	e defendant, Dylan Hendricks has been charged ss met Carmen Bell-Leon through Tender, a
Presented By: UP Mock Trial Team	Faculty Sponsor: Bill Curtis and Katya Acuna
<ul> <li>Pamplin School of Business</li> </ul>	Franz Hall 214
"Annual Founders' Day Elevator Pitch." (Group 1)	
Open to all students who would like to present their 90 second technology, or a product. The audience will select the best pitc audience. The winner receives a \$100 gift card.	
Presented By: All Students Welcome	Faculty Sponsor: Peter Rachor and Jon Down
Pamplin School of Business	Franz Hall 206
"Annual Founders Day Elevator Pitch." (Group 2)	
Open to all students who would like to present their 90 second technology, or a product. The audience will select the best pitc audience. The winner receives a \$100 gift card.	
Presented By: All Students Welcome	Faculty Sponsor: Peter Rachor and Jon Down
<ul> <li>School of Education</li> </ul>	Franz Hall 223
"STEM and its Implications for Social Justice in the	General Education Classroom."
This presentation investigates how STEM can balance inequity populations. The focal points of this presentation will be gender and place based education.	and meet the needs of diverse learners and
Presented By: Amanda Adams, Connor Burke, and Anna Quene	moen Faculty Sponsor: Hillary Merk
<ul> <li>School of Education</li> </ul>	Franz Hall 231
"Technology in the Classroom: Pros and Cons in the	e General Classroom."
Technology can be an inclusive tool for students with special le general learning classroom. Conversely, overuse or improper us distractions and causing disruption. I will discuss how to balan productive and enlightening learning experience.	earning needs and/or physical challenges in the se of technology can hinder learning by creating
Presented By: Angel Dowd	Faculty Sponsor: Tisha Morrell
"The Impact of Class Size on Student Performance	22

"The Impact of Class Size on Student Performance."

There are many factors that impact student learning in a classroom. One of these is class size. The larger the class, obviously the less individualized attention a student can receive and the greater the potential for classroom management issues to arise. We will examine the issue of class size on student performance and suggest ways teachers can be successful in an overcrowded classroom.

Presented By: Michael Birkhead and Javier Resop

College of Arts and Sciences | Political Science

Faculty Sponsor: Tisha Morrell

**Buckley Center 104** 

# Session IV 3:15 - 4:05 p.m.

#### Shiley School of Engineering

#### "Parkinson Device."

Hand tremors are a detrimental physical aspect of Parkinson's disease. Our team's goal is to design a purely mechanical hand device that reduces the hand tremors caused by Parkinson's disease. This device will be placed directly on the hand of the patient, which will enable their ability to perform a great variety of applications with steadiness.

Presented By: Adam Hoiness, Maddison McMurrin, Noah Webster, Jacob Giusti, and Rhett Larson *Faculty Sponsor: Tim Doughty, Industry Advisor: Jordan Schiemer* 

#### "Tinnitus Assistive Technology."

The Tinnitus Assistive Technology team worked to design a device that successfully treats or masks Tinnitus. This condition creates the perception of a ringing sound within the ear when no actual sound is present. Further, this device should be wearable, controlled by an app, and mask the effect of Tinnitus on diagnosed patients.

Presented By: Daniel Hollowell, Alex Rouhier, Rique Ortega, and Riley Jack Faculty Sponsor: Andrew Nuxoll and Tim Doughty, Industry Advisor: Robert Folmer

#### Shiley School of Engineering | Computer Science

"Electronic Health Record."

Electronic Health Record software is used to track information about patients, manage their care and help medical professionals identify changes over time in a patient's condition. This team is developing a custom EHR application for use by University of Portland's School of Nursing students.

Presented By: Will Bryan, Tim MacNary, and Alexandra Warlen Faculty Sponsor: Andrew Nuxoll

#### Shiley School of Engineering | Electrical Engineering

Shiley Hall 101

Shiley Hall 319

#### **"UP Digital Weather Station."**

This EE team created a digital weather station that will be located in the Shiley School of Engineering lobby. Since Shiley currently does not have a digital weather station, the team oversaw the production of a digital weather station specific to the weather on The Bluff in real time. The team implemented a design using an Arduino Uno, displaying information on an elnk screen.

Presented By: Shawn Strickland, Vanessa Guzman, Margaret Longo, and Mika Aga Faculty Sponsor: Robert Albright, Industry Advisor: Kevin Young

#### "Solar Tracker Project: Always Tilted."

A solar-tracking platform that will intelligently tilt a solar panel to follow the sun's movement. This will allow us to measure the output difference between a tracking and non-tracking panel and determine the commercial feasibility of a similar product.

Presented By: Ian Bingham, Nicholas Larson, and Justin Pham Faculty Sponsor: Robert Albright, Industry Advisor: Kyle Woodard

<ul> <li>Collaborative for International Studies and Global Outreach</li> </ul>	Franz Hall 015
"Words, Words, Words: How Language and Literature Bridg	e Differences and Evoke
Cultural Exchange."	
Presented By: Sasha Foley	Faculty Sponsor: Eduardo Contreras
"On Acquiring Language and Cultural Competence."	
Presented By: Kelsie Smith	Faculty Sponsor: Eduardo Contreras

"Culture, Language, and Identity: Reversing Active Linguicism in Today's Classrooms." Presented By: Molly Steiner Faculty Sponsor: Eduardo Contreras

Shiley Hall 301

# Poster Presentations 10:15 - 11:05 a.m.

<ul> <li>College of Arts and Sciences   Biology</li> <li>"Understanding the Functional Importance of two Unknown Generations"</li> </ul>	Shiley Hall 3rd Floor Atrium
System of V. vulnificus."	
Presented By: Michael Berry and Haley Pfeifer	Faculty Sponsor: Ryan Kenton
<ul> <li>College of Arts and Sciences   Biology</li> <li>"Effects of Differentiation on Migratory Properties of Glial Program</li> </ul>	Shiley Hall 3rd Floor Atrium
Presented By: Rochelle Shih	Faculty Sponsor: Susan Murray
"Activation of the Non-canonical NF-kB Pathway by TNF Recept Subsets."	ors in Human T Cell
Presented By: Claire Kearney	Faculty Sponsor: Susan Murray
<ul> <li>College of Arts and Sciences   Psychology</li> <li>"Burned by Prometheus: Molecular Evolution of Risk Alleles for</li> </ul>	Franz Hall 2nd Floor Balcony
Presented By: Jacob Robino	Faculty Sponsor: Mark Pitzer
<ul> <li>School of Education</li> <li>"Adapting Curriculum to Meet Students' Social-Emotional Need</li> </ul>	Franz Hall 2nd Floor Balcony
Presented By: Haley Anderson, Ivy Paradissis, Renae Perry, Josh Kachmarik, Eliza Gabriel	
Shiley School of Engineering   Mechanical Engineering	Shiley Hall 2nd Floor Atrium
"Primary Education CS Curriculum Development."	
Presented By: Elias Paraiso, Danh Nguyen, and Alexa Baldwin	Faculty Sponsor: MECOP
	Faculty Sponsor: MECOP
Presented By: Elias Paraiso, Danh Nguyen, and Alexa Baldwin	
Presented By: Elias Paraiso, Danh Nguyen, and Alexa Baldwin <b>"Harvested Energy Charger."</b> Presented By: Jacob Kirby, Anthony Lieu, Dylan Shuler, Phillip Manalili-Simeon, a	
Presented By: Elias Paraiso, Danh Nguyen, and Alexa Baldwin <b>"Harvested Energy Charger."</b> Presented By: Jacob Kirby, Anthony Lieu, Dylan Shuler, Phillip Manalili-Simeon, a <i>Faculty Sponsor: MECOP</i>	and Kieran Losh
Presented By: Elias Paraiso, Danh Nguyen, and Alexa Baldwin <b>"Harvested Energy Charger."</b> Presented By: Jacob Kirby, Anthony Lieu, Dylan Shuler, Phillip Manalili-Simeon, a <i>Faculty Sponsor: MECOP</i> <b>"The Borrow Bike."</b> Presented By: Grayson Taylor, Jesse Rubenstein, Ryan Dehart, Aaron Leung, Mar	and Kieran Losh
Presented By: Elias Paraiso, Danh Nguyen, and Alexa Baldwin <b>"Harvested Energy Charger."</b> Presented By: Jacob Kirby, Anthony Lieu, Dylan Shuler, Phillip Manalili-Simeon, a <i>Faculty Sponsor: MECOP</i> <b>"The Borrow Bike."</b> Presented By: Grayson Taylor, Jesse Rubenstein, Ryan Dehart, Aaron Leung, Marr <i>Faculty Sponsor: MECOP</i>	ind Kieran Losh tin Woodby, and Jack Padon
Presented By: Elias Paraiso, Danh Nguyen, and Alexa Baldwin <b>"Harvested Energy Charger."</b> Presented By: Jacob Kirby, Anthony Lieu, Dylan Shuler, Phillip Manalili-Simeon, a <i>Faculty Sponsor: MECOP</i> <b>"The Borrow Bike."</b> Presented By: Grayson Taylor, Jesse Rubenstein, Ryan Dehart, Aaron Leung, Mark <i>Faculty Sponsor: MECOP</i> <b>"Alternative Steering Control for Forklifts."</b> Presented By: Kaitlyn Krushinsky, Cormac Connolly, Jonathan Liao, Mitchell Kova	and Kieran Losh tin Woodby, and Jack Padon alev, Robert Hutchinson, and
Presented By: Elias Paraiso, Danh Nguyen, and Alexa Baldwin <b>"Harvested Energy Charger."</b> Presented By: Jacob Kirby, Anthony Lieu, Dylan Shuler, Phillip Manalili-Simeon, a <i>Faculty Sponsor: MECOP</i> <b>"The Borrow Bike."</b> Presented By: Grayson Taylor, Jesse Rubenstein, Ryan Dehart, Aaron Leung, Marr <i>Faculty Sponsor: MECOP</i> <b>"Alternative Steering Control for Forklifts."</b> Presented By: Kaitlyn Krushinsky, Cormac Connolly, Jonathan Liao, Mitchell Kova Kaitlin Tiernan	and Kieran Losh tin Woodby, and Jack Padon alev, Robert Hutchinson, and Faculty Sponsor: MECOP

College of Arts and Sciences | Chemistry "Investigation of Antibiotic and Anticancer Materials Extracted from Bacterium Collected at a Roman Archeological Dig Site." Presented By: Astrid Schick Faculty Sponsor: Angela Hoffman

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# Poster Presentations 11:15 a.m. - 12:05 p.m.

<ul> <li>College of Arts and Sciences   Chemistry</li> <li>"New Benzoic Pseudoanhydride Derivatives of Co</li> </ul>	Franz Hall 120
Presented By: Michael Nguyen	Faculty Sponsor: Edward Valente
"Pseudoamide Synthesis and Structure."	
Presented By: David Hoang	Faculty Sponsor: Edward Valente
<ul> <li>College of Arts and Sciences   Chemistry</li> </ul>	Franz Hall Lobby
<b>"Using Digital Video to Measure Chemical Kinetic</b> Presented By: Guilian Luchini and Alexandria Van Grouw	<b>5.''</b> Faculty Sponsor: Kevin Cantrell
resented by. Guinan Euclimit and Alexandria van Grouw	rucuity sponsor. Revin cuntren
<ul> <li>College of Arts and Sciences   Chemistry</li> <li>"Characterization of a Hypothetical Radical S-Ade</li> </ul>	Franz Hall Lobby enosyl-L-Methionine Enzyme from
Clostridium botulinum." Presented By: Mai Jones and Samuel Matsuura	Faculty Sponsor: Rachel Hutcheson
	rucury sponsor. Kucher nucleson
College of Arts and Sciences   Chemistry	Franz Hall 120
"Application of XRF and LIBS Spectroscopy in Elen the Ancient Roman City of Pollentia."	nental Analysis of Coins Excavated from
Presented By: Riley McCammon	Faculty Sponsor: Valerie Walters and Ronda Bard
<ul> <li>College of Arts and Sciences   Chemistry</li> </ul>	Franz Hall 120
"Isolation and Separation of Ancient Soil Actinom for Antibacterial and Antifungal Medications."	ycetes as Potential Alternative Sources
Presented By: Madeline Otto	Faculty Sponsor: Sr. Angela Hoffman O.S.B.
"Flavonoid Activity in Enzyme Inhibition."	
Presented By: Nancy Le	Faculty Sponsor: Sr. Angela Hoffman O.S.B.
"Antibiotic from Actinomycete Bacteria with Actin	
Presented By: Jessica Chung	Faculty Sponsor: Sr. Angela Hoffman O.S.B.
"Extraction, Isolation, and Identification of Natur	-
Presented By: Elena Lazarus and Vy Le	Faculty Sponsor: Sr. Angela Hoffman O.S.B.
<b>"The Search for Hyaluronidase Inhibiting Plant Ex</b> Presented By: Tsikata Apenyo	<b>tracts."</b> Faculty Sponsor: Sr. Angela Hoffman O.S.B.
<b>"Isolation of a Natural Insecticide from Yew Trees</b> Presented By: Connell Morantte and Triona Matheson	Faculty Sponsor: Sr. Angela Hoffman O.S.B.
"Anti-fungal Capabilities of Callisia frangrans and	l its Translation to Cancer Therapy."
Presented By: Siva Ho and Alexys Bermudez	Faculty Sponsor: Sr. Angela Hoffman O.S.B.
"Extraction and Kinetic Study of Partially Purified	Radish Peroxidase."
Presented By: Kate Wobbema	Faculty Sponsor: Sr. Angela Hoffman O.S.B.
"Isolation and Identification of Soil Actinomycete Pythium."	es with Antibiotic Activity Against
Presented By: Jennifer Chu	Faculty Sponsor: Sr. Angela Hoffman O.S.B.
"Biological Activity Analysis of Withania Somnife	era Extract."
Presented By: Shivam Swamy	Faculty Sponsor: Sr. Angela Hoffman O.S.B.

# Poster Presentations 11:15 a.m. - 12:05 p.m.

College of Arts and Sciences   Chemistry	Franz Hall Lobby
"Synthesis of Antimalarial 2-Hydroxy-1,4-naphthoquinon 3-Alkyl-diphenylether Side Chains."	es Containing
Presented By: Chelsea Swartchick and Alyson Sillin	Faculty Sponsor: Warren Wood
	e 11 11 11
<ul> <li>College of Arts and Sciences   Environmental Science</li> <li>"Democratizing High-resolution Orthoimage Generation L</li> </ul>	Franz Hall Lobby
Presented By: Dani Castillo	Faculty Sponsor: Ted Eckmann
<ul> <li>College of Arts and Sciences   Mathematics</li> </ul>	Franz Hall Lobby
"Describing the Symmetries of SUP-Groups."	
Presented By: Joseph Lippert	Faculty Sponsor: Aaron Wootton
<ul> <li>College of Arts and Sciences   Performing and Fine Arts</li> </ul>	Franz Hall Lobby
"Scenic Design Presentation for Appropriate."	
Presented By: Megan Macker	Faculty Sponsor: Gregory Pulver
<ul> <li>College of Arts and Sciences   Psychology</li> </ul>	Franz Hall 2nd Floor Balcony
"Hypoketonemia Risk Factors in Arctic Peoples."	-
Presented By: Jacob Robino	Faculty Sponsor: Mark Pitzer
<ul> <li>College of Arts and Sciences   Sociology</li> </ul>	Franz Hall Lobby
"Congressional Dialogues on Immigration from Obama to	Trump."
Presented By: Jefferson Lee	Faculty Sponsor: Martin Monto
<ul> <li>School of Education</li> </ul>	Franz Hall 2nd Floor Balcony
"Cluing into Student's Personal Backgrounds in the Classro	oom through Writing."
Presented By: Audrey Vaughan	Faculty Sponsor: Hillary Merk
<ul> <li>School of Nursing</li> </ul>	Buckley Center Auditorium Lobby
"Latino/Hispanic Men's Reactions to Use of Culturally Tailo	ored Images."
Presented By: Nathan Lynch	Faculty Sponsor: Amber Vermeesch
School of Nursing	Buckley Center Auditorium Lobby
"Implementing a Brown Rice Diet to Improve Glycemic Con Index."	ntrol and Decrease Body Mass
Presented By: Wendy Su and Ellycia Yokomizo	Faculty Sponsor: Barbara Braband
"Opioid Dependent Mothers and Neonatal Outcomes."	
Presented By: Laura Mannex, Ben Mulkey, Anna Demidovich, and Panah I Faculty Sponsor: Barbara Braband	Mehrabad
"Comparison of Insulin Administration Modes and HbA1c I Diabetes."	evels in Children with Type 1.
Presented By: Emma Lambert, Theresa Hommes, Rachel Walter, and Emil Faculty Sponsor: Barbara Braband	y Fazio

# Poster Presentations 11:15 a.m. - 12:05 p.m.

School of Nursing

**Buckley Center Auditorium Lobby** 

# "Efficacy of Atorvastatin With Lifestyle Modifications on Lowering LDL Cholesterol Levels in Dyslipidemic Patients." Presented By: Olivia Benson, Juliana Itchon, and Daniel Pham Faculty Sponsor: Barbara Braband "Photovoice Interview Assignment: Skill Development in Grief Interventions." Presented By: Anna Blake and Madissen Gallo • School of Nursing Buckley Center Auditorium Lobby "The Long Term Effects of Cesarean Section Deliveries on Health Outcomes." Presented By: Claire Shearer, Tayler Davis, Cambria Rooney, and Emily Gallegos Faculty Sponsor: Kaye Wilson-Anderson Poster Presentations 2:15 - 3:05 p.m.

<ul> <li>College of Arts and Sciences   Biology</li> <li>"Effects of Eutrophication in Estuarine Tidal Wetlands in Yac</li> </ul>	Shiley Hall 3rd Floor Atrium uina Bay, OR."	
Presented By: Madeline Henningsen, Grace Brennan, and Victoria Avalos	Faculty Sponsor: Christine Weilhoefer	
"Columbia River Fire's Downstream Effects on Young Creek.	<b>99</b>	
Presented By: Elijah Ballantyne	Faculty Sponsor: Christine Weilhoefer	
<ul> <li>College of Arts and Sciences   Biology</li> </ul>	Shiley Hall 3rd Floor Atrium	
<b>"Effects of Habitat Quality on Stress and Immunity in Wildli</b> Presented By: Dru Martinez	Faculty Sponsor: Laurie Dizney	
"The Effects of Ecological Restoration on Biodiversity at Mu	ltiple Trophic Levels."	
Presented By: Rachael Aber	Faculty Sponsor: Laurie Dizney	
"Nematode Diversity and Soil Composition in Varying Habi	tat Types."	
Presented By: Elijah Waxman	Faculty Sponsor: Laurie Dizney	
<ul> <li>College of Arts and Sciences   Chemistry</li> </ul>	Franz Hall 120	
<ul> <li>College of Arts and Sciences   Chemistry</li> <li>"Kinetics of Phosphorescence and Delayed Fluorescence of Arts and</li></ul>		
"Kinetics of Phosphorescence and Delayed Fluorescence of	Acridine Yellow."	
<b>"Kinetics of Phosphorescence and Delayed Fluorescence of</b> Presented By: Siva Ho and Christopher Heli	Acridine Yellow."	
"Kinetics of Phosphorescence and Delayed Fluorescence of A Presented By: Siva Ho and Christopher Heli "Raman Spectroscopy: The Vibrational Spectrum of CCl4."	Acridine Yellow." Faculty Sponsor: Steven Mayer	
<ul> <li><b>"Kinetics of Phosphorescence and Delayed Fluorescence of</b> Presented By: Siva Ho and Christopher Heli</li> <li><b>"Raman Spectroscopy: The Vibrational Spectrum of CCl4."</b> Presented By: Aileen Calletano and Matthew Foronda</li> </ul>	Acridine Yellow." Faculty Sponsor: Steven Mayer	
<b>"Kinetics of Phosphorescence and Delayed Fluorescence of</b> Presented By: Siva Ho and Christopher Heli <b>"Raman Spectroscopy: The Vibrational Spectrum of CCI4."</b> Presented By: Aileen Calletano and Matthew Foronda <b>"Determination of Excited State Energy Levels of 12."</b>	Acridine Yellow." Faculty Sponsor: Steven Mayer Faculty Sponsor: Steven Mayer Faculty Sponsor: Steven Mayer	
<ul> <li><b>"Kinetics of Phosphorescence and Delayed Fluorescence of</b> Presented By: Siva Ho and Christopher Heli</li> <li><b>"Raman Spectroscopy: The Vibrational Spectrum of CCI4."</b> Presented By: Aileen Calletano and Matthew Foronda</li> <li><b>"Determination of Excited State Energy Levels of I2."</b> Presented By: Anthony Nguyen and Justin Olson</li> <li><b>"Rubidium Atomic Absorption: A Hyper-fine Structure with</b></li> </ul>	Acridine Yellow." Faculty Sponsor: Steven Mayer Faculty Sponsor: Steven Mayer Faculty Sponsor: Steven Mayer	
<b>"Kinetics of Phosphorescence and Delayed Fluorescence of</b> Presented By: Siva Ho and Christopher Heli <b>"Raman Spectroscopy: The Vibrational Spectrum of CCl4."</b> Presented By: Aileen Calletano and Matthew Foronda <b>"Determination of Excited State Energy Levels of 12."</b> Presented By: Anthony Nguyen and Justin Olson <b>"Rubidium Atomic Absorption: A Hyper-fine Structure with Dips, and Crossover Resonances."</b>	Acridine Yellow." Faculty Sponsor: Steven Mayer Faculty Sponsor: Steven Mayer Faculty Sponsor: Steven Mayer Doppler Broadening, Lamb Faculty Sponsor: Steven Mayer	

# Poster Presentations 2:15 - 3:05 p.m.

<ul> <li>College of Arts and Sciences   Chemistry</li> </ul>	Franz Hall 120
"Energy Estimation of Conjugated Polyenes using Particle in a and Experimental Comparative Analysis."	Box Model: Theoretical
Presented By: Alexandria Van Grouw and Dylan Williams	Faculty Sponsor: Steven Mayer
"Acridine Yellow: A Fun yet Informative Insight into Fluorescer	ice and Phosphorescence."
Presented By: Justin Dingman and Connor McLoughlin	Faculty Sponsor: Steven Mayer
"Ro-vibrational Spectroscopy of HCl/DCl."	
Presented By: Claire Kearney and David Hoang	Faculty Sponsor: Steven Mayer
<ul> <li>College of Arts and Sciences   Environmental Science</li> </ul>	Franz Hall Lobby
"Geologic Controls on Shore Platform Morphology: Implication	ns for Biodiversity."
Presented By: Carla Cerda	Faculty Sponsor: Kristin Sweeney
"Quantifying Historic Landscape Change from Structure-from- Mount St. Helens, Washington."	Motion Photogrammetry:
Presented By: Rhys Coffee	Faculty Sponsor: Kristin Sweeney
<ul> <li>School of Education</li> </ul>	Franz Hall Lobby
"Incorporating Visual Access Points in Elementary Instruction."	9
Presented By: Maggie Keaty and Sarah Walley	Faculty Sponsor: Hillary Merk

# Poster Presentations 3:15 - 4:05 p.m.

<ul> <li>College of Arts and Sciences   Chemistry</li> </ul>	Franz Hall Lobby
"Examining the Phosphorescence and Florescence of Acridine	Yellow."
Presented By: Joey Lippert and Triona Matheson	Faculty Sponsor: Steven Mayer
"Deconstruction of the Vibrational Spectrum for Carbon Tetrac	hloride."
Presented By: Maxwell Armitage and Katherine Brown	Faculty Sponsor: Steven Mayer
"The Mechanics of Making a Michelson Inferometer and their Laser Light Shows."	Applications in
Presented By: Maddy Otto and Astrid Schick	Faculty Sponsor: Steven Mayer
"Visible Absorption Spectroscopy: I2."	
Presented By: Skye Chen-Johnson and Phong Ly	Faculty Sponsor: Steven Mayer
"The Hyperfine Splitting of Rb."	
Presented By: Jarren Takaki and Theodore Truong	Faculty Sponsor: Steven Mayer
"Ro-vibrational Spectroscopy of HCI/DCI."	
Presented By: Lauren Young and Nicholas Young	Faculty Sponsor: Steven Mayer
"Visible Absorption Spectroscopy of Conjugated Polyenes."	
Presented By: Madeline Otto and Michael Nguyen	Faculty Sponsor: Steven Mayer
<ul> <li>College of Arts and Sciences   Psychology</li> </ul>	Shiley Hall 3rd Floor Atrium
"Comparing Diagnosis and Treatment of Mental Illness in Colle Attending Emerging Adults."	ege and Non-college
Presented By: Him Hubbard, Lauren Tolcher, Paige Reohr, and Andrew Muth	Faculty Sponsor: Andrew Downs

# Poster Presentations 3:15 - 4:05 p.m.

<ul> <li>College of Arts and Sciences   Psychology</li> <li>"Sex Differences in Mental Health Symptomatology and Stress in</li> </ul>	Shiley Hall 3rd Floor Atrium n College Students."
Presented By: Paige Reohr, Lauren Tolcher, Kim Hubbard, and Andrew Muth	Faculty Sponsor: Andrew Downs
<ul> <li>College of Arts and Sciences   Psychology</li> <li>"Racquets, Regulation, and Education: Assessing Marginalized Y Self-Control Skills on Academic Assessments."</li> </ul>	Shiley Hall 3rd Floor Atrium <b>/ouths' Perceived</b>
Presented By: Jackie Nolan	Faculty Sponsor: Andrew Guest
"Inclusion: Making Space for Social Well Being?"	
Presented By: Brandon Cruz	Faculty Sponsor: Andrew Guest
"Serving Up Success: Assessing Self-Efficacy and Educational Out Tennis Program."	comes in an After School
Presented By: Taylor Trujillo	Faculty Sponsor: Andrew Guest
"Quitting Time? How Barriers Affect Motivation in Career Develo	opment."
Presented By: Danielle DeSalvo	Faculty Sponsor: Andrew Guest
"Today, I Bounce Back: How Different Occupational Therapy Sett	ings Promote Resiliency."
Presented By: Marissa Quinones	Faculty Sponsor: Andrew Guest
"Parenting and Social-Emotional Development for Adoptees."	
Presented By: Wanting Wu	Faculty Sponsor: Andrew Guest
"Reconnecting with Nature: The Therapeutic Effects of Gardenin Emotional and Behavioral Disabilities."	g on Youth with
Presented By: Hayley Reed	Faculty Sponsor: Andrew Guest
"Where Did They Go? Assessing Methods for Improving Retention Marginalized Populations."	on and Care Among
Presented By: Alyssa Wilson	Faculty Sponsor: Andrew Guest
"What Emoji Are You? The Effects of Emotional Self-Disclosure of Management."	n Classroom Behavior
Presented By: Sabrina Bernaldo-Olmedo	Faculty Sponsor: Andrew Guest
<b>"The Heartbeat of Suffering: Exploring the Motivations of Healt</b> Presented By: Brittani Klindworth	<b>h Care Professionals."</b> Faculty Sponsor: Andrew Guest
"I Messed Up, Now What? Conduct Process and Student Experier Portland."	nce at the University of
Presented By: Araceli Gonzalez	Faculty Sponsor: Andrew Guest
"If Walls Could Talk: Physical and Social Contexts as an Influence Analysis Therapists' Coping."	on Applied Behavioral
Presented By: Lou Tripp	Faculty Sponsor: Andrew Guest
"Community Responses to Stressors Related to Racial Justice and	d Identities."
Presented By: Reis Haitsuka	Faculty Sponsor: Andrew Guest
"Supports and Strategies for Students with IEPs."	
Presented By: Kelsie Jane Smith	Faculty Sponsor: Andrew Guest
"Helpers Needing Help: Investigating Stress Levels in Crisis Work Mechanisms for Self Care."	ters and Coping
Presented By: Anna Jensen	Faculty Sponsor: Andrew Guest

# Poster Presentations 3:15 - 4:05 p.m.

<ul> <li>College of Arts and Sciences   Psychology</li> <li>"The Adult Version of Play Dates: Is It Still Fun? Combating Soci</li> <li>Community Rooms."</li> </ul>	Shiley Hall 3rd Floor Atrium al Isolation in
Presented By: Nina Sackett	Faculty Sponsor: Andrew Guest
<ul> <li>College of Arts and Sciences   Psychology</li> <li>"Sex Differences with Humor in Relationship to Compassion for</li> </ul>	
Presented By: Abygail Kosiara <b>"Adolescents and Drug Abuse."</b>	Faculty Sponsor: Deana Julka
Presented By: Desiderio Morales and Alex Wallace	Faculty Sponsor: Deana Julka
"Responding to Race: How Do You See the World?" Presented By: Erin Ibaan, Laura Misch, and Amanda Zazueta	Faculty Sponsor: Deana Julka
"Effects of Childhood Parenting Styles on Conformity and Anxi	ety."
Presented By: Madison Kelly, Emma Larson, and Sarah Martinez	Faculty Sponsor: Deana Julka
<b>"Meticulous or Mental Disorder?: Misconceptions of Obsessive</b> Presented By: Lauren Van Tassell, Barrie Purcell, and Megan Hogan	Compulsive Disorder." Faculty Sponsor: Deana Julka
"The Role Race and Mixed Race Plays in Facial Recognition." Presented By: John Cambra and Kat Thatcher	Faculty Sponsor: Deana Julka
"Influence of Authority in Altruistic Decision Making." Presented By: Lauren Jones, Corinne Milette, and Molly Thomas	Faculty Sponsor: Deana Julka
"Effectiveness of Various Forms of Education Regarding Sexual Campuses."	Violence on College
Presented By: Madeleine Hansen, Miriam Starrett, and Olivia Sanchez	Faculty Sponsor: Deana Julka
"Student and Professional Knowledge of Eating Disorders." Presented By: Janina Dukart and Rachel Liening	Faculty Sponsor: Deana Julka
"Artistic Expression and Effects on Stress." Presented By: Erik Klee, Anjeline Buencamino, and Randall Burnett	Faculty Sponsor: Deana Julka
<b>"Personality, Academic Achievement, and Curriculum among C</b> Presented By: Jacob Robino	ollege Undergraduates." Faculty Sponsor: Deana Julka
"Impact of Grit on Future Readiness in Graduating Undergradua	ates."
Presented By: Analese Gonzalez, Justin Low, and Sam Wong	Faculty Sponsor: Deana Julka
<b>"Working and Student Well-being."</b> Presented By: Talia Liebscher, Billy Joel Rafil, and Miranda Whitters	Faculty Sponsor: Deana Julka
<ul> <li>School of Education</li> </ul>	Franz Hall Lobby
<b>"Impact of Social Economic Status of the 3 Rs."</b> Presented By: Taryn Okemura, Haley Huggins, Devon Schmidt, Kate Meredith, I Maddy Mandon, and Madeline Ochs <i>Faculty Sponsor: Hillary Merk</i>	Lindsay Chang, Danae Ah Nee,



