



UNIVERSITY OF PORTLAND



# FOUNDERS' DAY

## SCHEDULE OF EVENTS

TUESDAY, APRIL 9, 2019

**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.

## Presentations

- 3-9** Session I ..... 10:15 - 11:05 a.m.
- 9-14** Session II ..... 11:15 a.m. - 12:05 p.m.
- 14-17** Session III ..... 2:15 - 3:05 p.m.
- 17-18** Session IV ..... 3:15 - 4:05 p.m.

## Poster Sessions

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

- 19** 10:15 - 11:05 a.m.
- 20-21** 11:15 a.m. - 12:05 p.m.
- 21-22** 2:15 - 3:05 p.m.
- 22-24** 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

## Session I

▪ College of Arts and Sciences | Biology

Buckley Center 103

### **“Y-Haplotype Analysis Using Human Expectorate and Ancient Human Remains.”**

The objective of this project is to determine the genetic origins of several individuals using current ancient DNA analysis techniques. In collaboration with the UP Pollentia Undergraduate Research Expedition (PURE), ancient human remains excavated from the grave sites in Pollentia were collected, exported to the US, and analyzed to identify the demographics of the ancient population.

Presented By: Matt Schumann

*Faculty Sponsor: Amelia Ahern-Rindell*

### **“Multi-factor Analysis of Corticosterone Levels in Juvenile Northern Spotted Owl Feathers.”**

Northern Spotted Owls are a threatened species. This project focuses on extracting and quantifying corticosterone in owl feathers. Corticosterone levels are expected to indicate the individual's condition at the time the feathers developed. Factors including feather type, geographic location, climate, and interspecific competition with Barred Owls may contribute to feather corticosterone levels.

Presented By: Jacey Wreggelsworth

*Faculty Sponsor: Katie O'Reilly*

▪ College of Arts and Sciences | Chemistry

Buckley Center 104

### **“Anti-fungal Capabilities of Benzoyl Derivatives in Callisia Fragrans and its Translation to Cancer Treatment.”**

*Callisia fragrans* (basket plant) is found in tropical regions and is used by people in Vietnam as a medicinal herb. Leaves were extracted with methanol and many chromatography steps to separate and isolate active compounds. Activity was tested on *P. ultimum*. Active fractions were separated multiple times by flash chromatography on silica gel. Structures of two active samples have been determined.

Presented By: Siva Ho

*Faculty Sponsor: Angela Hoffman, Edward Valente*

### **“Isolation of Natural Insecticides from Yew Trees.”**

Taxol is an anticancer product found in yew trees. We have found that yew trees also produce insecticidal compounds. To identify these compounds, fractions of yew tree extracts have been separated with flash and TLC chromatography and tested on tobacco hornworms. Hornworms fed flash fraction 3 and a non-UV-active TLC fraction became sick or died. The next step is to identify the active compound.

Presented By: Connell Morantte

*Faculty Sponsor: Angela Hoffman*

### **“Expansion of Secondary Coordination Spheres Around 2,5-dihydroxy-1,4-quinone Core via Inclusion of Phosphonate Groups.”**

We have synthesized 2,5-bis(dimethylphosphonato)-3,6-dihydroxy-1,4-quinone and 2,5-bis(diethylphosphonato)-3,6-dihydroxy-1,4-quinone. Our initial investigations revealed that the phosphonate groups play a significant role namely in forming different coordination pockets towards Li<sup>+</sup>, Na<sup>+</sup>, and K<sup>+</sup> ions. Some of these compounds obtained may be of interest in developing alkali metal batteries.

Presented By: Claire Kearney, Samuel Lippert, Kailin Mooney

*Faculty Sponsor: Eugene Urnezius, Edward Valente*

### **“Compounds from Actinomycete Bacteria may Inhibit Pythium Ultimum and Escherichia Coli.”**

Our research is focused on secondary metabolites from ancient bacteria isolated from soil at Pollentia, Spain. Antibiotics against from a liquid culture of the bacterial strain P-13B-3B were capable of inhibiting growth of both *P. ultimum* and *E. coli*. They were fractionated by silica gel flash and thin layer chromatography (TLC). Active compounds and bacteria that made them are being identified.

Presented By: Jessica Chung

*Faculty Sponsor: Angela Hoffman*

▪ College of Arts and Sciences | Communication Studies

Buckley Center 110

### **“Tattoo Shop: Rapid Relational Building.”**

Presented By: Danielle Barsanti

*Faculty Sponsor: Alexa Dare*



## Session I 10:00-11:00 am

- College of Arts and Sciences | Communication Studies Buckley Center 110  
**“The Loudest Voices in the Room: Understanding Student Government Advocacy During a Tense Political Climate.”**

Presented By: Kaity Sullivan

Faculty Sponsor: Alexa Dare

- College of Arts and Sciences | Communication Studies Buckley Center 110  
**“Bringing Down the Oligarchy: Change-Making on Campus.”**

Presented By: Lydia Beagle

Faculty Sponsor: Alexa Dare

- College of Arts and Sciences | Communication Studies Buckley Center 110  
**“Sexual Assault Prevention Advocacy: Student Advocates’ Experiences of Institutional Resistance.”**

Presented By: Emily Critchley

Faculty Sponsor: Alexa Dare

- College of Arts and Sciences | English Buckley Center 111  
**“Please Make me a Handsome Tokyo Boy in my Next Life! Exploring Gender Binaries in Your Name.”**

Investigates the role of language, space, and the body in reinforcing and challenging gender binaries in Makoto Shinkai’s *Your Name*, the world’s highest-grossing Japanese animation film, about a teenage country girl and a teenage city boy who intermittently swap bodies.

Presented By: Christopher Lee

Faculty Sponsor: Molly Hiro

- College of Arts and Sciences | English Buckley Center 111  
**“God is a Fish: Slippery Words and Hollow Religion in *As I Lay Dying*.”**

An exploration of Faulkner’s critique of religious belief and the limits of language as a tool for making meaning in a seemingly meaningless world.

Presented By: Wes Cruse

Faculty Sponsor: Molly Hiro

- College of Arts and Sciences | English Buckley Center 111  
**“My Heart is a Ship: Exploring Alternate Views of Gender and Humanity in Sci-Fi.”**

How language is employed to subvert expectations of gender and humanity in the AI narrator of Ann Leckie’s science fiction novel *Ancillary Justice*, and how these observations reflect on the genre of science fiction as a whole.

Presented By: Katherine Brown

Faculty Sponsor: Molly Hiro

- College of Arts and Sciences | Environmental Science Buckley Center 112  
**“Air Pollution in Portland: Impact of Particulates.”**

Presented By: Dani Castillo, Jonathan Wiley, Anna Wood-Gaines

Faculty Sponsor: Heather Carpenter, Norah Martin

- College of Arts and Sciences | Environmental Science Buckley Center 112  
**“Air Pollution in Portland: Impact of Ozone.”**

Presented By: Megan MacInnes, Lionel Mills, Theresa Valdez

Faculty Sponsor: Heather Carpenter, Norah Martin

- College of Arts and Sciences | Environmental Science Buckley Center 112  
**“Air Pollution in Portland: Impact of Airborne Contaminates.”**

Presented By: Sasha Lower, Sophie Palumbo, Nicole Sarmiento

Faculty Sponsor: Heather Carpenter, Norah Martin

- College of Arts and Sciences | International Language and Cultures Franz Hall 217  
**“The Intersections of Identity, Motivation, and Strategy in Two Foreign Language Learning Journal Projects.”**

Panelists will explain Norton and McKinney’s constructs of identity and investment, common theories of motivation in second language learning, and language learner strategies as a preface to sharing their journal studies which chart their development as language learners over the course of the past fall semester and highlight the role of identity in improving language learning and motivation.

Presented By: Dylan Hite, Cierra Soukesian

Faculty Sponsor: Jeffrey White

## Session I 10:15 - 11:05 a.m.

▪ College of Arts and Sciences | International Language and Cultures

Shiley Hall 123

### **“El Cuento Latinoamericano.”**

Presented By: Karina Diaz, Dora Totoian, Madisson Pfeifer, Francesca Duncan, Cierra Soukesian, Mireysi Ventura, Catherine Wojda

*Faculty Sponsor: Maria Echenique*

▪ College of Arts and Sciences | Philosophy

Franz Hall 006

### **“Mentorship by Women of Color for Women of Color.”**

This paper focuses on how having women of color mentors for women of color students allows for a coalition-building that is limited when mentors who do not share these non-dominant identities.

Presented By: Sitara Nath

*Faculty Sponsor: Lara Trout*

### **“Letting Logic Be Messy.”**

Using the tu quoque fallacy as an example, I want to show that very simplistic and abstract notions of the terms “logic” and “argument” often fail to solve real world problems. Thus, more complex (messy) analyses of the purpose and nature of such terms should be considered and, furthermore, taught in introductory philosophy courses.

Presented By: Michael Dale

*Faculty Sponsor: Lara Trout*

### **“Dialogue to “Plurilogue”: Deconstructing White Feminism and Building New Coalition.”**

Inspired by María Lugones’ piece - “Playfulness, ‘World’ – Traveling, and Loving Perception”, this project explores the blind spots of white feminism, highlights minority women’s struggles to define their own narratives and build coalition with one another, and suggests one possible solution to these challenges: Shireen Roshanravan’s concept of an ongoing “plurilogue”.

Presented By: Emma Nellor

*Faculty Sponsor: Lara Trout*

▪ College of Arts and Sciences | Political Science

Shiley Hall 101

### **“UP Mock Trial Team presents: Midlands Television Station v. Kosacks.”**

The case involves a claim of negligence against animal trainer Danny Kosacks, whose chimpanzee, Elias, attacked and killed a writer at the Midlands Television Station studio. Kosacks is counterclaiming that it was the TV station that committed the negligence that caused the attack.

Presented By: UP Mock Trial Team

*Faculty Sponsor: Bill Curtis, Aaron Johnson*

▪ College of Arts and Sciences | Social Work

Franz Hall 015

### **“Kids No More: Examining the Unique Needs of Teens and Young Adults in Pediatric Hospitals.”**

This project examines the experiences of teens and young adults experiencing illness or injury and receiving treatment in a pediatric hospital through the lens of systems theory. This presentation will explore the unique needs of individuals ages 13-21 in comparison to younger children, with a particular focus on the specific resources offered by local hospitals and organizations.

Presented By: Mariah Graham

*Faculty Sponsor: Kevin Jones*

### **“The Art of Caregiving: Perspectives of those Giving and Receiving Care Among Older Adults.”**

Providing care to older adults is often highly demanding and under-appreciated work with high rates of burnout and emotional exhaustion. The goal of this project is to understand what keeps caregivers motivated and engaged with their work through an ecosystems theoretical lens and interviews with caregiving staff and participants at a local day center for older adults.

Presented By: Maggie Sheehy

*Faculty Sponsor: Kevin Jones*

## Session I 10:51-12:00 p.m.

▪ College of Arts and Sciences | Social Work

Franz Hall 015

### **“Assessing the Risk of Homelessness for Victims of Intimate Partner Violence.”**

This project aims to revise an existing document, the Danger Assessment by Jacquelyn C. Campbell, through the lens of Systems Theory in relation to the likelihood of homelessness for victims of Intimate Partner Violence (IPV). The goal is to assess if the likelihood of homelessness for victims of IPV can be predicted by adapting an existing resource.

Presented By: Kathryn Morrill

*Faculty Sponsor: Kevin Jones*

▪ College of Arts and Sciences | Sociology

Franz Hall 018

### **“Unequal Distribution of Environmental Risks and Hazards in Portland, Oregon.”**

Presented By: Emma Howard

*Faculty Sponsor: Martin Monto*

### **“Comparing Immigrant Generations and their Economic Status.”**

Presented By: Teeshawna Amor-Mashino

*Faculty Sponsor: Martin Monto*

### **“Embodying Masculinities: Intersections of Masculinity and Sports.”**

Presented By: Janelle Guldahl

*Faculty Sponsor: Martin Monto*

▪ College of Arts and Sciences | Theology

Franz Hall 034

### **“Our Apostolic Vocation: The Role of the Laity in the Rite of Christian Initiation of Adults.”**

Presented By: Kayla Garchar

*Faculty Sponsor: David Turnbloom*

### **“Bodies and Souls: Examining the Ritual of Priestly Ordination through the Eyes of Aquinas’s Anthropology.”**

Presented By: Tyler Tangen

*Faculty Sponsor: David Turnbloom*

▪ Pamplin School of Business

Franz Hall 206

### **“Soda Industry Analysis.”**

The presentation takes a macro perspective on the soda industry, discussing primarily the relationship between Coca Cola and niche competitors. It then transitions into a more detailed analysis on Jones’ Soda, which is a local craft soda distributor.

Presented By: Cole Cameron

*Faculty Sponsor: Mark Meckler*

### **“The Opportunities of Analytics in the Accounting Program.”**

Using a variety of analytical techniques such as: AI, Visualization, R, Advanced Excel, for in-depth financial analysis, extracted from Compustat financial database.

Presented By: Ameera Patel

*Faculty Sponsor: Teri Grimmer*

▪ Pamplin School of Business

Franz Hall 214

### **“Admissions: How Students Decided Where to Attend College.”**

This presentation focuses on identifying what prospective students desire in a university, and how colleges can distinguish themselves from one another. We will also provide recommendations with what the University of Portland Office of Admissions can do to attract more students to become future Pilots.

Presented By: Hayley Chawke, Chelsea Kau, Mellanie Muller

*Faculty Sponsor: Ian Parkman*

### **“The Beacon: Marketing Research Insights.”**

Three students researched factors important to target audience engagement for UP’s student-run media source, *The Beacon*. The campus perception of *The Beacon* has had mixed emotions about its credibility. This study sought to understand how factors like “fake-news” play a role in this perception and ways *The Beacon* can create content to better target its audience and combat misconceptions.

Presented By: Madison Polzin, Claire Desmarais

*Faculty Sponsor: Ian Parkman*

## Session I 10:15 - 11:05 a.m.

▪ School of Education

Franz Hall 223

### **“Increasing Accessibility to Maximize Inclusivity.”**

A discussion about making learning accessible for students of all ethnicities, abilities, and backgrounds to make classroom culture more inclusive.

Presented By: Laura Barros, Gabby Garcia, Hanna Knouf, Isabel Tubao

*Faculty Sponsor: Hillary Merk*

▪ School of Education

Franz Hall 231

### **“Promoting Engagement and Empathy by Incorporating Virtual Reality in the Classroom.”**

Virtual and Augmented Reality Technologies are becoming more and more accessible to the education world. Using work samples from Virtual Reality activities we will discuss benefits of bringing virtual and augmented reality technologies into the classroom, such as increased student interest and engagement.

Presented By: Sophia Aguirre, Theresa Foley, Mayetta Martel, Kristine Foo

*Faculty Sponsor: Randy Hetherington*

▪ Shiley School of Engineering | Civil Engineering

Shiley Hall 124

### **“UP Academic Building Project (Dundon Berchtold Hall).”**

Dundon Berchtold Hall is an academic building currently under construction on the UP campus. Students have designed their own structural frame for this academic building. Their design shall cater to the needs of the stakeholder while adhering to necessary codes to ensure a reliable design to the best of the students' abilities.

Presented By: John Black, Kyle Cadiz, Sofia Martinez, Leily Mojarab

*Faculty Sponsor: Mehmet Inan, Industry Advisors: Aaron Wegner, Andrew Burke, Kevin Kelly*

### **“NE Jackson School Road & Harewood Street Intersection Control Eval and Design.”**

This project involves designing a half mile public roadway improvement, focusing primarily on the intersections of Estate Drive, Harewood Street and Sunrise Lane. The purpose of this project is to create a user friendly multi-modal design.

Presented By: Brad Gillin, Alex Kauffman, Bridget McGinnis, Ivy Yamaguchi

*Faculty Sponsor: Mehmet Inan, Industry Advisor: Joey Bansen - Kittelson & Associates*

▪ Shiley School of Engineering | Electrical Engineering

Shiley Hall 301

### **“Infrared Motion-Tracking Robotic Arm.”**

The IR motion-tracking robotic arm utilizes a unique method for controlling a robotic arm, typically directed by conventional remotes or programs. Using a LEAP motion sensor, an Arduino Uno, and digital servos, the robotic arm will mimic the user's subtle movements to pick up various objects.

Presented By: Andrew Doan, Avery Guillermo, Gavin Low, Dayna Yoshimura

*Faculty Sponsor: Peter Osterberg, Industry Advisor: David Laning*

### **“BattleChip Game.”**

Inspired by the classic game Battleship, this is a fully electronic game controlled by a MOSIS processing chip and Raspberry Pi micro-controller display system. This modernized version is equipped with an LED playing field for each player, color coding, digitized control buttons, and an updated compact case.

Presented By: Kristin Taylor, Erik Torkelson, Matt Weaver

*Faculty Sponsor: Nazanin Mansouri; Matt Clark*

▪ Shiley School of Engineering | Mechanical Engineering

Shiley Hall 319

### **“Suppression of Parkinsonian Hand Tremors.”**

The design team has been tasked to design, fabricate and test a purely mechanical, wearable device to aid in the suppression of Parkinsonian hand tremors. The team has constructed an enhanced utensil whose theory has been translated to a small wearable device to suppress these tremors.

Presented By: Norma Gowans, Dante Mancinelli, Jennifer Manning, Langley Vogt

*Faculty Sponsor: Tim Doughty*



## Session I 10:05 - 11:05 a.m.

### ▪ Shiley School of Engineering | Mechanical Engineering

Shiley Hall 319

#### **“Parabolic Solar Trough.”**

This team has designed and built a module of two parabolic solar troughs to produce hot water for an organic Rankine Cycle. This is a thermodynamic cycle that produces energy and requires a heated fluid to operate. A parabolic solar trough is a type of concentrating solar technology that directs sunlight at a focal line, heating the fluid inside.

Presented By: Audrey Beattie, Ed Lane, John Pellessier, Abbie Smithline

Faculty Sponsor: Heather Dillon, Industry Advisor: Becca Baldwin

### ▪ School of Nursing

Buckley Center Auditorium

#### **“Social Media: The Effects it has on a Young Adult’s Mental Health.”**

Social media is a vastly growing online platform that many young adults take part in, but awareness of the impact it has on mental health must be brought to light. Numerous studies have shown the disturbing consequences of social media and how it is correlated with higher rates of anxiety, reports of low self-esteem and suicide.

Presented By: Leah Bohling, Lexi Gregov, Taylor Jones

Faculty Sponsor: Kaye Wilson-Anderson

#### **“Dying to Do Research: A Reflection of Quantitative and Qualitative Feedback from BSN Students on End-of-Life Care.”**

Have you ever felt overwhelmed by the task of navigating chronic illness and death with patients? To make that moment more comfortable, End-of Life Nursing Education Consortium has been implemented into the BSN curriculum. We analyze qualitative and quantitative perspectives of traditional and transfer nursing students with the goal of adjusting the curriculum to better equip future nurses.

Presented By: Kaileigh Valentine, Bethany McKenna, Claire Olson, Cheyenne Hoppe

Faculty Sponsor: Briana Rotter, Barb Braband, Janet Banks, Casey Shillam

### ▪ Collaborative for International Studies & Global Outreach

Franz Hall 026

Each Sojourner Scholar must submit a portfolio that they use to document their competencies in the Sojourner level Global and Intercultural Learning Outcomes (GILOs). The portfolio is a collection of student work that has been compiled over time that uses learning artifacts (e.g. classroom assignments, journal reflections, photographs, etc.) to demonstrate concrete examples learning.

#### **“Descubriendo la especia de la vida (Discovering the Spice of Life).”**

Presented By: Kaitlin Yap

Faculty Sponsor: Eduardo Contreras

#### **“A Peculiar Bridging of Cultures.”**

Presented By: Andrea Thompson

Faculty Sponsor: Eduardo Contreras

#### **“Two is Better Than One: On Intercultural Development.”**

Presented By: Christina Francisco

Faculty Sponsor: Eduardo Contreras

#### **“A Strange and Wonderful Dish: Cobbling Together an Intercultural Understanding to Share.”**

Presented By: Emma Scheve

Faculty Sponsor: Eduardo Contreras

## Session II 11:30 - 1:05 p.m.

▪ College of Arts and Sciences | Biology

Buckley Center 103

### **“The Effects of Habitat Quality on Small Mammal Health.”**

Ecological restoration attempts to improve habitat quality by returning degraded lands to a more natural state. Degraded habitats may negatively affect wildlife by increasing stress, which in turn may suppress immune function. Conversely, habitat restoration may improve wildlife health. We will present our findings from a three-year study on habitat quality and mammal health.

Presented By: A. Shreya Kumar, Sophie Boyd, Jessie Karr

*Faculty Sponsor: Laurie Dizney*

### **“For the Love of Hymenoptera: Lab and Fieldwork with Portland’s Native Bees.”**

An overview of research projects I am involved with at Portland State University’s Natural History Museum Invertebrate Collection.

Presented By: Riley O’Rourke

*Faculty Sponsor: Tara Prestholdt*

### **“Exploiting the Benefits of CRISPR Technology: Generation and Analysis of a Novel Mutation that Allows Precise Control of a Cell Division Regulator.”**

The ability to turn off a specific protein in a live animal is a powerful tool to understand the protein’s function, but this type of control has been difficult in most organisms until recently. With gene editing, we generated a mutation that allows us to control when and where a protein called HASP-1 is turned off. We are using the mutation to understand the function of this important protein.

Presented By: Katherine Brown

*Faculty Sponsor: David Wynne*

▪ College of Arts and Sciences | Chemistry

Buckley Center 104

### **“Extraction of Anticancer and Antibiotic Compounds Derived from Bacterial Sources.”**

Need for new antibiotic compounds is growing quickly. This project studied antibiotic compounds from soil bacterial cultures obtained at Pollentia, an archeological site on the island of Mallorca, Spain. Extracts from three bacterial strains showed activity against E. coli, S. aureus and P. utimum.

Presented By: Astrid Schick

*Faculty Sponsor: Angela Hoffman*

▪ College of Arts and Sciences | Communication Studies

Buckley Center 110

### **“Inclusion and Isolation: A Semiotic Examination of Public Spaces at the University of Portland.”**

Presented By: Mira Gill

*Faculty Sponsor: Alexa Dare*

### **“Photographing ‘Total Chaos’: A Visual Analysis of *The New York Times*’ coverage of Mass Shootings.”**

Presented By: Hannah Sievert

*Faculty Sponsor: Alexa Dare*

### **“Who Will Survive in America: Visualizing Race and Politics in Popular Culture.”**

Presented By: Riley Douthit, Heather Lewis

*Faculty Sponsor: Alexa Dare*

### **“Gaze in Graphic Novels: Establishing Power and Hierarchy.”**

Presented By: Haley Schleh

*Faculty Sponsor: Alexa Dare*

▪ College of Arts and Sciences | English

Buckley Center 111

### **“Answering the Call to Convert in *Wise Blood*.”**

This project combines close reading of Flannery O’Connor’s *Wise Blood* with a personal account of conversion, oddly enough as a result of O’Connor’s arguments against organized religion.

Presented By: Mayetta Martel

*Faculty Sponsor: Molly Hiro*

## Session II 10:35 a.m. - 12:05 p.m.

▪ College of Arts and Sciences | English

Buckley Center 111

### **"I Know You Want It: An Exploration Through Time of Male Entitlement to Female Sexuality in Music and Poetry."**

The history of how female sexuality has been represented in music and poetry and how it contrasts with contemporary music and poetry. Involves a discussion of the presence of male entitlement to female sexuality in said mediums and the reclamation of sexuality by female musicians and poets.

Presented By: Kyle Sparrman

Faculty Sponsor: Molly Hiro

### **"Virgin, Traitor, Mourner: Queering the U.S.-Mexican Border in "Woman Hollering Creek" and Borderlands/La frontera."**

An exploration of Sandra Cisneros' short story "Woman Hollering Creek" and Gloria Anzaldúa's book *Borderlands/La frontera* for their treatment of three key female icons from Mexican culture—La Virgen, La Malinche, and La Llorona—in order to explore the questions of Chicana identity and queerness in the U.S.-Mexico borderlands.

Presented By: Caroline Holyoak

Faculty Sponsor: Molly Hiro

▪ College of Arts and Sciences | Environmental Science

Buckley Center 112

### **"Anthropogenic Effects on the Killer Whales of Puget Sound."**

An analysis of the environmental, political, and ethical impacts of our actions on *Orcinus orca*.

Presented By: Callie Hogan, Madeleine Wallace

Faculty Sponsor: Steve Kolmes, Russ Butkus

### **"Clean UP Your Act: The Scale and Severity of the Great Pacific Garbage Patch."**

A multidisciplinary analysis of the Great Pacific Garbage Patch.

Presented By: Andrew Belove, Gordon Hamerski, Evan Suemori

Faculty Sponsor: Steve Kolmes, Russ Butkus

### **"Protect Your Future - Preservation Along the Oregon Coast."**

A visual exploration of the establishment and initiatives of various marine reserves along the Oregon Coast. Introduction to the formation of these safe-havens and their continued efforts to protect natural areas and wildlife will be portrayed through organization member's interviews, captured images, and additional research information. A discussion of future impact and involvement will follow.

Presented By: Taylor Corris, Annie Coyle, Kate Cronin

Faculty Sponsor: Steve Kolmes, Russ Butkus

### **"Kelp Forest Collapse: An Ecological Hangover of Fur Trapping."**

A multi lens perspective into the past, present, and future conditions facing the kelp forest ecosystem.

Presented By: Cody Hawken, Emma Howard, Zoë Tapert

Faculty Sponsor: Steve Kolmes, Russ Butkus

▪ College of Arts and Sciences | History

Franz Hall 217

### **"Steeped in Empire: Orientalism in British Tea Advertising, 1870-1914."**

Presented By: Emma Scheve

Faculty Sponsor: Blair Woodard

### **"Canoeing, Campfires, and Cultural Appropriation: Racism Against Native Americans in American Summer Camps 1880-2018."**

Presented By: Acacia Welsford

Faculty Sponsor: Blair Woodard

### **"Treasures of the San Juans: The Development of Tourism in the Towns of Telluride, Ouray, and Montrose, 1970-1997."**

Presented By: Stephanie Rowan

Faculty Sponsor: Blair Woodard

### **"Evacuating Fear: A History of Portland's Civil Defense Plan, 1950-1963."**

Presented By: Emma Hunter

Faculty Sponsor: Blair Woodard

## Session II | 10:00am - 12:00 pm

▪ College of Arts and Sciences | Mathematics

Franz Hall 026

### “A Topological Measure of Robustness in Food Chains.”

A food web is an interconnected network of food chains in an ecosystem. Food webs can be modeled using tools from graph theory and, in this framework, a measure of the robustness of a given food web has been given in terms of so-called redundant links. In this talk, we show how the robustness of a food web can be estimated by giving a topological bound on the number of redundant links.

Presented By: Lyndsay Zemanek

Faculty Sponsor: Christopher Lee

### “Leavitt Path Algebras over Arbitrary Unital Rings and their Two-sided Ideals.”

We provide an analog of a Hilbert basis theorem for Leavitt path algebras (LPAs) over associative, unital, Noetherian rings. In addition we describe two classes of graded ideals of such rings, and provide a classification of all graded ideals using these classes. Lastly, we give characterization of when such LPAs are prime, and a description of graded prime ideals.

Presented By: Joey Lippert

Faculty Sponsor: Hans Nordstrom

### “Opioid Addiction: the New Plague.”

More than 11 million people abuse their opioid prescription every year. As the number of opioid prescriptions skyrocket, more and more people start down the road of addiction, leading to one of the leading causes of death in the United States. We constructed a mathematical model which uses four major prescription opioids to compare each drug's respective effect on the overall crisis.

Presented By: Meghan Childs, Alex Tessner, Sam Rivas, Bryce Amato, Ruth Oleson

Faculty Sponsor: Eli Goldwyn

▪ College of Arts and Sciences | Performing and Fine Arts

Mago Hunt Recital Hall

### “Music Program Honors Recital”

The annual Honors Recital features some of the University's most talented performers in concert. This year's recital includes Tori Davis (voice), Alissa Henderson (voice), Kay Smith (clarinet), John Schuster (French horn), and Natalie Werner (voice).

Presented By: Tori Davis, Alissa Henderson, Kay Smith, John Schuster, Natalie Werner

Faculty Sponsor: Patrick Murphy

▪ College of Arts and Sciences | Philosophy

Franz Hall 006

### “A Meaningful Life.”

I investigate the conditions under which life can be meaningful, focusing on Susan Wolf's 'fitting fulfillment' view. I consider the extent, and the way, in which the results of such an inquiry can be objective.

Presented By: Dagan Kay

Faculty Sponsor: James Baillie

### “Is Love All You Need?”

This project investigates philosopher Harry Frankfurt's work on love and its role in his volitional framework of importance, care, and value. Specifically, it seeks to answer whether Frankfurt can admit of external or objective kinds of value; or, if his view cannot admit of such values, whether this inability constitutes a compelling objection against accepting his framework.

Presented By: Owen Price

Faculty Sponsor: Andrew Eshleman

### “The Relationship Between a Meaningful Life and Wu Wei.”

This presentation will give insight into a project that explores the relationship between a meaningful life and the Chinese philosophy of Wu Wei. One central question the project addresses is 'what are the similarities between the Chinese philosophy of Wu Wei and the modern day psychological concept of flow?'

Presented By: David Masino

Faculty Sponsor: Andrew Eshleman



## Session II

▪ College of Arts and Sciences | Political Science

Shiley Hall 101

### **“UP Mock Trial Team presents: Midlands Television Station v. Kosacks.”**

The case involves a claim of negligence against animal trainer Danny Kosacks, whose chimpanzee, Elias, attacked and killed a writer at the Midlands Television Station studio. Kosacks is counterclaiming that it was the TV station that committed the negligence that caused the attack.

Presented By: UP Mock Trial Team

Faculty Sponsor: Bill Curtis, Aaron Johnson

▪ College of Arts and Sciences | Psychology

Franz Hall 018

### **“Motivation of Social Racial Comparison on Performance Behavior.”**

Presented By: Kyle Dela Cruz

Faculty Sponsor: Zach Simmons

### **“The Effect of Huntington’s Disease on the Receiving End of Dopamine Pathways.”**

Presented By: Sarah Holden

Faculty Sponsor: Mark Pitzer, Zach Simmons

### **“Self Love and Hookups.”**

Presented By: Chloe Tanega

Faculty Sponsor: Zach Simmons

▪ College of Arts and Sciences | Social Work

Franz Hall 015

### **“Experiences of and Attitudes Toward Mental Health Services Among Older Youths in Foster Care.”**

Foster youth experience higher rates of mental health disorders and services than their peers. This project explores the experiences of older youth in foster care receiving mental health services and their perceptions of and satisfaction with those services. Informed by Systems Theory, the analysis examines the impact the system of mental health services has on the youths’ overall well-being.

Presented By: Shannon Scruggs

Faculty Sponsor: Kevin Jones

### **“Helping an Older Adult Heal Through Poetry Writing.”**

Using a single-subject case study design, this project explores the positive effects that poetry writing can have on an older adult who has experienced repeated traumas. Through the lens of trauma theory, poetry writing will be explored as a form of trauma-informed therapy and the effects and responses of it will be discussed.

Presented By: Julie Spencer

Faculty Sponsor: Kevin Jones

### **“How Trauma Affects Emotional Intelligence in Foster Youth.”**

This qualitative study examines youth who have been in foster care for varying amounts of time and how the trauma faced before entering care and during care affects how they build and work through relationships. Using trauma theory, I will discuss how to combat those traumas and why it is important to intervene early with foster youth.

Presented By: Natalie Root

Faculty Sponsor: Kevin Jones

▪ Pamplin School of Business

Franz Hall 206

### **“The Fear Index and the Performance of US Banks Post Financial Crisis.”**

This study will investigate the association between the Chicago Board of Exchange’s market volatility index (VIX) and the S&P500 US banks Equity index. I estimate a dynamic multivariate vector autoregressive model including other macroeconomic variables in addition to the VIX. These results shed light on the use of the VIX by equity investors in the banking sector.

Presented By: Angela Forhan

Faculty Sponsor: Bahram Adrangi

### **“Examining the Socioeconomic Variables Which Impact Obesity on the West Coast.”**

The goal of this project is to determine policy target variables which heavily influence obesity in the West Coast. The significance of these variables on the West Coast will be compared to those of the East Coast to examine obesity trends. Understanding the most impactful socioeconomic factors in different parts of the country allows for tailored policy development to help reduce obesity rates.

Presented By: Athena Hoppe

Faculty Sponsor: Bahram Adrangi

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

▪ Pamplin School of Business

Franz Hall 214

### **“Spotify Marketing Research.”**

Focusing on Spotify’s leading part in the evolving world of music consumption and streaming, young adults were surveyed to better understand the roles of streaming platforms and how they should adapt to present day habits. Comparing consumer behavior and opinions between traditional and contemporary methods of consumption strengthened the distinction of roles.

Presented By: Logan Fairbrother

*Faculty Sponsor: Ian Parkman*

### **Unity Café Marketing Research.”**

Unity Café operates within the Sulamita Slavic Evangelical Church, with 100% of the profit going back to the Youth program. It was created to raise money for Youth Ministry events and to encourage its many members to socialize within the church community. Our research goal is to find out ways to operate more effectively and continue bringing members together through elements of the café.

Presented By: Silas Yeak, Hannah Mitchek, Dominique Gillis, Angel Martinov

*Faculty Sponsor: Ian Parkman*

▪ School of Education

Franz Hall 223

### **“Three ‘I’s of Parental Involvement: Key Ingredients for Student, Classroom, and School Success.”**

This presentation offers a path for parental involvement in the classroom through providing information and opportunities for inclusion, creating investment. This three-step model provides a foundation for initiating and strengthening the crucial relationships between a parent and providers of their child’s formal education.

Presented By: Nick Krautscheid, Nicholas Campagna, Austin Gray

*Faculty Sponsor: Randy Hetherington*

▪ School of Education

Franz Hall 231

### **“Changing the Pedagogy: Incorporating Neuroscience Research to Empower Students through Visuals.”**

To illustrate the value of using visuals in the classroom, a brief, interactive tutorial on cartooning expectations and instructional content for students will be given. This presentation will also include other strategies that teachers can integrate into their classroom instruction to ensure that all students receive equal access to the content material.

Presented By: Anita Erskine, Bridget Ponzetti, Katie Hengel, Kiana Okino, Margaret Buzard, Melissa Sta. Maria, Jordyn Geenty

*Faculty Sponsor: Hillary Merk*

▪ Shiley School of Engineering

Shiley Hall 124

As a Shiley School of Engineering graduate of the National Academy of Engineering Grand Challenge Scholars Program, these presentations will address the basic theme of continuing life on the planet and making our world more sustainable, secure, healthy, and joyful.

### **“Star in a Jar: Harnessing the Power of Nuclear Fusion.”**

Presented By: Sam Pasmann

*Faculty Sponsor: Mark Kennedy*

### **“Making Solar Energy Sustainable: A Multidisciplinary Approach.”**

Presented By: Audrey Beattie

*Faculty Sponsor: Mark Kennedy*

### **“A Holistic Path to Hope: A Look at the Diverse Aspects Contributing to the Joy of Living.”**

Presented By: Haley Meisburger

*Faculty Sponsor: Mark Kennedy*

## Session II 1:30 - 3:00 pm

▪ Shiley School of Engineering

Shiley Hall 319

### “Aero Drone.”

Aero Drone is a universal package delivery attachment that converts a standard sized drone into a delivery vehicle. The final product consists of a winch, hook, and mounting system that allows for compatibility with several products. It allows for full autonomy and requires no human interaction after attaching the package for delivery.

Presented By: Andrew Joyce, Anders Pedersen, Matthew Rodriguez

Faculty Sponsor: Christy Ivler, Industry Advisor: Tony Clark

### “BorrowBike.”

This project is working to convert the current bike rental system for students, faculty and staff at UP from an inconvenient process to a hassle-free swipe of a card. BorrowBike's smart lock and online web application will streamline the check-out process and allow bikes to be rented at any time of the day.

Presented By: Ryan Dehart, Aaron Leung, Jack Padon, Jesse Rubenstein, Martin Woodby, Grayson Taylor

Faculty Sponsor: Tim Doughty, Industry Advisor: Andrew Borel

▪ Shiley School of Engineering | Computer Science

Shiley Hall 301

### “Virtual UP.”

The team designed a virtual-reality touring application of Shiley Hall, which will inform prospective students of UP's college environment.

Presented By: Devin Ajimine; Mitchell Nguyen; Andrew Ripple, Sean Tollisen

Faculty Sponsor: Steve Vegdahl, Industry Advisor: Matthew Young

### “LSST Data.”

The LSST (Large Synoptic Survey Telescope) Space Image Classifier Team built an application that uses crowd sourcing and machine learning to classify space objects in LSST image data. This project aims to work towards LSST science outreach goals.

Presented By: David Carbonari; Margaret Ryan; Brandon Vennes; Mikayla Whiteaker

Faculty Sponsor: Radana Dvorak, Industry Advisor: Viet Phan

## Session III 2:00 - 3:00 pm

▪ College of Arts and Sciences | International Language and Cultures

Franz Hall 223

### “Una interpretación de ‘La plaza del diamante’ (Rodoreda).”

Una narrativa digital.

Presented By: Maddy Nohr

Faculty Sponsor: Lora Looney

### “Una interpretación de ‘El polvo de carbón’ de ‘Los niños tontos’ (Matute).”

Una ponencia.

Presented By: Rachel Heath

Faculty Sponsor: Lora Looney

### “Una interpretación de ‘Los niños tontos’ (Matute).”

Una ponencia.

Presented By: Maddy Nohr

Faculty Sponsor: Lora Looney

### “Una interpretación de ‘El laberinto del fauno’ (Guillermo del Toro).”

Una narrativa digital.

Presented By: Riley Patterson

Faculty Sponsor: Lora Looney

### “Una interpretación de ‘La lengua de las mariposas’ (Rivas; Cuerda).”

Una narrativa digital.

Presented By: Francesca Duncan

Faculty Sponsor: Lora Looney

## Session III *Presentations*

▪ College of Arts and Sciences | Philosophy

Franz Hall 006

### **“A Discussion on Kuhn’s Understanding of Science.”**

Thomas Kuhn developed a view of science that placed a high premium on societal and historical roles. This discussion will touch on the scientific context of paradigms, the framework of Kuhn’s perspective and how the system holds up against a few historical examples, primarily the shift from the geocentric model to the heliocentric model.

Presented By: Matthew Linhart

*Faculty Sponsor: Caery Evangelist*

### **“Quantum Mechanics and General Relativity: A Case for Scientific Antirealism.”**

I look at the conflict between Quantum Mechanics and General Relativity to highlight the problems Scientific Realist must face in defending their position. I argue that the only way to make use of the two successful and contracting theories, is by holds a scientific antirealist position. I use van Fraassen position as the best form of scientific anti realism.

Presented By: Efrain Venegas Ramirez

*Faculty Sponsor: Caery Evangelist*

### **“The Notions of the Self and Causality in Buddha’s and Hume’s Philosophies.”**

This thesis compares and contrasts accounts of self, identity and causation in the theories of David Hume and the Buddha.

Presented By: Manuel Gonzalez

*Faculty Sponsor: Richard Askay*

▪ College of Arts and Sciences | Psychology

Franz Hall 018

### **“The Effect of Threat on Authoritarian Attitudes.”**

Presented By: Paige Tomlinson

*Faculty Sponsor: Zach Simmons*

### **“Healing Through Connection: The Effects of Confiding After Sexual Traumas on Growth and Resilience.”**

Presented By: Alyssa Cole

*Faculty Sponsor: Sarina Saturn, Zach Simmons*

▪ College of Arts and Sciences | Social Work

Franz Hall 015

### **“Why the Friends of the Children Youth Mentoring Model is so Special.”**

*Friends of the Children* uses a unique approach to mentoring youth who have experienced significant life challenges. This project uses trauma theory to compare the Friends of the Children model with traditional mentoring programs to show the unique aspects of Friends of the Children and why it is so effective for building youth success and potentially breaking the cycle of generational poverty.

Presented By: Molly Holmes Jacobs

*Faculty Sponsor: Kevin Jones*

### **“Early Access to Language in Oregon: Examining the Effects of Language Deprivation on Deaf and Hard-of-Hearing Children.”**

This research project examines what language deprivation is and its impacts on children with hearing loss. By using Social Learning Theory, and looking at how the macro, mezzo, and micro levels of society influence the development of deaf and hard-of-hearing children, we will understand the crucial need to establish an early language program for ages 0-5 in Oregon’s deaf education system.

Presented By: Rosa Rackham

*Faculty Sponsor: Kevin Jones*

▪ Pamplin School of Business

Franz Hall 206

### **“Assessing the Local and Regional Economic Impacts of The Eagle Creek Fire.”**

This research project looks at estimating the economic impact in local counties from post-fire repair spending and wildfire suppression spending including value of economic stimulus and job creation in Hood River County, Multnomah County and surrounding counties.

Presented By: Danny Politoski

*Faculty Sponsor: Ruth Dittrich*



## Session III 3:15-3:05 pm

### ▪ Pamplin School of Business

Franz Hall 206

#### **“The Economic Costs of Health Impacts due to the 2017 Eagle Creek Wildfire.”**

In this study, we value the effects Particulate Matter from the wildfire on health using the EPA's Environmental Benefits Mapping and Analysis Program (benMAP).

Presented By: Stuart McCallum

*Faculty Sponsor: Ruth Dittrich*

### ▪ Pamplin School of Business

Franz Hall 214

#### **“Surrounded App.”**

We are creating an app to confront the widespread problem of loneliness on campuses. The main functions of the app include connecting students to connect face to face, giving them a safe space to discuss their struggles, and providing them resources and tips to help their wellness physically, mentally, and spiritually.

Presented By: Angel Martinov, Hannah Mitchek, Tara Gartner

*Faculty Sponsor: Itzel Cruz Megchun*

#### **“Addressing Blind Spots on N. Willamette.”**

For drivers, bikers, and pedestrians, North Willamette Boulevard is a dangerous stretch of road. Parked cars along the street create blind spots so drivers cannot see if a vehicle, biker, or pedestrian is approaching. We addressed this problem by creating a light system that is recognizable, and has a low learning curve. We hope to make North Willamette Boulevard safer for everyone involved.

Presented By: Hayley Chawke, Meagan Helton, Chelsea Kau

*Faculty Sponsor: Itzel Cruz Megchun*

#### **“Warming Hearts Project.”**

Product that provides storage and heat for the homeless population.

Presented By: Karina Diaz, Devin Smith, Cathy Nalule

*Faculty Sponsor: Itzel Cruz Megchun*

### ▪ Shiley School of Engineering

Shiley Hall 301

#### **“Wireless Power Transfer.”**

The team created a system to wirelessly transmit power and use it to power a micro-controller. This technology could be applied to replace batteries in small devices and increase battery life in other devices.

Presented By: Anthony Lieu, Phillip Manalili-Simeon, Dylan Shuler

*Faculty Sponsor: Robert Albright*

#### **“Tutor UP.”**

The Tutor UP team created a responsive web application to help connect UP students with peer tutors.

Presented By: Alexa Baldwin, Danh Nguyen, Elias Paraiso

*Faculty Sponsor: Tammy VanDeGrift, Industry Advisor: Casey Siglemann*

### ▪ Shiley School of Engineering | Mechanical Engineering

Shiley Hall 319

#### **“Electromechanical Valvetrain.”**

This team has designed and implemented a new system to improve internal combustion engine performance and efficiency. This system replaces the traditional camshaft-based valvetrain with a computer-controlled pneumatic actuation system. It has the potential to reduce emissions without sacrificing the benefits which have made combustion engines a popular power source.

Presented By: Ryan Clarke, Joseph McKeirnan, Emmett Santucci, Nicholas Yako

*Faculty Sponsor: Jordan Farina, Industry Advisor: Ryan Jefferis*

#### **“UP Fusion.”**

The goal of the UP Fusion Team was to research, design and build an inertial electrostatic confinement fusion reactor (fusor), capable of producing fusion. The construction of this device will help build a greater public understanding of the potential of nuclear fusion and ultimately aid in the development of these sources.

Presented By: Mathew Coleman, Benjamin Kemper, Samuel Pasmann, Elizabeth Rowe

*Faculty Sponsor: Jordan Farina*

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

▪ School of Nursing

Buckley Center Auditorium

**“A Journey to Peru: Lessons on Cultural Humility.”**

Voluntourism offers opportunity for mutual growth, but also threatens harm and cultural divide that stems from lack of cultural understanding. Students sought to understand cultural humility in the context of short, international volunteer trips. We volunteered in Lima, Peru for a week. Through photo journals and reflections, we determined the necessity for a module to enhance cultural humility.

Presented By: Kaitlin Yap, Emma Covert, Stephanie Sherman, Sara Griffin Faculty Sponsor: Amber Vermeesch

**“How Can We Provide Health Education Without Understanding What Health Means to the Population? An Examination of Health Perceptions of Adults Living in a Transitional Housing Setting.”**

To ensure person-centered care in our interconnected society, it is imperative to listen to the voices of marginalized populations. In providing health education, the perceptions of those living in transitional housing must be valued. Using a qualitative approach, participants expressed their views on health. Learn about the study and how to improve health education with collaborative growth.

Presented By: Kaitlin Yap

Faculty Sponsor: Laura Mood, Barb Braband

▪ Institutional Research

Franz Hall 026

**“Creating Data Visualization Tools for Institutional Research.”**

This presentation outlines the process behind developing data visualization tools in UP's Office of Institutional Research that are used to help inform the upper administration. It includes a demonstration and preview of a Tableau Dashboard that shows where UP alumni attend graduate school and what types of degrees they earn that can be sorted in a number of ways, including by major.

Presented By: Allison Keil, Mary Grace Tiglao, Aoibhe Richards, James Li

Faculty Sponsor: Elizabeth Lee, Michael Johnson

## Session IV 3:15 - 4:05 pm

▪ College of Arts and Sciences | Biology

Buckley Center 103

**“Examining the Effect of Maternal Obesity on Vitamin D Metabolism in the Placenta.”**

It is estimated that over 65% of women entering pregnancy in the U.S. are either overweight or obese. Obese people have less circulating vitamin D than lean people, which can lead to health problems. This study focused on determining if obese mothers pass less vitamin D to their offspring than lean mothers do and whether vitamin D levels can be restored in cells by treatment with vitamin D.

Presented By: Nora Hendricks

Faculty Sponsor: Susan Murray

**“Effects of Early Alcohol Exposure on Neural Development in the Chick.”**

Embryonic alcohol exposure can cause Fetal Alcohol Syndrome, which includes defects such as incomplete cardiac innervation. We analyzed the effects of ethanol on cell death in migratory neural precursors and maturing cardiac neurons in chick embryos.

Presented By: Erin Faloon

Faculty Sponsor: Laura Dyer

▪ College of Arts and Sciences | International Language and Cultures

Franz Hall 223

**“Cómo el argumento de los duques en *Don Quijote II* se relaciona con el día de hoy.”**

This presentation examines the treatment of Sancho Panza and Don Quijote by the dukes and their retinue in book two of the novel. It also connects this treatment with the present day in terms of how people for their own enjoyment treat others considered strange or marginalized.

Presented By: Andre Jaurigui

Faculty Sponsor: Matthew Warshawsky

## Session IV 3:15 - 4:05 pm

▪ College of Arts and Sciences | International Language and Cultures

Franz Hall 223

### **“El tratamiento de la mujer en Don Quijote.”**

Studying the cases of Dorotea and several other female characters, this presentation focuses on how Cervantes calls attention to the unjust treatment of women. Additionally, the presentation addresses the role of masculine power causing this injustice.

Presented By: Janet Bedolla

*Faculty Sponsor: Matthew Warshawsky*

### **“Don Quijote: ¿Loco, o enamorado?”**

This presentation addresses the platonic love that Don Quijote feels for Dulcinea del Toboso within the context of knight errantry. It also studies the madness or wisdom of Don Quijote, who perhaps, not experiencing real love with Dulcinea, invents it for the sake of his own happiness.

Presented By: Angela Gonzalez

*Faculty Sponsor: Matthew Warshawsky*

### **“Don Quijote in the Forest: Creating a New Chapter for Cervantes’ Masterpiece.”**

This presentation discusses the difficulties and joys of trying to write a new chapter for Cervantes’ timeless *Don Quijote de la Mancha*.

Presented By: Caroline Holyoak

*Faculty Sponsor: Matthew Warshawsky*

▪ College of Arts and Sciences | International Language and Cultures

Franz Hall 231

### **High-Impact Practices in German Studies**

Students completing a major in German Studies will describe and reflect on learning experiences that have taken them outside of the classroom and that intersect significantly with their study of German language and German-speaking cultures. High-impact practices among these students’ experiences including undergraduate research, campus leadership, writing a thesis, study abroad, and internships

Presented By: Cole Marfise, Emma Scheve, Andrea Thompson Giuza, and Christina Francisco

*Faculty Sponsor: Laura McLary*

▪ Pamplin School of Business

Franz Hall 206

### **“Annual Founder’s Day Elevator Pitch (Group 1).”**

Open to all students who would like to present their 90 second “pitch” for a company, a not-for-profit, a technology, or a product. The audience will select the best pitch, and you don’t have to pitch to be part of the audience. The winner receives a \$100 gift card.

Presented By: All Students Welcome

*Faculty Sponsor: Peter Rachor, Jon Down*

▪ Pamplin School of Business

Franz Hall 214

### **“Annual Founder’s Day Elevator Pitch (Group 2).”**

Open to all students who would like to present their 90 second “pitch” for a company, a not-for-profit, a technology, or a product. The audience will select the best pitch, and you don’t have to pitch to be part of the audience. The winner receives a \$100 gift card.

Presented By: All Students Welcome

*Faculty Sponsor: Peter Rachor, Jon Down*

## Poster Presentations

- College of Arts and Sciences | Biology Franz Hall Lobby  
**“Shear Stress Levels During Remodeling of the Coronary Arteries.”**

Presented By: Allegra VanderWilde and Christopher C. Malibiran

Faculty Sponsor: Laura Dyer

- College of Arts and Sciences | Biology Franz Hall Lobby  
**“Microplastics in Oregon Coastal Macroinvertebrates.”**

Presented By: Emma Steffen

Faculty Sponsor: Christine Weilhoefer

- College of Arts and Sciences | History Shiley Hall 3rd Floor Atrium  
**“Do-It-Herself: Women Creating Zines, Claiming Space, and Constructing a (sub) Cultural Identity in 1990s Portland.”**

Presented By: Mary Thomas

Faculty Sponsor: Blair Woodard

- College of Arts and Sciences | History Shiley Hall 3rd Floor Atrium  
**“The English Disease: British Football Hooligans and the War to Restore Masculinity, 1970-1990.”**

Presented By: John Herrmann

Faculty Sponsor: Blair Woodard

- College of Arts and Sciences | History Shiley Hall 3rd Floor Atrium  
**“Consuming La Dolce Vita: Culinary Tourism and the Quest for Authenticity in Italy, 1951-2018.”**

Presented By: Genevieve Ayers

Faculty Sponsor: Blair Woodard

- College of Arts and Sciences | Mathematics Franz Hall 2nd Floor Balcony  
**“Vaccination Strategies and Herd Immunity Thresholds in Small World Models.”**

Presented By: Sam Rivas, Caelan Thomas, Emma Soriano, Owen Price

Faculty Sponsor: Hannah Highlander

- College of Arts and Sciences | Mathematics Franz Hall 2nd Floor Balcony  
**“A Brief History of Fusion Technology: the Road Towards the Clean Energy Source of the Future.”**

Presented By: Esaul Ochoa Castillo, Nicholas Salinas, Grace Wallace

Faculty Sponsor: Nermine Ramadan

- College of Arts and Sciences | Physics Franz Hall 2nd Floor Balcony  
**“Electronic Speckle Pattern Interferometry.”**

Presented By: Samuel Cowdery, Sawyer Kemmerly

Faculty Sponsor: Shannon Mayer

- College of Arts and Sciences | Physics Franz Hall 2nd Floor Balcony  
**“The Partial Derivative Machine.”**

Presented By: Margaret Ehrich

Faculty Sponsor: Shannon Mayer

- School of Education Franz Hall Lobby  
**“Rethinking Discipline Through Restorative Justice.”**

Presented By: McKenna Neal, Kendall Boland, Kayli Gribi, Samantha Laughlin

Faculty Sponsor: Hillary Merk

## Poster Presentations

- College of Arts and Sciences | Biology Franz Hall Lobby  
**“Purification and Isolation of Antibiotic Compounds from Archeological Site Soil.”**

Presented By: Anthony Gutierrez

Faculty Sponsor: Angela Hoffman

- College of Arts and Sciences | Biology Franz Hall Lobby  
**“Defining the Role of Two Newly Identified Proteins in the Vibrio Vulnificus TonB2 System.”**

Presented By: Brianne Zbylicki, Mario Manzo, Elysse Phillips

Faculty Sponsor: Ryan Kenton

- College of Arts and Sciences | Biology Franz Hall Lobby  
**“Factors that Contribute to Injuries in Female College Runners.”**

Presented By: Allegra VanderWilde

Faculty Sponsor: Terry Favero



## Poster Presentations

- College of Arts and Sciences | Chemistry Franz Hall 120
- “Let There Be Light: Synthesis of a Triboluminescent Copper (I) Compound.”**  
Presented By: Christoph Thode *Faculty Sponsor: Elizabeth Morton*
- “Measuring Chemical Reaction Rates Using Smartphone Video.”**  
Presented By: David Campbell, Sarah Bunger, Lauren Naatz *Faculty Sponsor: Kevin Cantrell*
- “Mechanism and Selectivity in Ring-opening/Ring-closing Metathesis Polymerization Reactions.”**  
Presented By: Christopher Elkhall *Faculty Sponsor: Buck Taylor*
- “Plectranthus Ambionicus Extracts Inhibit Pythium and Bacteria.”**  
Presented By: Mellonie Mwawai *Faculty Sponsor: Angela Hoffman*
- “Synthesis of Antimalarial 2-Hydroxy-1,4-naphthoquinones Containing 3-Alkyl-diphenylether Side Chains.”**  
Presented By: Chelsea Swartchick *Faculty Sponsor: Warren Wood*
- “Investigation of an Uncharacterized Radical S-adenosyl-L-methionine Enzyme from Thermatoga Neopolitana.”**  
Presented By: Lilly Landers, Kay Smith *Faculty Sponsor: Rachel Hutcheson*
- “Visual Identification and Elemental Analysis of Roman Coins from Pollentia.”**  
Presented By: John Pellessier, Ryan Helbling  
*Faculty Sponsor: Ronda Bard, Valerie Walters, Kara Breuer, Kevin Cantrell*
- “Synthesis of a Biomimetic Adhesive Polymer.”**  
Presented By: Aileen Calletano, Anthony Nguyen *Faculty Sponsor: Ronda Bard*
- “Uncovering landscapes with LiDAR: Analysis of possible archaeological features in Alcalá la Vieja.”**  
Presented By: Reina Inlow *Faculty Sponsor: Mario Ramirez Galan, Ronda Bard*
- “Copper Metal Isolated from Malachite and Transformed into a Bronze Alloy.”**  
Presented By: Rebecca Garbrick *Faculty Sponsor: Elizabeth Morton*
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- School of Education Franz Hall Lobby
- “The Structure and Benefits of Peer Mentoring Across Grade-Levels.”**  
Presented By: Dylan Hite, Katie Adams *Faculty Sponsor: Hillary Merk, Randy Hetherington*
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- School of Nursing Buckley Center Auditorium Lobby
- “The Newest Adolescent Health Endemic.”**  
Presented By: Sierra Savage, Mackenzie Minten, Rylee Martin, Emilee Shaheen *Faculty Sponsor: Kala Mayer*
- “Impact of Limited English Proficiency on Health Outcomes.”**  
Presented By: Neesa Anderson, Ben Bowerly, Lesly De Leon Gomez, Gricell Herrera  
*Faculty Sponsor: September Nelson*
- “Paid Paternity Leave: The Unexpected Solution.”**  
Presented By: Hannah Leahy, Lexi Gregov, Maureen Braun, Taylor Andreas *Faculty Sponsor: Kala Mayer*
- “Supervised Safe Injection Sites and Harm Reduction.”**  
Presented By: Marian Abdi, John Cacka, Keeli Cenami, Beronica Franklin, Gabrielle Miranda  
*Faculty Sponsor: Carol Craig*
- “Building Nurses’s Capacity to Address Delirium in the Intensive and Critical Care Setting.”**  
Presented By: Emily Holguin, Dannise Matarlo *Faculty Sponsor: Barb Braband, Amber Vermeesch*



## Poster Presentations

▪ School of Nursing

Buckley Center Auditorium Lobby

### **“Nutrition in the Homeless Population Living in Transitional Housing of Multnomah County.”**

Presented By: Ana Lutkemuller, Lucy Buehler, Sophia Flies, Elizabeth Fleshman, Kelly Lyp

Faculty Sponsor: Kala Mayer

### **“How Does Postpartum Care Affect Maternal Mortality Rates Between Racial Groups?”**

Presented By: Lok Yan Fick, Nawal Oumar, Dani Pasillas, Huitzil Zamudio-Velazquez

Faculty Sponsor: Kaye Wilson-Anderson

### **“How Can We Provide Health Education Without Understanding What Health Means to the Population? - An Examination of Health Perceptions of Adults Living in a Transitional Housing Setting.”**

Presented By: Kaitlin Yap

Faculty Sponsor: Laura Mood, Barb Braband

## Poster Presentations

▪ College of Arts and Sciences | Biology

Franz Hall Lobby

### **“Using a New Knockdown Technique to Determine When an Essential Cell Cycle Regulatory Protein Functions in the *C. elegans* Germline.”**

Presented By: Matt Ward, Adria Bowles

Faculty Sponsor: David Wynne

### **“Below-ground Implications of Ecological Restoration.”**

Presented By: Jessie Karr

Faculty Sponsor: Laurie Dizney

### **“Effects of Habitat Quality on the Health of Small Mammals.”**

Presented By: Shreya Kumar

Faculty Sponsor: Laurie Dizney

### **“A Comparison of American Crow Social Interactions With Human Feeders in Oregon and Connecticut.”**

Presented By: Asch McDonnell

Faculty Sponsor: Katie O'Reilly

### **“Comparison of Nest Box Temperatures of Tree Swallows on the Franz River Campus.”**

Presented By: Evan Schatz

Faculty Sponsor: Katie O'Reilly

### **“Cultivation and Chemical Analysis of Agricultural Crops.”**

Presented By: Elena Lazarus

Faculty Sponsor: Christine Weilhoefer

### **“Effects of Vegetation on Soil Nitrogen Concentration.”**

Presented By: Annie Coyle

Faculty Sponsor: Christine Weilhoefer

▪ College of Arts and Sciences | Chemistry

Franz Hall 120

### **“Comparison of HCl and DCl Using Ro-Vibrational Spectroscopy.”**

Presented By: Micha Blake, Sarah Bunger, Kay Smith

Faculty Sponsor: Steven Mayer

### **“The Vibronic Absorption Spectrum of Iodine Gas.”**

Presented By: John Hoang, Ruby Smith

Faculty Sponsor: Steven Mayer

### **“Spontaneous Phosphorescence of Acridine Yellow.”**

Presented By: Nathaniel Martinez, Mason Melbuer

Faculty Sponsor: Steven Mayer

### **“Investigating the Electronic Spectra of Polyenes and Understanding the Effects of Quantum Mechanical Tunneling.”**

Presented By: Nicolai Apenes, Chelsea Swartchick

Faculty Sponsor: Steven Mayer

## Poster Presentations

- College of Arts and Sciences | Chemistry Franz Hall 120

**“Analyzing Energies and Electronic Transitions of Cyanine Dyes Using the Particle-in-a-Box Model from Quantum Mechanics.”**

Presented By: Vanessa Eng, Cole Shugart *Faculty Sponsor: Steven Mayer*

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- College of Arts and Sciences | Environmental Science Franz Hall Lobby

**“From Farm to Landfill: the Unsustainability of Food Packaging.”**

Presented By: Evan Suemori, Maya Hurst, Danielle Barsanti *Faculty Sponsor: Tara Prestholdt*

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- College of Arts and Sciences | International Language and Cultures Franz Hall Lobby

**“The Paradoxical Nature of 19th-Century German and Austrian Women Travel Writers: Transcending & Reinforcing Boundaries.”**

Presented By: Emma Scheve *Faculty Sponsor: Laura McLary*

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- School of Education Franz Hall Lobby

**“Cultivating a Safe and Respectful Learning Environment.”**

Presented By: Nicole Geideman, Natalie Knoles *Faculty Sponsor: Hillary Merk*

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## Poster Presentations 3:15 - 4:05 pm

- College of Arts and Sciences | Chemistry Franz Hall 120

**“Comparing Fringe Patterns from the Michelson Interferometer and the Fabry-Perot Interferometer.”**

Presented By: Kara Miller, Amanda Low *Faculty Sponsor: Steven Mayer*
- “The Hyperfine Structure of Rubidium Using Near-IR Spectroscopy.”**

Presented By: Riley McCammon, Brandon Tran *Faculty Sponsor: Steven Mayer*
- “Fluorescence and Phosphorescence of Acridine Yellow.”**

Presented By: Rebecca Garbrick, Elena Lazarus *Faculty Sponsor: Steven Mayer*
- “Analyzing Rotational and Vibrational Modes in HCl and DCl Isotopes.”**

Presented By: Mario Manzo, Lauren Naatz *Faculty Sponsor: Steven Mayer*
- “Splitting Hairs: an Explanation of the Fine and Hyperfine Splitting in a Rubidium Absorbance Spectrum.”**

Presented By: Mitchell Law, John Pellessier *Faculty Sponsor: Steven Mayer*

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- College of Arts and Sciences | Psychology Shiley Hall 3rd Floor Atrium

**“Improving Mental Health Literacy: Results From a Crisis Hotline Outreach Program.”**

Presented By: Alex Gorretta *Faculty Sponsor: Andrew Guest*
- “Early Life Development: How Therapeutic Classrooms Change Based on Age.”**

Presented By: Lianne McLanahan *Faculty Sponsor: Andrew Guest*
- “Tell Me How You Really Feel Mr./Ms. Parole Officer: Happiness and Wellbeing of Parole Officers.”**

Presented By: Eddie Moore *Faculty Sponsor: Andrew Guest*
- “Smells Like Teen Altruism: Considering the Motivations of YouthLine Volunteers.”**

Presented By: Sophia Veis *Faculty Sponsor: Andrew Guest*

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## Poster Presentations

- College of Arts and Sciences | Psychology Shiley Hall 3rd Floor Atrium

**“Knocking on Doors as Well as Knocking Down Doors: Shyness and Sociability in Gang Enforcement Officers.”**

Presented By: Erikjone Cruz *Faculty Sponsor: Andrew Guest*
- “Sweating Together: How Bikram Yoga and Intentional Community Create Wellbeing.”**

Presented By: Karin Knighton *Faculty Sponsor: Andrew Guest*
- “The Resilience in the Risk: How Caseworkers View These Factors in Foster Youth.”**

Presented By: Natalie Root *Faculty Sponsor: Andrew Guest*
- “Weight Lifting for the Soul: The Intersection Between Positive Psychology and Campus Ministry.”**

Presented By: Cole Van Anrooy *Faculty Sponsor: Andrew Guest*
- “Addictive Technology: Ethical Implications of Behavioral Engineering.”**

Presented By: Chloe Tanega *Faculty Sponsor: Andrew Downs*
- “How Culture Affects Perceptions of Aging in Geriatric Populations.”**

Presented By: Allie Calaman, Alexa Levison *Faculty Sponsor: Deana Julka*
- “Effects of Perceived Racism on Asian-American College Students.”**

Presented By: Tiana Igarashi, Nicole Lee *Faculty Sponsor: Deana Julka*
- “Relationship Between Ideal Body Exposure and Body Image.”**

Presented By: William Lapachet, Lucy Healey *Faculty Sponsor: Deana Julka*
- “Music Effects on Mood.”**

Presented By: David Jerome, Josh Muir *Faculty Sponsor: Deana Julka*
- “Implications of Perceived Discrimination on Academic Performance and Satisfaction.”**

Presented By: Bridget Hulburt, Aoibhe Richardson *Faculty Sponsor: Deana Julka*
- “Effect of Popular Music on Reading Comprehension.”**

Presented By: Jorge Castro, David Jacobs *Faculty Sponsor: Deana Julka*
- “Factors Influencing Perceived Risk of Marijuana Use.”**

Presented By: Jessica Davis, Sydney Dodd *Faculty Sponsor: Deana Julka*
- “Mental Health Outcomes Among College Students Following Mindfulness Intervention.”**

Presented By: Isabelle Moes, Mallory Myers *Faculty Sponsor: Deana Julka*
- “Immigrant Generations: Health and Happiness.”**

Presented By: Teeshawna Amor-Mashino, Josh Abulencia *Faculty Sponsor: Deana Julka*
- “Sense of Belonging and Self Selection at UP.”**

Presented By: Andrea Thompson, Erin Lithgow *Faculty Sponsor: Deana Julka*
- “Making Music That Matters: Providing a Community for Diverse Youth Through Music Education.”**

Presented By: Brittney Kawakami *Faculty Sponsor: Andrew Guest*
- “Just Text, It’ll Be Okay: Attitudes and Beliefs of College Students on Using a Crisis Text Line.”**

Presented By: Maddie Held *Faculty Sponsor: Andrew Guest*
- “Officer Friendly: How the Portland Police Have Addressed Mental Health and Housing Insecurity.”**

Presented By: William Kelly *Faculty Sponsor: Andrew Guest*

Poster Presentations

- College of Arts and Sciences | Psychology Shiley Hall 3rd Floor Atrium  
**“Boomers and Barriers: Perspectives on Mental Health Among Older Adults.”**  
 Presented By: Maggie Sheehy *Faculty Sponsor: Andrew Guest*
- “Home Work Club: Encouraging Academic Progress in Bilingual Youth at a Community Program.”**  
 Presented By: Larkin Russell *Faculty Sponsor: Andrew Guest*
- “Build ‘Em Up, Buttercup: One Community Based After-School Program’s Effects on Self-Esteem.”**  
 Presented By: Brianna Arias *Faculty Sponsor: Andrew Guest*
- “Speaking Their Language: Meeting the Needs of Multilingual Preschoolers at Risk for Maltreatment.”**  
 Presented By: Amanda Godwin *Faculty Sponsor: Andrew Guest*
- “Bouncing Back: Factors of Resilience to Sports Injury.”**  
 Presented By: Laura Staeheli *Faculty Sponsor: Andrew Guest*
- “Therapeutic: How Physical and Occupational Therapists Cope With Stress.”**  
 Presented By: Michelle Ton *Faculty Sponsor: Andrew Guest*
- “How Can I Help You? Helping Behaviors and Attitudes in a Healthcare Setting.”**  
 Presented By: Elaika Celemen *Faculty Sponsor: Andrew Guest*
- “Educating the Educators: What Parents Need to Know for Clinic-Based CBT and Parent-Implemented Home Interventions.”**  
 Presented By: Kate Malonzo *Faculty Sponsor: Andrew Guest*

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- School of Nursing Buckley Center Auditorium Lobby  
**“Maggot Debridement Therapy vs. Other Debridement Techniques.”**  
 Presented By: Katie Angelot, Siobhan Burke, Golden Chung, Kathleen Santarelli  
*Faculty Sponsor: September Nelson*
- “Midwife Clinical Judgment in the Context of LGBTQIA+ Patient Care.”**  
 Presented By: Kimberly Mueller *Faculty Sponsor: Laura Mood, Barb Braband*
- “Use of Integrative Health Pain Relief in Labor & Delivery.”**  
 Presented By: Elizabeth Querido, Alyssa Rosenow, Angela Shvachka *Faculty Sponsor: Kaye Wilson-Anderson*
- “Impact of Adverse Childhood Experiences on Adulthood.”**  
 Presented By: Hannah Burns, Suzanne Burns, Lauren Jesse, Natalie Promes  
*Faculty Sponsor: Kaye Wilson-Anderson*
- “Multnomah County’s Transportation: Making Transportation Accessible to Low-Income Individuals.”**  
 Presented By: Cathryn Casey, Kaitlin Yap, Lok Yan Fick, Aafje Day *Faculty Sponsor: Kala Mayer*
- “A Journey to Peru: Lessons on Cultural Humility.”**  
 Presented By: Kaitlin Yap, Emma Covert, Stephanie Sherman, Sara Griffin *Faculty Sponsor: Amber Vermeesch*
- “Confidence in Palliative Care: Nursing Students’ Experiences with Comfort Care.”**  
 Presented By: Cheyenne Hoppe, Claire Olson *Faculty Sponsor: Briana Rotter, Barb Braband*
- “Dying to do Research: BSN Students Examine Implementation of ELNEC-UG Modules.”**  
 Presented By: Bethany McKenna, Kaleigh Valentine *Faculty Sponsor: Briana Rotter, Janet Banks, Casey Shillam*







