### PURE 2021-2022 Annual Activities Report

Program for Undergraduate Research Experiences

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### Introduction

With COVID-19, the academic year of 2021-2022 continues to be a year of unprecedented time for WOU, and PURE. Similar to the year of 2020-21, social distancing, online, virtual instruction for many of the classes on the campus for at least the first half of year 21-22, posed many restrictions for PURE to function as an institutional committee to continue to support undergraduate research experiences on campus. Despite the challenges, PURE continued to advocate for undergraduate research at WOU through two major routes: Academic Excellence Showcase and the journal of PURE insights, along with many other innovative activities and events.

This report summarizes what PURE accomplished in the past year and the new directions and opportunities we witnessed and visioned. The year 2021-22 marked as the third year into the pandemic, and documented a new era when PURE need to reimagine, and envision for a pandemic-shaped as well as post-pandemic world. With the challenges imposed the COVID, online meetings and instructions, PURE found more opportunities and new ways to continue to serve undergraduates' scholarship activities through new ideas, events, and directions.

### Personnel

### PURE's Executive Committee 2021-22

REPRESENTATI VE	AREA	STATUS	TERM STAR T (active start date)	TERM END	Term	Discipline/Prog ram
Megan Patton- Lopez	COE	VOTING	1 July 2019	30 June 2022	<b>1</b> st	Health and Ex. Sci.
Andrea Emerson	COE (2018 ByLaw adjustme nt)	VOTING	1 July 2019	30 June 2022	1 <sup>st</sup>	DEL
Rebecca McCannell	CLAS	VOTING	1 July 2020	30 June 2023	2 <sup>nd</sup>	Creative Art: Art
Feier Hou	CLAS	VOTING	1 July 2019 (1 July 2013)	30 June 2022	2 <sup>nd</sup>	NSM: Chemistry
Melissa Cannon	CLAS	VOTING	1 July 2021	30 June 2024	<b>1</b> st	Behavioral Sciences: Psychology
Joshua Schuzle	COE	VOTING	1 July 2020	30 June 2023	1 <sup>st</sup>	DEL

Gareth Hopkins	At-Large/ Communit y	VOTING	1 July 2020	30 June 2023	1 <sup>st</sup>	Biology
Lindsey Cochran	At-Large/ Communit y	VOTING	1 July 2020	30 June 2023	1 <sup>st</sup>	Grants/TRI
Sean O'Neill	Staff	VOTING	1 July 2021	30 June 2024	1 <sup>st</sup>	Library
Gavin Keulks	Honors Program Director	VOTING		Indetermin ate		Honors (English)
Maren Anderson	Managing Editor, PURE Insights	VOTING	1 Januar y 2020	31 Dec 2023	1 <sup>st</sup>	English
Xiaopeng Gong	Director	VOTINGOnly when ties	1 July 2020	30 June 2023	1 <sup>st</sup>	PURE/AES/DE L

### PURE's Executive Committee 2021-2022

The Board's membership in 2021-2022 expanded a bit in order to be more inclusive of staff on campus as well as to balance representation between CLAS and COE. Based on the bylaws and through an on-campus application and discussion as well as vote by the board members, two new members joined the board, including one representative from CLAS, and one staff representative. Altogether, the board was composed of twelve members from various divisions (see Table above).

### **Student Workers**

In 2021-22, PURE hired our previous CIP intern, Jeneba Diane King, to support all the PURE work throughout the whole academic year. She engaged in outreach, infrastructure support, content creation, and coordinating with MARCOM and Q-Loop, the print shop, and staff in various departments. We also had Andrea Gomez, our CiP student intern for Winter and Spring terms, she worked with Jeneba to support PURE work, and provided support for advocating PURE through social media and the annual Academic Excellence Showcase.

Their activities included, but were not limited to:

- Promoting AES among students
- Coordinating, recording promotion videos
- Developing multiple communication strategies
- Recruiting and coordinating volunteers for AES day
- Supporting brainstorming strategies
- Helping moderating and providing support for AES
- Coordinating and working on AES day

### Costs

CIP Intern program compensated Andrea Gomez for her efforts. Jeneba was paid \$445.60 in total for her work.

### Other Support for PURE

We receive incalculable support from different divisions and personnel across campus to make a face-to-face academic excellence showcase possible. Special thanks for the library, Marcom, University Computing Services, ODS, Facilities and Catering, their support is essential in making PURE's major events successful. Please see AES planning session below for details.

### **PURE Insights Journal Activities**

*PURE Insights* has continued to publish actively, recruit submissions from students and faculty, and clarify submission processes and requirements. Maren Anderson assumed Editorship from 1 January 2020, and the journal released its latest issue in fall 2021. In addition to research papers, the issue also featured several poems from students. The issue is composed of seven pieces of student works. A face-to-face celebration and recognition of authors and faculty mentors was held in Spring 2022. A new issue for the journal is under planning this summer with a deadline of July 1, 2022.

### Academic Excellence Showcase Activities

### **AES Planning Committee**

We held the first face to face AES in Spring 2022, after the hit of the pandemic. Nine talented and devoted colleagues from different divisions of the campus came together to form the AES planning committee (see below for a full list). They are supportive and inspirational, contributing ideas and staying in charge of their responsibilities, without whom, this year's AES would be impossible. Two general AES planning meetings were held in winter and early spring, to layout a "map" for the event and brainstorm ideas. Director of PURE also met with all the key committee members quite a few times to discuss about the details for room reservation, tech support, paper submission and cleaning, promotion of the AES event among WOU students and local community, designing AES flyers, stickers, and proceedings, etc. Below is a comprehensive list of the AES planning committee, their departments and responsibilities for the event:

**Stewart Baker**: Library, AES planning, proceeding and website formatting, encouraging AES presenters to submit to digital commons;

*Camila Gabaldon*: Library, AES planning, designing and managing the AES submission platform, sorting out and cleaning presentation data, addressing issues involving the submission system, designing digital attendance slip;

**Sarah Lockwood**: Student Engagement & Facilities, AES Planning, coordinating room reservations, tech support, setting up AES rooms and the building;

**Denise Visuano**: Visual Branding and Creative Services, AES planning, designing all AES flyer, stickers, and other promotion materials, AES handbook, certificate, designing presenter and mentor badge, etc.;

**Nathan Sauer**: University Computing Solutions, coordinating, providing and troubleshooting tech support for all AES rooms;

**Stacey Rainey**: Deaf & Hard of Hearing Services, AES planning, coordinating and providing support regarding interpreting services for deaf and hard hearing students and other communities before and on the AES day;

*Chrys Burcham*: Staff Interpreter and Scheduling Manager, AES planning, coordinating and providing support regarding interpreting services for deaf and hard hearing students, faculties, staff and other communities before and on the AES day

**Timothy Wallen**: Facilities, providing support for all facility issues;

(*Q-Loop*: a student-led team situated at COE, record an AES promotion video;) *Dr. Greg Zobel*: previous PURE director, providing advice for AES planning and scheduling in AES planning stage;

**Dr.** Xiaopeng Gong: PURE director, AES coordinator, coordinating AES preparation, submission, before and on the AES day.

### **Submission Platform**

In the years of 2020 and 2021, Digital Commons from the library was used as the platform for AES. This year, given the slowdown of the pandemic and a campus-wide eagerness to go back to normal for important events. The planning committee and the PURE board felt that it was now time to go back to a face-to-face campus AES. After several meetings, brainstorming ideas, sorting out possible barriers and challenges, we decided that the 2022 AES should be in-person. We envisioned that it was going to be smaller in scale, in comparison to pre-pandemic years, but similar to the year of 2020 and 2021 in terms of the number of attendance and presentations, etc. The 2022 AES was scheduled on May 26, Thursday, 2022, following the WOU tradition for the event.

We also decided to switch back to a submission system that was used before the year of 2020. However, given that the system has not been in use for quite a few years, it took some time to test it out, revise its content and form, clean up, and pilot proposal submission etc. The work took a few weeks, and eventually, by mid-April, we had an updated online submission system ready for an in-person AES.

### **Presentation Format**

AES 2022 has different types of presentations that are scheduled throughout the day and all over campus, including paper, poster, award, event and performance sessions. The presidential plenary session is scheduled from 9-10 am and features three distinguished faculty researchers from various divisions. They cover various important topics centers around this year's theme, such as resilience during uncertain times, creativity, and Asian-American's history of resilience. Due to Covid-restricts and family issues, two plenary speakers were not able to deliver in-person talks. PURE board then decided and approved that the speakers made pre-recorded videos, to be played by the session chair during the plenary session on the AES day. The third plenary speaker gave an in-person talk. All the other AES presentations, events and performances were in-person.

### Submissions to Digital Commons After AES

AES planning committee member Stewart Baker helped to encourage AES presenters to submit their abstracts to Digital Commons so their work can be digital and viewed by a global community. When submitted, students' work go digital can will be stored in Digital Commons permanently.

### Committee Service

The PURE Director served on several committees during 2021-22: a non-voting seat on IRB and a voting seat on the Outstanding Student Award Committee.

### Website

The website for PURE continues to exist and act as a key point of communication around and for AES and PURE. However, management of the site and content creation demand significant attention to keep things going. The director assumes most of the responsibility fall to winter. PURE board member Gareth Hopkins helped with website management in spring term.

### AES 2022 Event

AES 2022 weas held on Thursday, May 26, 2022. Over 130 students from different divisions presented at the event. The presentations include paper presentation, poster presentation, awards, event, and performance sessions. Students celebrated their major research and creative scholarship for the year, including but not limited to their master theses, capstone projects, research findings through collaborations with faculties and staff, creative performances and works, etc.

### Sanitary Procedures and Covid Impact

The Board and AES planning committee checked with university regarding the level of precautions and sanitary regulations, and consulted the covid-19 working team on campus. The following procedures were taken to ensure a safe environment: a sign with optional use of masks sign was posted. Hand sanitizers, sanitizing sprays and paper towels were provided at Werner Student Center, the major building in which AES takes place, information desk at the lower level of Werner Student Center, and all presentation/event rooms.

Notably, when AES 2022 was conducted in late May, it was right in the middle of covid-19 cases spike. On the morning of the AES day, the director received quite a few messages from faculty mentors and student presenters stating that they had to cancel the presentations, or a whole session due to confirmation of positive test results. Undoubtedly, an on-rising covid-19 cases influenced the campus attendance rate to some degree as well.

### Tech Features of AES 2022

Marcom helped design two versions of schedules: a full schedule, or proceeding with detailed info about all sessions, and an abbreviated version of schedule-at-a-glance. Based on experience and feedback from previous years, we did not provide any printed proceedings this year (except for five hardcopies on the info desk for reference and

emergency use). A digital version of AES proceeding was put in use instead. A QR code for the proceedings were printed on name tags, and copies of QR code were posted on walls of all presentation/event rooms, as well as the information/check-in desk. When scanned, the QR code leads to a digital version of AES proceedings posted on Digital Commons.

Another advancement is the use of digital attendance slip. One tradition of AES is that many faculties cancel classes on the day, and require students to attend a number of sessions to get credit for the class. As a proof for attending a session, student can collect a paper of attendance slip from AES presentation rooms, fill in the information and give it to their instructors to earn credit. This year, we made some changes for the attendance slip. With the help of Camila Gabalon, we designed a QR code, printed it out and posted it on the walls of AES rooms. When scanned, the QR code leads to a google form, where students can fill in the detailed info about the session (title of presentation, time, date, presenters, etc.), and submit online. Then a digital proof of attendance is sent to their email box directly, which they can send directly to instructors, or print it out.

### Volunteers

In addition to our student worker and CIP intern, we also had three student volunteers who generously helped on the AES day. Their job involves setting up AES presentations rooms, putting signs up and delivering all sanitary boxes, posting and changing session flyers on easels, working at the info desk to provide information, ensuring all sessions start up in time, and providing assistance when needed. One PURE board member also volunteered their time at the info desk. Another board member tested positive the morning of the event, thus was not able to come to help as planned. The director coordinates the work of the student group and the info desk throughout the day.

### **Major Takeaways**

To sum up, AES 2022 was the 1st in-person conference in the past three years (both AES 2020, and 2021 were held online). More than 130 students from the divisions of Mathematics, Arts, Chemistry, English Studies, Computer Science, History, Behavioral Science, Education, Biological Science, Leadership, Environmental Science presented at the conference. There were also two performances at Maple Hall, and Rice Auditorium, and three award events including Health and Exercise Recognition Event, Natural Science and Math Student Recognition, and Maurice Undergraduate Initiatives, most of which were the first time coming back to AES in three years. AES 2022 is bigger in terms of scale and number of presentations in comparison to AES 2021 and 2020 (There were 42 presentations, 17 posters, and 1 performance in AES 2021), but smaller than the year of 2019 before the pandemic hit. Given that we were in the midst of an ongoing pandemic, and a relatively low campus-wide research endeavor, this is expected, and reasonable. For a detailed AES 2022 program, see the end of the report.

### **PURE General Program Activities**

### **Three-Minute Project**

We started a new three-minute project which provides a platform for students, faculties and staff who are conducting research to share their research projects. Interested participants will contact PURE, submit a short video that is about three minute long.

Assistance for video recording, editing, or captioning will be provided upon request. All the videos will be shared on campus, on PURE website and WOU social media. We tried to launch the project in Fall term, got some feedback, and made a promotion video about the project, shared information about the project on WOU's Academic Newsletter. Due to remote teaching and working and a relatively low research activities on campus, we have not received any videos in the year of 2021-22. The board will discuss strategies about how to promote for the project, and decide on how to revise it to align with AES and PURE Insights, as well as other PURE activities.

### **Instagram Project**

PURE has been exploring new ways to promote for undergraduate research in the past two years. In particular, with most institutional activities moving online. We saw opportunities to reach out to students through virtual events and social media. The board, as well as our CIP intern and student worker have been brainstorming ideas and strategies to use Instagram as a platform to showcase PURE, AES, PURE Insights and other PURE sponsoring projects and events. By Spring term, we have developed some plans to launch some initial projects such as bi-weekly Instagram stories to feature research team, projects and events on campus. The project will be continued the year of 2022-23.

### Searches Conducted

In Spring 2021, we conducted a campus-wide search to fill two seats: 1 staff, and 1 LAS. Four applications were received, and the board selected 1 staff/library representative and 1 LAS representative. The new members joined the board in July 1, 2021.

### **Proposals Submitted**

During Spring 2022, a CIP Internship application was submitted for 2022-23. The proposal was not approved.

### **PURE Office Space**

PURE maintains its office in the Old COE building for storage.

### On-campus Partnerships

We worked to develop strong relationships with the IRB committee. PURE and IRB plan to seek future partnerships in the three-minute project in 2022-23, and other research-related endeavors.

### PURE 2021-22 Budget Overview

Of its \$7,200 budget, PURE only spent \$5765.70.

Thus we were left with \$1434.30.

This savings is due to not having to pay for a regular scale in-person AES event, as well as a remote working/learning environment throughout the academic year.

A copy of the monthly PURE transaction report is attached to this report.

### PURE: 2020-21 Goals Accomplished

- (1). Goal #1, make data-informed decisions. PURE's many decisions are made based on campus' feedback. For example, the AES 2022 theme: "Creativity and Resilience" was selected from a campus-wide survey. Also, based on feedback from previous AES, we provided a digital AES proceeding instead a hardcopy one. We also designed a digital attendance slip, which is easy to track and use.
- (2). Goal #2, AES submission systems. We revised and updated the previous AES submission system, and relaunched it in Spring 2022. The system turns out to be efficient, user-friendly, and can be used for future in-person AES events. By now, WOU proudly has two sets of submission system: one for an online event, one for an in-person event. The AES planning team will explore ways to merge data from both systems together in the future.

### **SWV** Analysis

### Strengths

PURE is fortunate to have a board that is composed of a group of representatives from various disciplines across the campus. They are knowledgeable, responsive, supportive and are engaged. The personnel are the most invaluable asset for PURE to continue to stay active and innovative amid the Covid pandemic.

### Weaknesses

Two main restraints exist: not enough time, and personnel. With AES as the major event organized by PURE, the annual planning, preparation, advertising, coordinating and putting everything together drains a high percentage of PURE meeting time and energy, not to mention the journal of PURE Insights. Despite that, the board got ambitious and spent a lot of time brainstorming, envisioning using online platforms and multimedia to promote for undergraduate research (e.g., the Instagram Story project). In addition, a relatively short turnaround for AES submission in Spring, proceedings designing, formatting, which together with a short of personnel, is always challenging for PURE.

### Visions

Given the two Virtual AES online experience in 2021 and 2020, based on community's feedback, PURE has the potential to use multiple online forms, including Digital Commons, social media such as Instagram to hold virtual events such as AES. The board envision that these online tools can reach more undergraduates and exert a more lasting and deeper influence on the WOU community. We also hope to use multimedia such as videos to help build a research community on campus. For example, in Spring terms, with the help of Q-loop team housed at COE, PURE made its advertising video about the three-minute project, which will help to introduce the project to WOU, and encourage students and faculties to share their research endeavors. Q-loop also helped created an AES promotion video this year.

Look ahead, in the year 2022-23, PURE's will continue to center its work around AES preparation, promotion, and the Journal of PURE Insights. We look forward to encourage students from different disciplines to present at 2023 AES, and look at better

ways to serve the campus community. With everything seems to slowly going back to "normal", we also look forward to hold more research-sharing events, such as CURE.

### Goals

PURE aims to continue to explore online platforms such as social media to advocate for WOU's undergraduate research, to increase PURE's visibility on campus, and to promote for Academic Excellence Showcase attendance and involvement.

We plan to reach out to more students and start build a research community through various projects, including the three-minute project and the Instagram stories project.

PURE will continue to explore possibility for a more flexible annual AES. For example, in 2022-23, the board will discuss possibilities of supporting some sessions to be hybrid, to allow flexibilities for students' presentation, and audience's attendance, and to maximize WOU students' research visibility and influence at the community and state levels.

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## Western Oregon University Detail Activity by Index

PAGE 1 FGRODTH

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# WOU'S 16TH ANNUAL Academic Excellence SHOWCASE

### GRESIENCE STRENCE

THURSDAY, MAY 26, 2022

pure@wou.edu | wou.edu/aes



### **MESSAGE FROM THE PRESIDENT**

Our 2022 Academic Excellence Showcase demonstrates our continuing commitment to our students' engagement in scholarly and creative activities. Through our commitment to engaged learning, our students promote a campus culture for academic excellence. The Academic Excellence Showcase will always be one of the university's highlights during the academic year. Western Oregon is committed to supporting our student achievements in all our disciplines.

Through this program, the students, with guidance from the faculty, can explore further applications of their studies. Some of the students' work may be presented only in this forum, and some will have their work published in PURE Insights, our peer-reviewed undergraduate journal. Students will present their work at state, regional, or national conferences. Regardless of our students' pathway after the Academic Excellence Showcase, our greatest wish for them is that this is only the beginning of a lifelong journey of learning and exploration.

WOU also acknowledges that it is our faculty that gives life to engaged transformative learning, inspiring students to stretch themselves beyond the boundaries of their classroom. Moving from classroom to Showcase presentation is both personal and professional growth for our students, made possible by the dedication and talent of our faculty.

To our students who have worked hard this year and are choosing to share their work with us, I thank you. To our faculty for nurturing and guiding our students, I commend you. Western Oregon recognizes the challenges of the past two years, and we are especially proud of all you do because together we succeed.

Jay Kenton Interim President, Western Oregon University May 26, 2022

### WELCOME FROM THE PROVOST

I am so pleased that the 2022 Academic Excellence Showcase is being held in person, where we can learn and celebrate scholarly work together, in person. This year's theme of creativity and resilience seems both appropriate and inspiring. The content of this year's showcase provides compelling snapshots of the academic discoveries and creative pursuits that take place every day at WOU—on stage, in the lab, at the library or in the field. WOU is a place where faculty encourage students to view learning as a dynamic process that extends beyond the traditional classroom, where students are urged to pursue their interests and commit to a quest of creativity and inquiry. Today's showcase is vibrant evidence of that intellectual and personal growth, illustrating the rich diversity of scholarly activities that take place at WOU.

It is a pleasure to acknowledge students' effort and accomplishments as they present their work today. I also want to convey my heart-felt appreciation to our faculty for their support of our students. I strongly encourage those students participating today as observers to become involved and to take advantage of your time at WOU, where professors are eager to mentor and collaborate with students in pursuit of knowledge, scholarship and creativity.

Rob Winningham Provost, Western Oregon University May 26, 2022

### PRESIDENTIAL PLENARY | 9 - 10 A.M.

### **SESSION 1**

10:15 A.M. - 12:30 P.M.

MATHEMATICS AND MATH EDUCATION PRESENTATIONS HWC 204

ART & DESIGN PORTFOLIO PRESENTATION
RWFC 101

COMPUTER SCIENCE AND INFORMATION SYSTEMS CAPSTONE PRESENTATIONS ITC 211

ENGLISH STUDIES: RECOGNITION AND READINGS

Willamette Room

**CHEMISTRY SEMINAR** NS 101

**HISTORY SENIOR SEMINAR** HWC 105

POSTER PRESENTATIONS
SESSION 1
10:15 - 11:15 A.M.

**BEHAVIORAL SCIENCE**Columbia Room

INTERDISCIPLINARY Calapooia Room **SESSION 2** 

11:30 A.M. - 12:30 P.M.

MATHEMATICS AND MATH EDUCATION PRESENTATIONS HWC 204

ART & DESIGN PORTFOLIO PRESENTATION RWEC 101

COMPUTER SCIENCE AND INFORMATION SYSTEMS CAPSTONE PRESENTATIONS

ITC 211

ENGLISH STUDIES: RECOGNITION AND READINGS

Willamette Room

**CHEMISTRY SEMINAR** NS101

HISTORY SENIOR SEMINAR HWC 105

POSTER PRESENTATIONS
SESSION 2

11:30 A.M. - 12:30 P.M.

BIOLOGICAL SCIENCE Columbia Room

**POLITICAL SCIENCE RESEARCH**Calapooia Room

**SESSION 3** 

12:45 - 1:45 P.M.

MATHEMATICS AND MATH EDUCATION PRESENTATIONS

**HWC 204** 

EARTH AND ENVIRONMENTAL SCIENCE SEMINAR

**HWC 301** 

COMPUTER SCIENCE AND INFORMATION SYSTEMS CAPSTONE PRESENTATIONS

ITC 211

INTERDISCIPLINARY PRESENTATION

Santiam Room

MODEL UNITED NATIONS MOCK SESSION

**RWEC 101** 

**CHEMISTRY SEMINAR** NS 101

HISTORY SENIOR SEMINAR HWC 105

POSTER PRESENTATIONS
SESSION 3

12:45 - 1:45 P.M.

**BIOLOGICAL SCIENCE**Columbia Room

**LEADERSHIP** Calapooia Room

### MESSAGE FROM THE DIRECTOR

WOU's annual Academic Excellence Showcase is a celebration of student research, scholarship, and creative performances. It is strong proof that by coming together as a community we can continue to advance despite unprecedented challenges, and that with creativity and a spirit of resilience we can turn crises into opportunities, uncertainties into assets.

Today we have the privilege to celebrate with so many WOU students, mentors, and families through many presentations, poster sessions, awards, performances, and special events. I encourage you to join the presidential plenary session, in which we are grateful to have three distinguished WOU faculty share their research and address many intriguing and important topics such as resilience, self-care, creativity, Asian-American history, and justice. Please also consider joining some of the various recognitions, celebrations, and awards, and enjoy the outstanding performances at Maple Hall and Rice Auditorium. Last, but not least, numerous presentations, poster sessions, and capstone projects are scheduled throughout the day to showcase great student work.

And be proud, as it is your day; a celebration of your own creative and scholarly efforts and those of your friends, students, and families, and more importantly your resilience through this uncertain yet remarkable time. Together, we succeed.

Xiaopeng Gong Associate Professor, Educational Psychology • Director of PURE May 26, In the "portal" year of 2022

### **SESSION 4**

2 - 3 P.M.

**BEHAVIORAL SCIENCES SYMPOSIUM** Willamette Room

**EARTH AND ENVIRONMENTAL SCIENCE SEMINAR** 

**HWC 301** 

**COMPUTER SCIENCE AND INFORMATION SYSTEMS CAPSTONE PRESENTATIONS** 

ITC 211

**ENVIRONMENTAL MINI-FILM FESTIVAL** 

Santiam Room

**CHEMISTRY SEMINAR** 

NS 101

**POSTER PRESENTATIONS** SESSION 4 2-3 P.M.

**LEADERSHIP** 

Calapooia Room

### **SESSION 5**

3:15 - 4:15 P.M.

**BIOLOGY RESEARCH PRESENTATION** 

**RWEC 107** 

**EARTH AND ENVIRONMENTAL SCIENCE SEMINAR** 

**HWC 301** 

**COMPUTER SCIENCE AND INFORMATION SYSTEMS CAPSTONE PRESENTATIONS** 

ITC 211

**CHEMISTRY SEMINAR** 

NS 101

**SESSION 6** 

4:30 - 5:30 P.M.

**CHEMISTRY SEMINAR** NS 101

### **PERFORMANCES**

10 A.M. - NOON **BLACK HISTORY OF OREGON** WITH WALIDAH IMARISHA (RECORDING) • Hamersly Library

107

11 A.M. - NOON HARNESSING CREATIVITY AND **RESILIENCE THROUGH DANCE MAKING** • Maple Hall

2 - 4 P.M. **BABY WITH THE BATHWATER"** BY CHRISTOPHER DURANG

Rice Auditorium

### **AWARDS**

3 - 5 P.M. **HEALTH AND EXERCISE SCIENCE** • RWFC 101

3:15 - 4:15 P.M. MAURICE UNDERGRADUATE **INITIATIVE • Santiam Room** 

5:45 - 6:45 P.M. **NATURAL SCIENCE & MATH** STUDENT RECOGNITION

• Willamette Room



### RESILIENCE AND SELF-CARE THROUGH TIMES OF UNCERTAINTY

**XIAOPENG GONG, Ph.D** 

Resilience is psychological characteristics defined as capabilities of "adapting well in the face of adversity, trauma, tragedy, threats or even significant sources of stress" (APA, 2014). The talk discusses the importance of resilience and selfcare, from a social-emotional learning perspective. The speaker calls for attention to building strong social and community connections to weather crises such as a global pandemic.

Dr. Xiaopeng Gong received her Ph.D from the Department of Educational Psychology, from Ball State University in Muncie, Indiana. She is currently an associate professor of educational psychology at Western Oregon University and teaches children's and adolescents' learning and human development courses to undergraduate and graduate students.

As a quantitative researcher, Dr. Gong's research involves how parenting practices and family affective environments affect adolescents' social and emotional development including emotion regulation, perfectionism and coping strategies. Her recent interests involve social-emotional learning (SEL) for K-12 education and teacher preparations, and uses SEL as a tool for fostering self-care and individuals' wellbeing.

### ASIAN-AMERICANS: RESILIENCE & CREATIVITY LIN WU. Ph.D

This presentation states the intersectional diversity within Asian American communities and explains the root of anti-Asian racism in the United States. It also highlights Asian American resilience and creativity in the context of the COVID-19 pandemic and advocates for everyone to (un)learn Asian American history that centers on our collective contributions and humanity. In the end, this presentation calls on all of us to reimagine the pandemic as a portal to justice.

Dr. Lin Wu, a first-generation college student and immigrant from China, is an assistant professor in the Division of Education & Leadership at Western Oregon University. Before joining the WOU community, he taught primarily Mexican American students in Southern Arizona for seven years and studied multicultural education at the University of Washington for five years. His research interests include culturally responsive pedagogy, multicultural teacher education, and Asian American education.

### Presidential Plenary Session

9-10 a.m. | Pacific Room, Werner University Center | ASL interpreters will be provided.







Drs. Xiaopeng Gong, Lin Wu, and David Foster (l-r)

### TALK 3 DAVID FOSTER, Ph.D

Dr. David Foster received his Ph.D. in Industrial/Organizational Psychology from George Washington University. Currently, he is a full professor in the Department of Psychological Sciences, director of the Creativity Research Lab, and program coordinator for the Organizational Leadership program at Western Oregon University.

His areas of academic specialization include leadership, teamwork, creativity, and group decision making. His current research focuses on developing measures of creative behavior including the development and application of a self-report measure of creative behavior as well as identifying language usage patterns associated with creative behavior to facilitate measuring creativity outside of the laboratory.

Dr. Foster's work experience includes facilitating organizational development for various Federal Government agencies as an internal consultant with the Office of Personnel Management and serving as a survey researcher for the Army Research Institute.

A plenary is a session that students and faculty from all fields are welcome to participate in. The first Presidential Plenary was in 2017, and the theme was solar eclipses.

The session included student presentations ranging from mathematics to poetry as well as a special introductory lecture. The showcase team has continued this tradition in AES.

### PERFORMANCES & AWARDS

Black History of Oregon with Walidah Imarisha (Recording) 10 a.m. - Noon Hamersly Library 107 Recorded presentation. Walidah Imarisha will speak about Oregon Black history, and the history of race, identity, and power in the Northwest. Imarisha is a transformative speaker who has presented statewide as a public scholar with Oregon Humanities Conversation Project on several topics, including Oregon Black history. She is also author of the nonfiction book Angels with Dirty Faces: Three Stories of Crime, Prison, and Redemption, which won a 2017 Oregon Book Award. Hosted by Chelle Batchelor.

Harnessing Creativity and Resilience Through Dance Making 11 a.m. - Noon Maple Hall Session chair: Cynthia Garner The Dance Program's session will include live dance performances by our 2021-22 guest artist. selected choreographic works by students, and selections of student's classwork.

"Baby With the Bathwater" by Christopher Durang 2 - 4 p.m.

Rice Auditorium

WOU Theatre presents Baby With the Bathwater, a biting satire by Christopher Durang, directed by Guest Artist Raissa Fleming. As the play begins Helen and John gaze proudly at their new offspring, a bit disappointed that it doesn't speak English and too polite to check its sex. So they decide that the child is a girl and name it Daisy—which leads to all manner of future emotional and personality problems when it turns out that Daisy is actually a boy.

In a series of brilliantly theatrical and wildly hilarious scenes, the saga of Daisy's struggle to establish his identity continues, despite his parents' growing obliviousness.

### **MAURICE UNDERGRADUATE INITIATIVE AWARD**

3:15 - 4:15 p.m. Santiam Room, Werner University Center

### **HEALTH AND EXERCISE SCIENCE AWARDS**

3 - 5 p.m. Richard Woodcock Education Center 101

### **NATURAL SCIENCE & MATH** STUDENT RECOGNITION

5:45 - 6:45 p.m. Willamette Room, Werner **University Center** Featuring students from Biology, Chemistry, Earth and Environmental Sciences, and Math.

### **PRESENTATIONS**

### **ART & DESIGN PORTFOLIO PRESENTATIONS**

10:15 a.m. - 12:30 p.m. Richard Woodcock Education Center 101 Session chairs: Jennifer Bracy, **Iodie Garrison** Featuring work by Josephine Lim, Connor McCannell, Julia Rogers, Maura Miller, Ruben Ramirez Alvarez, and Jenaya Stevenson.

### **BEHAVIORAL SCIENCES SYMPOSIUM**

2 - 3 p.m. Willamette Room, Werner **University Center** Session chair: Jaime Cloud

Advocacy Work for Low Income Older Adults Presenter: Maya Herb

Mentor: Margaret Manoogian

Fear and Frustration: A Qualitative Analysis of the Social and Political Impacts of COVID-19 on U.S. Older Adults Presenters: Sarah Schultz, Kacie

Rvden

Mentor: Melissa Cannon

To Honor Our Elders: Exploration of Elder Abuse In Long-Term Settings

Presenter: Noelle Haury Mentor: Margaret Manoogian

### **BIOLOGY RESEARCH PRESENTATIONS**

3:15 - 4:15 p.m. Richard Woodcock Education Center 107 Session chair: Gareth Hopkins

The Effects of Shade on Nonstructural Carbohydrate Content in Trees Mentor: Ava Howard Presenter: Kai Miller

Freshwater Turtle Nesting Patterns at Minto Brown Island

Park, Salem, OR

Presenter: Stephani Symanowicz

Mentor: Gareth Hopkins

### **CHEMISTRY SEMINAR**

10:15 a.m. - 5:30 p.m. Natural Sciences 101 Session chair: Feier Hou In this session, junior and senior students majoring in chemistry will each give a presentation on a chemistry-related topic of their choice. Topics typically include: forensic chemistry, medicines and biochemistry, and chemistry of materials.

DNA and the Impact on Solving Cold Cases

Presenter: Kian Horton Mentor: Feier Hou

Latent Fingerprints and Chemical **Visualization** 

Presenter: Jeweline King Mentor: Feier Hou

Blood: The Crime Scene Poet Presenter: Cheyenne Shepherd

Mentor: Feier Hou

On the Use of Ballistics in Forensic Science

Presenter: Matthew Larsen

Mentor: Feier Hou

Death's Aroma

Presenter: Jocelyne Hernandez

Mentor: Feier Hou

Chemistry of Taste Presenter: Kayla Davis Mentor: Feier Hou

How Does the Environment of Human Remains Affect the Rate

of Decomposition?

Presenter: Delaney Bishop

Mentor: Feier Hou

Production and Usage of Nonstructural Carbohydrates in Woody Plants

Presenter: Kai Miller

Mentors: Feier Hou, Ava Howard

The Fascial System Presenter: Jupiter Ceilidh Mentor: Feier Hou

The Chemical Compounds Behind the Aroma of Cannabis Presenter: Kevin Dao Mentor: Feier Hou

Nectar to Honey

Presenter: Aus Howse Adams

Mentor: Feier Hou

What Causes Dissimilar Photodegradation Rates in Various Wood Species?

Presenter: Max Decker Mentor: Feier Hou

### **COMPUTER SCIENCE AND** INFORMATION SYSTEMS **CAPSTONE PRESENTATIONS**

10:15 a.m. - 4:15 p.m. Instructional Technology Center 211 Session chairs: Scot Morse, Ted

Beers

**WOU Club Management** Presenters: Dennis Long, Justin Shields, Abdullah Luay Mentor: Ted Beers

*The Photographers* 

Presenters: Michael Berryman,

Kaylee Bennett Mentor: Ted Beers

College Knowledge Base

Presenters: Vanessa Watson, Dylan

Hilger, Kyle Markey Mentor: Ted Beers

**Wanderers** 

Presenters: Matteo Candelaria, Mijash Ghimire, Ashish Maharjan

Mentor: Ted Beers

Class Selection

Presenters: Ryan Miller, Taylor Aguilera, Faisal Al-Shawkani

Mentor: Ted Beers

**Project Unload** 

Presenters: Alaina Hatfield, Marko Ludlow, Noah Tangalin

Laina Hatfield, Marko Ludlow, Noah Tangalin

Mentor: Ted Beers

Homework App

Presenters: Michael Volkmann, Erin Cotrone, Tyler Cooley

Mentor: Ted Beers

SpoilBlock: Helping You Avoid

Spoilers on YouTube

Presenters: Ankit Shrestha, Edward

Borello, Nathan Camuso Mentor: Scot Morse

Opiniony: an application for users to create and cast votes, including anonymous voting Presenters: Vincent Nowell, Kaitlin

Haley, Samuel Torris Mentor: Scot Morse

Slice of Pi: Real Estate and Crime

**Statistics** 

Presenters: Ivan Lua-Diaz, Jeff Brusse Perando, Christopher

Lopez

Mentor: Scot Morse

DiscordStats: an application for discord users to see statistics based on the members of their

Presenters: Abraham Vela, Korbin

Cardoza. Ethan Sutton Mentor: Scot Morse

Earth and Environmental Sciences

Seminar

### **PRESENTATIONS**

12:45 - 4:15 p.m. Peter Courtney Health and Wellness Center 301 Session chair: Steve Taylor This theme session involves presentation by WOU Earth and **Environmental Science students** enrolled in ES473 Environmental Geology and ES497 Senior Seminar, Spring Term 2022. The focus is on the occurrence of landslides in western Oregon: causes, effects and consequences with case-study examples. Geologically, Oregon is located on the leading edge of the Cascadia subduction zone with intense seasonal precipitation patterns. Steep mountainous slopes, combined with thick soils and a rapidly growing population result in complex interplay between landslide hazards, land development and risk management. Topics of interest include landslide processes, geologic controls, land-use factors, co-seismic vs. climate triggers, landslide analysis, monitoring, and remediation.

Overview of Landslide Processes in Western Oregon Presenter: Alexandra Evernden

Mentor: Steve Taylor

Landslide Analysis and Monitoring Techniques Presenter: Grace Comer

Presenter: Grace Come Mentor: Steve Taylor

Geologic Controls on Landsliding in the Oregon Coast Range Presenter: Melina Mullin Mentor: Steve Taylor

Co-seismic vs. Climate Triggers in the Oregon Coast Range Presenter: Elle Knopp Mentor: Steve Taylor

### ENGLISH STUDIES: RECOGNITION AND READINGS

Willamette Room, Werner Center Times: 10:15 a.m. - 12:30 p.m. Session chair: Henry Hughes

Richard and Lotte Meyer Prize for Excellence in Literature
Presented by Gavin Keulks
Featuring Jasper Beck and April Massoni.

Peter Sear Poetry Prize
Presented by Henry Hughes
Featuring Josh Pautler, Josiah
Liljequist, and Trinity Herr

Best Essays in First-Year Writing A Presented by Leigh Graziano Featuring Makenna Bergerson, Laticia Garcia, Katie Chapman, Emmaline O'Donnell

English Studies Awards Featuring Olivia Acker, April Massoni, Nova Kohnke

Scholarship Recipients
Recipients of the Eddings and Alva
Scholarships

### ENVIRONMENTAL MINI-FILM FESTIVAL

2 - 3 p.m.

Santiam Room, Werner University Center Session chair: Mark Henkels Students created short 4-6 minute films addressing a variety of environmental issues in the Autumn PS 449 Environmental Politics and Political Action course.

### **HISTORY SENIOR SEMINAR**

10:15 a.m. - 1:45 p.m. Peter Courtney Health and Wellness Center 105 Session chair: Elizabeth Swedo

Making Room for History: Redoing an WWI Exhibit Presenter: TJ Fennimore Mentors: Patricia Goldsworthy-Bishop, Jerry Murphy

Weathering The Storm: Voices of Immigrant Farm Workers During the 1962 Columbus Day Storm Presenter: Jackson Beeler Mentors: Elizabeth Swedo, Suzanne Dufner

Developing a Digital Archive at Independence Heritage Museum Presenter: Ryan Duffy Mentor: Elizabeth Swedo Brazil and Racism: The Unified Black Movement, 1970-2000 Presenter: Maxwell Laine Mentor: Patricia Goldsworthy-Bishop

The Green Revolution as
Counterrevolution: a.m.erican
Philanthropy, Media, and the
Destruction of Mexico's Peasantry
Presenter: Sam Speckman
Mentor: Ricardo Pelegrin Taboada

The Two Revolutions: Factional Divides at the 1916 Mexican Constitutional Convention Presenter: Matt Worthy Mentor: Ricardo Pelegrin Taboada

Rights Divided: Eisenhower and the Civil Rights Movement Presenter: Sarah Hopkins Mentors: David Doellinger, Elizabeth Swedo

Brown vs. Board of Education: The Foundation for Civil Rights Presenter: Garak Garza Mentors: Ricardo Pelegrin Taboada, Donna Sinclair English Influence on the Regulation of Fundamental Rights in the U.S. Constitution Presenter: Cort Wildfang Mentor: Ricardo Pelegrin Taboada

A Confrontation of Conflicting Interests Regarding the Cuban Missile Crisis Presenter: Jesus Hernandez

Mentors: David Doellinger,

Elizabeth Swedo

The Political Complexities of Hunger: How Yemen's Humanitarian Crisis Reflects a Larger Problem Presenter: Audrey Manning Mentors: Patricia Goldsworthy-Bishop, David Doellinger

### INTERDISCIPLINARY PRESENTATIONS

12:45 - 1:45 p.m. Santiam Room, Werner University Center Session chair: Leigh Graziano

Analyzing the 2nd Amendment and its Correlation to Violence in America

Presenter: Elizabeth Braatz Mentor: Leigh Graziano

### MATHEMATICS AND MATH EDUCATION PRESENTATIONS

10:15 a.m. - 1:45 p.m. Peter Courtney Health and Wellness Center 204 Session chairs: Cheryl Beaver, Leanne Merrill

A Mathematical Analysis of American-style Crossword Puzzles with 90° Symmetry Presenter: Brandilan Moring Mentor: Leanne Merrill

Maximally-Voided American-Style Crossword Puzzles Presenter: Tj Rabosky Mentor: Leanne Merrill

Enumerating Crossword Puzzles for Odd-sized Grids Presenter: Angel Cruz Mentor: Ben Cote

The Mathematical Mystery of Odd Perfect Numbers Presenter: Jasmine Wetter Mentor: Leanne Merrill

The Binomial Distributions
Presenter: Nick Jones
Mentor: Cheryl Beaver

The Math Gene: Myth or Fact?
Presenter: Cameron Olson
Mentor: Cheryl Beaver

What Your Math Teachers did Wrong and What They Should be Doing Instead

Presenter: Madisyn Pruett Mentor: Cheryl Beaver

Improving The Problems Used In Math Classes Presenter: Michael Moore

Mentor: Cheryl Beaver

Promoting Active Learning in the Math Classroom Presenter: Kenton Fishwick Mentor: Cheryl Beaver

Developing a Growth Mindset in Mathematics Using Process-Oriented Feedback Presenter: Jill Essency Mentor: Cheryl Beaver

Maximum Number of Voids in Even Crossword Puzzles Presenter: Haley Willmott Mentor: Ben Cote

### POSTER SESSIONS

### **BEHAVIORAL SCIENCES POSTERS**

Time: 10:15 - 11:15 a.m. Location: Columbia Room, Werner University Center Session chair: Jaime Cloud

Non-Traditional Interview Attire and Job Follow Up

Presenter: Sandra Garcia Torres Mentor: Chehalis Strapp

COVID-19's Impact on Psychology Graduate School Admissions Presenters: Claire Graves, Sandra Garcia Torres, Taryn Wilson Mentors: Alicia Ibaraki, Kathy Espino-Pérez

Understanding and Addressing the Needs of Caregivers Who Are Part of Western Oregon University

Presenters: Kacie Ryden, Cruz

Lopez

Mentor: Melissa Cannon

Effects of Visuals on Levels of Human Support for Animal Rights

Presenter: Kayleigh Pierson Mentor: Jay Schwartz

### **BIOLOGICAL SCIENCE POSTERS**

Time: 11:30 a.m. - 1:45 p.m. Location: Columbia Room, Werner University Center

Session chair: Gareth Hopkins

The Effect of Shade on the Anatomy and Growth of the Oregon White Oak (Quercus garryana)

Presenter: Sarah Russ Mentor: Ava Howard

Heat and Humidity and The Effects on Cucumber Plants Presenter: Brooke Kline Mentor: Ava Howard Variation in Leaf Trichome Density of Oregon White Oaks Across Habitat Types Presenter: Calvin Cade Mentors: Ava Howard, Gareth

Hopkins

Digitalizing the Biological Data Collection Process for Oregon's Native Freshwater Turtles Presenters: Quinton Roan, Kaitlin Haley, Will Ollenbrook, Misha

Pierce

Mentor: Luke Cordova

Effects of Salinity Stress from Deicing Salts on Brandywine Tomato Plants

Presenter: Stephani Symanowicz

Mentor: Ava Howard

Invasive Snapping Turtles in Oregon

Presenter: Madison Smith Mentor: Gareth Hopkins

Pacific Tree Frog Bioacoustics Presenter: Madison Trussell Mentor: Gareth Hopkins

### **INTERDISCIPLINARY POSTERS**

Time: 10:15 - 11:15 a.m. Location: Calapooia Room, Werner University Center

Identifying the Forgotten: New Methodology for Identifying Transgender Skeletal Remains. Presenter: Loki Cockrill Mentor: Misty Weitzel

COVID-19 Vaccine Outreach and Engagement Strategies to Promote Vaccine Confidence and Uptake Among Latinx Families Presenters: Esmirna Tencos Mendoza, Pricila Tinajero Mentor: Megan Patton-Lopez

Polk County Contact Tracing & COVID-19 Hotline

Presenters: Emily Synegal, Hannah McCallister, Mckenzie Fisher,

Rebecca Zharkoff, Valeria Garibay Maravilla, Kailey Knospe Mentor: Emily Vala-Haynes

Advancing Software Testing Education using a Pedagogical Tool

Presenters: Seth Kirchgestner, Blake Finnie, Nathaniel Kuga,

**Evgeny Gubin** 

Mentor: Luke Cordova

Public Reporting App for Monitoring Oregon's Native Freshwater Turtles Presenters: Abraham Vela, Vince Nowell, Misha Pierce, Tessa Henson, Dennis Long

Digitizing the Biological Data Collection Process for Oregon's Native Freshwater Turtles Presenter: Quinton Roan Mentor: Luke Cordova

### **LEADERSHIP POSTERS**

Time: 12:45 - 1:45 p.m.

Location: Calapooia Room, Werner

**University Center** 

Session chair: Mary Pettenger

### POLITICAL SCIENCE RESEARCH POSTERS

Time: 11:30 a.m. - 12:30 p.m. Location: Calapooia Room, Werner

**University Center** 

Session chair: Mary Pettenger

Universal Basic Income Program
Presenter: Collin Hulling
Mentor: Mary Pettenger

Houselessness in Higher Education

Presenter: Kassidy Fegles-Jones Mentor: Mary Pettenger

Adopt-A-Road McMinnville City Proposal

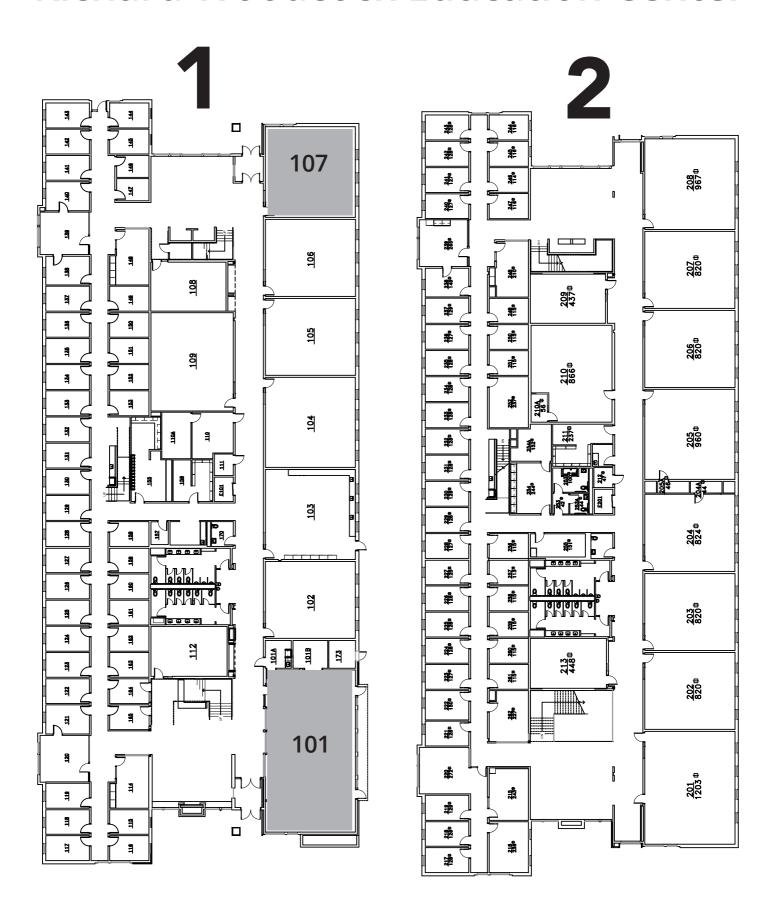
Presenter: Alejandro Perez

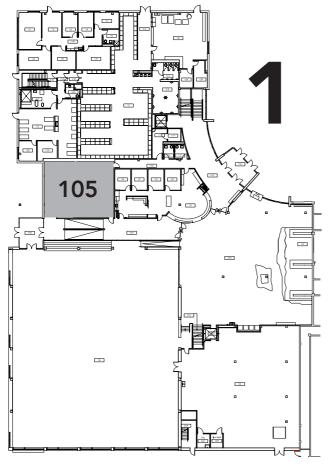
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Mentor: Mary Pettenger

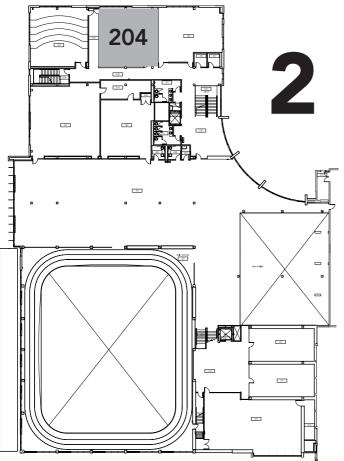
### **CAMPUS MAP AES EVENTS WILL** BE HELD IN THE **FOLLOWING BUILDINGS/ROOMS:** RICHARD WOODCOCK HERITAGE LP. -Hamersly Library: HL 107 **EDUCATION** Instructional Technology **CENTER** Center: ITC 211 E. Maple Hall Natural Sciences: NS 101 6 Peter Courtney Health & E Wellness Center: HWC 101, 105, 204, 301 Rice Auditorium Richard Woodcock Education Center: RWEC 101, 107 Werner University Center: (9) E Calapooia Columbia Pacific Santiam WERNER UNIVERSITY CENTER Willamette 6 **AES Information Desk** 6 NOLO **RICE** ENTER CAMPBELL UDITORIUN B. -(9) 6 (E) P 6 Ł. 4 **PETER** Parking on the WOU campus is **FREE** for AES attendees. NATURAL CIENCES WELLNESS Recommended parking lots: CENTER 6 **H** (access from Church St. or N. Monmouth Ave.) **A** (access from Powell and Warren) **R** (overflow lot, access from Jackson St.) (E)

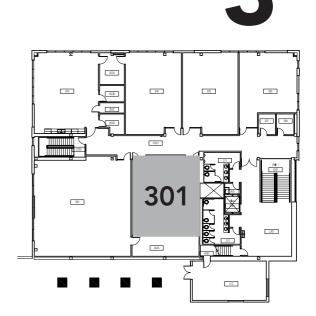
### **Richard Woodcock Education Center**





### Peter Courtney Health and Wellness Center





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