



2021-2022

# ANNUAL REVIEW

UNIVERSITY OF OREGON ENVIRONMENT INITIATIVE

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WORKING TOWARD A  
JUST & LIVABLE FUTURE

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# 2021-2022 ANNUAL REVIEW

UNIVERSITY OF OREGON  
ENVIRONMENT INITIATIVE

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# From the Executive Director



**Adell Amos**

Over the past year, we've engaged with faculty and staff from across campus to inventory our academic offerings, developed strategies for closing gaps and expanding opportunities, and collaborated on potential research themes.

We welcomed Keri Aronson as our dedicated development officer and Heather Brinton as a staff advisor to our team. Through the EI seed funding program, we were able to fund innovative curricular and research projects. To further the Environment Initiative, Provost Patrick Phillips supported six new faculty positions as part of a larger eleven cluster hire in climate solutions and environmental justice. Members of the EI Faculty Advisory Committee will serve on the search committees for these new positions to provide an interdisciplinary lens consistent with the EI Guiding Principles. I'd like to thank the Provost for his vision, and thank the faculty and staff for their work building the university towards a just and livable future.

**Adell Amos**

*Environment Initiative Executive Director  
Clayton R. Hess Professor of Law*







# HONORING NATIVE PEOPLE AND LANDS

The University of Oregon is located on Kalapuya Ilihi, the traditional Indigenous homeland of the Kalapuya people. Following treaties signed between 1851 and 1855, the U.S. government dispossessed Kalapuya people of their sacred homelands and forcibly removed them. We recognize that those treaties did not cede the lands that UO now occupies. Today, Kalapuya descendants continue to contribute to their communities, UO, Oregon, and the world, many of them citizens of the Confederated Tribes of Grand Ronde and the Confederated Tribes of Siletz Indians. We acknowledge the genocide inflicted by settler colonialism and the ongoing injustices against Kalapuya people. **We now hope to disrupt that legacy, beginning honest collaboration that is relevant and responsive to the needs of the tribal nations towards the shared goal of a just and livable future.**

The UO's Environment Initiative extends our respect to the nine federally recognized Indigenous nations of Oregon: the Burns Paiute Tribe, the Confederated Tribes of the Coos, Lower Umpqua and Siuslaw Indians, the Confederated Tribes of the Grand Ronde, the Confederated Tribes of Siletz Indians, the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of Warm Springs, the Coquille Indian Tribe, the Cow Creek Band of Umpqua Tribe of Indians, and the Klamath Tribes. We express our respect to the many more tribes who have ancestral connections to this territory, as well as to all other displaced Indigenous peoples who call Oregon home.



# UNIVERSITY OF OREGON'S ENVIRONMENT INITIATIVE



## BUILDING ON A LEGACY OF LEADERSHIP

The University of Oregon is known for its longstanding tradition of environmental teaching, research, service, and activism. This legacy of leadership has resulted in a deep and substantive history of engaging in environmental issues as a comprehensive public research university with an integrated mission to generate new knowledge and insight, explore, teach, and serve.

Individual students and scholars, teams of researchers and educators, in nearly every discipline and corner of the University of Oregon, engage in impactful work geared to addressing important questions about the environment and the communities that depend on it. Our programs sit near the top of rankings that stretch across numerous disciplines and fields of study.

UO faculty, staff, and students bring a broad range of expertise – from the humanities and social sciences to the natural sciences, law, journalism, business, design, and education – and, our engagement is critical to our public leadership in the state and the ecoregion.

The University of Oregon's Environment Initiative (EI) represents a campus-wide coordinated effort to create an intellectual and active hub focused on higher education's role and contribution to a just and livable future.

# RALLYING OUR STRENGTHS

With the goal of understanding the breadth and depth of this legacy, Environment Initiative executive director Adell Amos and her team conducted a broad campus engagement process. Read the full report [here](#).

Through the campus engagement process, the following areas of emphasis were identified:

- Hazards and Resilience
- Energy and Decarbonization
- Water Futures, Lifeways, and Sustainable Systems
- Ecology, Systems, and the Designed Environment
- Social Change through Environmental Education and Communication
- Indigenous Ecological Knowledge and Sovereignty

- Natural Climate Solutions, Restoration, and Biodiversity
- Environmental Entrepreneurship and Circular Economies

Regardless of the underlying substantive content, two significant and integrated themes emerged – (1) the need to address the urgency of climate change and (2) in addressing climate change and other issues, the need to address questions of social equity and justice. A phrase that seems to capture the sentiment is – **working to build and realize a just and livable future.**

Based on the feedback gathered in these conversations and with guidance from the EI Faculty Advisory Committee, the EI Guiding Principles were developed.

## Environment Initiative Guiding Principles

With the urgency created by the impacts of **climate change** and the need for **environmental justice** woven throughout, with our Environment Initiative we strive to be:

- Transdisciplinary and innovative in building opportunities for teaching, research, and service centered around climate solutions and environment and sustainability related topics;
- Policy-relevant, data-driven, and evidence-based by doing applied work that translates to decision-makers in government, industry and communities;
- Rooted and focused on the issue of equity and environmental justice in which we add and amplify voices to the conversation, including work directly with or within diverse communities, including Indigenous, Black, Latinx, LGBTQ+, and other communities;
- Responsive to the needs of local communities, tribal nations, the state, the eco-region and beyond; and
- Tied to direct student outcomes, experiential learning offerings, and new ways of thinking about professional pathways for a changing world.





## RESPONDING TO THE URGENCY OF NOW

Throughout the EI's campus engagement and strategic planning process, the campus community has consistently identified the need for institutional structure to support transdisciplinary research and teaching, experiential learning, and external engagement.

Rooted in the Guiding Principles, the EI launches and sustains areas of expertise and inquiry that are **relevant for the state and ecoregion**, that are **nationally significant** in creating new problem-solving pathways,

and that are **globally recognized**. The EI will organize the intellectual and creative muscle of University of Oregon for direct and meaningful research, education, and leadership on the climate crisis and its multitude of ecological and social challenges.



# VISIONING OUR ENVIRONMENTAL FUTURES WITH CREATIVITY, COURAGE, INTEGRITY, AND EMPATHY

## CEF Co-Directors:



**Stephanie  
LeManger**

Barbara and Carlisle  
Moore Professor of  
English

Professor of  
Environmental Studies



**Marsha  
Weisiger**

Julie and Rocky Dixon  
Chair of U.S. Western  
History

## CEF Graduate Employees:

**Nadya Barba Ramirez**

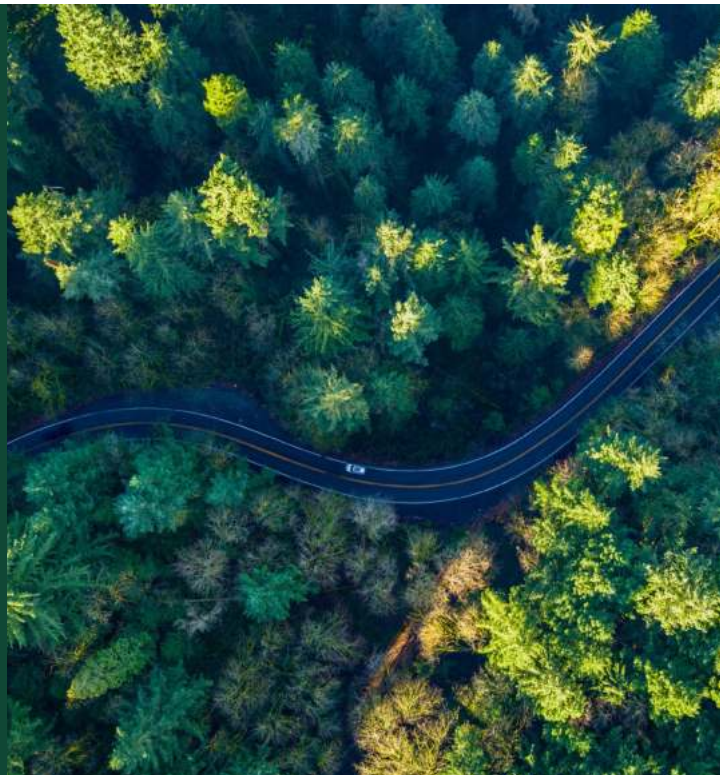
JFI Coordinating Assistant, 2021-22

**Rachael Lee**

JFI Coordinating Assistant, 2021

**Maya Revell**

JFI Coordinating Assistant, 2021-22



The Center for Environmental Futures (CEF) is an interdisciplinary group of faculty and students that reflects a longstanding investment in environmentalism and social justice at the University of Oregon and in the larger Eugene community. They engage environmentalism and environmental justice through the arts and humanities, in dialogue with allied fields.

CEF's mission is to encourage faculty and students in interdisciplinary environmental studies research and teaching, to encourage and support members of the community to participate in the University's environmental studies programming and problem-solving, and to cultivate relationships and build projects to address the most pressing environmental and social problems. CEF recognizes that problems of environment, justice, and culture call for a broad interdisciplinarity that includes the natural and physical sciences, communication and journalism, education, and law.



### CEF Activities 2021-2022

**Interdisciplinarity 101 Workshops** – CEF gatherings to share works-in-progress by faculty and graduate students and to cultivate interdisciplinary problem solving in the humanities, social sciences, arts, architecture, and education.

**Environmental Justice Pathways Summit** – Summit joining leaders and representatives from frontline communities with scholars, students, policymakers, institutions, and NGOs for critical conversations around Oregon's leadership on policies to address environmental justice concerns across our state. This summit was developed in collaboration with CEF's community partner, Beyond Toxics.

**Emerald Earth Film Festival** – CEF hosts film series exploring diverse environmental cultures, traditions, species, ecosystems, practices, and resistance efforts to protect planet Earth.

**Totem Pole Journey** – CEF supported and co-hosted the Totem Pole Journey, the intertribal nonprofit organization Se'Si'Le and the UO Natural History Museum's Whale People exhibit on the UO campus for a series of events, May 5-8, 2022.

**Public Lands Project** – Fieldwork-based CEF project exploring the status of Oregon's public lands and how public attachment is established through recreation, hunting/fishing, logging, and ranching/agricultural work. The PLP considers the futures of public lands by looking to their history and to environmental justice issues regarding Indigenous land sovereignty and socioeconomic class.

**Data Storytelling** – In collaboration with the U. of Pennsylvania, CEF co-directors Stephanie LeMenager and Marsha Weisiger, and dissertation fellow Hayley Brazier presented public lands stories by Oregon ranchers and land managers to show how stories can act as data that contributes to political decision-making.

**Environmental Justice Curriculum Guide** – As a spin-off from an Environmental Justice Webinar Series, CEF partnered with Beyond Toxics to create an Environmental Justice Curriculum Guide aimed at high school students.



### JFI Co-Directors:



John  
Arroyo

JFI Director

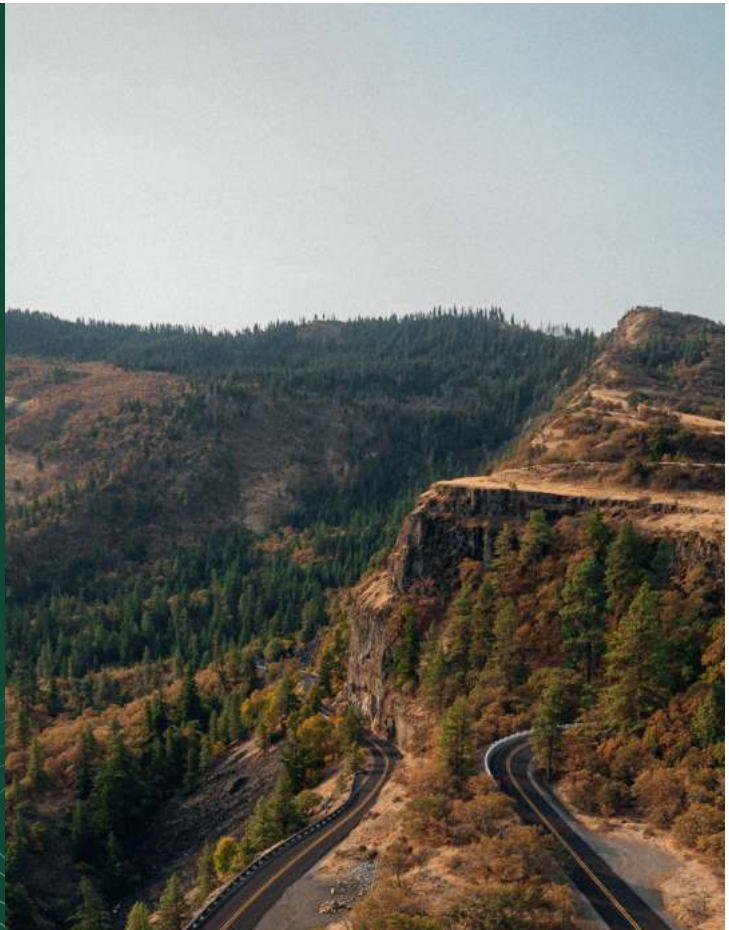
Assistant Professor,  
Planning, Public Policy,  
and Management



Alai  
Reyes-Santos

JFI Associate Director

Professor of Practice,  
School of Law



In January 2021, CEF received a grant from The Mellon Foundation to create the Pacific Northwest Just Futures Institute for Racial and Climate Justice. The \$4.52 million grant is the largest humanities award in UO history. The UO was among 38 institutions invited to submit proposals to the Just Futures initiative – and CEF is one of 16 grantees selected out of 165 proposals. JFI is a seedbed for applied, publicly engaged research that addresses the intertwined issues of racial inequality and climate crisis in innovative ways.

### JFI Activities 2021-2022

Eight intersecting initiatives focus on sustaining the livelihoods of local Indigenous, Latinx, Black, and rural working-class people. Under these initiatives, research teams will create a set of shared products that address racial and climate justice in the PNW. These applied projects demonstrate how community-engaged humanities scholarship and teaching open new portals to our diverse histories and instigate cultural change.

#### **Sustaining Racial Justice through Academic Incentives:**

- Karin Bolender awarded the 2022-23 CEF Postdoctoral Fellowship
- Yesenia Navarrete awarded the 2022-23 IRES Postdoctoral Fellowship
- Holly Moulton awarded the 2022-23 Dissertation Fellowship

#### **Sustaining Anti-Racist, Economic Dignity through Research and Experimental Pedagogy**

- Sarah Stoeckl of the Office of Sustainability recruited two cohorts of Sustainability Fellows to foster student-led research into the experiences and lives of essential but invisible workers
- Created a pedagogical toolkit for faculty and students who want to contribute to the PNW Atlas of Essential Work through the Sustainability Fellows program
- Taylor McHolm of the Student Sustainability Center recruited and awarded the Just Futures Fellowship to nine recipients
- Published English and Spanish versions of LERC's "A State of Immigrants" report



## Visioning our Environmental Futures continued

### Ice, Society, and Climate Justice Initiative

- Recruited a cohort of students for the 2022 Ice & Environmental Justice Summer Undergraduate Research Awards
- Selected faculty recipients for the 2022-23 Course Development Stipend Awards to develop new UO courses on themes related to ice, society, and climate justice

### Sustaining Indigenous Lifeways through Outreach and Public Engagement

- Awarded Climate Change and Indigenous People's (CCIP) fellowship

### Sustaining Inclusive Cities

- Conducted research on recent immigration legislation at the local, state, and federal level and on trauma and migration's effect on creative placemaking in cities
- Developed historic preservation workshop on African American cultural heritage in Portland's Albina district
- Conducted housing research via oral histories with Latinx migrants and prepared for applied housing studio
- Began design for Historical Highway Markers website
- Began development of Latino/a/x Urbanism research database

### Sustaining Climate Justice and Health through Afro-Indigenous Healing

- Caribbean Women Healers project received the 2022 Latin American Studies Association Honorable Mention
- Began building relationships with collaborators in the Pacific Northwest
- Spanish-language book, *Sanadores* was published by Editorial Buho
- Developed digital scholarship curriculum with communities of color
- Published a Spanish-language website for the Healers projects
- Dr. Reyes-Santos and Dr. Ana Lara are Dominican Studies Institute Research Fellows for 2022-2023 for their work on the website

### Next West Media Lab (Whitman College)

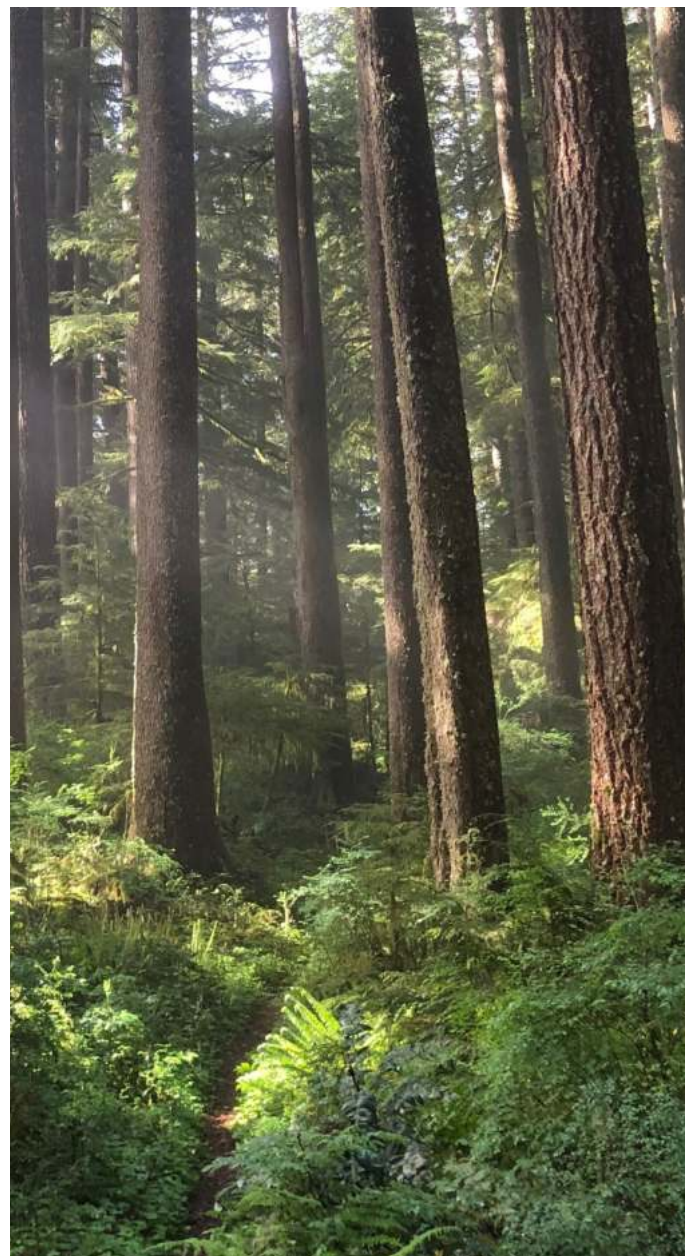
- Held a gathering with Indigenous elders to dig roots in Zumwalt Prairie
- Solidified partnerships with Maxville Museum, the Joseph Center for Arts and Culture, and the Homelands Institute in Wallowa County
- Accepted to American Society for Environmental History's Pedagogy panel

### Stories of Fire: A PNW Climate Justice Atlas (University of Idaho)

- The Stories of Fire Predoctoral Fellowship was awarded to Sasha White
- Began work on the next stage of the Atlas
- Hired Creative Writing and Environmental Humanities In-Residence and Project Coordinator

The Just Futures Institute (JFI) has made tremendous progress within the community in just one year and a half. Through publications, community targeted projects, student and faculty awards, oral history, interviews, workshops, and inclusive research, JFI is breaking new ground for models of applied learning in the Pacific Northwest.

We hope that you, too, will join us in our efforts to address the legacies of the past and understand contemporary environmental issues through the environmental humanities. We welcome your participation and your support. Visit us [online](#) to read the full report on CEF and JFI's accomplishments in 2020-2022.



# MEET THE ENVIRONMENT INITIATIVE FACULTY FELLOWS

The Environment Initiative offered a new faculty [fellowship program](#) that aims to enhance transdisciplinary research. Faculty fellows complete a project that contributes to the goals of the initiative, which include a just and livable future that addresses the intersections of environmental research and teaching with social and environmental justice.



## John Arroyo

John Arroyo, assistant professor of engaging diverse communities in the School of Planning, Public Policy and Management at the College of Design, was appointed as the [inaugural faculty fellow](#) for fall 2021. Arroyo is also the director of the [Pacific Northwest Just Futures Institute for Racial and Climate Justice](#), a regional collaboration led by UO. As part of his fellowship, Professor Arroyo led a workshop for participants to contextualize our [Research and Data Justice Principles](#) in their own research. Watch an interview with Professor Arroyo [here](#).



## Sarah Stapleton

As the [spring fellow](#), Professor Stapleton, an assistant professor in the College of Education, will move forward an interdisciplinary effort to create and implement, in coordination with teachers, a climate change and environmental justice [curriculum](#) in K-12 schools. Read more about Professor Stapleton's [work](#).





# CREATIVE RESEARCH, CURRICULUM APPROACHES GARNER AWARDS

The Environment Initiative's first funding cycle highlights virtual learning, leadership, elevating minority voices, and sustainability.

The Environment Initiative Seed Funding Program, established this year to support both research and curricular projects, will support one Research Award and five Curriculum Awards.

"I am thrilled we have awards like this to recognize and support the innovative work of our faculty," said Patrick Phillips, provost and senior vice president at the University of Oregon. "The activities selected this round really enhance the university's goal of preparing our students with timely and real-world experiences."

This seed funding program is also significant in creating alignment between our research, teaching, and public engagement endeavors. "This program was our first effort at calling for, and evaluating, proposals across research and curriculum," said Adell Amos, Executive Director of the Environment Initiative. "I am excited by the synergies that have emerged particularly with regard to the potential for community connections."

## Virtual Excursions for Science Learning

Danny Pimentel and Kelly Sutherland's Virtual Excursions for Science Learning (VESL) proposal was selected for the Research Award. The Environment Initiative seed funding will kickstart research focused on immersive, virtual reality (VR) learning experiences capable of increasing ocean science literacy, catalyzing interest in STEM careers and promote environmental attitudes among users



Participants in a field study testing an early version of project S.H.E.L.L.

in informal learning contexts (this includes places like museums). They hope the project will clarify the psychological mechanisms through which experiences like VESL influence human perceptions of self and science.

"For students of all ages, access to experiential learning is limited and scientific expeditions are all but an impossibility," Pimentel said. "With VESL, we hope to reduce these barriers with a scalable solution where students embark on seemingly realistic expeditions that are equal parts fun and educational."

Pimentel is an assistant professor of immersive media psychology. His research explores the prosocial implications of immersive storytelling. Sutherland is an associate professor of biology and

## SEED FUNDING AWARDS *continued*

director of the Sutherland Lab. Her ocean science research focuses on interactions between marine organisms and the physical environment. Kelly's projects engage scientists, journalists, and artists to create communication products that engage diverse communities with science.

Their collaborators are [Troy Elias](#), associate professor and director of the advertising program; [Shane Burrell](#), a doctoral student in game studies; Karen Stritzinger of Old Hara Studios; and Justin Dunnivant, an assistant professor of anthropology at UCLA.

## Teaching Environmental Leadership, Indigenous Knowledge, Decarbonization Analysis, Environmental Education, and Climate Equity Rules

For the upcoming academic year, the Environment Initiative seed funding program provided five curricular awards. Each award supports faculty to develop innovative courses and dynamic classroom experiences.



### Broadening Experiential Learning through the Environmental Leadership Program

Since 2001, the [Environmental Leadership Program](#) has developed and implemented more than 100 experiential field-based projects that have served nearly 900 undergraduate students, 120 graduate students and more than 50 community partners. The program's mission has been to develop the leadership, communication and collaboration skills of undergraduate students by creating hands-on learning opportunities that respond to environmental challenges in the community. With the seed funding, [Kathryn Lynch](#) and [Peg Boulay](#), co-directors of the Environmental Leadership Program, plan to develop a strategic plan and dig into how to amplify BIPOC voices more effectively in the program.



### Indigenous Knowledge Keepers Curriculum Development

Led by [Theresa May](#), professor of Theatre Arts and [Jennifer O'Neal](#), assistant professor of Indigenous, Race and Ethnicity Studies, this project will update two existing courses and develop three new courses in Native Studies and Theatre Arts in collaboration with Indigenous elders, knowledge keepers and culture bearers. The multidisciplinary project honors tribal sovereignty and promotes experimental learning for a just and livable future by expanding on decade-long efforts to include Indigenous ways of knowing consistently and responsibly in student learning experiences. In addition, the faculty will create guidelines and protocol for researching and engaging with tribal communities, as well as lead a workshop for researchers interested in working with tribal communities directly.



### Technoeconomic Analyses for Decarbonization

[Paul Kempler](#), associate director of the Oregon Center for Electrochemistry and [Joshua Skov](#), senior instructor of management will design a new course combining the scientific and business principles needed to evaluate the impacts of new technologies for energy and decarbonization. This course will be offered in Spring 2023 to graduate students in the chemistry department and the business school who are pursuing careers supporting the future decarbonized economy. The collaboration combines financial expertise from the Lundquist College of Business with technological expertise from the Oregon Center for Electrochemistry to provide training in technoeconomic modeling used to evaluate proposed solutions for decarbonization.



## SEED FUNDING AWARDS *continued*



### **Building Environmental Education Infrastructure at the UO**

This award funds a proposal by [Sarah Stapleton](#), assistant professor in the Education Studies Department of the College of Education and [Kathryn Lynch](#), ELP Instructor, Environmental Studies Program to explore the potential for Environmental Education (EE) and integrate efforts into coherent and visible programs, research, and outreach that will shape the university's identity as a leading sustainable institution. Building from an existing network of programs, courses, community partnerships and practitioners, the researchers will collect data and research a strategic plan toward making the UO a national leader in EE, attracting new students from undergraduate to graduate, new funding and new recognition to the university.



### **Oregon Students Helping Oregon Communities Address Climate, Equity and Affordability**

Led by [Marc Schlossberg](#) and [Nico Larco](#), co-directors of the [Sustainable Cities Institute](#), this funding will help recalibrate and focus the UO's innovative Sustainable City Year Program to support new statewide 'Climate Friendly and Equitable Community' rules, build a long-term partnership (and funding) with Oregon's Department of Land Conservation and Development, help Oregon communities accelerate their environmental and equity practices and train the next generation workforce and faculty in this vital new public policy sphere.

"The awarded proposals demonstrate the creative approaches UO faculty are taking to address environmental challenges and to train the next generation of people who will take action to counteract the climate crisis," said Cass Moseley, interim vice president for research and innovation."

– By Kelley Christensen, Office of the Vice President for Research and Innovation, and Emmily Bristol, Strategic Communications, [AtO story](#), June 6, 2022

## **Environment Initiative funds research to support State of Oregon**

To support Oregon's climate change adaptation and mitigation planning, the Oregon Legislature charges the Oregon Climate Change Research Institute with the development of a biannual assessment of current climate science and the projected impacts of climate change on human and natural systems. The University of Oregon School of Law's Environmental and Natural Resources Law Center is contributing the first law-focused chapter for the Seventh Oregon Climate Assessment, which will be released in January 2023. The Center's contribution – authored by Sarah Adams-Schoen, Assistant Professor and Michelle Smith, Research Associate – will explain land use law's unique role in the State's efforts to both mitigate and adapt to climate change and identify opportunities to use land use law to reduce the State's contribution of climate disruptive emissions, preserve and increase the capacity of natural and working lands to sequester carbon (i.e., carbon sinks), and increase the resilience of human communities in the face of current and future climate-related risks.





# Environment Initiative Themes

In the 2021-2022 academic year, the Environment Initiative offered a series of workshops, each focused on one of the eight themes and empowered participants to brainstorm projects, develop partnerships, and create new opportunities for interdisciplinary work.



# HAZARDS AND RESILIENCE



This theme is focused on improving human preparation, response, and recovery to natural hazards and creating resilient communities that are strengthened through sustainable development and fostering new relationships between people and land to achieve socio-ecological sustainability. At the same time, the uneven vulnerability of people to natural hazards (fire, drought, earthquakes, sea level rise, etc.) requires tackling issues of social inequity and envisioning of solutions adapted to diverse social, economic, and ecological contexts.

## WORK IN THIS AREA:



### **A network of 1,000 cameras is watching for Western wildfires—and you can, too**

The camera system is expanding to Oregon and has even started to employ artificial intelligence. ALERTWildfire — run by a consortium of three universities: the University of Nevada Reno, the University of California San Diego, and the University of Oregon—has become a go-to resource for numerous government agencies, first responders, researchers, everyday folks on “Fire Twitter,” and residents in camera-covered regions. Here’s how it all [works](#).



### **Burned forest now a landscape abuzz with bees and flowers**

When the Holiday Farm Fire tore through the McKenzie River Valley in 2020, burning 174,000 acres, it created a blank canvas of sorts. Amid the fire’s blackened landscape, UO ecologist Lauren Ponisio saw an opportunity to establish pollinators, specifically bees, in the burned forest. Read the full story [here](#).

# ENERGY AND DECARBONIZATION



## STORY FROM CAMPUS:

### Environmental Law Professor Accepts U.S. Senate Position

Greg Dotson, JD '95, assistant professor of law at the University of Oregon School of Law, will take a leave of absence to accept the position of Chief Counsel for the U.S. Senate Committee on Environment and Public Works. The Committee on Environment and Public Works has legislative jurisdiction over environmental protection, national climate change policy, and federal programs for investment in infrastructure. Read more.

To respond successfully to climate change and other environmental problems, we need to envision, and deploy not only renewable energy and new energy-efficient technologies but also new energy-conscious business practices, laws and policies, and designs for transportation and building infrastructure. This theme may include engaging the physical space of energy generation, transportation, and energy use in the designed environment. Through transdisciplinary collaboration, we will move past carbon offsets to negative emissions through nature-based engineering.

## WORK IN THIS AREA:



### UO's Geri Richmond gets the nod as new US energy undersecretary

UO chemist Geraldine Richmond has been confirmed as the new undersecretary of science and energy for the federal Department of Energy following a voice vote by the U.S. Senate. "As a renowned scientist, researcher and teacher, Dr. Geraldine Richmond has made historic contributions to the fields of chemistry and physics and has diligently applied that research to power breakthroughs in the fight against the climate crisis," Granholm said. Read the full story here.



### Team probes new approach to carbon-free biomass process

Amid a global effort to transition to more climate-friendly biofuel options, a UO chemistry professor is helping develop carbon-free fermentation technology. Read full story here.



# WATER FUTURES, LIFEWAYS, AND SUSTAINABLE SYSTEMS



## EVENTS ON CAMPUS:

### Cascades Glaciers and Water Resilience Symposium

On February 23, we held a virtual symposium focused on Cascades Glacier and Water Resilience. Sponsored by the University of Oregon's Environment Initiative, Office of the Vice President for Research Innovation, Just Futures Institute, Earth Sciences Department and Environmental Studies Program, this symposium brought together researchers and environmental practitioners in the Cascades region to generate ideas about research, collaboration, and engagement opportunities that can help address community needs and interests for climate adaptation and justice.

While the Northwest is perceived to have an abundance of water, higher demands from activities such as irrigation, changing conditions due to climate change, and increasing concern about equity of access will continue to place a big burden on our current systems. This node gathers those interested in practices that engage the future of water systems and lifeways (both human and non-human) at all scales in the Pacific Northwest with a variety of methodologies and cultural perspectives in consideration of the history and future of water use in the PNW. While focused on the PNW, the work of this node can and should extend beyond the region both in terms of providing examples of challenges and success and also in the context of national and international engagement.

## WORK IN THIS AREA:



### Indigenous, communities of color shape top 6 actions to bring water justice

Building on the experiences of approximately 200 community members and feedback from tribal governments, researchers, state agencies, utilities and environmental organizations, Oregon Water Futures identified the following six water-justice concerns. Read the full story [here](#).



### UO partners with state to improve tsunami evacuation planning

The UO has partnered with the state to build a web-based platform that directs Oregon coastal communities to evacuation routes in the event of a tsunami. Read [more](#).

# ECOLOGY, SYSTEMS, AND THE DESIGNED ENVIRONMENT



Broadly, this node gathers those interested in advancing futures for the designed environment at all scales (from the microbiome, to the body, to the room, to the building, to the community, and to the eco-region). This topic invites consideration of climate impacts, ecosystem context, livability, structural equity, justice, health, happiness, and social trust. The node should include those working on human and more-than-human environments with a breadth of methodologies—including but not limited to environmental sciences, environmental humanities, the arts, policy, environmental design and other spatial practices and through a variety of cultural lenses including traditional and local ecological knowledge and traditionally underrepresented cultural viewpoints.

## WORK IN THIS AREA:



### **Landscape Architecture Faculty Ko and Lee Part of a \$1.5M NSF Grant Studying Tree Equity**

Landscape Architecture Associate Professor Yekang Ko and Career Instructor Junhak Lee will investigate how urban forest assessment and valuation tools affect decision-making around urban tree equity thanks to a \$1.5 million National Science Foundation grant as part of a multi-institutional team. The ultimate goal of this project is to advise how these digital tools can be improved to support just and inclusive urban forest planning and management. Read [more](#).



### **UO programs bolstered by \$16M in Build Back Better funds**

Researchers at the University of Oregon will receive more than \$16 million in federal funds as part of a grant to the Oregon Mass Timber Coalition from the Build Back Better Regional Challenge. Read full story [here](#).



# SOCIAL CHANGE THROUGH ENVIRONMENTAL EDUCATION AND COMMUNICATION



This node takes a multidisciplinary approach to the social change needed for a just and livable future. Drawing from our strengths in journalism and communication, education, environmental studies, and other fields, we apply our expertise to promote meaningful and effective communication, engage communities, and drive social change. We also seek to address the tremendous need to prepare educators (including K-12 teachers and those in informal settings) to serve their communities by communicating and teaching about pressing environmental issues. In all environmental education and communication work, we center critical and participatory approaches that consider justice from many perspectives (Indigenous, Black, Latinx, and other people of color, global injustice, climate justice, environmental justice, etc.).

## WORK IN THIS AREA:



### **Virtual reality gives humans a turtle's-eye view of wildlife**

A virtual reality simulation designed by a UO professor could help spur people to environmental action. "Embodiment of nonhuman bodies is a powerful tool that environmental storytellers can use," said Daniel Pimentel, a professor in the UO's School of Journalism and Communication who led the work. "I hope that this experience can help raise awareness and hopefully engage the public in a way that trickles down to more support." Read full story [here](#).



### **College of Education class builds paths for future climate action**

Teaching about climate change in K-12 classrooms takes a careful balance between discussions on potentially dire consequences and inspiring hope for the future. That was the message delivered by a group of future educators at a recent UO College of Education workshop. Sarah Stapleton, an assistant professor in the Department of Education Studies at the UO, led the class and coached students through development of the workshop. Read [more](#).

# INDIGENOUS ECOLOGICAL KNOWLEDGE AND SOVEREIGNTY



## EVENTS ON CAMPUS:

### **Totem Pole Journey**

Led by members of the Lummi Nation and the House of Tears Carvers, the [Totem Pole Journey](#) is a Pacific Northwest community experience that engages participants through ceremony, art, science, ancestral knowledge and cross-cultural collaboration. This May, the Totem Pole Journey began its tour with a series of events co-sponsored by the Environment Initiative and the Center for Environmental Futures. Read [more](#).

This node brings together researchers anchored in the methods and values grounded in Indigenous nationhood, sovereignty, and self-determination. What does it mean to acknowledge the history, culture, prior claims, and ongoing presence of Indigenous nations? In what multiple ways have Indigenous peoples stewarded and managed lands, resources, and relationships, and how might those practices inform contemporary debates over land/resource management, conservation, protection, and stewardship? How might a robust understanding of tribal nationhood and sovereignty transform these conversations/practices? How might Indigenous fire practices intervene in mass forest fire events and revise fire/forest management policies? How might Indigenous philosophies of relationality and reciprocity inform debates over water resource use and allocation, dam removal, and habitat restoration? How might policies and protections of first foods, culturally significant resources, and the revitalization, restoration, and reaffirmation of Indigenous languages and knowledges help address some of the most important environmental and ecological questions of our time?

## WORK IN THIS AREA:



### **Fighting fire with fire: Native American burning practices spark interest in a year of historic wildfires**

"The fires are much more dangerous than ever before, because we have interrupted that long-standing practice of cultural burning by Native peoples, which kept things in check," said Kari Norgaard, a sociologist at the University of Oregon. Federal fire-prevention policies have largely put a halt to the controlled burns carried out for centuries by Indigenous tribes. That prohibition is beginning to give way. Read [more](#).



### **A theater collaboration brings Native voices to the UO stage**

A unique partnership between a Department of Theatre Arts professor, director and playwright and a Grand Ronde tribal elder and actor has given Native theater a voice and a presence on campus. Read the full story [here](#).



# NATURAL CLIMATE SOLUTIONS, RESTORATION, AND BIODIVERSITY



To solve converging crises, the relationship of humans to ecosystems must change. Restoration strategies across landscapes must aim to clean up the atmosphere by sequestering carbon, boost biodiversity, and recover degraded landscapes. The effort requires collaborative consideration of scientific protocols, socioeconomic incentives, workforce development, land management realities, conservation law tools, and narratives that can inspire communities and bridge polarities. We need multidisciplinary collaborations to bring the tools of the environmental humanities—a focus on narrative, critical thinking, history, cultural analysis, aesthetics, and ethics—together with environmental science and policy in order to reimagine the human role in Nature. We aim to create new and encompassing approaches to move the needle on the litigation, adoption, and legislative fronts.

## WORK IN THIS AREA:



### **Students use UO sustainability data to seek climate solutions**

To develop the ability to understand data and use it to make specific recommendations, Professor Lucas Silva crafted an assignment where students use information from Project Drawdown, a research-driven breakdown of the top solutions to global warming; an academic article focused on the importance of localized carbon reduction strategies; and data from the university's sustainability dashboard. Read [more](#).



### **Gift from Roger Worthington helps Oregon Law address urgent climate challenges**

Worthington's gift will support the law school's Environmental and Natural Resources Law Center and the work of Mary Christina Wood, a Philip H. Knight Professor of Law. Expanding on decades of research and scholarship on the public trust doctrine, Wood is developing new strategies to force climate recovery. Read the full story [here](#).

# MEET THE ENVIRONMENT INITIATIVE FACULTY ADVISORY COMMITTEE

Under Amos' leadership, the Faculty Advisory Committee worked throughout the year to advance Initiative goals in concrete and faculty-driven ways by advising on strategic planning, Initiative-tied Institutional Hiring Plan proposals, seed funding proposals for research and curriculum projects, advancing curricular strategies, and facilitating the convening of multidisciplinary research and teaching nodes. The Faculty Advisory Committees has recommended that we explore the development of a new institute to strengthen our educational, research, and outreach activities in this area.



Adell  
Amos

Environment Initiative Executive Director  
Clayton R. Hess Professor of Law

Adell L. Amos holds the Clayton R. Hess Professorship at the University of Oregon School of Law and serves as the Executive Director of the UO's Environment Initiative. Her most recent research focuses on the integration of law and policy into hydrologic and socioeconomic modeling for the Willamette River Basin through a multi-institutional, interdisciplinary effort funded by the NOAA and the National Science Foundation.



Kirby  
Brown

Associate Professor, English

Kirby Brown is an Associate Professor of Native American Literatures in the Department of English, the Director of Native American and Indigenous Studies, and an enrolled citizen of the Cherokee Nation. New research projects include an essay on the politics of form in the short fiction of Ruth Muskrat Bronson, edited collections on Indigenous modernisms with *Modernism/modernity* journal and Routledge Press, and continuing work in Native American and Indigenous studies.



Dane  
Christensen

Associate Professor, Accounting

Dane Christensen is an associate professor in the School of Accounting and Charles E. Kern Research Scholar at the Lundquist College of Business. His expertise includes corporate misconduct, corporate social responsibility, and the political economy.



Mark  
Carey

Professor, History

Mark Carey is a Professor of Environmental Studies and Geography, and currently serves as Director of the Environmental Studies Program. Carey's multidisciplinary Glacier Lab for the Study of Ice and Society investigates how forces of inequality and injustice affect people's ability to address climate change and ice loss in their communities.



Greg  
Dotson

Associate Professor, Law

Greg Dotson is an Associate Professor of Law and a faculty member of the Environmental and Natural Resources (ENR) Law Center at the University of Oregon School of Law. Dotson teaches Environmental Law, Climate Change Law and Policy, and the Environmental Policy Practicum. In his role with the ENR Center, Dotson serves as the faculty advisor for the Energy Law and Policy Project.



## FACULTY ADVISORY COMMITTEE continued



Stephanie  
LeMenager

Professor, English

Stephanie LeMenager is the Barbara and Carlisle Moore Distinguished Professor in English and American Literature, and Professor of Environmental Studies. She is currently finishing two book projects, on fictionality in the era of climate change and the public lands.



Ellen  
Peters

Philip H. Knight Chair and Professor, Journalism and Communication, Psychology

Philip H. Knight Chair Ellen Peters is a Professor in the School of Journalism and Communication and the Psychology Department at the University of Oregon. She is also Director of both the Center for Science Communication Research and the Cognitive and Affective Influences in Decision making (CAIDE) Lab at the University of Oregon.



Alicia  
Salaz

Vice Provost and University Librarian

In 2018, Alicia Salaz joined the University of Oregon as Vice Provost and University Librarian. Prior to taking on these important roles with the University of Oregon, Salaz acted as a senior librarian and the Associate Dean for Research and Academic Services at Carnegie Mellon University Libraries. Currently, Salaz oversees five libraries located across the University of Oregon's Eugene and Portland campuses and within the Oregon Institute of Marine Biology.



Erin  
Moore

Associate Professor, Architecture

Erin E. Moore is a professor in the Department of Architecture and in the Environmental Studies Program. Moore works in teaching, research and design practice on the environmental context of building construction and on the ways that buildings shape and reflect cultural constructions of nature. Recent work explores the architectural space of fossil fuel consumption, biogenic carbon sequestration, and climate change.



Josh  
Roering

Professor, Earth Sciences

Josh Roering is professor and head of the Department of Earth Science. His recent work emphasizes quantifying how perturbations such as extreme rainfall, fire, earthquakes, and land management practices, including timber harvesting, influence landscapes, the potential for geologic hazards, and the sustainability of soil function.



Lucas  
Silva

Associate Professor, Environmental Studies

Lucas Silva is an interdisciplinary environmental scientist who focuses on soil-plant-atmosphere interactions as a way to understand socioecological systems. His projects combine theory and experimentation to accelerate climate change mitigation and adaptation efforts in natural and human-engineered landscapes.

## FACULTY ADVISORY COMMITTEE continued



Hollie  
Smith

Professor, Earth Sciences

Hollie Smith is an applied social scientist whose work focuses on communication dimensions of science and environmental issues and serves as the Associate Director for the Center for Science Communication Research. Smith's research has looked at communication and media dynamics on issues of wildfire, federal forest policy, water contamination, climate change, and alternative energy transitions.



Doug  
Toomey

Professor, Earth Science

Doug Toomey is a Professor of Geophysics in the Earth Sciences Department at the University of Oregon. He is also the Director of the Oregon Hazards Lab and the Principal Investigator for the Oregon components of the Pacific Northwest Seismic Network, ShakeAlert, and ALERTWildfire. I. Lokey Science and Technology Outreach Librarian at the University of Oregon. He has consulted for the US-EPA, and served as a field ecologist with The Nature Conservancy and the Virginia and West Virginia Natural Heritage Programs.



Mary  
Wood

Professor, Law

Mary Christina Wood is a Philip H. Knight Professor of Law at the University of Oregon and the Faculty Director of the law school's nationally acclaimed Environmental and Natural Resources Law Center. Wood is a frequent speaker on climate issues and has received national and international attention for her sovereign trust approach to global climate policy.



Sarah  
Stapleton

Assistant Professor, Education

Sarah Stapleton is an Assistant Professor in Education Studies at the University of Oregon. In her research, Stapleton uses critical and participatory methodologies to investigate social and environmental inequities. She has published papers about climate justice, food and schools, school food activism, participatory research with teachers, students and the more-than-human world, and race and environmental education.



Dean  
Walton

Lorry I. Lokey Science and Technology Outreach Librarian, UO Libraries

Dean Walton is a conservationist, biologist, educator, and the Lorry I. Lokey Science and Technology Outreach Librarian at the University of Oregon. He has consulted for the US-EPA, and served as a field ecologist with The Nature Conservancy and the Virginia and West Virginia Natural Heritage Programs.

Learn more about  
the Faculty Advisory  
Committee [here](#).



# IN CASE YOU MISSED IT...



## Legislation and Climate Change Solutions

On May 24, the Environment Initiative partnered with the Environmental and Natural Resources Law Center to organize a hybrid event discussing the role of academia, state and the federal government at a time of urgently needed transition to address climate change. [Law professor Greg Dotson](#) discussed his engagement with the senate to develop and pass the historic Infrastructure Investment and Jobs Act. Provost Patrick Phillips and law school dean and Dave Frohnmayer Chair in Leadership and Law Marcilynn Burke joined Professor Dotson for a panel discussion on the resulting infusion of resources to the state of Oregon and how the package includes key provisions related to climate change.



## Outdoor Program redefines 'outdoorsy' to increase diversity

The Environment Initiative was proud to be one of the cosponsors for "Redefining Outdoorsy." What began as virtual events has grown to live recreational excursions and a full-day conference as a UO program works to empower often underrepresented communities to create more equitable access to the outdoors. The educational aspect of Redefining Outdoorsy – giving students and community members the chance to learn and discuss the inequities people face when recreating outside – is one of the original pillars of the project. Read the full story [here](#).



## Sustainability Awards recognize contributions across campus

This spring University of Oregon honored the work of individuals and teams across campus and in the community during the annual UO Sustainability Awards. These awards celebrate work in sustainability across a range of institutional activities.

Congratulations to Mark Carey and Kathy Lynn for receiving the Town and Gown Award sponsored by Government and Community Relations for their work organizing the [Climate Change and Indigenous Peoples initiative](#).

Each winner receives recognition at the annual awards ceremony, a physical award sustainably made by a local business, and a [video overview of their winning work](#). Learn more about this year's winners [here](#).



## The Climate Wisdom Lab

The UO's Office of Sustainability and Teaching Engagement Program organized a two-day pedagogy workshop this June. This custom workshop, The Climate Wisdom Lab, brought together staff and faculty from around the UO, to think deeply about their own well-being, the ways in which that's impacting their work, and the ways in which an emotional and affective approach to the climate crisis can help both personally and professionally.

# DONORS AND SPONSORS

## THANK YOU FOR SPONSORING THE ENVIRONMENT INITIATIVE!



Keri Aronson

Hello!

I am thrilled to be introducing myself to you as the chief development officer for the University of Oregon's Environment Initiative. My newly created position demonstrates UO leadership's commitment to environmental justice and climate solutions. I cannot think of a more urgent and important fundraising priority.

To those of you who have already made a financial investment, thank you! What we need most is a spendable unrestricted fund to think big and you have planted the seeds to help us grow. Some of you may still doubt that we can make a difference because humans have done too little for too long and "climate" is too vast and undefined. I have met the UO faculty, staff and students who are excited to change your mind. These dedicated Ducks are currently doing the work and are excited to build on it and to share it with you, Oregon and the world. The University of Oregon Environment Initiative is poised to make a huge difference.

Adell and I would love to meet with you and answer all of your questions. We're happy to address your doubts and concerns. Give me a call or drop me a line. I welcome your thoughts and ideas.

Together, we can create a just and livable future for all.

GO DUCKS!

Keri

If you have questions about giving,  
please contact Keri Aronson at  
(541) 346-1890 or email at  
[keria@uoregon.edu](mailto:keria@uoregon.edu)



# ENVIRONMENT INITIATIVE GUIDING PRINCIPLES



With the urgency created by the impacts of **climate change** and a fundamental commitment to **environmental justice**, we strive to be:

- Transdisciplinary and innovative in building integrated opportunities for teaching, research, and community engagement centered around climate solutions, environment, and sustainability-related topics;
- Policy-relevant, data-driven, and evidence-based by doing applied work that translates to decision-makers in government, industry and communities;
- Rooted and focused on issue of equity and environmental justice in which we add
- and amplify voices to the conversation, including work directly with or within diverse communities, including Indigenous, Black, Latinx, LGBTQ+, and other communities;
- Responsive to the needs of local communities, tribal nations, the state, the eco-region and beyond; and
- Tied to direct student outcomes, experiential learning offerings, and new ways of thinking about professional pathways for a changing world.



[environment.uoregon.edu](https://environment.uoregon.edu)



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