# SUSTAINABILITY **ACROSS THE UW**





## **PURPOSE**

### **UWS WILL USE THIS RESOURCE TO:**

- > Raise awareness in our office to increase our ability to foster collaboration
- > Serve as a directory/resource to draw upon expertise for sustainability-related problem-solving
- > Serve as directory/resource to draw upon for creating Living Lab opportunities

## **DESCRIPTION**

- > On the following pages are descriptions of groups and individuals that work on sustainability on the academic side
- > They are organized by the institute, college, and department they are affiliated with

### **NAVIGATING THIS DIRECTORY**

- > This directory is split into 3 main sections:
  - Student Organizations Identified student-led, campus organizations
  - Multidisciplinary Institutes Identified research institutes associated with UW
  - Colleges & Schools Identified experts associated with UW and organized alphabetically by college/school > department > individual
- > Each slide has a button in the bottom right corner that takes you back to the Table of Contents, not including the Table of Contents. Most slides have a second button that will take the viewer to that slide's section page.
  - (Example Kyle Crowder will return the viewer to Sociology.)
- > Departmental pages link back to the college they fall within.
- > All slides are linked to their UW Web Page
- > If you are looking for a specific expert, push CTRL + F (for Windows) or Command + F (for Mac), type their name in the box that appears. The various locations their name appears in the directory will be selected.

## **CREDITS**

### **GLOBAL HEALTH RESOURCE GUIDE:**

- > Climate Change Centers & Institutes
- > Climate Change Experts

note: We hope to go through the "<u>University</u> of Washington experts" page to find additional people to include in this directory

## **TABLE OF CONTENTS**

- > <u>UW Definition of Sustainability</u>
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- > Colleges & Schools
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### **UW DEFINITION OF SUSTAINABILITY**

#### <u>Website</u>

- > At the University of Washington, we define sustainability as the capacity to create and maintain healthy, equitable and diverse communities now and into the future. That capacity comprises
  - (1) an understanding and respect for the interdependence of the atmosphere, the waters, the land, and the Earth's inhabitants, and
  - (2) a commitment to use our collective wisdom to act out of that understanding and respect.

## **UW SUSTAINABILITY TARGETS ('21-'25)**

#### **Website**

- Double student, staff, and faculty sustainability engagement by 2024
- **2.** One UW-wide sustainability *framework* by 2022
- **3.** Double sustainability-oriented **research** projects by 2025
- 4. Comprehensive *equitable purchasing* targets by 2022
- **5.** 5% lower emissions from professional *travel* by 2025

- **6.** 35% of **food** is from local sources by 2025
- 7. 6% decrease in single-occupancy **commuting** rate per campus by 2028
- **8.** 15% lower *energy* usage intensity by 2025
- **9.** 10% less solid *waste* by 2025
- **10.** 45% reduction of greenhouse gas *emissions* by 2030

## LIVING LAB OPPORTUNITIES

#### **Website**

The University of Washington campuses serve as living laboratories for a broad range of sustainability-related projects that address operational, education, and research challenges and opportunities.

Many of these projects provide innovative solutions for our campus, as well as for our local communities and for the state, by linking the creative new ideas of students with the expertise of our faculty and staff. A living lab project may involve students, faculty, and staff working together on a research project, pilot, or campus-wide initiative on one of our campuses. Such projects work to provide information and solutions that help in achieving the UW's sustainability goals or that have value and meaning for our local community or State.

The criteria below are key considerations in developing a living lab project:

- Place: projects reflect a commitment to our campuses, the surrounding community, or our State
- > <u>Sustainability:</u> projects strive to implement lasting change that incorporates the full spectrum of social, cultural, ecological, and economic dimensions of sustainability
- Real-world learning: projects link educational goals with real world needs and applications
- > <u>Fit:</u> projects supports the campuses' sustainability goals, as well as community and State interests
- > <u>Adaptive:</u> projects provide information and data that serve to optimize future efforts
- Collaborative Action: projects engage students, faculty, and staff, as well as (when appropriate) constituents from local communities and the State
- > <u>Evaluation and continuous improvement:</u> projects monitor progress and evaluate impacts

## **UW Sustainability**

#### **Website**

UW Sustainability advances the university's commitment to sustainability. Acknowledging UW's legacy for the future, UW Sustainability leads the development and execution of innovative and inclusive solutions that are socially responsible, economically viable, and affect positive environmental impact. We work with students, faculty and staff across the University of Washington to coordinate and implement sustainability programs and efforts, and provide sustainability resources for the UW community.

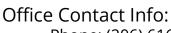


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### STUDENT ORGANIZATIONS

#### **Website**

### List of Student Organizations

- American Fisheries
   Society- UW Chapter
- American Water
   Resources Association
- Bioengineers Without Borders
- <u>Campus Sustainability</u>
   <u>Fund</u>

- EcoReps
- <u>Engineers Without</u> Borders
- Green Husky Coalition
- Green Greeks
- Society for Ecological Restoration
- <u>Student Association of</u> Green Environments

- Student Environmental Health Association
- ASUW Student Food Cooperative
- Students Expressing Environmental Dedication
- <u>UW Farm</u>
- <u>UW Solar</u>
- WashPIRG Students

# American Fisheries Society-UW Chapter

#### **Website**

The mission of the Chapter is to advance the conservation and intelligent management of aquatic resources within a context of sound ecological principles, gather and disseminate information pertaining to aquatic science and fisheries management.

The AFSUW has a multitude of outreach activities, such as career development seminars, mentorship programs, and bonding events for members.



#### How to Connect:

Email: <u>afsuw@uw.edu</u>

Twitter Handle: @AFSUW

Facebook Page: @AFSUW

#### **UW Target Connections:**

1. Double student, staff, and faculty sustainability engagement by 2024

## American Water Resources Association

#### **Website**

To share ideas within the water resources community at the University of Washington and to provide students with opportunities to interact with water resources professionals.

- Seminars with topical guest speakers and presentations.
- Water-related environmental stewardship projects.
- Internships, scholarships, and cooperative work experiences.
- Membership in the AWRA
   Washington State Section,
   including the bimonthly
   newsletter, dinner meeting
   discussions, and
   involvement with the Fall
   Conference in Seattle.

#### How to Connect:

Email: <u>awra@u.washington.edu</u>

<u>UW Target Connections:</u> 1,3

## **Bioengineers Without Borders**

#### Website

Engineering. Low cost. Sustainable. Medical. Technologies. Developing professional & design experience. No borders. What they are working on:

- Capnography Patient Monitor
- Humidification Team
- Hydration Monitor
- Prosthetics
- Target Malaria Project

#### How to Connect:

- Contact Form: <u>https://bwb-uw.wixsite.com</u> /noborders/contact-us
- Social Media: @uw\_bwb

**UW Target Connections:** 1,3

## **Campus Sustainability Fund**

#### Website

Our goal is to create a sustainable campus and foster an environmentally conscious culture by funding student-led projects that lessen the University of Washington's environmental impact.



CSF provides opportunities for UW students to engage in the proposal, planning, and implementation of sustainability-oriented projects from conceptual design to project management through completion.

#### **How to Connect:**

Email: <u>uwcsf@uw.edu</u>

Twitter/FB: @uwcsf

Instagram: @uw\_csf

#### **UW Target Connections:**

1, 2, 3- could be more if projects are centered towards other targets

## **EcoReps**

#### Website

EcoReps is a student-run organization that works with our peers, faculty, and staff to make the University of Washington a more sustainable place. By aiding in the development of sustainable projects on campus, EcoReps will work in alignment with the UW **Environmental Policy** statement and the Climate Action Plan goals to decrease UW's environmental impact.

They're current projects include Green Dawgs
Certification, Volunteering and Fundraising, Social Media, Club Newsletter, Agroforestry, and Hydroponics. When they are able to return to campus in person, ongoing projects include Green Husky Market, Clothing Swap, Sustainability in the Arts, 3D Bin Displays and many more.



#### How to Connect:

- Email: <u>ecoreps@uw.edu</u>
- Twitter/Instagram: @uwecoreps

<u>UW Target Connections:</u>
1, 2, 3- could be more if projects are centered towards other targets

## **Engineers Without Borders**

#### Website

To help disadvantaged communities improve their quality of life through the implementation of environmentally and economically sustainable engineering solutions.

#### 2021 Objectives:

- Remote Implementation of Solar Pump
- Continued Implementation of Composting Toilets
- Monitoring and Evaluation of Western Expansion
- Begin next phase of Water Supply

#### 2020 Objectives:

- Composting Toilet Continued Implementation Report submission
- Solar Pump Final Implementation Report submission
- Water Supply Project Phase 1
   Implemented Remotely

#### **How to Connect:**

- Email: ewbuws.president@gmail.com
- Facebook: @ewbhuskies
- Instagram: @ewb\_uw

<u>UW Target Connections:</u> 1, 3, 8, 9

# **Green Husky Coalition**

#### Website

The Green Husky Coalition is a group of student organizations that meet monthly to bring together ideas to change and promote sustainable culture on campus. Representatives from all UW student groups are welcome.

"We aim to create more opportunities for groups to promote their projects and foster a network of organizations that can work together to better achieve their goals. Each organization has a voice in this group and together we will form a collective that strives to make the campus more sustainable!"



#### How to Connect:

Email: <u>ecoreps@uw.edu</u>

<u>UW Target Connections:</u> 1,3

### **Green Greeks**

#### Website

Through impactful action and innovative strategies, the GGRP has become a national leader for the sustainability movement on college campuses.

Members of fraternities and sororities throughout the Greek System attend meetings where guest speakers present career opportunities before students break into their "Project Groups" to work on a specific sustainability focus. Our mission is to foster a collaborative environment dedicated to promoting sustainable action in the community through student-led consulting, leadership, and events.

#### How to Connect:

- Email: <u>uwgreengreekdirector@gmail</u> .com
- ggrp@uw.edu

<u>UW Target Connections:</u>
1, 2, 3- could be more if projects are centered towards other targets



# **Society For Ecological Restoration**

#### Website

To create a community for networking among UW and regional restoration students, researchers, practitioners, and other organizations and to share information and job/research opportunities related to restoration ecology.

#### **Current Projects:**

- Native Plant Nursery
- Snaggle Site
- Douglas-Fir Site
- Paccar Site
- Kincaid Ravine
- Whitman Walk
- SER-UW Site Map

#### How to Connect:

Email: <u>seruw@uw.edu</u>

<u>UW Target Connections:</u> 1, 3

## Student Association of Green Environments

#### Website

To spread awareness for environmental issues on and off campus and to promote events for greener, sustainable environment. We are committed to community engagement and education, and creating professional opportunities.



#### **How to Connect:**

Email: uw.sage.green@gmail.com

**UW Target Connections:** 1, 3

# Student Environmental Health Association

#### **Website**

To promote awareness of the far-reaching impacts of the environment on human health and create networking opportunities for the members in the professional field of environmental health.

- Promote environmental health education
- Involve our members in the social, moral, and ethical obligations of the profession of environmental health
- Assist in improving and understanding world environmental health problems
- Contribute to the welfare of environmental health students

#### How to Connect:

• Email: <u>sehauw@uw.edu</u>

<u>UW Target Connections:</u> 1, 3

# **ASUW Student Food Cooperative**



#### Website

Operates a cafe in the South Campus Center and a cart on Red Square, affordably providing healthy, organic, local and sustainably-grown food. By working with the UW Farm, we will turn passive customers into active participants in each step of the food system. The goal of the cooperative is to make the university more sustainable by changing lifestyles through engendering a culture of sustainability.

#### **Current Projects:**

#### **Humble Feast**

 bi-annual celebration of locally-sourced, organic, sustainable food! It is a 4 course feast cooked by co-op students for our local community.

#### SFC Cookbook

 free cookbooks that are tailored to student needs

#### **Recipe Testing**

 We recipe-test to foster a creative cooking outlet for students and bring together a community interested in cooking sustainably, locally, and on a budget.

#### How to Connect:

- Email: <u>asuwsfcp@uw.edu</u>
- Instagram: @asuwsfc

<u>UW Target Connections:</u> 1, 3, 6, 9

## Students Expressing Environmental Dedication



#### **Website**

SEED encourages environmentally sound practices in the residence halls and serves to raise awareness about environmental issues that affect the residential community.

#### Current Projects:

#### Reusable Containers

 OZZI machine was brought to the dining hall in west campus, Local Point. The machine provides an option for reusable containers when they order food to reduce single-use containers.

#### **Compost Bins**

- SEED checks out in-room compost bins to residents

#### Pot- A- Plant

 All the materials necessary to pot your plant are provided

#### How to Connect:

- Email: <u>uwseed@uw.edu</u>
- Instagram: @uw\_seed
- Facebook: @uwseed

<u>UW Target Connections:</u> 1, 3, 9

### **UW Farm**

#### Website

The UW Farm's purpose is to educate the UW community about the global impacts of our food choices as well as teach students how to grow food in a sustainable manner.

The results are the production of over 6 tons of produce for campus dining, the Food Pantry, and the community, a new awareness of the food system, knowledge of a farm as an agro-ecosystem, and place for innovation, research, leadership skills, access to organic fresh vegetables and the potential for a healthier lifestyle.

#### How to Connect:

• Email: <u>uwbg@uw.edu</u>

UW Target Connections: 1, 3, 6, 8, 9

### **UW Solar**

#### **Website**

An interdisciplinary team of students at the University of Washington in conversation with the UW Housing & Food Services regarding the development of a solar installation with accompanying Industrial Control Systems on buildings at the UW campus, and are engaged in providing effective outreach to students about the benefits of smart solar investments.

#### Project Development

- Site Evaluations and Shading Analysis
- Photovoltaic (PV) System
   Preliminary Design
- Cost Estimation and Financial Modeling of Solar Arrays
- Creating and reviewing policy documents with sections for Industry Trends, Federal Regulations, State Law, City Code and UW Policy
- Procurement of Funding
- Request for Proposal (RFP)
   Drafting
- Contractor Selection
- Reviewing of Installation and Comissioning

#### How to Connect:

• Email: <u>solaruw@uw.edu</u>

<u>UW Target Connections:</u> 1, 3, 8

## **WashPIRG Students**

# WASHPIRG Students

#### Website

An organization dedicated to facing up to society's big problems, taking action, and winning concrete changes that improve the quality of our lives.

Read about recent sustainability victories here: <a href="https://washpirgstudents.org/accomplishments/">https://washpirgstudents.org/accomplishments/</a>

#### How to Connect:

targets

 Get in Touch: <u>https://washpirgstudents.o</u> <u>rg/volunteer-on-campus/</u>

<u>UW Target Connections:</u>1, 2, 3- could be more if projects are centered towards other

### **MULTIDISCIPLINARY INSTITUTES**

- <u>Center for</u>
   <u>Environmental Politics</u>
- <u>Center for Health and</u>
   <u>the Global</u>
   <u>Environment</u>

#### List of Institutes

- <u>Center for Studies in</u>
   <u>Demography & Ecology</u>
- <u>Climate Impacts Group</u>

- Clean Energy Institute
- <u>EarthLab</u>
- Integrated Design Lab

# Center for Environmental Politics



#### Website | 101 Gowen Hall | College of Arts & Sciences

The Center hosts eminent faculty located across units such as political science, communications, geography, philosophy, history, anthropology, environmental and forestry sciences, American Indian studies, law, marine affairs, built environment, earth and space sciences, and international studies. These scholars write on subjects such as:

- Policy & Regulation
- Policy Implementation
- Informational Signals
- Political Communication
- Environmental Advocacy
- Sustainability Policies
- Environmental Justice



#### Aseem Prakash

Founding Director;
Professor, Department of
Political Science;
Walker Family Professor for
the College of Arts & Sciences

Our mission is to play a leadership role in producing and disseminating social science research on environmental politics, policy, and governance at local, regional, national, and global levels.

#### Institute Contact Info:

Email: <u>envirpol@uw.edu</u>

Phone: (206) 543-2780

• Box #: 353530

<u>UW Target Connections:</u> 1, 2, 3

# Center for Environmental Politics (cont.)



#### **Website** | Faculty



Zack Almquist Assistant Professor, Department of Sociology; Senior Data Science Fellow, eScience Institute



Sara Curran Professor, Jackson School of International Studies, Evans School of Public Affairs



Stephen M. Gardiner Professor, Department of Philosophy



Phoebe Bernard

Affiliate Professor, UW-Bothell



Nives Dolsak Professor and Director, School of Marine & Environmental Affairs



Benjamin Gardner Associate Professor, School of Interdisciplinary Arts & Sciences, UW-Bothell



Lance Bennett Professor (Emeritus), Department of Political Science



David Fluharty Associate Professor, School of Marine & Environmental Affairs



Martha Groom Professor, School of Interdisciplinary Arts & Sciences -UW Bothell; Professor, Dept. of Biology, UW-Seattle



Shannon Cram Assistant Professor, School of Interdisciplinary Arts & Sciences, UW-Bothell



Maria Elena Garcia Associate Professor, Jackson School of International Studies; Comparative History of Ideas

# Center for Environmental Politics (cont.)



#### <u>Website</u> | Faculty



Himanshu Grover Assistant Professor, Department of Urban Planning & Design



Shalini Sarin Jain Associate Professor of Management, Milgard School of Business, UW-Tacoma



Tom Koontz Professor, School of Interdisciplinary Arts & Sciences, Division of Science & Mathematics, UW-Tacoma



Stevan Harrell Professor (Emeritus), School of Environmental & Forest Sciences



Lucy Jarosz Professor (Emeritus), Department of Geography



Sabine Lang Professor, Henry M. Jackson School of International Studies



Jake Grumbach Assistant Professor, Department of Political Science



Sunila S. Kale Associate Professor, Jackson School of International Studies



Karen Litfin Professor, Department of Political Science



Christine Ingebritsen
Professor, Department of
Scandinavian Studies



Ryan Kelly Associate Professor, School of Marine & Environmental Affairs

# Center for Environmental Politics (cont.)



#### **Website** | Faculty



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Scott L. Montgomery Faculty, Jackson School of International Studies



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Peter May Professor (Emeritus), Department of Political Science



Timothy Nyerges Professor (Emeritus), Department of Geography



Todd Wildermuth Director, Environmental Law Program, School of Law



Victor Menaldo Professor, Department of Political Science



Joshua L. Reid Associate Professor, Department of History



Yen-Chu Weng Lecturer, Environmental Studies Program



David R. Montgomery Professor, Department of Earth & Space Sciences



Claire M. Ryan
Professor, School of Environmental
and Forest Sciences, College of the
Environment



Megan Ybarra Associate Professor, Department of Geography

# Center for Health and the Global Environment (CHanGE)

#### **Website | School of Public Health**

With partners inside and outside the UW, we vigorously pursue three linked priorities:

- action-oriented research,
- preparing the next generation of researchers and practitioners, and
- infusing health into decision support.



Jeremy Hess
MD, MPH, FACEP
Director
Associate Professor,
Departments of Emergency
Medicine, Environmental &
Occupational Health Sciences,
and Global Health

In 2014, we launched CHanGE with the vision of centering health in climate action. We believe health considerations should be at the forefront of efforts to reduce greenhouse gas emissions and to prepare for and respond to climate change impacts.

#### Institute Contact Info:

- Email: <a href="mailto:chge@uw.edu">chge@uw.edu</a>
- Phone: (206) 543-6342
- Box #: 354695

<u>UW Target Connections:</u> 1, 2, 3

# Center for Health and the Global Environment (cont.)

#### **Website** | Members



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Marci Burden Program Manager, CHanGE



Marty Cohen
Teaching Professor, Department
of Environmental & Occupational
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Tania Busch Isaksen Associate Professor, Undergraduate Coordinator, Department of Environmental & Occupational Health Sciences



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Nicole Errett Co-Directors, Collaborative on Extreme Event Resilience, Community Engagement Core



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Karen Levy Associate Professor, Department of Environmental & Occupational Health Sciences



Heather Burpee Research Associate Professor, Integrated Design Lab

# Center for Health and the Global Environment (cont.)

#### **Website** | Members



Katherine Foster Assistant Professor, Department of Psychology



Jon Ilgen Associate Professor, Department of Medicine; Associate Director, Center for Leadership & Innovation in Medical Education



Kelly M. Chang CHanGE Member



Howard Frumkin Senior Vice President, Trust for Public Land; Professor (Emeritus), Department of Environmental and Occupational Health Sciences



John Ji Adjunct Associate Professor, Global Health Research Center, Duke Kunshan University



Peter M. Rabinowitz Professor, Department of Environmental & Occupational Health Services; Director, Center for One Health Research



Derek Fulwiler Chief Strategy Officer, UW Population Health Initiative



Grace John-Stewart
Professor, Departments of Global
Health, Epidemiology,
Medicine-Allergy and Infectious
Diseases, and Pediatrics



Todd Mitchell CHanGE Member



Hilary Godwin
Dean, School of Public Health;
Professor, Department of
Environmental & Occupational
Health Services



Jairam R. Lingappa Professor, Departments of Global Health & Medicine - Allergy & Infectious Diseases; Adjunct Professor, Pediatrics

# Center for Health and the Global Environment (cont.)

#### **Website** | Members



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Administration, Department of
Global Health; CEO, UW - Kenya



Associate Professor & Assistant Chair, Department of Environmental & Occupational Health Sciences

June Spector



Yanfang Su Assistant Professor, Department of Global Health



Julie Rajaratnam Clinical Assistant Professor, Department of Global Health; Director, Monitoring, Evaluation, & Learning, PATH

# **Center for Studies in Demography** & Ecology



#### Website | 206 Raitt Hall | College of Arts & Sciences

CSDE is a community of faculty and students associated to advance population science through research and training. As a federally funded research center with over 70 years of experience, the CSDE community of scholars develops new demographic measures and methods, advances knowledge about population dynamics, generates new data and evidence to support population science, and trains the next generation of demographers.



Sara Curran MS. PhD Director Professor, Departments of International Studies. Sociology, & the Daniel I. Evans School of Public Policy & Governance

With over 100 research affiliates representing scientific endeavors and units across the entire UW campus, CSDE scholars apply innovative demographic measurements and methods to investigate human migrations and settlements, environments and population, health of people and populations, and well being of families and households.

#### Office Contact Info:

Email: csde@uw.edu Phone: (206) 616-7743

Box #: 35412

**UW Target Connections:** 1, 2, 3

# Center for Studies in Demography & Ecology (cont.)

#### <u>Website</u> | Staff



Zack Almquist Assistant Professor, Department of Sociology; Senior Data Science Fellow, eScience Institute

Administrator, Northwest Federal

Statistical Research Data Center

Carlos Becerra



Matt Dunbar
Affiliate Assistant Professor,
Department of Geography,
Science Lead, Spatial Research
Scientist, CSDE



Mark Ellis
Director, NWRDC



Jessica Godwin Statistical Demographer, CSDE; Training Director, Demographic Methods Certificate Program, CSDE



Steven Goodreau

Development Core Director, CSDE



Eleanor Brindle
Biodemography Director, CSDE



Grace Falken
Information RA



Deven Hamilton Senior Research Scientist & Engineer, CSDE



Gianna Cannataro *Program Coordinator, CSDE* 



Jill Fulmore Graduate Certificate Advisor, CSDE

# Center for Studies in Demography & Ecology (cont.)

#### <u>Website</u> | Staff



Phil Hurvitz Research Scientist, CSDE



Tyler McCormick Science Core PI, CSDE



Moris Vrachoski Security Analyst



Scott Kelly

Administrator, CSDE



Jeremy Pritchard Web Developer, CSDE



Matt Weatherford Computing Director



Alan Li Senior Computer Scientist, CSDE



Belinda Sachs Grants Manager, CSDE



Emily Lust
Computer Support Specialist,



Angie Thai
Budget/Fiscal Analyst

# Climate Impacts Group

#### Website | Campus Location | College of the Environment

The University of Washington Climate Impacts Group is widely recognized for scientific discovery, as an experienced creator of impartial and actionable science on identifying and managing climate risks, and as a catalyst and supporter of regional efforts to build climate resilience.



**Amy Snover** Director University Director, Northwest Climate Adaptation Science Center; Affiliate Associate Professor, School of Marine & **Environmental Affairs** 

The Climate Impacts Group develops and delivers scientific information that is both useful to and used by the decision making community by fully integrating research with stakeholder engagement.



#### Office Contact Info:

Email: cig@uw.edu

Phone: (206) 616-7903

Box #: 355674

**UW Target Connections:** 1, 2, 3, 5, 10

# Climate Impacts Group (cont.)

#### **Website** | Staff and Research Scientists





Jason Vogel Deputy Director, CIG



Guillaume Mauger Research Scientist, CIG



Andrew Shirk
Research Scientist, CIG



Erica Asinas Research Scientist, CIG



Anam Mehta Program Coordinator, CIG



Rishi Sugla Frontline Community Climate Resilience Scientist, CIG



Zach Kearl Research Scientist, CIG



Crystal Raymond Climate Adaptation Specialist



Zackary Thill
Climate Justice Research Program
Integration Specialist, CIG



Meade Krosby Senior Scientist, CIG; University Deputy Directory, Northwest Climate Adaptation Science Center



Matt Rogers Research Scientist, CIG

# Climate Impacts Group (cont.)

#### <u>Website</u> | Faculty





Jason Won Research Consultant, CIG



Tyler Hoecker Climate Adaptation Postdoctoral Fellow, Northwest Climate Adaptation Center



Jenny Dettman
Executive Assistant & Office
Manager, CIG; Program
Coordinator, Northwest Climate
Adaptation Science Center



Tess Wrobleski Communications Manager, CIG



Darcy Widmayer Communications Manager, Northwest Climate Adaptation Center

### **Clean Energy Institute**

#### Website | MoIES 220 | College of Engineering

Building a Clean Energy Future. At the Clean Energy Institute, the next generation of energy leaders are expanding the frontiers of research and developing facilities and tools to bring climate tech innovations to market.

The Clean Energy Institute (CEI) at the University of Washington was founded in 2013 with funds from the state of Washington. Our mission is to accelerate the adoption of a scalable clean energy future that will improve the health and economy of our state, nation, and world.



Daniel Schwartz

Advanced Degrees

Director

Boeing-Sutter Professor
of Chemical Engineering

CEI supports the advancement of next-generation solar energy and battery materials and devices, as well as their integration with systems and the grid. The Institute creates the ideas and educates the people needed to generate these innovations, while facilitating the pathways to bring them to market.



#### Office Contact Info:

Email: <u>uwcei@uw.edu</u>

Phone: (206) 221-9263

Box #: 351651

UW Target Connections: 1, 2, 3, 8, 10

#### **Website** | Leadership & Staff





David Ginger Chief Scientist, CEI; Alvin L. & Verla R. Kwiram Endowed Professor of Chemistry; Washington Research Foundation Distinguished Scholar



Danica Hendrickson Associate Director of Education & Workforce Engagement



Corin Shelley-Reuss Events & Communications Specialist



J. Devin MacKenzie
Technical Director, Washington Clean
Energy Testbeds; Washington Research
Foundation Associate Professor of
Clean Energy, Materials Science &
Engineering, Mechanical Engineering



Michael B. Pomfret Managing Director, Washington Clean Energy Testbeds



Kristine Parra Staff Scientist, Washington Clean Energy Testbeds



Amanda McCracken-Roberts
Collaboration Core Administrator



Madison Weaver Operations Manager



Sharay Rapozo
Administrative Coordinator



Suzanne Offen Associate Director of COmmunications & External Relations



Owen Freed *Communications Specialist* 

#### **Website** | Researchers





Stuart Adler Associate Professor, Department of Chemical Engineering



Karl F. Böhringer Professor, Departments of Electrical & Computer Engineering, & Bioengineering



Youngjun Choe Assistant Professor, Department of Industrial & Systems Engineering



M.P. (Anant) Anantram
Professor, Department of
Electrical & Computer Engineering



Guozhong Cao Professor, Department of Materials Science & Engineering



Jiun-Haw Chu Washington Research Foundation Innovation Assistant Professor, Department of Clean Energy & Physics



Payman Arabashahi Associate Professor, Department of Electrical & Computer Engineering



Ting Cao Assistant Professor, Department of Materials Science & Engineering



Corie Cobb Washington Research Foundation Innovation Associate Professor of Clean Energy & Mechanical Engineering



David Bergsman Assistant Professor, Department of Chemical Engineering



Chun-Long Chen Affiliate Associate Professor, Department of Chemical Engineering



Brandi Cossairt Professor, Department of Chemistry

#### **Website** | Researchers





James DeYoreo NW IMPACT Co-Director; Affiliate Professor, Departments of Chemistry and Materials Science & Engineering



Matthew Golder Assistant Professor, Department of Chemistry



Alex K-Y. Jen Professor (Emeritus), Department of Materials Science & Engineering



Scott Dunham Professor, Department of Electrical & Computer Engineering



Anne Goodchild Professor, Department of Civil & Environmental Engineering



Samson Jenekhe Professor, Department of Chemical Engineering



Kai-Mei Fu Associate Professor, Departments of Electrical & Computer Engineering and Physics



Hugh Hillhouse Professor, Department of Chemical Engineering



Brian Johnson Washington Research Foundation Professor of Clean Energy and Electrical & Computer Engineering



Daniel Gamelin UW MEM-C Director; Professor, Department of Chemistry



Vincent Holmberg Assistant Professor, Department of Chemical Engineering

#### **Website** | Researchers





Jessica Kaminsky Assistant Professor, Department of Civil & Environmental Engineering



Lih Lin Professor, Department of Electrical & Computer Engineering



Arka Majumdar Assistant Professor, Departments of Electrical & Computer Engineering and Physics



Daniel Kirschen Professor, Department of Electrical & Computer Engineering



Jun Liu Washington Research Foundation Innovation Chair in Clean Energy



Alexander Mamishev Professor, Department of Electrical & Computer Engineering



Hyun Woo "Chris" Lee Associate Professor, Department of Construction Management



Hong Ma Research Associate Professor, Department of the Materials Science & Engineering



David Masiello Professor, Department of Chemistry



Xiaosong Li Professor, Department of Chemistry



Donald MacKenzie Associate Professor, Department of Civil & Environmental Engineering

#### **Website** | Researchers





Shwetak Patel
Professor, Departments of
Computer Science & Engineering
and Electrical & Computer
Engineering



Jim Pfaendtner DIRECT Principle Investigator & Director; Professor & Department Chair, Department of Chemical Engineering



Lilo D. Pozzo Professor, Department of Chemical Engineering



John J. Rehr Professor (Emeritus), Department of Physics



Eleftheria Roumeli Assistant Professor, Department of Materials Science & Engineering



Walter van Schalkwijk Affiliate Professor, Department of Chemical Engineering



Cody Schlenker Washington Research Foundation Innovation Assistant Professor of Clean Energy & Chemistry



Gerald T. Seidler Professor, Department of Physics



C.J. Richard Shi Professor, Department of Electrical & Computer Engineering



Tom Spiro Professor, Department of Chemistry



Eric Stuve Professor, Department of Chemical Engineering

#### **Website** | Researchers





Venkat Subramanian Professor, Department of Mechanical Engineering



Junlan Wang Associate Professor, Department of Mechanical Engineering



Jihui Yang Professor & Department Chair, Department of Materials Science & Engineering



Jim Thomson Assistant Professor, Department of Civil & Environmental Engineering



Denise Wilson Assistant Professor, Department of Electrical & Computer Engineering



Matthew Yankowitz Washington Research Innovation Assistant Professor in Clean Energy & Materials Science & Engineering and Physics



Stéphanie Valleau Assistant Professor, Department of Chemical Engineering



Dianne Xiao Assistant Professor, Department of Chemistry



Baosen Zhang Professor, Department of Electrical & Computer Engineering



Alexandra Velian Assistant Professor, Department of Chemistry



Xiaodong Xu Professor, Departments of Materials Science & Engineering and Physics

### **EarthLab**

#### Website | College of the Environment

As a Carnegie-classified Community Engagement University, the University of Washington (UW) aspires to be the #1 university in the world as measured by impact. EarthLab is a visionary institute at the UW that pushes boundaries to address our most pressing environmental challenges, with urgency and action on climate and its intersection with social justice.



Ben Packard

Harriet Bullitt Endowed

Executive Director

EarthLab's mission is to push boundaries to develop innovative, just and equitable solutions to environmental challenges and climate action. We do this by connecting across sectors and academic disciplines to inspire and incentivize new partnerships that bridge the UW and the wider community.

#### Office Contact Info:

• Email: <u>earthlab@uw.edu</u>

• Phone: (206) 543-5045

Box #: 355674

<u>UW Target Connections:</u> 1, 2, 3, 5, 6, 9

### EarthLab (cont.)

#### **Website** | Core Team



Laura Davis Grants & Contracts Manager



Amy Oakley Innovation Grants Specialist



Rabia Ramzan *Fiscal Specialist* 



Mary Dwyer Administrator



Jessica Peyla Nagtalon Assistant to the Director



Hana Sawanobori *Financial Analyst* 



Allie Long
Marketing & Communications
Specialist



Kathleen Phan
Director for Advancement



Anastasia Ramey Grants Program Lead



### EarthLab (cont.)

#### **Website** | Faculty Steering Committee



Becky Alexander Professor and Director, Program on the Environment



Derek Fulwiler Chief Strategy Officer, UW Population Health Initiative



Peter Kahn Professor, Department of Environmental and Forest Sciences



Ann Bostrom Professor, Environmental Policy



Jeremy Hess, MD Director, The Center for Health and the Global Environment



Terrie Klinger Co-Director, Washington Ocean Acidification Center



Kyle Crowder

Blumstein-Jordan Professor,

Department of Sociology



Martha Groom
Professor, UW Bothell



Josh Lawler Professor & Director, Nature & Health



Sara Curran Professor, Jackson School of International Studies, Evans School of Public Affairs



Michelle Johnson-Jennings Professor, School of Social Work

### EarthLab (cont.)

#### **Website** | Faculty Steering Committee



Clarita Lefthand-Begay Assistant Professor, ISchool



Julian Olden Professor, School of Aquatic & Fisher Sciences



Daniel Schwartz

Director, Clean Energy Institute



Phil Levin
Professor, Department of
Environmental & Forest Sciences



Yoshitaka Ota Professor & Director, Nippon Foundation Ocean Nexus Center



Amy Snover
Director, Climate Impacts Group



Jan Newton Co-Director, Washington Ocean Acidification Center



Emily Cox Pahnke Associate Professor, Foster School of Business



Ken Yocom Associate Professor, Department of Landscape Architecture

### **Integrated Design Lab**

#### **Website** | College of Built Environments

The University of Washington's Center for Integrated Design (UW CID) is a Research Center operated by the Department of Architecture in the College of Built Environments at the University of Washington. Its research organization, the Integrated Design Lab (IDL), is a self-sustaining lab that includes interdisciplinary faculty, staff, students, professional collaborators, and partner organizations.



Christopher Meek

AIA, IES

Director

Associate Professor,
Department of Architecture

Our mission is to discover solutions that overcome the most difficult building performance barriers, and to meet the building industry's goals of moving towards radically higher performing buildings and healthy urban environments. We advance our mission through interconnected research, technical assistance, and professional educational and tour programs.

#### Office Contact Info:

• Phone: (206) 616-6566

<u>UW Target Connections:</u> 1, 2, 3, 8, 9, 10

# **Integrated Design Lab (cont.)**

#### **Website** | Senior Staff & Affiliated Faculty



Heather Burpee Research Associate Professor, IDL

Teresa Moroseos

Post-Doctoral Scholar



Deborah Sigler Tour Program Coordinator



Kate Simonen Associate Professor, Department of Architecture



Rob Peña Associate Professor & Undergraduate Program Coordinator, Department of Architecture



Joel Loveland Professor (Emeritus), IDL

### **COLLEGES & SCHOOLS**

#### List of Colleges and Schools

- College of Arts & Sciences
- College of Built Environments
- Michael G. Foster School of Business
- Paul G. Allen School of Computer Science & Engineering
- College of Education

- College of Engineering
- College of the Environment
- The Graduate School
- Henry M. Jackson School of International Studies
- School of Law
- The Information School

- School of Medicine
- <u>Daniel J. Evans School of</u>
   <u>Public Policy &</u>
   Governance
- School of Public Health
- School of Social Work
- <u>UW Tacoma</u>
- UW Bothell

### **COLLEGE OF ARTS & SCIENCES**

#### Website

The College of Arts & Sciences is at the heart of the University of Washington. As the UW's largest college, Arts & Sciences produces more than half of all bachelor's degrees on the Seattle campus. A third of our 24,000+ students are the first in their families to attend college. Faculty in our 39 academic departments are dedicated to helping students think critically, communicate clearly, and engage diverse perspectives respectfully. In Arts & Sciences, our discoveries in learning, teaching, and research engage us with our local, national and global communities — and with each other.

#### List of Departments

- American Indian Studies
- Anthropology
- Applied Mathematics
- Art + Art History + Design
- Biology
- Chemistry
- <u>Communication</u>
- Comparative History of Ideas
- <u>Economics</u>
- English
- French & Italian Studies
- Gender, Women & Sexuality
   Studies

- Geography
- German Studies
- <u>History</u>
- Philosophy
- Physics
- Political Science
- Psychology
- Scandinavian Studies
- <u>Sociology</u>
- Statistics

### **Carlos Becerra**

PhD Candidate, Geography, UC Davis MS, Community Development, UC Davis

#### Website

Carlos Becerra has joined CSDE as the new Northwest Federal Statistics Research Data Center (NWFSRDC) administrator at the University of Washington. Carlos holds an M.S. in Community Development from UC Davis, where he is also a PhD candidate in Geography. His research focuses on the intersection between immigration, socioeconomic inequality, and racialization in the US. He has experience using the ACS, CPS, and Census Decennial data through IPUMS, NHGIS, and the Census API. Carlos is passionate about knowledge dissemination and share the Census' core organizational believe that data-driven decision making is a key component for positive social change to occur. As an RDC Administrator, he will place particular attention to outreach strategies to attract researchers from underrepresented groups inside and outside academia so that they enjoy the benefits of accessing the wealth of data available at the RDCs.

**UW Target Links: 4** 

**SDG Links:** 1, 5, 8, 10, 16

#### Departments & Roles:

 <u>CSDE</u> | Northwest Federal Statistics Research Data Center Administrator

#### **Contact Information:**

• Email: <u>carlos.becerra@census.gov</u>



#### Areas of Expertise:

- Immigration
- Socioeconomic Inequality
- Racialization in the US

### **Deven Hamilton**

PhD, Sociology, University of Washington MA, Sociology, University of Washington MPH, Epidemiology, Emory University

#### **Website**

Deven Hamilton is a broadly trained sociologist and epidemiologist who has been an active researcher in the field of HIV/AIDS for 19 years including, several years as a research scientist in the private and academic sectors. Much of his work has focused on building agent based network models of HIV transmission in order to further our understanding of how the structure of the contact network and their interaction with behavior impacts HIV transmission dynamics and thereby the distribution of risk across populations. Hamilton has been working with world-renowned leaders in the field of network analysis and network epidemiology since 2001 and he is currently serving as a site PI on a CDC funded five-year cooperative agreement as well as a Co-Investigator and area expert on multiple NIH funded projects, all with the goal of designing a building modeling tools to further our understanding of HIV/STI transmission in different populations and contexts.

**UW Target Links: 3** 

**SDG Links:** 3, 5

#### Departments & Roles:

• <u>CSDE</u> | Senior Research Scientist and Engineer

#### **Contact Information:**

Email: <u>dth2@uw.edu</u>



#### Areas of Expertise:

- HIV/AIDS
- Agent Based Network Models
- Transmission Dynamics
- Network Analysis
- Network Epidemiology

### **Eleanor Brindle**

MA, Bioanthropology & Demography, Penn State

#### **Website**

Eleanor Brindle, M.A., became Director of the Biodemography Core for CSDF in 2005 Ms. Brindle is a highly-skilled laboratory research scientist with 12 years experience in biomarker development and application. Ms. Brindle was a founder of the reproductive endocrinology lab at Penn State, and has shepherded many large projects from initial conception, pilot work, and grant preparation to completion and publication in the lab, both at Penn State and UW.

**UW Target Links: 3** 

**SDG Links:** 7, 9

#### Departments & Roles:

• <u>CSDE</u> | Biodemography Core Director Areas of Expertise:

 Biomarker Development and Application

#### Contact Information:

• Email: <u>ebrindle@uw.edu</u>

• Phone: 206-543-9525

Office: Raitt218D

### **Jessica Godwin**

MS, Statistics, Auburn University

#### **Website**

Jessica Godwin is a Statistical Demographer and the Training Director for the Demographic Methods Certificate Program with CSDE. In her role as a Statistical Demographer, she will support the research of CSDE Affiliates and Trainees via consulting and the organization and facilitation of CSDE Workshops. Dr. Godwin received her PhD in Statistics from the University of Washington in 2021 and also completed CSDE's Graduate Certificate in Demographic Methods. She was also the recipient of two CSDE fellowships, one from NICHD and one from the Shanahan Endowment. Her dissertation work examined how to best estimate child mortality from various sources and to improve upon national and subnational estimates in places with sparse data.

#### **UW Target Links: 3**

**SDG Links:** 3, 5, 8, 11, 16, 17

#### Departments & Roles:

• <u>CSDE</u> | Statistical Demographer & Training Director

#### **Contact Information:**

Email: jlg0003@uw.edu



#### Areas of Expertise:

- Demography
- Bayesian Spatio-Temporal Methods
- Survey Statistics

### **Phil Hurvitz**

MA, Forest Resources, UW College of Forest Resources PhD, Urban Design and Planning, UW

#### **Website**

Phil Hurvitz joined CSDE as a research scientist in 2019 to lead the UW Data Collaborative. He works closely with CSDE's IT group to assure that the servers are maintained to provide a high level of performance and a high level of security. Phil is also available for research support and consulting for students, staff, and faculty as part of CSDE's research support infrastructure. He can provide guidance on geographic information systems analysis, database management, processing of large data sets, use of ubiquitous sensing devices such as global positioning system data loggers and accelerometers, and automation of data processing.

<u>UW Target Links:</u> 1, 2, 3, 4, 5, 6, 10

**SDG Links:** 3, 4, 12, 13, 17

#### Departments & Roles:

- <u>CSDE</u> | Research Scientist
- Urban Form Lab | Researcher and Informatics Lead

#### Areas of Expertise:

- GIS Analysis
- Database Management
- Large Data Set Processing;
- Ubiquitous Sensing Devices
- Automation of Data Processing

#### **Contact Information:**

Email: phurvitz@uw.edu

### **American Indian Studies**

#### College of Arts & Sciences | Website

The development of an American Indian Studies Center at the University of Washington began in the spring of 1970 following student protests calling for more diversity of UW's curriculum, faculty, staff and students. A group of Native American students came together in a class to discuss the aims of such a program and the educational processes required to establish it. The American Indian Studies Center began in Autumn Quarter, 1970, with both Indian and non-Indian faculty involvement from departments that included Anthropology, Art, English, History, Sociology, and Political Science, as well as the Burke Museum.

That small center has now grown to an established Department, one of only a handful in the entire United States, with a major, two minors, a Graduate Certificate, and an affiliated research center. The Department of American Indian Studies has become the home for indigenous knowledge at the University of Washington and we work to contribute to the growing field of Indigenous Studies with our world-class faculty, students, and staff.

#### List of Related Individuals

- Clarita Lefthand-Begay
- <u>Jose Antonio Lucero</u>
- <u>loshua L. Reid</u>
- María Elena García
- Megan Ybarra
- P. Joshua Griffin

### P. Joshua Griffin (he/him)

PhD, Anthropology, University of Washington, 2019 MDiv, Theology and Religious Studies, Harvard University, 2009

#### Website

P. Joshua Griffin is an environmental anthropologist working at the intersections of Indigenous studies, political ecology, critical social science, and climate change. His community-engaged research focuses on Arctic Indigenous ecologies, climate change, environmental health, food sovereignty, hunting and fishing governance/rights, and environmental planning. More broadly, he is interested in approaches to "climate adaptation" that center Indigenous sovereignty and self-determination; participatory digital methods to support Indigenous environmental history, cultural heritage and planning; coastal dynamics, sea level rise, and climate-induced migration; and social movements for environmental and climate justice, including faith-based movements.

**UW Target Links:** 1, 3, 6

**SDG Links:** 1, 2, 3, 4, 5, 6, 10, 11, 12, 13, 14, 16, 17

#### Departments & Roles:

 American Indian Studies and Marine & Environmental Affairs
 Assistant Professor

#### **Contact Information:**

- Email: pjgriff@uw.edu
- Phone
- Building: PDL C-514D



#### Areas of Expertise & Interest:

- American Indian/Native American
- Arctic
- climate change
- Critical Theory
- Environmental Justice
- Ethnography
- Food Sovereignty
- Indigenous
- Religion
- Social Justice
- Sovereignty
- Sustainability
- Traditional Ecological Knowledge

### **Anthropology**

#### **College of Arts & Sciences | Website**

Anthropologists at the University of Washington share a commitment to advancing understanding of human diversity. Reflecting the organization of our discipline as a whole, our department is organized into sub disciplinary programs that focus on different aspects of human diversity (the human past, the human body, and contemporary social life), each employing the specific theoretical and conceptual tools appropriate to its particular emphasis. We thus pursue our shared commitment through research and teaching that draws on a strikingly diverse array of humanistic and scientific approaches: from evolutionary theory to critical social theory, mathematical modeling, thermoluminescence dating, bioassays, social network analysis, archival research and sustained participant observation. Many of our research foci, meanwhile, cross-cut subdisciplines and have been reflected in our curricular developments including options and/or areas of emphasis in Environmental Anthropology, Medical Anthropology and Global Health, and Anthropology of Globalization.

#### List of Related Individuals

- Ben Fitzburgh
- Celia Lowe
- María Elena García
- Peter Lape
- Stevan Harrell
- Steven Goodreau

# Ben Fitzhugh (he/him/his)

PhD, Anthropology, University of Michigan, 1996 MA, Anthropology, University of Michigan, 1992

#### **Website**

My research focuses on human-environmental dynamics and archaeological histories of maritime/coastal hunter-gatherers especially in the North Pacific. This research addresses questions of human vulnerability and resilience in remote subarctic environments. I collaborate widely with scholars across a range of disciplines in atmospheric, earth and biological sciences and take an historical ecological perspective on human adjustments to (and of) environments in which they live. Recent efforts include the development of international collaborations to explore the ecological & archaeological histories of the North Pacific Rim.

**UW Target Links:** 1, 3, 10

**SDG Links:** 10, 11, 13, 17

#### Departments & Roles:

- <u>Anthropology</u> | Professor
- <u>CSDE</u> | Research Affiliate

#### Contact Information:

- Email: <u>fitzhugh@uw.edu</u>
- Phone: (206) 543-9604
- Building: 242 Denny Hall



- Archaeology: Indigenous, Arctic, & Subarctic
- Climate Change
- Demography
- Ecology
- Behavioral & Human
- Environment

### Celia Lowe (she/her/hers)

PhD, Yale University, 1999

#### **Website**

Celia Lowe is Professor of Anthropology and International Studies and Director of the Southeast Asia Center at the University of Washington. Her work in Indonesia concerns the travels of scientific knowledge, especially biological knowledge, between EuroAmerica and Southeast Asia. Her first book. Wild Profusion: Biodiversity Conservation in an Indonesian Archipelago, published by Princeton in 2006, examined the role of Indonesia's conservation biology in the creation of a new national park. She is currently working on a book on the recent H5N1 avian influenza outbreak in Indonesia and is interested in the way new forms of biosecurity and risk were in play in relation to the disease. She contributes to work in the fields of science and technology studies, environmental humanities, and Southeast Asian studies.

**UW Target Links: 3, 10** 

**SDG Links:** 9, 11, 13, 17

#### Departments & Roles:

- <u>Anthropology</u> | Professor
- <u>International Studies</u> | Professor
- Southeast Asia Center | Director

#### **Contact Information:**

- Email: <u>lowe@uw.edu</u>
- Phone: (206) 543-5386
- Building: 117 Denny Hall



#### Areas of Expertise:

- Science & Technology
- Sociocultural Anthropology
- Southeast Asian
- Multispecies Ethnography
- Indonesia
- Environment & Health

### Peter V. Lape

PhD, Anthropology, Brown University, 2000 MA, Museum Studies, San Francisco State University, 1995

#### **Website**

My research focuses on understanding social change in Island Southeast Asia over the last 5,000 years. I have been particularly interested in island landscapes and seascapes, cross cultural interactions such as trade and warfare, human-environment interactions and climate change. I also have an interest in archaeology practice, cultural resource management and public archaeology in the Seattle area.

**UW Target Links:** 1, 3, 6

**SDG Links:** 4, 6, 11, 12, 13, 14, 17

#### Departments & Roles:

- <u>Anthropology</u> | Professor
- Burke Museum

#### **Contact Information:**

• Email: <u>plape@uw.edu</u>

• Phone: (206) 685-9364

Building: 129 Denny Hall



- Agriculture;
- Archaeology: Community, Historical, & Landscape
- Climate Change
- Material Culture
- Museum Studies/Museology
- Religion
- Southeast Asian
- Trade Networks
- Island Seascapes

### **Stevan Harrell**

PhD, Stanford University, 1974

#### **Website**

My primary professional interests while I was actively employed lay in building collaborations between earth scientists and social scientists to understand better how people relate to their environments, and to using the knowledge from these collaborations to help local people solve local problems. Theoretically, this meant a combination of ethno-ecology and resilience theory; substantively, it meant looking at the historical relations between people and natural resources, particularly forests; and geographically, it happens mostly in Liangshan, China, but also in Taiwan and in Washington State. Implications of this interest have led me to co-found the Yangjuan Primary School in Liangshan and the Cool Mountain Education Fund. My other interests are in building scholarly community across cultural barriers. particularly with scholars in China, and in promoting international student exchange. This in turn gives me reason to be interested in translation, particularly between the English and Chinese languages.

**UW Target Links:** 1, 3, 6

SDG Links: 4, 10, 11, 12, 13, 16, 17

#### Departments & Roles:

 Anthropology | Professor Emeritus

#### **Contact Information:**

Email: stevehar@uw.edu



- Culture
- Demography
- Ecology
- Environment
- Material Culture
- Race and Ethnicity
- Sociocultural
- Anthropology
- China and Taiwan

### Steven Goodreau (he/him/his)

Ph.D., Anthropology, The Pennsylvania State University, 2001 M.A., Anthropology, The Pennsylvania State University, 1996

#### **Website**

Steven Goodreau's research has two related themes: how does the complex biobehavioral ecology of HIV produce disparities in disease burden within and between populations; and how can we make more statistically sound use of social network data to understand the structure of populations and the flow of infections or other entities within them? Since joining the UW faculty seven years ago, he has published on these topics in Demography, AIDS, the Journal of the American Statistical Association, Genetics, Social Networks, the Journal of Infectious Disease, AIDS and Behavior, and eight others.

**UW Target Links: 3** 

**SDG Links:** 3, 5, 9, 11, 17

#### Departments & Roles:

- <u>Anthropology</u> | Professor
- <u>CSDE</u> | Research Affiliate
- <u>Epidemiology</u> | Adjunct Professor

#### **Contact Information:**

- Email: goodreau@uw.edu
- Phone: (206) 685-3870
- Building: M236 Denny Hall



- Anthropology: Biological & Medical
- Computational Methods
- Demography
- Health Disparities & HIV
- Human Disease Ecology
- Public Health
- Sexuality
- Statistics

### **Applied Mathematics**

#### **College of Arts & Sciences** | Website

Applied and computational mathematics incorporates interdisciplinary study in the physical, engineering, and biological sciences. We provide dynamic and engaging graduate training that is especially strong in scientific computing and modern mathematical methods and in the application areas of mathematical biology, nonlinear waves and coherent structures, mathematical finance, and climate modeling.

Since its creation, the department has preserved, advanced, disseminated applied mathematical knowledge. Today the department hosts a vibrant community of scholars dedicated to conducting world-class interdisciplinary research in the physical, biological, and engineering sciences. We currently have some 16 faculty, 14 adjunct faculty, 50 doctoral students, and 300 master's students carrying out the research and teaching missions of the department.

#### List of Related Individuals

- Chris Bretherton
- David Masiello
- Ka-Kit Tung
- Mark Kot

# **Christopher (Chris) Bretherton**

PhD, Mathematics, Massachusetts Institute of Technology, 1984

#### **Website**

Professor Bretherton received his doctorate in Mathematics in 1984 from the Massachusetts Institute of Technology, and in 1985 joined the UW Department of Applied Mathematics. Since 1988 he has been jointly appointed with the Department of Atmospheric Sciences. Prof. Bretherton studies cloud formation and turbulence and improves how they are simulated in global climate and weather forecast models. His research includes participating in field experiments and observational analyses. three-dimensional modeling of fluid flow in and around fields of clouds, and understanding how clouds will respond to and feedback on climate change. Computer code developed by his research group for simulating the effects of subgrid cumulus cloud formation is used in the two leading US climate models. He was a lead author of the Intergovernmental Panel on Climate Change Fifth Assessment Report in 2013,

**UW Target Links: 3** 

**SDG Links:** 1, 3, 11, 13, 14, 17

#### Departments & Roles:

- Applied Mathematics and Atmospheric Sciences | Professor (Emeritus)
- Allen Institute for Artificial Intelligence | Senior Director of Climate Modeling

#### Contact Information:

- Email: <u>breth@amath.washington.edu</u>
- Phone: (206) 685-7414
- Building: 704 Atmospheric Science



#### Areas of Expertise:

- Atmospheric Sciences
- Climate Modeling
- Computational Methods
- Fluid Mechanics
- Geophysical Sciences

# **Ka-Kit Tung**

B.S. and M.S., Aeronautical Engineering, California Institute of Technology, 1972 Ph.D., Applied Mathematics, Harvard University, 1977

## Website

Professor Tung received his baccalaureate and master's degrees at the California Institute of Technology, both in 1972, in the field of Aeronautical Engineering. He earned his doctorate degree in Applied Mathematics at Harvard University in 1977, where he also stayed on for two more years as a postdoc before moving on to MIT. first as an Assistant Professor of Applied Mathematics and then as an Associate Professor. He became a John Simon Guggenheim Fellow in 1985. Professor Tung joined the Department as Professor of Applied Mathematics in 1988 and became Department Chair in August 1993, a position he held until July 2007. He is currently the Frederic and Julia Wan Endowed Professor. He was the Chief. Editor of Journal of Atmospheric Sciences until 2013.

**UW Target Links: 3** 

**SDG Links:** 1, 3, 11, 13, 17

### Departments:

- Applied Mathematics | Frederic
   & Julia Wan Endowed Professor
- Atmospheric Science | Adjunct Professor

#### **Contact Information:**

- Email: tung@amath.washington.edu
- Phone: (206) 685-3794
- Building: 323 Lewis



## Areas of Expertise:

- Atmospheric Sciences
- Climate Modeling
- Geophysical Fluid
- Mechanics
- Global Warming

## **Mark Kot**

PhD, Ecology and Evolutionary Biology, University of Arizona, 1987 MS, Ecology and Evolutionary Biology, University of Arizona, 1987 MS, Applied Mathematics, University of Arizona, 1984 MS, Theoretical and Applied Mechanics, Cornell University, 1979

## Website

Mark Kot earned a B.A. in Physics and Applied Mathematics from New College (Sarasota, FL) in 1977, an M.S. in Theoretical and Applied Mechanics from Cornell University (Ithaca, NY) in 1979, an M.S. in Applied Mathematics from the University of Arizona (Tucson, AZ) in 1984, and an M.S. and Ph.D. in Ecology and Evolutionary biology from the University of Arizona (Tucson, AZ) in 1987. He was a faculty member at the University of Tennessee (Knoxville, TN) during 1987-1989 and 2000-2005 and first joined the Department of Applied Mathematics in 1990. His research lies at the interface between applied mathematics and ecology and evolutionary biology. He models the dynamics of biological populations and has focused, in recent years, on the behavior of integrodifference equations, i.e., on discrete-time, continuous-space models for the growth and spread of biological populations. These models are commonly used to model the spread of invasive organisms and to model the response of organisms to climate change.

### **UW Target Links: 3**

**SDG Links: 13, 15** 

## Departments & Roles:

 Applied Mathematics | Associate Professor

#### Contact Information:

Email: mark kot@comcast.net

• Phone: (206) 543-0908

Building: 230B Lewis



## Areas of Expertise:

- Mathematical Ecology
- Evolutionary Biology
- Biological Population Dynamics
- Organism Response to Climate Change

# Art + Art History + Design

## **College of Arts & Sciences** | Website

The School of Art + Art History + Design is the center for creative innovation and study at the University of Washington, one of the world's leading public research institutions. The School's focus on interdisciplinary collaboration and the development of new practices enhances both studio and classroom learning as well as fostering dynamic engagement and critical discourse. Our students are inspired to learn through a rigorous and creative academic experience, competitive internships, and international opportunities. Learning from influential faculty, alumni, visiting artists, designers, and scholars, students of our undergraduate, masters, and doctoral programs investigate and create in an environment of possibility.

## List of Related Individuals

Philip Govedare

# Philip Govedare (he/him/his)

MFA, Tyler School of Art, 1984

## **Website**

Philip Govedare has received numerous awards including an individual artist fellowship from the National Endowment for the Arts in 1993, a Pollock-Krasner Foundation Award in painting in 1991, and a Fellowship in Visual Arts from the Pennsylvania Council on the Arts in 1988. He has exhibited his work in New York. Philadelphia, Pittsburgh, San Francisco, San Jose, Houston, Seattle, and Rome, Italy. His solo exhibitions include the Morris Gallery of the Pennsylvania Academy of Fine Art, Paul Cava Gallery where he was represented in Philadelphia, and Francine Seders Gallery in Seattle. His numerous interdisciplinary collaborations include the American Association of Geographers, and his essay "Altered Landscapes" is in the book Geohumanities: Art, History, Text at the Edge of Place published in 2011.

**UW Target Links:** 1, 3, 5, 6

**SDG Links:** 4, 9, 12, 13

## Departments & Roles:

- Art + Art History + Design |
   Professor, Painting + Drawing
- <u>Comparative History of Ideas</u> Paris Program Co-Director

#### **Contact Information:**

- Email: <u>pgov@uw.edu</u>
- Campus-Building: ART 314



## Areas of Expertise:

- Drawing
- Painting
- Northwest Environmental Art
- Prehistoric and Post-Apocalyptic Landscapes

# Biology

## **College of Arts & Sciences | Website**

We are an integrative department taking a connective approach to the life sciences, fostering collaboration and intellectual partnerships across many different disciplines. The research and teaching we do spans from cellular and molecular biology to global climate change, and from bacterial microevolution in the lab to evolution and extinctions hundreds of millions of years ago. Unlike most other biology departments, ours is unique in its integration across organismal and organizational boundaries, its open and collaborative atmosphere, and the broad set of units and programs at the UW (and beyond) in which our faculty and students participate (e.g., Friday Harbor Labs, Allen Institute, Burke Museum). We relish working at the boundaries and across disciplines and are excited to find new ways to do so. We are not only the largest UW department, but also the largest producer of STEM degrees in Washington. Our success as a department is driven by the curiosity of our faculty, students, postdocs, and staff. They uphold our research and education missions through the quality of their work in classrooms, labs, field sites, and beyond. We recognize that diversity and diverse connections within our community are essential for generating novel ideas and approaches, and are working hard to create a truly equitable, inclusive and accessible department to promote such diversity. Come join the next generation of educators, researchers, policy leaders, and entrepreneurs!

## List of Related Individuals

- Abigail Swann
- Curtis Deutsch
- Daniel Schindler
- Dee Boersma
- Emily Carrington
- Janneke-Hille Ris Lambers
- <u>lennifer Ruesink</u>
- <u>Iulia Parrish</u>
- Lauren Buckley
- Lisa Graumlich
- Martha Groom

## **Dee Boersma**

PhD, Zoology, Ohio State University, 1974

## **Website**

Dr. Boersma received her B.Sc. Honors from Central Michigan University in 1969, and her Ph.D. in Zoology, from Ohio State University in 1974. Her thesis was titled: The Galapagos Penguin: A Study of Adaptations for Life in an Unpredictable Environment." Dr. Boersma holds the Wadsworth Endowed Chair in Conservation Science at the University of Washington, and since 1998 has been a professor of Biology in the Biology Department and an adjunct faculty member in the Women Studies Department. Dr. Boersma has published numerous articles in scientific journals, and is the founder and current Executive Editor of Conservation, an award-winning conservation magazine she launched in 2000.

#### **UW Target Links: 3**

**SDG Links: 6, 13, 14, 15, 17** 

### Departments & Roles:

- <u>Biology</u> | Professor
  - <u>Women's Studies</u> | Adjunct Professor
- Center for Ecosystem Sentinels | Director

#### Contact Information:

- Email: boersma@uw.edu
- Phone: (206) 616-2185
- Building: A023A PAA



## Areas of Expertise:

- Conservation Biology
- Ecology
- Seabirds as Indicators for Environmental Change

# **Emily Carrington**

PhD, Biological Sciences, Stanford University, 1992

## **Website**

Dr. Carrington studied Biological Sciences at Cornell University (BA 1985) and Stanford University (PhD 1992). She was a postdoctoral fellow at the University of British Columbia before joining the faculty of the Department of Biological Sciences at the University of Rhode Island in 1995. She has been on the faculty of the UW Department of Biology since 2005, splitting her time between the Seattle campus and Friday Harbor Laboratories. From 2016-2019, she served as a Program Director at the National Science Foundation in Alexandria, VA in the Directorate for Biological Sciences.

**UW Target Links:** 3

**SDG Links:** 6, 14

## Departments & Roles:

• <u>Biology</u> | Professor

### Areas of Expertise:

- Biomechanics
- Ecology
- Marine Biology
- Functional Design of Organisms
- Ocean Warming and Acidification

#### **Contact Information:**

Email: ecarring@uw.edu

Phone: (201) 221-4676

Building: 461 LSB

# **Jennifer Ruesink**

PhD, Zoology, University of Washington, 1996 MPhil, Botany, Cambridge University, 1990

## **Website**

The lab emphasizes field experimental approaches to test responses and feedbacks between organisms and their environment, primarily in estuarine soft sediment systems. Current areas of research include controls of life history and morphological traits in eelgrass, community structure in oyster and eelgrass habitats, restoration strategies for native oysters, environmental impacts of shellfish aquaculture, and recruitment variability and phenology under climate warming.

### **UW Target Links: 3**

**SDG Links:** 6, 11, 14, 15

## Departments & Roles:

- Biology | Professor
- Aquatic & Fishery Sciences | Adjunct Professor

#### Contact Information:

- Email: ruesink@u.washington.edu
- Phone: (206) 543-7095
- Building: 453 LSB



## Areas of Expertise:

- Conservation Biology
- Ecology
- Marine Biology
- Natural History
- Plant Biology
- Estuarine Soft Sediment Systems
- Eelgrass
- Oyster Restoration Strategies
- Climate Warming

# **Julia Parrish**

PhD, Schooling Behavior of Fish, Duke Marine Lab

## **Website**

Julia K. Parrish is a marine scientist whose research follows three major routes: marine conservation, seabird ecology, and citizen science. She is the Executive Director of the Coastal Observation and Seabird Survey Team (COASST), a project that enlists participants from California to Alaska to walk beaches in search of dead birds and marine debris. Additionally, she is Associate Dean of Academic Affairs at the College of the Environment. She holds the Lowell A. and Frankie L. Wakefield Endowed Professorship, is a AAAS fellow, a Leopold Leadership Fellow, and was one of 12 "Champions of Change" invited to the White House to speak on public engagement in science, and scientific literacy.

<u>UW Target Links:</u> 1, 3, 5, 6, 9, 10

**SDG Links:** 4, 6, 11, 12, 13, 14, 15

## Departments & Roles:

- Biology | Professor
- Aquatic and Fishery Sciences | Professor

#### Contact Information:

- Email: jparrish@uw.edu
- Phone: (206) 221-5787
- Building: 202A FSH



## Areas of Expertise:

- Conservation Biology
- Ecology
- Evolution & Systematics
- Seabird Biology and Conservation
- Conservation Solutions

# **Lauren Buckley**

PhD, Biological Sciences, Stanford University, 2005

## **Website**

Lauren Buckley's research is focused on improving forecast of ecological and evolutionary responses to climate change. She majored in Biology and Math as an undergrad at Williams College, conducted graduate research in Biology at Stanford University, and held postdoctoral fellowships at the National Center For Ecological Analysis and Synthesis and the Santa Fe Institute. She has been recognized as an NSF CAREER awardee, a National Academy of Sciences Kavli Frontiers of Science Fellow, and a Future Leader at the Science and Technology in Society Forum.

**UW Target Links:** 3

**SDG Links:** 13, 15, 17

### Departments & Roles:

• <u>Biology</u> | Professor

#### Contact Information:

• Email: <u>lbuckley@uw.edu</u>

• Phone: (206) 616-6108

Building: 449 LSB



## Areas of Expertise:

- Ecology
- Evolution & Systematics
- Physiology
- Ecoinformatics
- Biogeography
- Montane Butterflies and Grasshoppers
- Climate Change

# Chemistry

## **College of Arts & Sciences | Website**

Chemistry is the science that studies matter, the stuff of which all things are made. Chemists study the composition, structure, properties, and reactions of matter on the molecular scale and larger. Chemists also discover and synthesize entirely new materials. Modern chemistry touches many other fields of science, engineering, and medicine. Chemistry will continue to provide critical solutions to intellectually exciting and societally important problems. A student wishing to study chemistry or biochemistry and undertake cutting-edge research in the Pacific Northwest has a nationally and internationally recognized option at the University of Washington.

## List of Related Individuals

- Alexandra Velian
- Brandi M. Cossairt
- Cody Schlenker
- Chun-Long Chen
- Daniel Gamelin
- <u>David Ginger</u>
- David Masiello
- Dianne Xiao

- Eric Stuve
- <u>lames De Yoreo</u>
- Matthew Golder
- Samson Jenekhe
- Tom Spiro
- W. lim Pfaendtner
- Xiaosong Li

## **Alexandra Velian**

PhD, Massachusetts Institute of Technology, 2014

## **Website**

Alexandra Velian's research group is pursuing the total synthesis of atomically-precise inorganic nanomaterials for catalytic, electronic and quantum information applications. In 2020, Alexandra received the NSF Career award funding work on elucidating and harnessing metal—support interactions in single atom catalysts using designer nanoclusters as functional models.

**UW Target Links:** 3, 5, 8, 10

**SDG Links:** 7, 9, 12

## Departments & Roles:

- <u>Chemistry</u> | Assistant Professor
- <u>CEI</u> | Bernard and Claudine Endowed Fellow Member Faculty

## Areas of Expertise:

- Catalysis
- Clean Energy
- Inorganic Chemistry
- Materials
- Solar Energy
- Energy Storage

#### Contact Information:

- Email: <u>avelian@uw.edu</u>
- Phone: (206) 616-5179
- Building: CHB 304C

## Brandi M. Cossairt (she/her)

PhD, Massachusetts Institute of Technology, 2010

## **Website**

Brandi Cossairt received her B. S. in Chemistry from the California Institute of Technology in 2006. Brandi went on to pursue graduate studies at the Massachusetts Institute of Technology under the guidance of Professor Christopher C. Cummins and was awarded her Ph.D. in 2010. She then continued her academic career as an NIH NRSA Postdoctoral Fellow at Columbia University between 2010 and 2012 working with Professor Jonathan Owen. Brandi joined the Department of Chemistry at the University of Washington as an Assistant Professor in 2012 and was promoted to Associate Professor with Tenure in 2018. Her research group examines the nucleation, growth, surface chemistry, and reactivity of nanoscale materials to enable next-generation technologies in the diverse areas of displays, lighting, catalysis, quantum information, and hybrid matter.

**UW Target Links: 3, 8** 

SDG Links: 7, 9

## Departments & Roles:

- <u>Chemistry</u> | Lloyd E. and Florence M. West Endowed Professor
- <u>CEI</u> | Member Faculty

#### **Contact Information:**

- Email: cossairt@uw.edu
- Phone: (206) 543-4643
- Building: CHB 304D



## Areas of Expertise:

- Catalysis
- Clean Energy
- Inorganic Chemistry
- Materials
- Solar Energy
- PV Materials & Devices
- Solar
- Hydrogen

# Cody Schlenker (he/him/his)

PhD, Chemistry, University of Southern California, 2010

## **Website**

Professor Schlenker received his B.S. in Chemistry from Linfield College in 2004. He then conducted graduate research with Professor Mark E. Thompson at University of Southern California, studying photophysics of organic optoelectronic devices. After earning his Ph.D. in Chemistry, he worked with Professor David S. Ginger at University of Washington, studying excited-state dynamics of semiconducting polymers as an NSF SEES Postdoctoral Fellow. In 2014 he joined the University of Washington Department of Chemistry Faculty as an Assistant Professor, where he is also a member of the UW Clean Energy Institute (CEI), and the Molecular Engineering & Sciences Institute.

**UW Target Links:** 3, 8, 10

**SDG Links:** 7, 9

## Departments & Roles:

- <u>Chemistry</u> | Assistant Professor
- <u>CEI</u> | Member Faculty

#### **Contact Information:**

- Email: schlenk@uw.edu
- Phone: (206) 221-8627
- Building: BAG 296



## Areas of Expertise:

- Physical Chemistry
- Clean Energy
- Materials
- Catalysis
- Solar Energy
- Energy Storage
- PV Materials & Devices
- Battery Materials & Devices

## **Daniel R. Gamelin**

Ph.D., Chemistry, Stanford University, 1998

## **Website**

Daniel Gamelin is the director of the UW Molecular Engineering Materials Center (MEM·C) and the Harry and Catherine Jaynne Boand Endowed Professor of Chemistry. Prof. Gamelin received his Ph.D. in Chemistry from Stanford University in 1998. His research targets the development and physical characterization of new functional inorganic materials with unusual electronic structures that give rise to desirable photophysical, photochemical, chemical, electronic, magnetic, or magneto-optical properties. He is the recipient of the NSF CAREER Award. Presidential Early Career Award for Scientists and Engineers, a Sloan Research Fellowship, and is a Fellow of the AAAS.

**UW Target Links: 3, 8, 10** 

**SDG Links:** 7, 9

## Department(s):

 <u>Chemistry</u> | Nicole A. Boand Endowed Chair & Professor

#### **Contact Information:**

Email: gamelin@uw.edu

Phone: (206) 685-0901

Building: CHB 404B



## Areas of Expertise:

- Solar Energy
- Inorganic Materials
- Catalysis
- Clean Energy
- Inorganic Chemistry
- Materials
- Physical Chemistry
- PV Materials & Devices

# **David Ginger**

PhD, Physics, University of Cambridge, 2001

## **Website**

His research centers on the physical chemistry of conjugated polymers and nanostructured materials with applications in optoelectronics – especially thin film solar cells – and sensing. Ginger has been recognized by the Research Corporation, Alfred P. Sloan Foundation, Camille and Henry Dreyfus Foundation, NSF, ACS, and the Microscopy Society of America, and was elected a Fellow of the AAAS in 2012.

**UW Target Links:** 3, 8, 10

**SDG Links:** 7, 9

## Departments & Roles:

- <u>Chemistry</u> | Alvin L. and Verla R.
   Kwiram Endowed Professor
- <u>CEI</u> | Chief Scientist
- <u>Physics</u> | Adjunct Professor
- NW IMPACT | Founding Co-Director

#### **Contact Information:**

- Email: dginger@uw.edu
- Phone: 206-685-2331
- Building: BAG 202B



## Areas of Expertise:

- Analytical Chemistry
- Clean Energy
- Materials
- Physical Chemistry

## **David Masiello**

Ph.D., Chemical Physics, University of Florida, 2004 B.S., Mathematics, University of Florida, 1999

## **Website**

Professor Masiello's research focuses on the theoretical understanding of a variety of nanoscale light-matter interactions in plasmonics, nanophotonics, and quantum optics. Particular emphasis is placed upon bringing insight and understanding to experiment through the formulation of simple yet rich theoretical models. David is also an adjunct professor of Applied Mathematics and Materials Science and Engineering at UW. David is a recipient of an NSF CAREER Award in 2013 and a Presidential Early Career Award (PECASE) awarded by President Ohama in 2016

**UW Target Links: 3, 8** 

**SDG Links:** 7, 9

## Departments & Roles:

- <u>Chemistry</u> | Nist Endowed Professor
- Applied Mathematics | Adjunct Professor
- <u>CEI</u> | Affiliate Faculty

#### **Contact Information:**

Email: masiello@uw.edu

• Phone: 206-543-5579

Building: CHB 304F



## Areas of Expertise:

- Materials
- Physical Chemistry
- Theory and Computation
- Electron and Optical Spectroscopy and Microscopy
- Plasmonics
- Nanophotonics
- Quantum Optics

## **Dianne Xiao**

PhD, University of California–Berkeley, 2016

## Website

The Xiao research group develops new strategies to control the structure of porous frameworks and dense coordination solids across multiple length scales, from the molecular to the nano-, meso-, and macroscale. In particular, we are interested in how controlling both the local and long range self-assembly and structure of porous materials can lead to enhanced transport properties, new catalytic activity, and novel emergent behavior. Students in the Xiao research. group will receive training in synthesis (inorganic, organic, materials), characterization (spectroscopy, diffraction. electrochemistry, gas sorption, electron microscopy), and catalysis.

**UW Target Links:** 3, 8, 10

**SDG Links:** 7, 9

## Departments & Roles:

- <u>Chemistry</u> | Assistant Professor
- <u>CEI</u> | Affiliate Faculty

#### Contact Information:

- Email: djxiao@uw.edu
- Phone: 206-543-4136
- Building: CHB 304H



## Areas of Expertise:

- Catalysis
- Clean Energy
- Inorganic Chemistry
- Materials

# James J. De Yoreo

PhD, Cornell University, 1985

## **Website**

The research interests of the De Yoreo group can be broadly categorized as understanding and manipulating the physics of interactions and assembly at solid-liquid interfaces in nanoscale, biological, biomimetic, and environmental systems. The primary techniques used in support of this work are *in situ* scanned probe microscopy and *in situ* transmission electron microscopy (TEM), in combination with theoretical analysis.

**UW Target Links: 3, 8** 

**SDG Links:** 7, 9

## Departments & Roles:

- <u>Chemistry</u> | Affiliate Professor
- Materials Science & Engineering Affiliate Professor
- <u>CEI</u> | Member Faculty

#### Contact Information:

- Email: James.DeYoreo@pnnl.gov
- Phone: 509-375-6494
- Building: Pacific Northwest National Laboratory



## Areas of Expertise:

- Biophysics
- Clean Energy
- Materials
- Physical Chemistry

## Matthew Golder (he/him)

PhD, University of Oregon, 2015

## **Website**

Matt's research team is in a unique position to utilize synthetic chemistry to build novel macromolecular architectures that address challenges spanning energy, sustainability, and biomedicine. The discovery of structural motifs spanning a variety of size regimes requires innovative approaches to construct and link functional building blocks, thus requiring an expertise in both organic synthesis and polymer chemistry. Some representative goals of our research team include the design of methodology to access functional cyclic polymers, development of reconfigurable crosslinked polymer networks, and construction of force-responsive soft materials.

**UW Target Links: 3, 8** 

SDG Links: 7, 9

### Departments & Roles:

- <u>Chemistry</u> | Assistant Professor
- <u>CEI</u> | Affiliate Faculty

#### **Contact Information:**

- Email: goldermr@uw.edu
- Phone: 206-616-8195
- Building: CHB 204H



## Areas of Expertise:

- Catalysis
- Materials
- Organic Chemistry

# **Tom Spiro**

PhD, Massachusetts Institute of Technology, 1960

## **Website**

Thomas Spiro moved his laboratory to University of Washington in 2007 after a long career on the faculty of Princeton University, where he was chair of the Chemistry Department. The role of metal ions in biology has been the principal theme of his research. His laboratory pioneered the application of laser resonance Raman spectroscopy, including time-resolved techniques, to the structure and reactivity of metalloproteins, and to the mechanisms of protein folding and allostery. At Princeton, he developed courses in environmental chemistry, and co-authored a text-book. Chemistry of the Environment.

**UW Target Links:** 3

**SDG Links:** 11, 16, 17

### Departments & Roles:

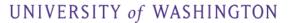
- <u>Chemistry</u> | Professor
- <u>CEI</u> | Affiliate Faculty

## Areas of Expertise:

- Catalysis
- Clean Energy
- Inorganic Chemistry
- Physical Chemistry
- Bioinorganic Chemistry
- Spectroscopy
- Biomineralization
- Environmental Chemistry

#### **Contact Information:**

- Email: spiro@chem.washington.edu
- Phone: 206-685-4964
- Building: BAG 219



# Xiaosong Li

PhD, Chemistry, Wayne State University, 2003

## **Website**

Following a post-doctoral training at the Yale University, he joined the University of Washington as Assistant Professor in the fall of 2005. He was promoted to Associate Professor in 2011 and to Full Professor in 2015. Currently, he is the Harry and Catherine Jaynne Boand Endowed Professor and Associate Chair of Chemistry at the University of Washington, Lab Fellow at the Pacific Northwest National Lab, and Adjunct Professor of Materials Science and Engineering. His research focuses on developing and applying time-dependent relativistic and non-relativistic electronic structure theories for studying excited state chemical processes that underpin energy conversion, photocatalysis, and ultrafast spectroscopies.

**UW Target Links:** 3, 8, 10

**SDG Links:** 4, 7, 9

## Departments & Roles:

- <u>Chemistry</u> | Harry and Catherine Jaynne Boand Endowed Professor
- Applied Chemical Science & Technology
   Master's Program | Director
- <u>Graduate Education</u> | Associate Chair
- <u>CEI</u> | Member Faculty

#### Contact Information:

• Email: xsli@uw.edu

Phone: 206-685-1804

• Building: BAG 305A



## Areas of Expertise:

- Chemistry Education
- Clean Energy
- Materials
- Physical Chemistry
- Theory and Computation

## Communication

## **College of Arts & Sciences** | Website

The Department of Communication at the University of Washington is committed to rigorous, relevant scholarship that speaks to public challenges and promotes social progress. We foster and teach equitable and ethical communicative practices in an intellectually diverse, innovative, and interdisciplinary environment.

Communication is foundational to our political, cultural, and economic systems; our interpersonal relationships; and to the constitution of our individual and collective identities in an increasingly diverse and globalized world. The ability to connect, communicate, and collaborate on issues and ideas has never been more critical. As such, Communication as a field of study has never been more relevant, with partisan rhetoric dominating the news; social media and data analytics reshaping public life; seismic paradigm shifts transforming journalism and politics; and our personal, familial, and community interactions facing new challenges. Our department is a leader in the field for relevant, engaged scholarship that advances our discipline, prepares our students for a changing professional and civic landscape, and fosters connections within and outside the academy. We share the University of Washington's commitment to "being public," and we embrace our role as global citizens, rooted in a dynamic local community.

### List of Related Individuals

Lance Bennett

# Comparative History of Ideas

## **<u>College of Arts & Sciences</u>** | Website

CHID is a one-of-a-kind department where students enjoy the freedom of an interdisciplinary liberal arts degree within the context of a renowned research university. Our award-winning faculty and staff help students explore their passions and deepen their understanding of the world.

By introducing students to the interrelation of ideas and society, Comparative History of Ideas demonstrates the need to consider intellectual problems from many perspectives. The goal of the department is to develop the tools of critical thinking in each student. We hope to engender an attitude of personal engagement and creativity within students. We encourage them to think for themselves, and to think critically about the world and the categories we use to understand it. In addition, the department seeks to inculcate a sense of the importance of a disciplined and interdisciplinary methodology as a means to investigate intellectual problems, while at the same time revealing the inherent weaknesses and limitations of any system.

#### List of Related Individuals

- lason Groves
- <u>lose Antonio Lucero</u>
- María Elena García
- Megan Ybarra
- Philip Govedare
- Richard Watts
- Sunila S. Kale

## **Economics**

## **College of Arts & Sciences** | Website

Economics studies the institutions and arrangements that are used to create, protect, and allocate scarce resources that have alternative uses. It advances our understanding of the behavior of individuals, firms, governments and other organizations. Economics' deep intellectual roots, rigorous analytic methods, and powerful ability to explain and evaluate social phenomena make it an exceptionally rewarding field of study.

Established in 1917, Economics is one of the largest and oldest departments in the College of Arts & Sciences, offering the BA, BS, MA, and PhD. Our faculty strengths include econometrics, finance, macroeconomics, international economics, industrial organization, environmental economics, development economics, and microeconomic theory.

#### List of Related Individuals

Robert Halvorsen

## **Robert Halvorsen**

PhD, Economics, Harvard University, 1973 MPA, Harvard University, 1968 MBA, Harvard University, 1965

## **Website**

No Bio Information Found



**SDG Links:** 8, 9, 17

## Departments & Roles:

• <u>Economics</u> | Professor

#### Contact Information:

- Email: halvor@uw.edu
- Phone: 206-543-5546
- Building: Savery 351



## Areas of Expertise:

- Environmental Economics
- Applied Microeconomics
- Resource Economics

# **English**

## **College of Arts & Sciences | Website**

The Department of English is large and programmatically diverse. We offer a BA and a Minor on the undergraduate level, and we have three graduate programs, MA/Ph.D., MFA, and MAT(ESOL). We include three writing programs: Expository Writing, Interdisciplinary Writing, and Creative Writing. In addition to running several public scholarship initiatives, we oversee multiple community-oriented teaching and training programs. Our faculty work in such areas as British, American, colonial and postcolonial Anglophone literatures and cultures; literary and critical theory; creative writing in poetry and prose; antiracist, feminist, queer, and Indigenous studies; applied linguistics, history of English, and language acquisition; contemporary rhetoric; pedagogy; and composition studies.

To study English is to experience the power of literature, language, and culture. We take pride in our foundational role in the university: more than 90% of undergraduates take an English class, presenting a unique responsibility for our department to provide students with writing and reading skills that undergird their studies and professional lives. Our students engage with and transform public culture through creative work and through literary, linguistic, and cultural analysis. Our research plays a vital role in the tradition of humanistic inquiry: making visible the workings of the English language in myriad genres, media, contexts, and global settings and exploring its usage and teaching ethically and creatively. As researchers, educators, and writers, we seek to foster intellectual vitality, inspire enthusiasm for literature, hone critical insight, prepare future teachers, and craft the stories that animate our world.

### List of Related Individuals

- lason Groves
- <u>Jesse Oak Taylor</u>

# Jesse Oak Taylor

(he/him/his

PhD, English, University of Wisconsin-Madison, 2010 MA, English, University of Wisconsin-Madison, 2005

## **Website**

My research focuses on industrialization and empire in the nineteenth century and their relevance for tracing the emergence of the Anthropocene, a proposed designation within the Geologic Time Scale (GTS) acknowledging human disruption of the Earth System. I teach courses on Victorian Britain and the British Empire, especially centered on Darwin and evolutionary theory, and the environmental humanities.

**UW Target Links:** 1, 3, 5, 6

**SDG Links:** 4, 9, 11, 12, 13

### Departments & Roles:

- <u>English</u> | Associate Professor
- Undergraduate Programs | Director

#### **Contact Information:**

- Email: jot8@uw.edu
- Phone: 206-616-0563
- Building: PDL A-405



## Areas of Expertise:

- 19th Century
- British
- Culture
- Ecocriticism
- Environment
- Literature
- Modernism
- Novel/Pros
- Fiction
- Postcolonial
- Science and Technology
- Climate change
- the Anthropocene
- Conservation

## French & Italian Studies

## **College of Arts & Sciences** | Website

To prepare our students to become leaders in an increasingly diverse society by providing them with French and Italian cultural literacy in dialogue with global contexts, and professionally relevant linguistic, research, interpretive, and expressive skills and tools. Students learn to understand their multilingual, multicultural world in historical perspective, to convincingly convey this understanding to others in both English and one or both of our target languages, and to articulate and implement the career transferability of their skills.

#### List of Related Individuals

• Richard Watts

## **Richard Watts**

(he/him/his

PhD, Yale University

## **Website**

Richard Watts has research and teaching interests in the post/colonial francophone world. He is the author of Packaging Post/Coloniality: The Manufacture of Literary Identity in the Francophone World (Lexington Books, 2005), which considers how the presentation of books - their covers, illustrations, dedications, and, most significantly, prefaces - functioned as instruments of cultural translation. and allowed the works to pass from the post/colonial space of their production to the largely metropolitan French space of their consumption.

**UW Target Links:** 1, 3, 5, 6

**SDG Links:** 3, 4, 6, 9, 11, 12, 13

## Departments & Roles:

• French | Associate Professor

#### **Contact Information:**

- Email: rhwatts@u.washington.edu
- Phone: (206) 685-1618
- Building: PDL C-255



## Areas of Expertise:

- 20th Century
- 21st Century
- Ecocriticism
- Francophone
- Literature
- Postcolonial
- Translation and Interpretation

# Gender, Women & Sexuality Studies

## **College of Arts & Sciences** | Website

The Department of Gender, Women & Sexuality Studies at the University of Washington draws on feminist thought to foreground transformative intersectional and transnational analyses of social formations such as race, ethnicity, class, gender, and sexuality as they are shaped in conjunction with local and global, political and economic histories and structures. Our research innovates and enlivens academic and public debates using books, articles, archive development, exhibit curation, digital media production, poetry, performance, and community engagement. Our histories of innovative public engagement are both wide and rich.

Social justice concerns have been central to our mission from the beginning. As individual scholars and as a department, our research is dedicated to the analysis of historical and contemporary intersectional feminist praxis in the realms of feminist technologies and creative practice; gender equality, queer, and trans rights; indigenous, immigrant, labor, and environmental rights; prison abolition, Black Lives Matter, and anti-war movements; and other on- and offline mobilizations that advance justice-minded paradigms across the Global South and North and imagine new worlds.

#### List of Related Individuals

- Christine Ingebritsen
- Dee Boersma

# Geography

## College of Arts & Sciences | Website

Geography faculty are interested in the reciprocal interactions and relationships between people and the environment. Our research themes, methods, and conceptual frameworks cross rigid disciplinary boundaries and over the years we have forged numerous long-lasting connections to other departments and units on campus. These include strong ties with the School of Public Health; Gender, Women and Sexuality Studies; the Center for Studies in Demography and Ecology; the Law, Societies, and Justice Program; the Jackson School of International Studies; and the Simpson Center for the Humanities.

Faculty scholarship reflects these interdisciplinary affiliations, with prominent research projects covering a wide range of inquiry. Recent research projects include mapping the geographies of carbon emissions and consumption, examining processes of urbanization and migration in China, understanding the locational choices of UW immigrants, comparing middle class poverty politics across the Americas, examining the spatial regulation of gay people's bodies and spaces in pre-AIDS Seattle, investigating the militarization of environmental conservation in Guatemala, mapping children's educational politics, and a multidisciplinary collaboration examining the processes or urbanization in American cities.

#### List of Related Individuals

- Benjamin Gardner
- Jin-Kyu Jung
- <u>lose Antonio Lucero</u>
- <u>Lucy Jarosz</u>
- María Elena García
- Mark Ellis
- Matthew Dunbar
- Megan Ybarra
- Santiago Lopez
- Shannon Cram
- Timothy Nyerges

# Lucy Jarosz (She/Her)

PhD, University of California, Berkeley, 1990

## **Website**

Most recently, I have been analyzing and comparing food security policy and food sovereignty discourses in their relationship to world hunger in a series of articles and book chapters. I have also examined questions of vulnerability in alternative food networks in the urbanizing landscapes of the Pacific Northwest and the feminist political ecology of alternative agriculture. I am currently working on an analysis of food and eating in Quebec and its relationship to class and gender formation among rural and working class French-Canadians

**UW Target Links:** 6, 7

**SDG Links:** 1, 2, 5, 8, 10, 11, 16, 17

## Departments & Roles:

- <u>Geography</u> | Professor Emerita
- African Studies | Professor & Chair

#### **Contact Information:**

• Email: jarosz@uw.edu



## Areas of Expertise:

- Agriculture
- Economics
- Environment
- Feminism and Feminist Theory
- Food
- Poverty
- Research Methods

## **Mark Ellis**

(he/him/Mark)

PhD, Indiana, 1988

## **Website**

Mark Ellis's research over the past decade has been devoted to answering two broad but related questions about the geographies of racial and ethnic groups in the US: How and why does immigrant settlement geography change? And how can we understand the dynamics of change in race and ethnic geographies in US cities? In the last decade he has published on these topics in Annals of the Association of American Geographers, Ethnic and Racial Studies, Progress in Human Geography, Economic Geography, International Migration Review, Journal of Ethnic and Migration Studies, and Proceedings of the National Academy of Sciences.

**UW Target Links: 4, 7** 

**SDG Links:** 5, 8, 10, 11, 16, 17

## Departments & Roles:

- Geography | Professor
- <u>CSDE</u> | NWRDC Director

#### **Contact Information:**

• Email: ellism@uw.edu

Phone: (206) 616-6207



## Areas of Expertise:

- Immigration
- Migration
- Segregation
- Labor
- Statistical Methods

## **Matt Dunbar**

PhD, Geography, University of Kansas, 2010

## **Website**

Matt joined CSDE's Methods and Data Core in 2008 to lead the development of a research infrastructure for spatial analysis. He came to CSDE with over seven years of Geographic Information Systems (GIS) research experience. At CSDE he has developed relationships with and supported the spatial analysis research needs of our center's faculty affiliates to use GIS to collect/create. store, manage, display and analyze spatial demographic data. Broad areas of GIS services provided for affiliates' research includes mobile data collection. (phone devices with GPS), mapping/ cartography, geocoding/ address-matching, GIS database creation, archiving, and management, spatial data acquisition, spatial statistics and customized programming.

**UW Target Links: 3** 

SDG Links: 17

## Departments & Roles:

- CSDE | Science Lead, Spatial Research Specialist
- <u>Geography</u> | Affiliate Assistant Professor

#### **Contact Information:**

- Email: mddunbar@uw.edu
- Phone: 206-543-7685
- Building: Raitt 218E



## Areas of Expertise:

- Geographic Information Systems (GIS)
- Spatial Analysis Research

# **Megan Ybarra**

(she/her/hers)

PhD, UC Berkeley

## **Website**

Megan Ybarra is an associate professor in the Department of Geography. As a human geographer, she is interested in radical placemaking, abolition geographies and environmental justice across Abiayala (also known as the Américas). Her research has included archival research of community records and planning documents, surveys, participant observation and institutional ethnographies to explore the workings of power relations and promise of liberation. She advises graduate students in the MA/PhD program who are researching abolition, migration, environmental justice and/or Latinx geographies.

**UW Target Links:** 1, 2, 3, 4, 6

**SDG Links:** 4, 5, 10, 11, 12, 13, 15, 16

### Departments & Roles:

- <u>Geography</u> | Associate Professor
- American Indian Studies and Comparative History of Ideas | Adjunct Associate Professor

#### Contact Information:

- Email: mybarra@uw.edu
- Phone: (206) 616-5033
- Building: SMI 303C



## Areas of Expertise:

- Environment
- Immigration
- Indigenous
- Migration
- Public Scholarship
- Race and Ethnicity
- Radical Pedagogy
- Environmental Justice
- Latinx geographies
- Abolition
- Activist scholarship

# **Timothy Nyerges**

Ph.D., Geography GIS, Ohio State University, 1980 M.A., Geography Cognitive Studies, Ohio State University, 1976

## **Website**

Dr. Timothy Nyerges' research and teaching specialties include geographic information systems and science, spatial decision support systems and group decision making, geodesign, water, land use/cover, transportation, coastal sustainability management, sustainability modeling using GIS, and fledgling development of sustainability information science.

**UW Target Links:** 5, 7, 10

**SDG Links:** 5, 6, 9, 10, 11, 14, 15, 16, 17

## Departments & Roles:

- <u>Geography</u> | Professor Emeritus
- <u>Sustainability Management</u>
   Program | Director
- <u>Urban Design & Planning</u> | Affiliate Professor

#### Contact Information:

• Email: nyerges@uw.edu



## Areas of Expertise:

- Environment
- Geographic Information Systems
- Research Methods
- Sustainability
- Participatory GIS for Decision Support
- Watersheds
- Coastal GIS
- Resilience
- Sustainability Information Science

## **German Studies**

## **College of Arts & Sciences** | Website

Through innovative teaching and engaging programming, UW's Department of German Studies aims to provide inclusive learning environments that support critical inquiry and historical understanding, expose students to different cultural perspectives, facilitate sustained inquiry into questions of identity and identity-making, and empower students to understand and challenge normativities and injustices.

We understand German Studies to be a springboard for sustained inquiry into contemporary political and social issues, including the workings of race, class, gender, and sexuality, as well as their historical origins. With language as a primary focus, we integrate socially critical questions and critical self-reflection across all course levels. Through student-centered teaching approaches, we seek to ensure that students can connect their studies to their lives and learning objectives. While our programs enable students to acquire transferable skills for a variety of careers, we would like to highlight and promote the social benefits of our programs, specifically where they build students' capacity for civic engagement and societal transformation.

#### List of Related Individuals

- lason Groves
- Sabine Wilke

## Jason Groves

(he/him/his

PhD, German, Yale University, 2012 MA, German Studies, Johns Hopkins University, 2006

## **Website**

In 2020 The Geological Unconscious: German Literature and the Mineral Imaginary appeared with Fordham University Press. In this book I trace the withdrawal of the earth as a reliable setting, unobtrusive backdrop, and stable point of reference for literature written well before the current climate breakdown Generous reviews have appeared in German Studies Review, Modern Language Quarterly, Monatshefte, symploke, and The Germanic Review. More recently, my translation of Sonja Neef's monograph, The Babylonian Planet: Culture and Encounter Under Globalization, appeared with Bloomsbury late in 2021.

**UW Target Links:** 1, 2, 3, 5, 6

**SDG Links:** 4, 5, 9, 10, 11, 12, 13

## Departments & Roles:

- German Studies and Comparative
   History of Ideas | Associate Professor
- English | Department Affiliate
- Undergraduate Programs Coordinator
- Honors Advisor

#### **Contact Information:**

- Email: jagroves@uw.edu
- Phone: (206) 221-2566
- Building: DEN 342



## Areas of Expertise:

- Ecocriticism
- Global and Transnational Studies
- Jewish Studies
- Literary Criticism
- Performance Studies
- Poetry and Poetics
- Public Scholarship
- Translation and Interpretation

## **Sabine Wilke**

(she/her/hers

Ph.D., University of Mainz (Germany), 1986

## Website

Sabine Wilke's research and teaching interests include modern German literature and culture, intellectual history and theory, cultural and visual studies, and the environmental humanities. She has written books and articles on body constructions in modern German literature and culture, German unification, the history of German film and theater, contemporary German authors and filmmakers, German colonialism, and the German environmental imagination. Most recently, Wilke was involved in a larger project about German colonialism and postcoloniality with a focus on the Pacific. With assistance from the Alexander von Humboldt Foundation Wilke founded a transatlantic research network on the environmental humanities and is now focusing on environmental criticism, in particular questions of waste, climate, non-humans, and the Anthropocene.

**UW Target Links:** 1, 3, 5, 6, 9, 10

**SDG Links:** 4, 9, 11, 12, 13

## Departments & Roles:

 German Studies | Joff Hanauer Distinguished Professor in Western Civilization & Department Chair

#### Contact Information:

- Email: wilke@uw.edu
- Phone: (206) 543-4580
- Building: DEN 360



## Areas of Expertise:

- Austrian
- Critical Theory
- Culture
- Ecocriticism
- German
- Literature
- Postcolonial

## **History**

## **College of Arts & Sciences** | Website

We are a highly accomplished community of teachers and scholars. Our expertise spans the globe – from the Pacific Northwest and the United States to Asia, Europe, Latin America, the Middle East, and Africa – and extends across human history, from ancient and medieval times through to the early twenty-first century. Many of us are engaged in teaching and research projects that examine the myriad ways in which religion, ethnicity, race, class, and gender have shaped the patterns of human experience. Faculty, graduate, and undergraduate students in the History Department also collaborate on a wide variety of digital history initiatives focusing on diverse thematic, geographic, and temporal areas.

#### List of Related Individuals

• <u>loshua L. Reid</u>

# Joshua L. Reid

(he/him/his)

Ph.D., University of California at Davis M.A., University of California at Davis

## **Website**

Professor Reid's research interests include American Indians, identity formation, cultural meanings of space and place, the American and Canadian Wests, the environment, and the indigenous Pacific. He teaches courses on American Indian History, the American West, U.S. History, and Environmental History.

**UW Target Links:** 1, 3, 6, 9

**SDG Links:** 4, 5, 10, 11, 12,13, 14, 16

## Departments & Roles:

- <u>History</u> | John Calhoun Smith Memorial Endowed Professor
- American Indian Studies | Associate Professor
- Center for the Study of the Pacific Northwest | Director

#### Contact Information:

- Email: jlreid@uw.edu
- Phone: (206) 616-3661
- Building: SMI 203D



## Areas of Expertise:

- 19th Century
- American Indian/Native American
- Borderlands
- Comparative Colonialisms
- Indigenous
- Maritime History
- North American West
- Pacific Northwest
- Pacific Worlds
- U.S. Environmental
- United States

# **Philosophy**

## College of Arts & Sciences | Website

The Department of Philosophy at the University of Washington is a community of philosophers with an expansive vision and an outward focus. We aspire to practice "engaged philosophy," believing that our discipline has vital contributions to offer all areas of inquiry. We aim, through our teaching and research, to foster interdisciplinary conversations in which philosophical tools and methods are brought to bear upon problems and topics of public interest.

#### We are committed to:

- building an inclusive community of scholars who thrive on diverse perspectives
- pursuing innovative research agendas that have impact beyond the walls of the academy
- embracing evidence-based teaching methods that inspire all our students and enable them to cultivate the skills of lifelong learners
- training graduate students for impactful professional careers
- demonstrating the value of philosophical inquiry across campus and in the local, regional, and global communities we inhabit

#### List of Related Individuals

• Stephen Gardiner

# **Stephen Gardiner**

(He/him/his)

PhD, Philosophy, Cornell University, 1999

## **Website**

Steve is the author of A Perfect Moral. Storm (Oxford, 2011), and co-author of Debating Climate Ethics (Oxford, 2016) and Dialogues on Climate Justice (Routledge, in press). He is also the editor of Virtue Ethics. Old and New (Cornell, 2005) and the Oxford Handbook of Intergenerational Ethics (Oxford, in press), and co-editor of the Oxford Handbook of Environmental Ethics (Oxford, 2016), Climate Ethics: Essential Readings (Oxford, 2010) and The Ethics of "Geoengineering" the Global Climate: Justice, Legitimacy and Governance (Routledge, 2020). His research focuses on global environmental problems, future generations and virtue ethics.

**UW Target Links:** 1, 3, 4, 6, 10

<u>SDG Links:</u> 1, 3, 4, 5, 10, 11, 12, 13, 16

## Departments & Roles:

- <u>Philosophy</u> | Professor
- Program on Ethics | Director
- Ben Rabinowitz Endowed
   Professor of Human Dimensions
   of the Environment

#### **Contact Information:**

- Email: smgard@uw.edu
- Phone: 206-221-6459
- Building: 390 Savery Hall



## Areas of Expertise:

- Applied Ethics
- Climate Change
- Environment
- Ethics
- Greek (Classical)
- Human Rights
- Political Philosophy

## **Physics**

## **College of Arts & Sciences** | Website

The University of Washington has taught Physics since the late 1800's. A distinct Department of Physics is first listed in the 1905 general catalogue. Some notable portions of the Department's history are recounted here.

Ongoing research in the Department of Physics covers many areas. These include searches for new particles and forces, connections between quantum information and gravity, and studies of the collective behavior of many particle systems ranging from nuclei to nanostructures to living cells to neutron stars. See our research pages for more information.

#### List of Related Individuals

- Arka Majumdar
- David Ginger
- Gerald T. Seidler
- <u>liun-Haw Chu</u>
- <u>John J. Rehr</u>
- Kai-Mei Fu
- Lih Lin
- <u>LuAnne Thompson</u>
- Matthew Yankowitz
- M. P. (Anant) Anantram
- Xiaodong Xu

# **Arka Majumdar**

PhD, Electrical Engineering, Stanford University (2012) MS, Electrical Engineering, Stanford University (2012)

## **Website**

Prof. Arka Majumdar is an Associate Professor in the departments of Electrical and Computer Engineering and Physics at the University of Washington (UW). His research interests include developing a hybrid nanophotonic platform using emerging material systems for optical information science, imaging, and microscopy. Majumdar is the recipient of multiple Young Investigator Awards from the AFOSR (2015), ONR (2020), NSF (2019) and DARPA (2021), Intel early career faculty award (2015), Amazon Catalyst Award (2016), Alfred P. Sloan fellowship (2018). UW college of engineering outstanding junior faculty award (2020) and iCANX Young Scientist Award (2021). He is co-founder and technical advisor of Tunoptix, a startup commercializing software defined meta-optics.

**UW Target Links: 3, 8** 

**SDG Links:** 7, 9

### Departments & Roles:

- Physics and Electrical & Computer Engineering Associate Professor
- <u>CEI</u> | Affiliate Faculty

#### **Contact Information:**

- Email: arka@ece.uw.edu
- Phone: 206-616-5558
- Building: M230 ECE



## Areas of Expertise & Interest:

- Condensed Matter Experiment
- Quantum Information
- Nano- and Quantum Photonics
- Low Power Optoelectronics
- Advanced Energy Materials

# Gerald (Jerry) T. Seidler

Advanced Degree, Topic, School, Year

## **Website**

Jerry Seidler is a Professor of Physics at the University of Washington. His research emphasizes the use of synchrotron x-ray light sources to study problems in basic, applied, and environmental energy science. This includes experiments on materials for battery electrodes, supercapacitors, photovoltaic cells, actinide fuels for fission reactors, and catalysts for both hydrocarbon cracking and for fuel cells. His group also plays an important role in the development of new x-ray spectroscopies for general users of the Department of Energy light sources, including especially instrument development for inelastic x-ray scattering and x-ray emission spectroscopy.

**UW Target Links: 3, 8, 10** 

**SDG Links:** 7, 9

## Departments & Roles:

- <u>Physics</u> | Professor
- <u>CEI</u> | Member Faculty

#### **Contact Information:**

- Email: seidler@uw.edu
- Phone: 206-616-8746
- Building: B448



## Areas of Expertise & Interest:

- Condensed Matter Experiment
- Advanced Energy Materials
- X-ray Spectroscopy

# Jiun-Haw Chu

PhD, Applied Physics, Stanford University, 2012

## **Website**

My primary research goals are directed towards discovery and understanding of novel collective behaviors in quantum materials. Particular examples include unconventional superconductivity emerging near a quantum critical point, and exotic Weyl/Dirac excitations in semimetals with strong spin-orbit coupling. My research group focuses on crystal growth, thermodynamic and magnetic measurements, and novel experimental techniques that utilize strain to probe and manipulate the symmetry properties of materials.

**UW Target Links: 3, 8** 

SDG Links: 7, 9

## Departments & Roles:

- <u>Physics</u> | Associate Professor
- <u>CEI</u> | Member Faculty
- Washington Research Foundation Innovation Assistant Professor of Clean Energy & Physics

#### Contact Information:

- Email: jhchu@uw.edu
- Phone: 650-862-2808
- Building: B452, B023, B021



## Areas of Expertise & Interest:

- Condensed Matter Experiment
- Design, growth and characterization of novel quantum materials for energy application, such as high temperature superconductors and topological insulators
- Advanced Energy Materials
- Quantum Materials

## John J. Rehr

Advanced Degree, Topic, School, Year

## **Website**

John J. Rehr is Professor Emeritus of Physics at the University of Washington. Professor Rehr's main interests related to clean energy lie in first principles calculations of electronic structure, excited states, optical response and x-ray probes of systems relevant to energy research. His group's x-ray spectroscopy codes FEFF are used worldwide in many energy research applications.

**UW Target Links:** 3, 7, 8, 10

SDG Links: 7, 9

## Departments & Roles:

- <u>Physics</u> | Professor Emeritus
- <u>CEI</u> | Member Faculty

#### Contact Information:

- Email: jjr@uw.edu
- Phone: 206-543-8593
- Building: B456

## Areas of Expertise & Interest:

- Condensed Matter Theory
- X-Ray Spectroscopy
- Advanced Energy Materials

## Kai-Mei Fu

PhD, Applied Physics, Stanford University 2007 MS, Applied Physics, Stanford University 2003

## **Website**

As director of the Quantum Defects Lab, Kai-Mei Fu's research focuses on identifying and controlling the quantum properties of point defects in crystals, which has potential applications for both information and sensing technologies. Fu has been honored with an NSF CAREER Award, the Cottrell Scholar Award and the UW College of Engineering Junior Faculty Award. She is the co-chair of the UW OuantumX Steering Committee, Director of the NSF National Research Traineeship: Accelerating Quantum-Enabled Technologies, Deputy Director of the DOE Co-design Center for Quantum Advantage and holds a dual appointment with the Pacific Northwest National Laboratory.

**UW Target Links:** 3, 8, 10

**SDG Links:** 7, 9

## Departments & Roles:

<u>Physics</u> and <u>Electrical & Computer Engineering</u>
 Associate Professor

#### Contact Information:

Email: kaimeifu@uw.edu

Phone: 206-543-2787

Building: B445, B065, B069



## Areas of Expertise & Interest:

- Atomic Physics
- Condensed Matter Experiment
- Quantum Information
- Single-Impurity
   Optoelectonics
- Photonics and Nano Devices
- Semiconductor-Based Photonics
- Fundamental understanding of how defects enhance/degrade clean-energy device performance
- Advanced Energy Materials

## **Matthew Yankowitz**

PhD, Physics, University of Arizona, 2015

## **Website**

The Yankowitz Lab is an experimental condensed matter physics laboratory at the University of Washington in Seattle. We specialize in the investigation and control of novel electronic states in quantum materials, with a focus on atomically-thin van der Waals materials and heterostructures.

Our research probes the nature of topology, correlations, magnetism, and symmetry in these materials. We characterize devices at low temperatures and in high magnetic fields with a combination of electrical transport measurements and scanning probe microscopy.

**UW Target Links: 3, 8** 

**SDG Links:** 7, 9

## Departments & Roles:

- <u>Physics</u> and <u>Materials Science & Engineering</u> | Assistant
   Professor
- WRF Innovation Assistant Professor in Clean Energy

#### Contact Information:

- Email: myank@uw.edu
- Phone: (206) 543-1685
- Building: PAB B435



## Areas of Expertise & Interest:

- Electronic, Optical & Magnetic Materials
- Materials Physics
- Condensed Matter Experiment
- Quantum Information
- Two-Dimensional Quantum Materials

# Xiaodong Xu

PhD, Physics, University of Michigan, Ann Arbor, 2008

## **Website**

We are interested in understanding the optical, electronic, and quantum properties of novel solid state nanostructures by nanoscale device design, optical spectroscopy, electrical transport, and scanning photocurrent measurements.

**UW Target Links: 3, 8** 

**SDG Links:** 7, 9

## Departments & Roles:

- <u>Physics</u> and <u>Materials Science & Engineering</u> | Professor
- <u>Electrical & Computer</u>
   <u>Engineering</u> | Adjunct Professor

#### **Contact Information:**

- Email: xuxd@uw.edu
- Phone: 206-543-8444
- Building: B437, B009



#### Areas of Expertise & Interest:

- Condensed Matter Experiment
- Quantum Information
- Nanoscale Optoelectronics
- Electronic, Optical & Magnetic Materials
- Materials Chemistry
- Materials Characterization
- Materials Physics
- Solid State Nanostructures
- Nanoscale Device Design
- Optical Spectroscopy
- Electrical Transport
- Photocurrent Measurements
- Energy

## **Political Science**

## **<u>College of Arts & Sciences</u>** | Website

The Department of Political Science at the University of Washington has a long history of excellence in teaching and research. Political Science is one of the largest undergraduate majors in the College of Arts and Sciences, a reflection of our strong collective commitment to innovative and engaging teaching of a fascinating and important topic. Our graduate program provides a supportive environment for students conducting a wide range of original research. The department faculty features internationally renowned scholars who conduct path breaking and influential research on important questions about politics and policy. We are located in Seattle, one of the most beautiful and vibrant urban settings in the United States, in a region known worldwide for creativity and public policy innovation.

#### List of Related Individuals

- Aseem Prakash
- Christine Ingebritsen
- <u>lake Grumbach</u>
- Karen Litfin
- Lance Bennett
- Nives Dolšak
- Peter May
- Victor Menaldo

## **Aseem Prakash**

PhD, Political Science and School of Public & Environmental Affairs, Indiana University, Bloomington 1997



## **Website**

Aseem Prakash is Professor of Political Science, the Walker Family Professor for the College of Arts and Sciences, and the Founding Director of the Center for Environmental Politics. He is the Founding Editor of the Cambridge University Press Series in Business and Public Policy as well as Cambridge Elements in Organizational Response to Climate Change: Business, Governments & Nonprofits. Professor Prakash's research focuses on climate governance, NGOs, and voluntary regulation.

Aseem Prakash is a member of National Academies of Sciences, Engineering, and Medicine's Board on Environmental Change and Society and International Research Fellow at the Center for Corporate Reputation, University of Oxford.

**UW Target Links: 3, 10** 

<u>SDG Links:</u> 1, 5, 8, 10, 13, 15, 16, 17

## Departments & Roles:

- <u>Political Science</u> | Professor
- Walker Family Professor for the Arts and Sciences
- <u>CEP</u> | Founding Director

#### **Contact Information:**

Email: aseem@uw.edu

### Areas of Expertise & Interest:

- Environmental Politics
- Human Rights
- International Relations
- Labor
- Political Economy
- Poverty
- Social Movements
- South Asian
- Sustainability

# Jacob (Jake) Grumbach

PhD, UC Berkeley

## **Website**

Professor Grumbach's research focuses broadly on the political economy of the United States. He is particularly interested in public policy, American federalism, racial capitalism, campaign finance, and statistical methods. His book project, based on his award-winning dissertation, investigates the causes and consequences of the nationalization of state politics since the 1970s. Additional recent projects investigate labor unions, election law, and race and gender in campaign finance. Professor Grumbach teaches courses in statistics for the social sciences and in state and local politics.

**UW Target Links: 3, 4** 

**SDG Links:** 5, 8, 9, 10, 16, 17

## Departments & Roles:

• <u>Political Science</u> | Assistant Professor

#### **Contact Information:**

- Email: grumbach@uw.edu
- Building: GWN 131



### Areas of Expertise & Interest:

- African American
- American Political Development
- American Politics
- Environmental Politics
- Labor
- Political Economy
- Political Methodology
- Public Policy
- Quantitative Methods
- State Politics
- Statistics

## **Karen Litfin**

PhD, University of California, Los Angeles, 1992

## **Website**

Karen Litfin's first two books were Ozone Discourses: Science and Politics in Global Environmental Cooperation (Columbia University Press, 1994) and The Greening of Sovereignty in World Politics (MIT Press, 1998). She has also written on the politics of earth remote sensing; the political implications of Gaia Theory; the relationship between climate science and politics; the ecological politics of sacrifice; the global ecovillage movement; and contemplative pedagogical practices.

**UW Target Links:** 1, 2, 3, 6, 10

<u>SDG Links:</u> 4, 5, 8, 10, 11, 12, 13, 16, 17

## Departments & Roles:

• <u>Political Science</u> | Professor Emerita

#### **Contact Information:**

- Email: litfin@uw.edu
- Building: Online, Gowen 33



## Areas of Expertise & Interest:

- Civic Engagement
- Contemplative Education
- Environmental Politics
- International Relations
- Service Learning
- Social Movements
- Sustainability

## **Lance Bennett**

PhD, Political Science, Yale University, 1974

## **Website**

Lectured internationally on the role of media in civic life. Research areas include: press-government relations; communication and social movements; transnational activism; citizenship and youth civic engagement, digital media and political participation, and the organizational uses of information technology. Current work focuses on aligning ideas about the economy, democracy and the environment to build more equitable and sustainable human systems.

<u>UW Target Links:</u> 1, 2, 3, 4, 5, 6, 10

<u>SDG Links:</u> 4, 5, 8, 9, 10, 12,13, 16, 17

## Department(s):

- <u>Political Science</u> | Professor Emeritus
- <u>Communication</u> | Ruddick C. Lawrence Professor
- Center for Communication & Civic Engagement | Founding Director

#### **Contact Information:**

• Email: lbennett@uw.edu



### Areas of Expertise & Interest:

- Press-government relations
- Communication & social movements
- Transnational activism
- Digital media & political participation
- Organizational uses of information technology
- Civic Engagement
- Comparative Politics
- Environmental Politics
- Media Studies
- Political Communication
- Sustainability

## **Peter May**

PhD, Public Policy, University of California, Berkeley, 1979 Masters, Public Policy, University of California, Berkeley, 1976

## **Website**

Peter J. May is the Donald R. Matthews Distinguished Professor Emeritus of American Politics. He came to the UW in 1979 and retired in December 2014. May has been a visiting scholar at the U.S. Department of Interior (1997-78), a senior Fulbright Scholar and Visiting Fellow at the Australia National University (1991), a visiting professor at Aarhus University, Denmark (1998), a visiting professor at the University of Hong Kong (2009), and a research affiliate of the Danish National Centre for Social Research in Copenhagen.

**UW Target Links: 3** 

**SDG Links:** 1, 3, 11, 13, 17

## Departments & Roles:

<u>Political Science</u> | Donald R.
 Matthews Distinguished
 Professor Emeritus of American
 Politics

#### Contact Information:

Email: pmay@uw.edu



## Areas of Expertise & Interest:

- Policy Processes
- Environmental Regulation
- Policymaking
- Natural Disasters

## **Victor Menaldo**

PhD, Stanford University, 2009

## **Website**

Menaldo has published articles in the American Political Science Review, American Journal of Political Science, Journal of Politics, British Journal of Political Science, Annual Review of Political Science, Comparative Political Studies, World Politics, Comparative Politics, International Studies Quarterly, among several other places.

Menaldo is interested in the political economy of property rights, industrialization, innovation, liberal democracy, and development and enjoys sharing his insights with policymakers, pundits, and the general public; he has published numerous Op-eds in the Wall Street Journal, New York Times, Washington Post (Monkey Cage), USA Today, Seattle Times, Forbes, Foreign Policy, Areo, and Inside Higher Ed.

**UW Target Links:** 3, 7

**SDG Links:** 1, 5, 8, 9, 17

## Departments & Roles:

- <u>Political Science</u> | Professor
- <u>CEP</u> | Affiliate Faculty
- <u>Near Eastern Studies</u> | Affiliate Professor

#### **Contact Information:**

Email: vmenaldo@uw.edu



## Areas of Expertise & Interest:

- Comparative Politics
- Environmental Politics
- Latin American
- Political Economy

# **Psychology**

## **College of Arts & Sciences** | Website

Promoting Healthy Minds and Society through Psychological Science

UW Psychology generates ground-breaking insights into the mind, brain, and behavior through our mission to:

- Promote social equity
  - By investigating biased attitudes, inequities, and disparities
  - By redesigning organizational practices
  - By solving social justice issues
- Optimize human potential by increasing one's resilience
  - In young children and adults
  - To address mental health disparities
  - In vulnerable conditions
  - Through new and innovative research and therapies
- Understand the mind through behavior and brain science
  - To enhance communication
  - To improve learning, memory, and decision making
  - o To improve emotional stability

#### List of Related Individuals

- Katherine Foster
- Peter Kahn

## **Katherine T. Foster**

PhD

## **Website**

My work applies a person-centered approach to first understand the uniqueness of each individual (i.e., a person-specific, idiographic profile comprised of patterns across multiple variables) to then draw inferences about what is common to many (i.e., a prevalent, nomothetic "cause"). With this work, I have three primary goals: (1) to understand both unique and common origins, trajectories, and outcomes of psychopathology and health risk behavior like alcohol and drug use over the lifespan, (2) to improve translation of clinical science evidence to case-specific applications (i.e., assessment and intervention across diverse individuals) with maximal personalization and precision, and (3) to advance scalable implementation methods that reduce barriers to effective mental health support (e.g., stigma, affordability, accessibility, need for expert adaptation) at the individual level across diverse communities.

#### **UW Target Links: 3**

**SDG Links:** 2, 3, 5, 6, 8, 12, 16

## Departments & Roles:

 <u>Psychology</u> and <u>Global Health</u> | Assistant Professor

#### Contact Information:

- Email: ktfoster@uw.edu
- Building: Kincaid 354



## Areas of Expertise & Interest:

- Developmental Psychopathology
- Clinical Heterogeneity
- Precision Medicine
- Global Mental Health
- Child and Adolescent Health (incl. Pediatrics)
- Research
- Social Determinants of Health

## **Scandinavian Studies**

## College of Arts & Sciences | Website

The Department of Scandinavian Studies seeks to discover, preserve, and transmit fundamental knowledge about the languages, literature, history, politics, and cultures of the Scandinavian/Nordic countries (Denmark, Finland, Iceland, Norway, Sweden) and the Baltic countries (Estonia, Latvia, Lithuania). Focusing on interdisciplinary study in comparative and cross-cultural contexts, language study is the vital core of the Department. Additionally, the Department seeks to provide background training and knowledge of the entire Nordic region to students, scholars, and the broader community.

The Department of Scandinavian Studies seeks to prepare students for productive careers in an increasingly diverse, multicultural and global society through a firm dedication to providing excellent undergraduate and graduate education, while facilitating contacts and understanding between Americans and the peoples of the Scandinavian and Baltic countries. As a Department with several disciplines represented, the Department of Scandinavian Studies is a kind of "mini-liberal arts college" that seeks to train future scholars, citizens, and policy makers while also contributing to the establishment of an overall sense of community. In this way, students will be encouraged to learn to think creatively, rationally, and critically, while communicating cogently, correctly, and persuasively.

#### List of Related Individuals

• Christine Ingebritsen

# **Christine Ingebritsen**

PhD, Cornell University, 1993

## **Website**

Christine Ingebritsen is a political scientist who teaches and conducts research on the position of small states in international relations. Her work seeks to explain how and why Scandinavian governments (Denmark, Sweden, Norway, Finland and Iceland) have responded differently to contemporary challenges — from a more globalized international political economy to an integrated Europe. Collectively, Scandinavia seeks to export best practices to international institutions and acts as a "norm entrepreneur" in several important issue-areas (the environment, human rights and security).

**UW Target Links:** 1, 3, 6

<u>SDG Links:</u> 4, 5, 10, 11, 12, 13, 16, 17

## Departments & Roles:

- <u>Scandinavian Studies</u> | Professor
- Women's Studies and Political Science | Adjunct Professor

#### Contact Information:

- Email: ingie@u.washington.edu
- Building: RAI 305 R



### Areas of Expertise & Interest:

- Ecology and Sustainability
- Scandinavian Literature and Culture
- Scandinavian Area Studies
- Norwegian
- Gender, Women, and Sexuality Studies
- International Studies
- Political Science

# Sociology

## **College of Arts and Sciences | Website**

Partly due to its geographical isolation at the northwest corner of the country, Washington sociology has long been characterized by its intellectual innovation. Under the influence of George Lundberg, it became one of the first American sociology departments to develop a vision of sociology as a scientific discipline. Although many of the enthusiasms of that day have faded with time - it's hard to imagine any current faculty writing a book titled Can Science Save Us?, as did Lundberg - this vision of the department as committed to scientific research continues to describe much of the flavor of Washington sociology. As a consequence, the graduate curriculum places particular emphasis on general theory and quantitative methodology. In the 1970s, under the leadership of H. M. Blalock and Herbert Costner, the department became a leading center for causal inference and quantitative sociological methodology in the field. At roughly the same time, Richard Emerson pioneered exchange theory in social psychology, and Travis Hirschi did the same for social control theory in criminology. In the 1980s, Washington became the first department to apply rational choice theory to macrosociological problems, and the influential religious economies approach to the sociology of religion was developed here.

#### List of Related Individuals

- Adrian Raftery
- Kyle Crowder
- Sara Curran
- Tyler McCormick
- Zack Almquist

# **Adrian Raftery**

PhD, Université Pierre et Marie Curie, 1980

## **Website**

Raftery has published over 170 refereed articles in statistical, sociological and other journals. His research focuses on Bayesian model selection and Bayesian model averaging, model-based clustering, inference for deterministic simulation models, and the development of new statistical methods for sociology, demography, and the environmental and health sciences.

## **UW Target Links: 3**

**SDG Links:** 3, 5, 11, 13, 14, 17

## Departments & Roles:

- <u>Sociology</u> and <u>Statistics</u> | Boeing International Professor
- Atmospheric Sciences | Adjunct Professor
- <u>CSDE</u> | Research Affiliate

#### **Contact Information:**

- Email: raftery@uw.edu
- Phone: (206) 543-4505
- Building: Savery 242, Padelford C313 UNIVERSITY of WASHINGTON



## Areas of Expertise & Interest:

- Demography
- Environment
- Fertility
- Immigration
- Morbidity/Mortality
- Population Health
- Quantitative Methods
- Statistics

# **Kyle Crowder**

PhD, State University of New York, Albany, 1997

## Website

My teaching efforts have been focused most recently on courses related to urban sociology, demography, research methods, and statistics. At the University of Washington I regularly teach courses in the graduate-level statistics sequence, a graduate-level course on Urbanism and Urbanization, and service-learning and writing-intensive undergraduate courses on urban dynamics. In Winter 2019, I will also teach a course on Sports in Society.

<u>UW Target Links:</u> 3, 4, 5, 6, 7, 9, 10

**SDG Links:** 1, 3,5, 10, 11, 12, 13, 16, 17

## Departments & Roles:

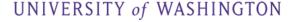
Sociology | Blumstein-Jordon Professor

### Areas of Expertise & Interest: Demography

- Environment
- Neighborhoods
- Race and Ethnicity
- Research Methods
- Social Stratification/ Inequality
- **Urban Studies**

#### Contact Information:

- Email: kylecrow@uw.edu
- Phone: (206) 616-1203
- Building: Savery 225



## Sara Curran (she/her)

PhD, Sociology, University of North Carolina, Chapel Hill, 1994 MS, Sociology & Economics, North Carolina State University

## Website

I joined the faculty of the University of Washington's Henry M. Jackson School of International Studies and the Daniel I. Evans School of Public Policy & Governance in 2005. Lam Professor of International Studies, Professor of Sociology, and Professor of Public Policy & Governance. I am an Adjunct Professor of Global Health, affiliate faculty of the Center for Global Studies. the Southeast Asian Center, the Technology and Social Change Group (TASCHA), and EarthLab. I hold degrees from the Univ. of Michigan (B.S., Natural Resource Management), North Carolina State Univ. (M.S., Sociology and Economics), and the Univ. of North Carolina at Chapel Hill (Ph.D., Sociology).

UW Target Links: 3, 4, 10

**SDG Links:** 1, 2, 3, 5, 10, 11, 13, 16, 17

## Departments & Roles:

- International Studies and Sociology and Public Policy & Governance Professor
- Global Health | Adjunct Professor
- CSDE | Director

#### Contact Information:

scurran@u.washington.edu



## Areas of Expertise & Interest:

- Gender
- Migration dynamics
- Social change
- Climate change
- Natural disasters
- Population change

## **Zack Almquist**

PhD, Sociology, University of California, Irvine MA's, Sociology, Demography, University of California, Irvine MS, Statistics, Northwestern University

## **Website**

My research centers on the development and application of mathematical, computational, and statistical methodology to better understand the problems and theories of social networks analysis, demography, education, homelessness, and environmental action and governance. Currently, my research program is focused on understanding, modeling, and predicting the effects that space and time have on human interaction and social processes. My research has been published in numerous peer-reviewed journals in the social sciences, statistics and computer science fields.

**UW Target Links:** 1, 3, 6

<u>SDG Links:</u> 3, 4, 9, 10, 11, 12, 13, 17

## Departments & Roles:

- <u>Sociology</u> | Assistant Professor
- eScience Institute | Senior Data Fellow
- <u>CSDE</u> | Training Core PI/Director

#### **Contact Information:**

zalmquist@uw,edu



### Areas of Expertise & Interest:

- Social Network Analysis
- Big Data
- Computational Social Science
- Sociology of Education
- Environmental Policy
- Public Health
- Demography
- Homelessness
- Human Judgement and Decision Making

## **Statistics**

## **College of Arts and Sciences** | Website

Statistical thinking is pervasive in all disciplines engaged in empirical inquiry. The purpose of Statistical Science is to develop methods for designing and analyzing such inquiries, and to disseminate this methodology through teaching and scholarly communication.

Development of useful statistical methodology cannot take place in a vacuum. To be scientifically relevant this development should be problem-driven, motivated and guided by applications of scientific importance. Identifying and understanding important applications requires interaction with other disciplines that acquire and analyze data. Collaborative research is therefore essential to the viability and growth of Statistics.

#### List of Related Individuals

- Adrian Raftery
- <u>lanneke-Hille Ris Lambers</u>
- Mark Ellis
- Tyler McCormick
- Youngiun Choe

## **Janneke Hille Ris Lambers**

PhD, Duke University, 2001

## **Website**

I received my Ph.D. from Duke University in 2001 (working with James S. Clark). While at Duke, my field work took me to the Coweeta Hydrologic Laboratory in western North Carolina (an LTER site), where I studied differences among temperate tree species in seed dispersal, seed banking and density-dependent mortality, and how those differences contribute to diversity-maintenance. I then worked with David Tilman at the Cedar Creek Ecosystem Reserve (another LTER site associated with University of Minnesota). There, I studied how declining diversity and species identity influences productivity and the impacts of global change on seed production.

## **UW Target Links: 3**

**SDG Links:** 1, 3, 11, 13, 15

## Departments & Roles:

- <u>Biology</u> | Affiliate Professor
- <u>Statistics</u> | Professor

#### **Contact Information:**

- Email: jhrl@uw.edu
- Phone: (206) 543-7389
- Building: 451 LSB



## Areas of Expertise:

- Conservation Biology
- Ecology
- Plant Biology
- Climate Change
- Species Distribution
- Population Dynamics
- Phenology
- Community Structure
- Species Coexistence

# **Tyler McCormick**

PhD, Statistics, Columbia University, 2011

## **Website**

Tyler's work develops statistical models for inference and prediction in scientific settings where data are sparsely observed or measured with error. His recent projects include estimating features of social networks (e.g. the degree of clustering or how central an individual is) using data from standard surveys, inferring a likely cause of death (when deaths happen outside of hospitals) using reports from surviving caretakers, and quantifying & communicating uncertainty in predictive models for global health policymakers. He holds a PhD in Statistics (with distinction) from Columbia University and is the recipient of the NIH Director's New Innovator Award, NIH Career Development (K01) Award, Army Research Office Young Investigator Program Award, and a Google Faculty Research Award

**UW Target Links: 3** 

**SDG Links: 11, 16, 17** 

## Departments & Roles:

• <u>Sociology</u> and <u>Statistics</u> Associate Professor

#### **Contact Information:**

Email: tylermc@uw.eduPhone: (206) 221-6981

Building: Savery 238



## Areas of Expertise & Interest:

- Statistical Models
- Inference and Prediction
- Social Networks

## **COLLEGE OF BUILT ENVIRONMENTS**

## Website

At the University of Washington College of Built Environments (CBE) we value the traditions of design and community building. We do this with a conscious perspective of positively advancing social and technological change. Our unique gathering of disciplines—architecture, construction management, landscape architecture, real estate, and urban design and planning—provides a unique advantage and enables the College to truly define and excel in all areas of built environments. We believe in programs that meet the complex interconnected physical, cultural, and ecological systems in which we live, work and play.

Home to six research labs and four research centers, we join forces with non-profit groups, government agencies, schools, and development experts on research projects and find solutions to our communities growing needs and changing dynamics. As a result, the CBE community has a significant impact on our region's future. Our thousands of graduates reflect our values and practice when they launch into their careers, meeting in the workplace to collaborate as professionals in every sector of the built environment.

## List of Departments

- Architecture
- Construction Management
- Landscape Architecture
- <u>Urban Design & Planning</u>

### **Architecture**

#### **College of Built Environment** | Website

We value excellence in research and teaching, the traditions of architecture within the context of social and technological change, the continuing legacy of craft in the making of architecture, an activist and community-based design process, and ethical action to address human and environmental concerns.

The core value of our department is design—a fundamentally integrative activity that synthesizes ethical, cultural, and ecological values with creativity, emerging technologies and advanced areas of research. We believe in a culture of creative research and teaching where design is a vehicle for research and research is a vehicle for design.

#### List of Related Individuals

- Christopher (Chris) Meek
- Daniel Abramson
- Heather Burpee
- Kate Simonen
- Rob Peña

# **Christopher (Chris) Meek**

Masters, Architecture, University of Washington, 2002

#### **Website**

Professor Meek's areas of research include building energy performance for new construction and retrofits, daylighting, visual comfort, electric lighting, and climate responsive design. His work bridges practice, research, and education with collaboration between practitioners, faculty, and students. Under his leadership, the Center advances its mission through interconnected research, technical assistance, and educational programs that create impact in three primary areas: (1) influential new construction and renovation projects that achieve exceptional energy performance targets and serve as a model for future buildings; (2) the development and advancement of tools, methods, and technologies to accelerate energy efficient buildings through peer-reviewed publications and competitive grant awards, and; (3) the delivery of educational programs and experiences that form the next generation of leaders in the building industry.

**UW Target Links:** 7, 8, 10

**SDG Links:** 1, 3, 4, 7, 8, 9, 11, 13, 17

#### Departments & Roles:

- <u>Architecture</u> | Professor
- Center for Integrated Design | Director

#### **Contact Information:**

- Email: cmeek@uw.edu
- Building: Center for Integrated Design, Bullitt Center



#### Areas of Expertise & Interest:

- Energy Performance for New Construction and Retrofits
- Working, Learning, and Healing Environments
- Daylighting
- Visual Comfort
- Electric Lighting
- Climate Responsive Design

# **Heather Burpee**

Masters, Architecture, University of Washington, 2008

#### **Website**

Heather Burpee, Research Associate Professor at the University of Washington Integrated Design Lab, is a nationally recognized scholar in high-performance buildings — buildings that reduce energy and promote healthy indoor environments. Her work bridges practice, research, and education with collaboration between practitioners, faculty, and students. Her research addresses both qualitative and quantitative aspects of buildings including tracking health impacts and synergies between environmental quality, natural systems, sensory environments, and energy efficiency. She has led several efforts to create protocols for performance-based tracking and auditing for hospitals, higher education, and commercial buildings.

**UW Target Links:** 3, 8, 10

**SDG Links:** 3, 7, 11

#### Departments & Roles:

 Integrated Design Lab and Architecture | Research Assistant Professor and Director of Education & Outreach

#### Contact Information:

- Email: burpeeh@uw.edu
- Phone: (206) 616-6566
- Building: Center for Integrated Design, Bullitt Center



#### Areas of Expertise & Interest:

- High Performance Buildings
- Energy Efficiency
- Sustainability
- Health
- Hospitals
- Research

### **Kate Simonen**

Masters, Architecture, University of California, Berkeley, 1992 MS, Structural Engineering & Mechanics of Materials, University of California, Berkeley, 1991

#### **Website**

Kate Simonen, AIA, SE is the executive director of the Carbon Leadership Forum and Professor and Chair of the Department of Architecture at the University of Washington. Licensed as an architect and structural engineer, she connects significant professional experience in high performance building design and technical expertise in environmental life cycle assessment she works to spur collective action to bring net embodied carbon to zero through cutting-edge research, cross-sector collaboration, and the incubation of new approaches.

**UW Target Links:** 3, 5, 7, 9, 10

**SDG Links:** 9, 11, 12, 17

#### Departments & Roles:

- Architecture | Professor and Department Chair
- Carbon Leadership Forum | Founding Director

#### Contact Information:

Email: ksimonen@uw.edu

Phone: (206) 685-7282

Building: Gould Hall 208F



#### Areas of Expertise & Interest:

- High Performance Building Systems,
- Seismic Design and Retrofitting,
- Net-Zero Energy
   Residential Construction,
   Prefabrication and
   Collaborative Practice
- Environmental Life Cycle Assessment (LCA)
- Integrated Practice and Innovative Construction Materials and Methods

### **Rob Peña**

Masters, Architecture, University of California, Berkeley, 1987

#### **Website**

Professor Peña's academic and professional work can be characterized by three interconnected themes: critical practice in the architecture sub-discipline of ecological design; teaching through the development of the knowledge and methods for sustainable design; and service in the university and community aimed at ecological literacy, environmental health, and resource conservation. In partnership with the UW Center for Integrated Design, Professor Peña works regionally with design teams on the development of high performance and net-zero energy buildings. Since the inception of the Bullitt Center, he worked with the Bullitt Foundation, the Miller Hull Partnership, and Schuchart Construction on the design and development of this groundbreaking high performance building.

**UW Target Links: 2, 7** 

**SDG Links:** 4, 6, 8, 9, 11, 12

#### Departments & Roles:

- Architecture | Associate
   Professor and Graduate
   Program Coordinator
- <u>Landscape Architecture</u>
   Adjunct Professor

#### **Contact Information:**

Email: rbpena@uw.edu

• Phone: (206)543-7274

Building: Gould 208M



#### Areas of Expertise & Interest:

- Ecological Design and High-Performance Buildings
- Critical Practice
- Teaching Through Sustainable Design
- Ecological Literacy
- Net-Zero Energy Buildings
- Environmental Health
- Resource Conservation

# **Construction Management**

#### **College of Built Environment** | Website

Our Mission: To prepare individuals for careers in construction and related industries by providing high-quality education, to conduct research that will benefit the construction industry, and to provide service to the community. This includes educating students in developing a sustainable built environment and applying innovative construction techniques based on cutting edge research to advance current and future needs in construction.

Our Vision: To be an internationally-recognized leader of education and research in construction management.

#### List of Related Individuals

• Hyun Woo "Chris" Lee

# **Hyun Woo "Chris" Lee**

PhD, Civil and Environmental Engineering, University of California, Berkeley, 2012 MS, Civil and Environmental Engineering, University of California, Berkeley, 2004

#### **Website**

Prof. Lee's research interests center on developing models to identify, quantify, and mitigate various risk factors inherent in the development of energy-efficient commercial buildings and sustainable infrastructures. His research is currently focused on 3 types of risk factors: (1) financial risks associated with sustainability and energy-efficiency investments, (2) worker safety risks associated with sustainable design features, and (3) design-related risks due to project complexity.

**UW Target Links:** 3, 7, 8, 10

<u>SDG Links:</u> 3, 6, 7, 8, 9, 10, 11, 12, 17

#### Departments & Roles:

 <u>Construction Management</u> | P.D. Koon Endowed Associate Professor

#### Contact Information:

Email: hyunwlee@uw.edu



#### Areas of Expertise & Interest:

- Climate & Energy
- Design & Building
- Economy & Finance & Development
- Infrastructure & Transportation
- Natural Resources & Sustainability
- Safety & Health & Wellbeing
- Technology & Innovation

# **Landscape Architecture**

#### **College of Built Environment** | Website

The Department's mission is to offer nationally recognized, professionally accredited undergraduate and graduate degree programs in landscape architecture that focus on Urban Ecological Design. We endeavor to educate students to become innovative practitioners and leaders in both public service and private practice and to create positive change in our communities, region and world. The education that we provide for students builds a design expertise based on both intellectual and experiential understanding of human and natural systems, gained through an iterative and interdisciplinary approach to project-based learning.

#### List of Related Individuals

- Daniel Abramson
- Ken Yocom
- Rob Peña

### Ken Yocom (he/him/his)

PhD, Built Environment, University of Washington, 2007 Master, Landscape Architecture, University of Washington, 2002

#### Website

Ken's current research, teaching, and practice explore the convergence of urban infrastructure and ecological systems through adaptive design approaches that serve to demystify emerging strategies and technologies for sustainable and resilient development. More specifically, he investigates how water -in all its forms- shapes the past to future functions and patterns of our built environments. He has written extensively on the themes developed from his work including two books, Ecological Design and NOW Urbanism: The Future City is Here. He also regularly contributes to professional practice and scholarly publications on issues of global biodiversity, urban environmental governance, ecological design, and contemporary nature and society relations in the urban context.

**UW Target Links: 3, 7, 10** 

**SDG Links:** 9, 11, 15

#### Departments & Roles:

<u>Landscape Architecture</u> Department Chair and Associate Professor

#### Contact Information:

Email: kyocom@u.washington.edu

Phone: 206.221.0296 Building: Gould 342



#### Areas of Expertise & Interest:

- **Urban Ecology**
- Watershed Planning
- **Green Technology**
- Systems-Based Design
- **Ecological Democracy**

# **Urban Design & Planning**

#### **College of Built Environment** | Website

Our core mission is to develop a community of inquiry, learning, and practice that helps urban regions to become more livable, just, economically effective, and environmentally sound through a democratic process of urban design and planning.

#### List of Related Individuals

- Andrew Dannenberg
- Christine Bae
- Daniel Abramson
- Himanshu Grover
- Jan Whittington
- Marina Alberti
- Nives Dolšak
- Timothy Nyerges

### **Christine Bae**

PhD, Urban and Regional Planning, University of Southern California

#### **Website**

am an Associate Professor in the Department of Urban Design and Planning at the University of Washington, Seattle. I received my Ph.D. in Urban and Regional Planning from the University of Southern California. My primary areas of interest are transportation and the environment; land use, growth management and urban sprawl; urban regeneration; environmental equity and justice; and international planning and globalization. I recently co-authored an article on measuring pedestrian exposure to PM2.5 in the Seattle, Washington, International District. I teach a course "Mega City Planning", in which I lead a group of students to Seoul. South Korea for two weeks in spring quarter. I am currently the West Representative for the Association of Collegiate Schools of Planning, and a Board Member for the Western Regional Science Association.

**UW Target Links: 3, 4, 7, 10** 

<u>SDG Links:</u> 3, 5, 6, 8, 9, 10, 11, 12, 14, 16, 17

#### Departments & Roles:

 <u>Urban Design & Planning</u> | Associate Professor

#### **Contact Information:**

- Email: cbae@uw.edu
- Building: 410 Gould Hall



#### Areas of Expertise & Interest:

- Data Science & Spatial Analysis
- Economy & Finance & Development
- Equity & Justice
- Global Built Environment
- Infrastructure & Transportation
- Land Use & Planning
- Modeling & Scenario Planning
- Natural Resources & Sustainability
- Water

### **Daniel Abramson**

PhD, Urban Planning & Design, Tsinghua University, 1998 MC, City Planning, Massachusetts Institute of Technology, 1992 MA, Architecture, Massachusetts Institute of Technology, 1992

#### **Website**

I approach the discipline of planning through urban design, historic preservation and planning history, methods of socio-spatial analysis and public participation, and qualitative study of the politics and cultures of development decision-making. My experience in community-engaged planning, research, and design – mostly with immigrant, low-income, indigenous, or otherwise marginalized communities – ranges from Boston to the American and Canadian Pacific Northwest, and from Poland to China and Japan.

**UW Target Links:** 1, 3, 4, 10

<u>SDG Links:</u> 1, 3, 9, 11, 12, 13, 16, 17

#### Departments & Roles:

- <u>Urban Design & Planning</u> |
   Associate Professor
- Architecture & Landscape
   Architecture | Adjunct Professor
- <u>International Studies</u> | Faculty Member

#### Contact Information:

Email: abramson@uw.edu

Phone: (206) 543-2089

Building: 448F Gould Hall



#### Areas of Expertise & Interest:

- urban design
- historic preservation and planning
- socio-spatial analysis and public participation
- politics and cultures of development decision-making
- community-engaged planning
- community resilience and adaptive planning in disaster recovery and hazard mitigation
- periurban and rural responses to rapid urbanization
- recovery planning
- earthquake recovery
- earthquake- and tsunami-resilient development

### **Himanshu Grover**

PhD, Urban & Regional Sciences, Texas A&M University

#### **Website**

Himanshu Grover has a broad background in urban planning, community resilience, spatial analytics, social equity analysis, risk perception, and hazard mitigation. He has significant training and expertise in ethnographic and survey research and secondary data analysis on risk perception to natural hazards, policy impact analysis, and social vulnerability assessments. Himanshu's research interests lie at the intersection of ecological sustainability, local development policies, and community resilience.

**UW Target Links:** 3, 4, ,5, 7, 10

<u>SDG Links:</u> 1, 3, 5, 9, 10, 11, 13, 15, 16, 17

#### Departments & Roles:

- <u>Urban Design & Planning</u> |
   Assistant Professor
- <u>CSDE</u> | Research Affiliate

#### **Contact Information:**

- Email: groverh@uw.edu
- Building: Gould 410 J



#### Areas of Expertise & Interest:

- Climate Change Management
- Environmental and Land Use Planning
- Social Equity
- Urban Infrastructure Management
- Hazard Mitigation
- Community Resilience
- Place-Based Planning Policies
- Equitable Development

# Jan Whittington

PhD, City & Regional Planning, University of California, Berkeley, 2008 Masters, City & Regional Planning, California Polytechnic State University, San Luis Obispo, 1993

#### Website

Dr. Jan Whittington is Associate Professor of the Department of Urban Design and Planning, at the University of Washington, Seattle. Her research applies transaction cost economic theory to networked infrastructures, such as transportation, water, and communications systems, to internalize factors historically treated as external to transactions. Her publications include methodologies for greenhouse gas mitigation and resilience through capital investment planning, examination of the efficiency of public-private contractual arrangements for infrastructure, and the evaluation of online transactions for efficiency, security, and privacy. She teaches infrastructure planning and finance, public finance, infrastructure mega-projects, science for environmental policy, planning for water, and land use planning.

**UW Target Links:** 3, 4, 5, 7, 10

**SDG Links:** 5, 6, 9, 10, 11, 12, 13, 17

#### Departments & Roles:

Urban Design & Planning |
 Associate Professor

#### Contact Information:

• Email: janwhit@uw.edu

Phone: (206) 221-6298

Building: 448D Gould Hall



#### Areas of Expertise & Interest:

- Infrastructure
- Economics
- Climate Change
- Privacy and Cybersecurity
- Finance

### **Marina Alberti**

PhD, Urban and Regional Planning, Massachusetts Institute of Technology, 1992

#### **Website**

Marina Alberti is Professor of Urban and Environmental Planning in the Department of Urban Design and Planning at the University of Washington. She is Director of the Urban Ecology Research Lab and PI of the NSF Funded Research Collaboration Networks on Urban Eco-Evolutionary Dynamics. She teaches courses in Urban Science, Urban Ecology, Environmental Planning, Research Design, Geographic Information Systems, and Group Dynamic and Conflict resolution. Alberti's research interests are in urban ecology and evolution.

**UW Target Links: 3, 7** 

**SDG Links:** 1, 3, 9, 11, 13

#### Departments & Roles:

- <u>Urban Design & Planning</u> |
   Professor
- Urban Ecology Research Lab | Director

#### Contact Information:

- Email: malberti@uw.edu
- Phone: (206) 616-8667
- Building: 427 Gould Hall



#### Areas of Expertise & Interest:

- Interactions between Urban Patterns and Ecosystem Function
- Urban Signatures of Evolutionary Change
- Properties of cities that Enhance Resilience and Transformative Capacity
- Urban Ecological Modeling
- Scenario Planning
- Urban Ecological Metrics

### MICHAEL G. FOSTER SCHOOL OF BUSINESS

#### Website

UW Foster is a world-class business school in a pioneering city perched on the Pacific Rim. The world's best and brightest leaders are here, applying ingenuity to better humanity. We celebrate our rich and uniquely Foster partnerships with iconic companies – we collaborate, we innovate, we call them neighbors. From entrepreneurial ventures to world-class companies, you will find Foster alumni working to create their greatest impact.

Community is the heart of who we are – it is why we start our purpose statement with "together." We are committed to fostering a welcoming and inclusive environment that inspires everyone to be better together. We encourage every individual to bring their full self to all that we do. We foster leaders who better humanity through action. We foster the future by striving to be better tomorrow than we are today.

Our approach relies on fostering imagination, curiosity and innovation to solve unstructured, real-world problems. We gather insights by listening and truly hearing each other. We find strength in diversity and originality. We proactively lift each other up.

#### List of Departments

- Finance & Business Economics
- Management & Organization
- Marketing & International Business

### **Finance & Business Economics**

#### **School of Business** | Website

The Finance and Business Economics Department at the University of Washington Foster School of Business is a collegial group of thought leaders based in one of the world's most dynamic cities. Our faculty actively engage with business leaders and students to develop and share new insights that span the areas of Asset Pricing and Investments, Corporate Finance and Governance, Fintech, Household and Behavioral Finance, Mergers & Acquisitions, Small and Minority Business Economics, and Machine Learning applications in finance.

#### List of Related Individuals

Charlie Donovan

### **Charlie Donovan**

DBA, IE Business School, 2013 MBA, Vanderbilt University, 2001

#### **Website**

Donovan began his career as a Policy Analyst at the US **Environmental Protection** Agency during the Clinton Administration and subsequently spent more than a decade as a finance executive in the energy industry. Before joining Imperial College London, he was the co-founder and chief financial officer of Cleandrone, a cleantech startup based in Europe.

**UW Target Links:** 1, 3, 4, 7

<u>SDG Links:</u> 1, 3, 6, 9, 10, 11, 12, 13, 17

#### Departments & Roles:

• <u>Finance & Business Economics</u> | Visiting Professor

#### Areas of Expertise & Interest:

- Asset Valuation
- ESG Investing
- Natural Capital Accounting
- Risk Management
- Sustainable Finance

#### **Contact Information:**

- Email: profcd(at)uw.edu
- Phone: 206-616-7705
- Building: 577PACCAR Hall

# **Management & Organization**

#### **School of Business** | Website

As a world-class team of researchers and teachers, the Department of Management and Organization works to advance the Foster School's three key pillars of strength: leadership, strategic thinking, and entrepreneurship. We passionately emphasize these and other important content areas in our research and integrate these concepts in our undergraduate, graduate, and doctoral courses.

#### List of Related Individuals

Ryan Fehr

# **Ryan Fehr**

PhD, University of Maryland, College Park, 2010 MA, University of Maryland, College Park, 2007

#### **Website**

Ryan Fehr is an Associate Professor and Michael G. Foster Faculty Fellow at the University of Washington's Foster School of Business, where he teaches MBA courses on ethics, leadership, and related topics. His research focuses on building more positive relationships at work, with a particular interest in gratitude, compassion, and forgiveness, which he has studied in organizations ranging from a micro-lending non-profit in Pakistan to a large airline catering service in China. His work has been featured in news outlets such as the New York Times and Wall Street Journal, and in bestselling books such as Dan Pink's When and Marie Kondo and Scott Sonenshein's Joy at Work.

**UW Target Links: 2, 3** 

**SDG Links:** 3, 4, 5, 10, 12, 16

#### Departments & Roles:

Management & Organization
 Associate Professor

#### **Contact Information:**

• Email: rfehr(at)u.washington.edu

Phone: 206-543-4935

Building: 565PACCAR Hall



#### Areas of Expertise & Interest:

- Corporate Social Responsibility
- Ethics
- Gratitude
- Organizational Behavior
- Positive Organizational Scholarship
- Ethics and Morality
- Leadership

# Marketing & International Business

### **School of Business | Website**

The Marketing Department at the University of Washington Foster School of Business is a collaborative group of thought leaders making its home in the backyard of one of the world's most vibrant economies. Through a thought leadership approach and commitment to continued excellence, our faculty is dedicated to developing expertise and driving insight into tomorrow's world of commerce and communication.

#### List of Related Individuals

Elizabeth Stearns

### **Elizabeth Stearns**

MBA, New York University, 1978

#### **Website**

Stearns has worked to create a systems approach for sustainability across the Foster School, She teaches a cases in sustainability class with a systematic and holistic approach to sustainability, as well as promoting this vision in her other classes. She has been an active Net Impact Foster MBA Chapter Board member for nine years, helping foster a space for MBA students to discuss and promote ideas of sustainability. She has influenced many Foster alumni to work for sustainability, and to consider the economic, social, and environmental impact of every decision made.

**UW Target Links: 3** 

SDG Links: 17

#### Department(s):

 <u>Marketing</u> | Associate Teaching Professor

#### Contact Information:

- Email: estearns@uw.edu
- Phone: 206-543-6783
- Building: 438 PACCAR Hall



#### Areas of Expertise & Interest:

- Advertising
- Direct Marketing
- Marketing Management
- Strategic Planning

# PAUL G. ALLEN SCHOOL OF COMPUTER SCIENCE & ENGINEERING

#### Website

The Allen School is widely regarded as among the most distinguished programs in the nation. We have roughly 80 full-time faculty, 100 technical and administrative staff members, 450 graduate students (300 in the full-time program and 150 in the Professional Masters Program), and 1,500 undergraduate students (currently growing to award more than 450 Bachelors degrees per year). Allen School faculty are widely recognized as among the top in their fields. Forty-three current faculty members have won Presidential/NSF Young Investigator Awards or NSF CAREER Awards. Six faculty members are ONR Young Investigator Award recipients. Five - plus five former faculty have held NSF Presidential Faculty Fellow or Presidential Early Career (PECASE) Awards. Twenty-seven have held Sloan Research Fellowships. Among current and emeritus senior faculty are nine Fulbright recipients, three Guggenheim recipients, twenty-two Fellows of the ACM, fifteen Fellows of the IEEE, two Fellows of the International Association for Pattern Recognition, five Fellows of the Association for the Advancement of Artificial Intelligence, three Fellows of the American Association for the Advancement of Science, four Fellows of the American Academy of Arts & Sciences, three recipients of ACM or IEEE Field Awards, three MacArthur Fellows, four (plus one Adjunct) Allen Distinguished Investigators, and four (plus ten Adjunct/Affiliate) Members of the National Academies.

#### List of Related Individuals

- Bill Howe
- Chirag Shah
- Shwetak Patel

### **COLLEGE OF EDUCATION**

#### Website

As a public college of education, we strive to transform inequitable systems of education to create just, sustainable and culturally-thriving democracies by engaging in dynamic, collaborative partnerships, practices and research.

#### List of Related Individuals

• Phillip Bell

# **Phillip Bell**

PhD, Education in Human Cognition & Development, University of California, Berkeley, 1998. MA, Education in Mathematics, Science, and Technology from the University of California, Berkeley, 1996.

#### Website

Philip Bell is a professor of the Learning Sciences & Human Development and holds the Shauna C. Larson Endowed Chair in Learning Sciences. He is executive director of the UW Institute for Science & Math Education focused on equity-focused innovation in K-12 STEM education, and he is co-director of the Learning in Informal and Formal Environments (LIFE) Science of Learning Center. Bell pursues a cognitive and cultural program of research across diverse environments focused on how people learn in ways that are personally consequential to them. He has studied everyday expertise and cognition in science and health, the design and use of novel learning technologies in science classrooms, youth argumentation, culturally expansive science instruction, and scaled implementation of educational improvement.

**UW Target Links:** 1, 3, 5, 6

**SDG Links:** 3, 4, 5, 9, 12, 13, 17

#### Departments & Roles:

- School of Education Learning
   Sciences | Shauna C. Larson
   Chair
- Institute for Science + Math Education | Director

#### **Contact Information:**

- Email: pbell@uw.edu
- 206-221-6373
- 312F Miller



#### Areas of Expertise:

- Equity Studies
- Learning Sciences & Human Development
- Qualitative Research Methods
- Science & Mathematics

### **COLLEGE OF ENGINEERING**

#### Website

Today's challenges require innovative thinking and collaborative approaches that bridge engineering disciplines with science, law, public policy and business.

Together with world-class partners, the University of Washington's College of Engineering is developing a new generation of innovators. A national leader in educating engineers, each year the College turns out new discoveries, inventions and top-flight graduates, all contributing to the strength of our economy and the vitality of our community.

UW Engineering is ranked 20th among all engineering schools with more than half of its departments ranked in the top 20 of their respective fields.

#### List of Departments

- Aeronautics & Astronautics
- Bioengineering (MED)
- Chemical Engineering
- <u>Civil & Environmental Engineering</u>
- <u>Electrical & Computer Engineering</u>
- Industrial & Systems Engineering
- Materials Science & Engineering
- Mechanical Engineering

### **Kristine Parra**

MS, Chemical Engineering, University of Illinois, Urbana-Champaign

#### **Website**

With a B.S. and M.S. in chemical engineering from Stanford University and University of Illinois, Urbana-Champaign, respectively, Kristine has academic and industry experience in the fabrication and characterization of cutting-edge photovoltaic materials. As manager of the Research Training Testbed, Kristine works with UW Clean Energy Institute faculty, graduate students, and undergraduate students to support research and develop educational programs.

**UW Target Links:** 3, 8, 10

**SDG Links:** 7, 9

#### Departments & Roles:

CEI | Senior Staff Scientist

#### **Contact Information:**

• Building: Clean Energy Institute



#### Areas of Expertise & Interest:

- Fabrication and Characterization
- Cutting-Edge Photovoltaic Materials

### **Aeronautics & Astronautics**

#### **College of Engineering** | Website

Excellence, Diversity, Equity, Inclusion, Collaboration, Innovation, Integrity, Community

In the William E. Boeing Department of Aeronautics & Astronautics:

- We promote excellence in education, research and service.
- We are committed to a welcoming culture that actively promotes the academic, professional and personal well-being of all members of the community regardless of individual background.
- We apply standards and expectations equitably to all members of our community.
- We practice respectful, ethical conduct at all times.
- We practice the highest standards of safety in all activities and spaces.
- We recognize, respect and defend the dignity of all members of our community.
- We remove barriers and practice behavior to ensure the academic, professional and personal well-being of all members of our community.

Our vision: We will catalyze aerospace engineering education and research to innovate collaborative solutions for a more sustainable and just world.

#### List of Related Individuals

• David Shean

# Bioengineering

#### **College of Engineering** and **School of Medicine** | Website

Every day UW Bioengineering invents the future of medicine. We bridge the traditional disciplines of medicine and engineering to drive health care forward for those in remote parts of the world and here at home. Students, scientists, engineers, and physicians come together here to develop innovative and cost-effective approaches to improve health care. Our interdisciplinary teams collaborate in a wide range of areas, from biomedical imaging to biomaterials, and from diagnostic tools to targeted drug delivery.

#### List of Related Individuals

Karl F. Böhringer

# **Chemical Engineering**

#### **<u>College of Engineering</u>** | Website

Values: The University of Washington Chemical Engineering community values diversity and inclusiveness, collegiality and respect. Quality and excellence are prized, together with multidisciplinary thinking and entrepreneurial spirit. The department strives for continuous improvement for creativity and innovation in both undergraduate and graduate research and education.

Mission: To educate the next generation of visionaries, prepare students for leadership in diverse careers, create knowledge, and provide multidisciplinary solutions to broad societal problems.

#### List of Related Individuals

- Chun-Long Chen
- Daniel (Dan) T. Schwartz
- David S. Bergsman
- Eric Stuve
- Guozhong Cao
- Hugh Hillhouse
- <u>lun Liu</u>
- Lilo D. Pozzo

- Mary Lidstrom
- Samson Jenekhe
- Stéphanie Valleau
- Stuart Adler
- W. lim Pfaendtner
- Walter van Schalkwijk
- Venkat Subramanian
- Vincent Holmberg

# **Chun-Long Chen**

PhD, Sun Yat-Sen (Zhongshan) University, 2005

#### **Website**

The main research interests in the Chen. Group focus on understanding principles that govern behavior of sequence-defined peptoids with a particular emphasis on (1) self-assembly of peptoids into functional materials with hierarchical structures, such as biomimetic nanomembranes, crystalline nanotubes and biomimetic hydrogels, and (2) biomimetic control of inorganic crystallization, for example, peptoid-controlled formation of metal oxide and plasmonic nanoparticles and their self-assembly. The Chen Group also works on transferring the peptoid-based biomimetic materials into innovative applications that impact energy technologies and biological research, such as biomimetic catalysis, water separation, molecular sensing, biological imaging, and drug delivery.

**UW Target Links: 3, 8** 

**SDG Links:** 6, 7, 9

#### Departments & Roles:

- <u>Chemical Engineering</u> | Affiliate Associate Professor
- <u>Chemistry</u> | Affiliate Professor
- <u>CEI</u> | Member Faculty

#### **Contact Information:**

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#### Areas of Expertise & Interest:

- Macromolecular Self-Assembly
- Biomimetic Crystallization
- Nanomaterials synthesis
- Solid-phase synthesis of sequence-defined polymers
- İn situ AFM imaging

# Daniel (Dan) T. Schwartz

PhD, University of California, Davis, 1989 MS, University of California, Davis, 1985

#### **Website**

Schwartz is the Boeing-Sutter Professor of Chemical Engineering and the founding director of the UW Clean Energy Institute (CEI). Established with funding from the state of Washington in 2013, CEI supports the advancement of next-generation solar energy and battery materials and devices, as well as their integration with systems and the grid. His research explores transport and reaction in electrochemical systems, including the performance of complex electrodes used in energy storage and conversion. Schwartz served on the Technical Advisory Board for Washington's Energy Strategy in 2012 and, in 2018, he received the Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring from the White House Office of Science and Technology Policy and the National Science Foundation.

**UW Target Links: 3, 7, 8, 10** 

**SDG Links:** 7, 9, 17

#### Departments & Roles:

- <u>Chemical Engineering</u> | Boeing-Sutter Professor
- Materials Science & Engineering
   | Adjunct Professor
- <u>CEI</u> | Director

#### Contact Information:

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Phone: (206) 685-4815

Building: BNS 305



#### Areas of Expertise & Interest:

- Energy Systems
- Data Science & Molecular Simulation
- Advanced Materials & Interfacial Engineering
- Electrochemical Materials
   & Interfaces
- Nano/microfabrication
- Energy Technologies
- Functional Materials
   Synthesis

# David S. Bergsman

PhD, Chemical Engineering, Stanford University, 2018 MS, Chemical Engineering, Stanford University, 2014

#### Website

In the Bergsman Research Group, we enable the use of new technologies in the water-energy nexus by using atomic layer processing tools, which can be used to create previously unrealized nanomaterials in membrane separations and catalytic energy conversion that demand precise interfacial control. We also use advanced characterization methods and high-throughput synthesis to quickly screen promising materials candidates and answer fundamental questions about the thermodynamics, kinetics, and transport behavior in these systems.

**UW Target Links:** 3, 5, 8, 9, 10

**SDG Links:** 6, 7, 9, 11, 12

#### Departments & Roles:

- <u>Chemical Engineering</u> | Assistant Professor
- <u>CEI</u> | Member Faculty

#### **Contact Information:**

• Email: dbergs@uw.edu

Phone: (206) 221-7332

• Building: BNS 253



#### Areas of Expertise & Interest:

- Energy Systems
- Advanced Materials & Interfacial Engineering
- Membranes For Water Treatment and Industrial Energy Reduction
- Nanostructured Catalysts For Carbon Capture and Wastewater Remediation
- Scalable Manufacturing and Materials Upgrading
- Atomically-controlled Ultrathin Films and Coatings
- High-throughput Materials
   Screening

### **Eric Stuve**

PhD, Stanford University, 1984 MS, Stanford University, 1979

#### Website

Stuve's teaching interests include energy and the environment, process design, and fuel cell engineering. Working with Professor Stu Adler, he developed a curriculum in fuel cell and electrochemical engineering that covers electrochemical fundamentals, polymer exchange membrane (PEM) fuel cells, and solid oxide fuel cells (SOFC). He has integrated fuel cells into the capstone design course, as fuel cell systems embody all of the concepts of chemical engineering, but on a scale accessible to students working in a university laboratory. More than 500 students have participated in fuel cell projects, and a number have pursued careers in fuel cell and electrochemical energy systems.

**UW Target Links: 3, 8, 10** 

SDG Links: 7, 9

#### Departments & Roles:

- <u>Chemical Engineering</u> | Professor
- <u>Chemistry</u> | Adjunct Professor
- <u>CEI</u> | Member Faculty

#### **Contact Information:**

- Email: stuve@u.washington.edu
- Phone: (206) 543-0156
- Building: BNS 343



#### Areas of Expertise & Interest:

- Energy Systems
- Health & Biotechnology
- Electrocatalysis
- Electrochemical Surface
   Science
- Fuel Cell Engineering

# **Hugh Hillhouse**

PhD, Chemical Engineering, University of Massachusetts, 2000 MS, Physics, University of Massachusetts, 2000 MS, Chemical Engineering, University of Washington, 1996

#### **Website**

Hillhouse's research lies at the nexus of nanomaterials and energy conversion. Within the realm of molecular and nanoscale science many new molecules, nanocrystals, electronic materials, and device architectures can be envisioned that may be able to address our current energy harvesting, utilization, and storage challenges. Research efforts within the group span the range from fundamental studies of molecular precursor chemistry, nanocrystal nucleation and growth, and materials defect chemistry to device fabrication, characterization, and modeling of solar cells and fuel cells to system-level analyses of the life-cycle and impact of potential new technologies.

**UW Target Links:** 3, 8, 10

**SDG Links:** 6, 7, 9, 12, 17

#### Departments & Roles:

- <u>Chemical Engineering</u> | Rehnberg Chair Professor
- <u>CEI</u> | Member Faculty

#### **Contact Information:**

Email: h2@uw.edu

• Phone: (206) 685-5257

• Building: MOL 123



#### Areas of Expertise & Interest:

- Energy Systems
- Data Science & Molecular Simulation
- Advanced Materials & Interfacial Engineering
- Solar Energy Conversion
- Nanomaterials
- Colloidal & Interfacial Phenomena
- Electrochemistry

# **Mary E. Lidstrom**

PhD, University of Wisconsin, 1977 MS, University of Wisconsin, 1975

#### **Website**

Dr. Lidstrom is a Professor of Microbiology and holds the Frank Jungers Chair of Engineering, in the Department of Chemical Engineering, at the University of Washington, Seattle. She received her B.S. in Microbiology from Oregon State University. After receiving her M.S. and Ph.D. in Bacteriology from the University of Wisconsin, Dr. Lidstrom conducted work as a Leverhulme postdoctoral Fellow in Microbiology at the University of Sheffield. Dr. Lidstrom has previously held academic appointments in Microbiology at the University of Washington, in the Center for Great Lakes Studies in Milwaukee, Wisconsin, and in Environmental Engineering Science at the California Institute of Technology.

**UW Target Links:** 3, 5, 6, 9, 10

**SDG Links:** 2, 3, 9, 10, 11, 12, 13

#### Departments & Roles:

- Chemical Engineering & Microbiology | Professor
- Frank Jungers Endowed Chair of Engineering

#### Contact Information:

Email: lidstrom@u.washington.edu

Phone: (206) 685-1751Building: GRB G80



#### Areas of Expertise & Interest:

- Health & Biotechnology
- Metabolic & Genomic
   Manipulation of
   Methanotrophic Bacteria
- Microbial Community Interactions

# Samson A. Jenekhe

PhD, Chemical Engineering, University of Minnesota, 1985 MA, Philosophy, University of Minnesota, 1981 MS, Chemical Engineering, University of Minnesota, 1980

### Website

The Jenekhe Research Laboratory is focused on basic and applied studies in the chemistry, physics, and engineering applications of organic/polymer semiconductors. We combine synthesis of well-defined semiconducting polymers and small-molecule organic semiconductors with detailed investigation of their charge transport, photophysics, electroluminescence, and photovoltaic properties towards understanding of underlying structure-property-morphology relationships. We explore applications of organic/polymer semiconductors in organic photovoltaics, organic/flexible electronics, energy conversion and storage systems, light-emitting diodes for displays and lighting, and nanotechnology.

**UW Target Links:** 3, 8, 10

**SDG Links:** 7, 9

#### Departments & Roles:

- <u>Chemical Engineering</u> | Boeing-Martin Professor
- Chemistry | Professor
- <u>CEI</u> | Member Faculty

#### Contact Information:

- Email: jenekhe@uw.edu
- Phone: (206) 543-5525
- Building: BNS 365



#### Areas of Expertise & Interest:

- Energy Systems
- Advanced Materials & Interfacial Engineering
- Organic Photovoltaics: Materials synthesis and device engineering
- Organic/Flexible Electronics: Materials synthesis and charge transport
- Organic Light-Emitting Diodes: Materials synthesis and device engineering
- Synthesis and Properties of Semiconducting Polymers
- Energy Conversion and Storage Systems

# **Stéphanie Valleau**

PhD, Physical Chemistry with Secondary Field in Computer Science, Harvard University, 2016 MA, Physics, Harvard University, 2013 MS, Physical Chemistry, University of Milan, 2010

### Website

Designing optimal catalysts, clean energy materials and reactivity is at the heart of chemical engineering. Finding the features which maximize the efficiency of chemical transport processes, catalyst activity and so on, can enable us to define new tools for more rapid chemical design.

In the Valleau group, we aim to search for these features and to address the questions of reactivity, exciton transport and material design by combining and developing methods from different fields: computational chemistry, biophysics and computer science. Among our goals, we want to understand how long term changes, such as biological evolution and temperature variations influence short timescale chemical transport processes.

**UW Target Links:** 3, 7, 8, 10

**SDG Links:** 7, 9, 17

#### Departments & Roles:

- <u>Chemical Engineering</u> | Assistant Professor
- <u>CEI</u> | Affiliate Faculty

#### **Contact Information:**

- Email: valleau@uw.edu
- Building: BNS 351



#### Areas of Expertise & Interest:

- Energy Systems
- Data Science & Molecular Simulation
- Exciton Transport and Materials Design
- Evolution and Reconstruction of Photosynthetic Systems
- Application of Machine Learning to Chemical Engineering
- Reaction Dynamics and Networks
- Open Quantum Systems

# Stuart B. Adler

PhD, Chemical Engineering, University of California, Berkeley, 1993 MS, Chemical Engineering, University of California, Berkeley, 1989

### Website

A common theme of our research is the use of transient voltage-current response (impedance and nonlinear impedance) to probe factors limiting electrode performance or causing electrode degradation. We often couple these measurements with operando techniques to probe more directly what is happening in or around the electrode materials during a reaction. By measuring and modeling these responses as a function of frequency, we gain deeper insights about the physics and chemistry of the reaction, and which factors limit performance. More recently we have been extending these methods to entire systems, and the use of data science and machine learning to interpret measured responses in terms of physics, chemistry, and operational parameters.

**UW Target Links:** 3, 7, 8, 10

**SDG Links:** 7, 9

#### Departments & Roles:

- Chemical Engineering | Associate Professor
- <u>CEI</u> | Member Faculty

#### **Contact Information:**

Email: stuadler@uw.edu

Phone: (206) 543-2131

Building: BNS 355



#### Areas of Expertise & Interest:

- Energy Systems
- Electrochemical Engineering
- Kinetic, Transport, and Thermodynamic Properties of Solids
- Advanced Measurement and Modeling of Solid State Electrochemical Systems

# **Venkat Subramanian**

PhD, Chemical Engineering, University of South Carolina, Columbia, 2001

### **Website**

Professor Venkat Subramanian's research and educational interests are at the confluence of electrochemistry, electrochemical engineering, applied mathematics and systems engineering.

**UW Target Links:** 3, 7, 8, 10

**SDG Links:** 7, 9, 11

#### Departments & Roles:

- <u>Chemical Engineering</u> and Clean Energy | Washington Research Foundation Innovation Professor
- <u>Electrical Engineering</u> | Adjunct Professor
- <u>CEI</u> | Affiliate Faculty

#### Contact Information:

- Email: vsubram@uw.edu
- Phone: 206-543-2271
- Building: 253 Benson



#### Areas of Expertise & Interest:

- High energy and power batteries
- Clean energy grid and transportation technologies
- Model reformulation
- Battery management system (BMS)
- Lithium-ion batteries
- Electrode materials
- Energy systems
- Multiscale simulation
- Energy storage
- Battery materials and devices

# **Vincent Holmberg**

PhD, Chemical Engineering, The University of Texas at Austin, 2011 MSE, Chemical Engineering, The University of Texas at Austin, 2010

### **Website**

The Holmberg research group is devoted to the development and study of new functional nanomaterials that have the potential to be produced in a scalable and cost-effective manner. We focus on inorganic nanostructures, such as nanowires and nanocrystals, synthesized via scalable solution-based and supercritical fluid-based processes, with an emphasis on nanomaterial growth, assembly, and integration. A portion of our laboratory is currently devoted to the development and study of new types of flexible, high-rate, high-capacity battery materials, with the remainder focused on magnetic, plasmonic, and photonic nanomaterials.

**UW Target Links:** 3, 8, 10

**SDG Links:** 7, 9

#### Departments & Roles:

- <u>Chemical Engineering</u> | Assistant Professor
- <u>CEI</u> | Faculty Member

#### Contact Information:

Email: holmvc@uw.edu

Phone: (206) 616-0199

Building: BNS 357



#### Areas of Expertise & Interest:

- Energy Systems
- Advanced Materials & Interfacial Engineering
- Nanomaterials Chemistry and Engineering
- Materials For Energy Conversion and Energy Storage
- Defect Engineering
- Magnetic, Plasmonic, and Photonic Nanomaterials
- Nanomaterial Assembly and Integration

# W. Jim Pfaendtner

Ph.D. Northwestern University, 2007

### **Website**

Our group uses computer simulations to understand and control molecular scale driving forces for a wide range of applications spanning biotechnology to fuel combustion. We develop new methods that expand the capabilities of molecular simulation and use advanced research computing resources to solve challenging problems in the area of computational molecular science.

**UW Target Links: 8, 10** 

**SDG Links:** 7, 17

#### Departments & Roles:

- <u>Chemical Engineering</u> | Steven and Connie Rogel Endowed Professor & Chair
- <u>Chemistry</u> | Professor

#### **Contact Information:**

- Email: jpfaendt@u.washington.edu
- Phone: (206) 616-8128
- Building: BNS 107



#### Areas of Expertise & Interest:

- Energy Systems
- Data Science & Molecular Simulation
- Health & Biotechnology
- Advanced Materials & Interfacial Engineering
- Computational Molecular Science
- Interfacial Phenomena of Proteins
- Applications of Al to Chemical Engineering
- Complex Reacting Systems
- Biomineralization

# Walter van Schalkwijk

Advanced Degree, Topic, School, Year

### Website

Walter van Schalkwijk is a Northwest leader and consultant in the lithium-ion battery research and development community. His research supports advanced batteries for the tech industry, including power sources for mobile and wearable technologies, and electrochemical devices that enable reliable operation of data center infrastructure. He has been has been under contract as Microsoft's "Principal Battery Scientist" since 2016 and is also under contract to Duracell Corporation as a battery manufacturing specialist.

**UW Target Links: 3, 7, 8, 10** 

SDG Links: 7, 9

#### Departments & Roles:

- Chemical Engineering | Affiliate Professor
- **CEI** | Affiliate Faculty

#### Contact Information:

Email: waltvans@uw.edu



#### Areas of Expertise & Interest:

- **Energy Storage**
- PV Materials & Devices
- Lithium-ion Batteries
- Wearable Technologies
- **Electrochemical Devices**

# Civil & Environmental Engineering

### **College of Engineering** | Website

At the University of Washington, Civil & Environmental Engineering students and faculty are taking on the challenges presented by our aging national infrastructure, while developing new approaches to address the needs of urban systems and communities around the globe. UW CEE is dedicated to providing students with leading-edge technical skill development and opportunities for hands-on practice to enable them to tackle complex engineering problems in response to changing technological and societal needs.

#### List of Related Individuals

- Amy Kim
- Anne Goodchild
- Cynthia Chen
- David Butman
- David R. Montgomery
- David Shean
- <u>Donald (Don) MacKenzie</u>
- Dorothy Reed
- Erkan Istanbulluoglu
- Faisal Hossain

- <u>lessica Kaminsky</u>
- <u>Jessica Lundquist</u>
- lim Thomson
- <u>Julian Marshall</u>
- Mike Gomez
- Rebecca Neumann
- Scott Meschke
- Stephen Muench
- Xuegang (Jeff) Ban
- Yinhai Wang

# **Amy Kim**

PhD, Civil Engineering, Texas A&M University, 2013 MS, Civil Engineering, Illinois Institute of Technology, 2008

### **Website**

Prior to starting her PhD program she worked as a construction engineer for over 8 years. She is LEED AP (BD+C) certified with an interest in reducing energy consumption for the built environment with emerging materials, tools, approaches and technologies.

Her ongoing research interests include investigating construction management issues for transportation projects, particularly with the NCHRP. She is working on a research project investigating long-range strategic issues affecting preservation, maintenance and renewal of highway infrastructure, as well as developing a comprehensive and scalable scoping process to assist transportation agencies to improve on-time and on-budget delivery of highway projects.

**UW Target Links:** 3, 5, 7, 8, 10

**SDG Links:** 7, 9, 11

#### Departments & Roles:

<u>Civil & Environmental</u>
 <u>Engineering</u> | Assistant
 <u>Professor</u>

#### **Contact Information:**

- Email:
- Phone:
- Building:



#### Areas of Expertise & Interest:

- Energy consumption
- Emerging materials, tools, approaches, and technologies
- Construction managementtransportation projects
- Long-range strategic issues affecting preservation, maintenance and renewal of highway infrastructure

# **Anne Goodchild**

PhD, Civil and Environmental Engineering, UC Berkeley, 2005 MS, Civil and Environmental Engineering, UC Berkeley, 2003

### **Website**

Dr. Anne Goodchild leads the University of Washington's academic and research efforts in the area of supply chain, logistics, and freight transportation. She is Professor of Civil and Environmental Engineering, and serves as Founding Director of both the Supply Chain Transportation & Logistics online Master's degree program and the Supply Chain Transportation & Logistics Center, the latter which launched the Urban Freight Lab (UFL) in 2016 to bring together the public and private sectors to address the challenges of the urban freight system by engaging in innovative research.

**UW Target Links:** 4, 7, 10

**SDG Links:** 2, 10, 11, 12, 17

#### Department(s):

- <u>Supply Chain Transportation & Logistics Program | Director</u>
- <u>Civil & Environmental</u> <u>Engineering</u> | Professor
- Industrial & Systems Engineering
   Adjunct Professor

#### **Contact Information:**

- Email: annegood@uw.edu
- Phone: (206) 543-3747
- Building: WCL 111



#### Areas of Expertise & Interest:

- Supply Chain Logistics
- Freight Transportation
- Energy Systems
- Transportation Engineering

# **Cynthia Chen**

PhD, University of California, Davis MS, New Jersey Institute of Technology

### **Website**

The THINK (Transportation-Human Interaction and Network Knowledge) Lab, directed by Cynthia Chen, studies the sustainability and resilience of a city through the lens of human beings interacting with the physical environment. We generate new knowledge and insights for use in city planning, infrastructure development and policy design. Our research results facilitate real-time disaster. response and recovery efforts. Our work is highly interdisciplinary, drawing on the latest methods and ideas in disciplines from social and natural sciences to engineering.

**UW Target Links: 3, 7, 10** 

<u>SDG Links:</u> 1, 3, 8, 9, 11, 12, 13, 17

#### Department(s):

- <u>Civil & Environmental</u> <u>Engineering | Professor</u>
- THINK Lab | Director

#### Contact Information:

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Building: MOR 133A



#### Areas of Expertise & Interest:

- Transportation Engineering
- Social and Physical Systems
- Resilient Systems
- Human Behaviors

# **David Butman**

PhD, Forestry & Environmental Studies, Yale University
MS, Environmental Science, Yale School of Forestry and Environmental Studies

### **Website**

Fresh water is critical to human survival and yet we continue to use and degrade this resource directly through mismanagement and indirectly through changes to the global climate system and unsustainable land use. Butman's work highlights these connections through investigations into the biogeochemistry of watersheds around the world, using advanced field techniques, geospatial modeling and satellite based remote sensing.

#### **UW Target Links: 3**

**SDG Links:** 1, 3, 6, 11, 13, 14, 15, 17

#### Departments & Roles:

<u>Civil & Environmental</u>
 <u>Engineering and Environmental</u>
 <u>& Forest Sciences</u> | Associate
 <u>Professor</u>

#### Contact Information:

Email: dbutman@uw.edu

Phone: (206) 685-0953

• Building: BLD 264



#### Areas of Expertise & Interest:

- Environmental Engineering
- Hydrology and Hydrodynamics
- Global and Regional Carbon Cycling
- The Biogeochemical Connections Between Land and Waters Systems
- Climate Change and Adaptation
- Ecosystem Science
- Landscape Ecology
- Remote Sensing and Geoinformatics
- Soil Science and Hydrology
- Statistics, Spatial Analysis, and Modeling

# **David Shean**

PhD, Earth and Space Sciences, University of Washington, 2016 ScM, Geology, Brown University, 2006

### **Website**

David's research involves the development and application of new methods to study dynamic Earth system components with real-world implications for water resources, sea level rise, and natural hazards. His current research uses satellite, airborne, UAV, and terrestrial remote sensing observations to understand the Earth's cryosphere, with focus on mountain glaciers, seasonal snow, and ice sheets. Much of this work requires the development and application of automated data processing pipelines, modern data science approaches, and cloud computing to answer questions that cannot be addressed using traditional approaches.

**UW Target Links: 3** 

**SDG Links:** 6, 14, 15, 17

#### Departments & Roles:

- <u>Civil & Environmental</u>
   <u>Engineering</u> | Assistant
   Professor
- <u>Aeronautics & Astronautics</u>
   Adjunct Assistant Professor

#### Contact Information:

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Phone: (206) 543-3105

Building: WIL 265



#### Areas of Expertise & Interest:

- Hydrology and Hydrodynamics
- Geotechnical Engineering
- Remote Sensing
- Geospatial Data Analysis
- Glaciology
- Cryospheric Science
- Geodesy
- Planetary Science

# **Donald (Don) Mackenzie**

PhD, Engineering Systems, Massachusetts Institute of Technology, Cambridge, MA, 2013 SM, Technology & Policy, Massachusetts Institute of Technology, Cambridge, MA, 2009

### **Website**

The goal of MacKenzie's research is to understand how emerging transportation technologies can be leveraged to make our transportation system more economically viable and environmentally benign, while providing access to goods, services, and opportunities for all.

**UW Target Links:** 4, 5, ,7, 8, 10

**SDG Links:** 5, 7, 8, 9, 10, 11, 13, 16

#### Departments & Roles:

- <u>Civil & Environmental</u> <u>Engineering</u> | Associate Professor
- <u>CEI</u> | Affiliate Faculty

### Areas of Expertise & Interest:

- Transportation Engineering
- Vehicle Electrification
- New Mobility Services
- Impacts of Vehicle Automation

#### Contact Information:

- Email: dwhm@uw.edu
- Phone: (206) 685-7198
- Building: MOR 121B

# Erkan Istanbulluoglu

PhD, Civil and Environmental Engineering, Utah State University, Logan, UT, 2003 MS, Agricultural Engineering, Uludag University, Bursa, Turkey, 1998

### **Website**

Erkan's research is highly interdisciplinary and aims to improve the understanding and modeling of interactions among hydrologic, ecologic, and geomorphic processes in watersheds; their connections to society; and the impact of climate change on watershed response. Erkan teaches undergraduate and graduate courses including Physical Hydrology, Hydraulic Design for Environmental Engineers, and Advanced Hydrology. He currently serves as an Associate Editor in Water Resources Research, and on the CUAHSI board of directors

**UW Target Links: 3** 

**SDG Links:** 3, 6, 11, 13, 15

#### Departments & Roles:

• <u>Civil & Environmental</u> <u>Engineering | Professor</u>

#### **Contact Information:**

- Email: erkani@u.washington.edu
- Phone: (206) 543-7923
- Building: WIL 160



#### Areas of Expertise & Interest:

- Hydrology and Hydrodynamics
- Geomorphology
- Hydrology
- Ecohydrology

# **Faisal Hossain**

PhD, Environmental Engineering, University of Connecticut, Storrs, CT, 2004 M Eng, Civil Engineering, National University of Singapore, Singapore, 1999

### **Website**

The overarching mission of Faisal Hossain is to make access to information. on water a 'fundamental right for all nations and all humans' and apply earth science discoveries with engineering technology to reduce social inequity in availability of food, water and energy around the world. He has published over 170 peer-reviewed journal articles, authored an undergraduate textbook, edited four books and contributed nine book chapters. His capacity building and education initiatives involving satellite remote sensing, numerical weather prediction and physical land surface modeling have resulted in several independently-owned satellite management system for Governments of several Asian nations for improved water, food and energy security.

**UW Target Links: 2, 4, 6, 8** 

**SDG Links:** 2, 4, 5, 6, 7, 9, 10, 12, 16, 17

#### Departments & Roles:

- American Institute of Hydrology
   Professional Hydrologist
- <u>Civil & Environmental</u>
   <u>Engineering</u> | John R. Kiely
   Endowed Professor

#### Contact Information:

• Email: fhossain@uw.edu

Phone: (425) 419-4629

Building: WIL 167



#### Areas of Expertise & Interest:

- Hydrology and Hydrodynamics
- Water Resources Management
- Remote Sensing
- Water-food-energy Security
- Infrastructure Resilience
- Human Impacts On Weather
- Climate and Water Resources
- Engineering Education

# Jessica Kaminsky

PhD, Civil Engineering, University of Colorado, Boulder, 2013

### **Website**

Lam an Associate Professor in the Civil and Environmental Engineering Department at the University of Washington. A scholar of engineering projects and organizations, I conduct research on infrastructure for developing communities with a particular interest in topics of social sustainability. While I am particularly interested in the global south, I am also interested in any context that is experiencing significant change in basic civil infrastructure (or, is developing). The practical goal of my research is to make basic civil infrastructure better serve all the world's people by enabling increased human capabilities.

**UW Target Links:** 3, 4, 6, 7, 10

<u>SDG Links:</u> 1, 2, 6, 9, 10, 11, 16, 17

#### Department(s):

- <u>Civil & Environmental Engineering</u>
   | Associate Professor and
   Associate Chair for Diversity,
   Equity, Inclusion, and Climate
- Global Health | Adjunct Associate Professor
- <u>CEI</u> | Affiliate Faculty

#### Contact Information:

- Email: jkaminsk@uw.edu
- Phone: (206) 221-3058
- Building: MOR 121H



#### Areas of Expertise & Interest:

- Environmental Engineering
- Construction, Energy and Sustainable Infrastructure
- Civil Infrastructure
- Developing Communities
- Qualitative Methods
- Global Engineering Projects and Organizations
- Social Sustainability

# Jessica Lundquist

PhD, University of California, San Diego MS, University of California, San Diego

### **Website**

Dr. Lundquist's research focuses on spatial patterns of snow and weather in the mountains and how those patterns are likely to affect streamflow and water resources in a changing climate.

#### **UW Target Links: 3**

**SDG Links:** 1, 3, 6, 11, 12, 13, 14, 15

#### Departments & Roles:

<u>Civil & Environmental</u>
 <u>Engineering | Professor</u>



#### Areas of Expertise & Interest:

- Hydrology and Hydrodynamics
- Mountain Hydrology
- Snow
- Environment
- Hydrometeorology
- Forest Hydrology

#### **Contact Information:**

- Email: jdlund@uw.edu
- Phone: (206) 685-7594
- Building: WIL 165

# Jim M. Thomson

PhD, Physical Oceanography, MIT/WHOI, 2006

### **Website**

Dr. Thomson studies waves and turbulence at the surface of the ocean surface, including interactions with sea ice. His work emphasizes field measurements and physical processes and includes the development of instrumentation and autonomous platforms. Applications for his work include remote sensing synthesis, model development, and naval operations.

**UW Target Links:** 3, 8, 10

**SDG Links:** 6, 7, 9, 14, 17

#### Departments & Roles:

• <u>Civil & Environmental</u> <u>Engineering</u> | Professor WOT

#### **Contact Information:**

- Email: jthomson@apl.washington.edu
- Phone: (206) 616-0858
- Building: Applied Physics Lab



#### Areas of Expertise & Interest:

- Hydrology and Hydrodynamics
- Environmental Fluid Mechanics
- Coastal Oceanography and Morphodynamics
- Surface-gravity Waves
- Field Observations and Remote Sensing
- Marine Renewable Energy (waves and Tides)

# **Julian Marshall**

PhD, Energy & Resources, UC Berkeley, 2005 MS, Energy & Resources, UC Berkeley, 2002

### **Website**

My research is in exposure assessment: understanding how much pollution people breathe, and how to reduce those exposures. My specific areas of focus are (1) Air pollution impacts of urban form; (2) Air pollution and health impacts of transportation energy consumption, including alternative fuels (biofuels, electric vehicles) and active travel (walking, biking); (3) In situ measurement of fine particles in developing countries. Two core themes underlying those areas are modeling and measuring spatiotemporal variability in pollution concentrations: and environmental justice: understanding who is more exposed or less exposed to air pollution, how exposures correlate with attributes such as race or income, and how changes in emissions might shift existing exposure gaps.

<u>UW Target Links:</u> 2, 3, 4, 5, 8, 9, 10

<u>SDG Links:</u> 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 16

#### Departments & Roles:

- <u>Civil & Environmental</u>
   <u>Engineering</u> | Professor and
   Associate Chair for Diversity,
   Equity, Inclusion, and Climate
  - Global Health | AdjunctProfessor

#### Contact Information:

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Phone: (206) 685-2591

Building: WIL 268



#### Areas of Expertise & Interest:

- Environmental Engineering
- Air Quality Engineering
- Air Pollution Exposure Assessment
- Environmental Impacts of Energy Consumption
- Environmental Engineering in Low-income Countries
- Environmental Health
- Environmental Justice

# **Mike Gomez**

PhD, Civil and Environmental Engineering, University of California, Davis, 2017 MS, Civil and Environmental Engineering, University of California, Davis, 2013

### **Website**

Michael Gomez joins the department from the University of California, Davis, where he completed his Ph.D. in 2017. His research focuses on leveraging natural chemical and biological processes in soils to develop sustainable geotechnical ground improvement technologies, which address global environmental challenges related to population growth, climate change, and material and energy demands. In particular, Michael's research has focused on the strengthening of loose and weak soils through a bio-mediated calcite precipitation process known as Microbially Induced Calcite Precipitation (MICP).

**UW Target Links:** 3, 7, 8

<u>SDG Links:</u> 1, 3, 6, 7, 9, 11, 12, 13, 15

#### Departments & Roles:

• <u>Civil & Environmental</u> <u>Engineering</u> | Assistant Professor

#### Contact Information:

• Email: mggomez@uw.edu

Phone: (206) 543-7614

Building: MOR 132G



#### Areas of Expertise & Interest:

- Geotechnical Engineering
- Bio-mediated Soil Improvement
- Sustainable Geotechnics
- Advanced Soil Characterization
- In-situ Testing
- Non-Invasive & Non-Destructive Measurements
- Cemented and Aged Geomaterials

# Rebecca Neumann

PhD, Massachusetts Institute of Technology

### **Website**

The hydro-biogeochemistry research group is revealing how physical, chemical and biological factors interact in soils, aguifers and surface water to control chemical fate and transport. We aim to inform development of management and policy decisions that protect human and environmental health. Thus we tackle societally relevant topics, such as food and water quality and global climate change. Recognizing the complexity of environmental systems, we take a multifaceted approach. We harness knowledge and techniques from multiple disciplines, including hydrology, limnology, aquatic chemistry, soil science, plant ecophysiology, and microbial ecology, and we use a combination of observational. experimental and computational methods to examine processes that occur at multiple spatial scales.

**UW Target Links: 3, 6, 8, 10** 

**SDG Links:** 2, 3, 7, 13, 15, 17

#### Department(s):

• <u>Civil & Environmental</u> <u>Engineering</u> | Associate Professor

#### Contact Information:

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Phone: (206) 221-2298

Building: WIL 168



#### Areas of Expertise & Interest:

- Hydrology and Hydrodynamics
- Environmental Engineering
- Subsurface Hydrology and Metal Biogeochemistry
- Plant-controlled Hydrology and Biogeochemistry
- Field, Lab and Modeling Studies of Water and Food Quality
- Hydro-biogeochemistry

# **Stephen Muench**

PhD, Civil Engineering, University of Washington, 2004 MSCE, University of Washington, 1998

### **Website**

Steve has research interests. in the transportation infrastructure realm with special emphasis on sustainability. Current sustainability efforts include Greenroads, a sustainability rating system for roadway design and construction. Other interests include heavy civil construction, pavements and online training.

**UW Target Links:** 3, 7, 10

**SDG Links:** 9, 11

#### Departments & Roles:

- <u>Civil & Environmental</u>
   <u>Engineering</u> | Tom and Marilyn
   Draeger and The Beavers
   Charitable Trust Professor
- Associate Chair for Undergraduate Education

#### Contact Information:

- Email: stmuench@u.washington.edu
- Phone: (206) 616-1259
- Building: MOR 133C



#### Areas of Expertise & Interest:

- Construction, Energy and Sustainable Infrastructure
- Pavements
- Greenroads
- Sustainability
- Transportation
   Infrastructure and
   Construction
- Online Training

# Xuegang (Jeff) Ban

PhD, Civil and Environmental Engineering, University of Wisconsin, Madison, 2005 MS, Computer Sciences, University of Wisconsin, Madison, 2003 MS, Automotive Engineering, Tsinghua University, P. R. China, 2000

### Website

Dr. Ban's research interests are in transportation network system modeling and simulation, urban traffic system modeling and operations, and Intelligent Transportation Systems (ITS). He develops modeling tools to study dynamic transportation networks with emerging technologies and systems such as connected/ automated vehicles and shared mobility. He also works on urban traffic system state estimation/prediction using mobile sensing data.

**UW Target Links:** 3, 7, 8, 10

**SDG Links:** 3, 7, 9, 11, 17

#### Department(s):

<u>Civil & Environmental</u>
 <u>Engineering</u> | William M. and
 Marilyn M. Connor Endowed
 Professor

#### Contact Information:

Email: banx@uw.eduPhone: (206) 543-9655

Building: MOR 121G



#### Areas of Expertise & Interest:

- Transportation Engineering
- Transportation Network
   System Modeling &
   Simulation
- Urban Traffic System Modeling and Operations
- Intelligent Transportation Systems
- Connected / Automated Vehicles
- Transportation Big Data Analytics

# **Yinhai Wang**

PhD, University of Tokyo, Tokyo, Japan, Sept. 1998 MS, Computer Science and Engineering, University of Washington, Seattle, Washington, 2002 MSCE, Construction Engineering, Tsinghua University, Beijing, China, 1991

### **Website**

My research effort has been dedicated in developing (1) new traffic sensors; (2) data quality control algorithms; (3) big data analytics tools; (4) data-driven methods; and (5) data management solutions to support the research and practical needs in traffic operations, traffic safety, urban mobility, connected/automated vehicle deployments, etc.

**UW Target Links:** 3, 7, 10

**SDG Links:** 3, 9, 11, 17

#### Departments:

- PacTrans and STAR Lab | Director
- <u>Civil & Environmental Engineering</u> |
   Professor
- <u>Electrical & Computer Engineering</u> | Adjunct Professor

#### Contact Information:

- yinhai@uw.edu
- (206) 616-2696
- MOR 121F



#### Areas of Expertise & Interest:

- Transportation Engineering
- Traffic Detection Systems
- Transportation Big Data Analytics
- E-science of Transportation
- Traffic Operations and Simulation
- Connected/automated Vehicle Impacts
- Smart Urban Mobility

# **Electrical & Computer Engineering**

### **<u>College of Engineering</u>** | Website

At UW ECE, we cultivate innovation and inspire through high-impact research. We educate and develop tomorrow's leaders to solve the world's most pressing challenges.

UW ECE's position as a top-ranked electrical and computer engineering department provides our faculty and student body with a vibrant learning culture. Students receive a robust education through a strong technical foundation, group project work and hands-on research opportunities. Our faculty work in dynamic research areas collaborating with academia, industry and government institutions.

UW ECE continues to lead in cutting-edge science an technology while advancing socially-responsible innovation. Our innovation ecosystem is critical in promoting an entrepreneurial mindset in our teaching, and is strengthened through diverse partnerships that address complex global challenges in health, energy, technology and the environment.

#### List of Related Individuals

- Alexander Mamishev
- <u>Arka Majumdar</u>
- Baosen Zhang
- Bill Howe
- Brian Johnson
- C. J. Richard Shi
- Daniel Kirschen
- Denise Wilson

- Kai-Mei Fu
- Karl F. Böhringer
- Lih Lin
- M. P. (Anant) Anantram
- Payman Arabshahi
- Scott Dunham
- Shwetak Patel
- Yinhai Wang

# **Alexander Mamishev**

PhD, Electrical Engineering & Computer Science, MIT, 1999 MSEE, Texas A&M University, 1994

### **Website**

Alexander V. Mamishev is a professor and the director of the Sensors, Energy, and Automation Laboratory (SEAL) in the Department of Electrical Engineering, University of Washington, Seattle. Mamishev is author on more than 120 technical publications. He served as an associate editor for the IEEE Transactions on Dielectrics and Electrical Insulation. He is a recipient of the NSF CAREER Award, the IEEE Outstanding Branch Advisor Award, and the **UW EE Outstanding Research** Advisor Award.

**UW Target Links:** 3, 8, 10

**SDG Links:** 7, 9

#### Departments & Roles:

- <u>Electrical & Computer</u> <u>Engineering</u> | Professor
- <u>CEI</u> | Affiliate Faculty

#### **Contact Information:**

- Email: mamishev@ece.uw.edu
- Phone: 206-221-5729
- Building: 215K ECE



#### Areas of Expertise & Interest:

- Robotics and Controls
- Photonics and Nano Devices
- Power and Energy Systems

# **Baosen Zhang**

PhD, Electrical Engineering and Computer Science, University of California, Berkeley, 2013

### Website

Baosen Zhang is an associate professor in the Department of Electrical & Computer Engineering at the University of Washington. He received his B.A.Sc. degree in engineering science from the University of Toronto, Toronto, ON, Canada, in 2008 and his Ph.D. from the Department of Electrical Engineering and Computer Science at the University of California at Berkeley, in 2013. Before joining UW, he was postdoctoral scholar at Stanford University, jointly hosted by departments of Civil and Environmental Engineering and Management & Science Engineering. His interest is in the area of power systems and cyber physical systems, particularly in the fundamentals of physical resource allocations, economics, and controlling systems with humans in the loop.

**UW Target Links: 3, 7, 8, 10** 

**SDG Links:** 7, 8, 9, 17

#### Departments & Roles:

- Electrical & Computer **Engineering** | Keith and Nancy Rattie Endowed Career **Development Professor**
- **CEI** | Member Faculty

Email: zhangbao@ece.uw.edu

Phone: 206-616-3818 Building: M310 ECE

#### Areas of Expertise & Interest:

- Power and Energy Systems
- Data Science
- **Robotics and Controls**

Contact Information:

# **Brian Johnson**

PhD, Electrical and Computer Engineering, University of Illinois, Urbana-Champaign, 2013 MS, Electrical and Computer Engineering, University of Illinois, Urbana-Champaign, 2010

### **Website**

Brian Johnson joined UW's Electrical & Computer Engineering Department in 2018 as an assistant professor. He received his M.S. and Ph.D. degrees in electrical and computer engineering from the University of Illinois at Urbana-Champaign in 2010 and 2013, respectively, and was awarded a National Science Foundation Graduate Research Fellowship in 2010. He has five years of prior experience as a staff scientist at the National Renewable Energy Laboratory where he led a variety of projects centered on the development of next-generation controllers and energy conversion circuits for power systems. He currently serves as an associate editor for the IFFF Transactions on Energy Conversion.

**UW Target Links: 3, 8, 10** 

**SDG Links:** 7

#### Departments & Roles:

<u>Electrical & Computer</u>
 <u>Engineering</u> | Washington
 Research Foundation Innovation
 Assistant Professor of Clean
 Energy

#### Contact Information:

• Email: brianbj@ece.uw.edu

Phone: 206-616-4502Building: M322 ECE

Areas of Expertise & Interest:

Power and Energy Systems

# C. J. Richard Shi

Advanced Degree, Topic, School, Year

# 68

### **Website**

C. J. Richard Shi's primary research interests relate to computer-aided design and test of VLSI circuits and systems with the emphasis on analog and deep-submicron circuit modeling, simulation and optimization. His recent research activities include also VLSI implementation of communication systems, three-dimensional VLSI circuits, and radiation-hardened by design technologies. He has supervised 20 PhD students and post doctoral fellows.

**UW Target Links:** 3, 5, 8, 10

**SDG Links:** 5, 7, 9, 17

#### Departments & Roles:

- <u>Electrical & Computer</u> <u>Engineering</u> | Professor
- <u>CEI</u> | Affiliate Faculty

#### **Contact Information:**

- Email: cjshi@ece.uw.edu
- Phone: 206-221-5291
- Building: 210 ECE

#### Areas of Expertise & Interest:

- Computing and Networking
- Biosystems
- Data Science

# **Daniel Kirschen**

Advanced Degree, Topic, School, Year

### **Website**

The main objective of his research focuses on developing techniques that achieve the optimal balance between providing a reliable grid service, minimizing the cost of providing energy, and reducing the environmental impact of the electrical system while facilitating the use of renewable energy sources.

**UW Target Links: 3, 7, 8, 10** 

**SDG Links:** 7, 9, 11, 17

#### Departments & Roles:

- <u>Electrical & Computer</u>
   <u>Engineering</u> | Donald W. and
   Ruth Mary Close Professor
- <u>CEI</u> | Member Faculty

#### Contact Information:

- Email: kirschen@ece.uw.edu
- Phone: 206-543-2174
- Building: M326 ECE



Areas of Expertise & Interest:

Power and Energy Systems

# **Denise Wilson**

PhD, Electrical Engineering, Georgia Institute of Technology, 1995 MS, Electrical Engineering, Georgia Institute of Technology, 1989

### **Website**

Wilson's interests are split between microsensor systems and engineering education research. In the sensors arena. she has developed a range of microsystems using chemical, biological and radiant sensor systems focused on solving sensing problems that require compact, low-power and portable solutions, with particular emphasis in environmental monitoring. In engineering education, her basic research is focused on the role of belonging, self-efficacy and other non-cognitive factors on academic success and persistence, and her applied research has sought to develop toolboxes for effective teaching of sustainability and professional development topics. She also conducts research on women and other underrepresented groups in engineering including ethnic and racial minorities and underrepresented sexual identities.

<u>UW Target Links:</u> 1, 3, 4, 6, 8, 10

**SDG Links:** 4, 5, 7, 10, 12, 13, 16, 17

#### Departments & Roles:

• <u>Electrical & Computer</u> <u>Engineering | Professor</u>

#### **Contact Information:**

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UNIVERSITY of WASHINGTON

#### Areas of Expertise & Interest:

- Photonics and Nano Devices
- Data Science

# **Dorothy Reed**

PhD, Princeton University, 1980 MSE, Princeton University, 1977

### **Website**

Her research interests include the investigation of the resiliency and sustainability of civil infrastructure systems with particular emphasis on post-hurricane performance of power delivery systems. Her research has been featured in the NSF Science Nation series. Recently, her research has focused on green infrastructure and energy efficiency of buildings. She is on the board of directors of the Americas Association for Wind Engineering (AAWE), and conducted post-hurricane damage investigations in the Gulf of Mexico. She serves as elected chair of the national technical Structural Wind Engineering Committee (SWEC), of the American Society of Civil Engineers (ASCE).

**UW Target Links:** 3, 7, 8, 10

**SDG Links:** 1, 3, 7, 8, 9, 11, 13, 17

#### Departments & Roles:

- <u>Civil & Environmental</u> <u>Engineering | Professor</u>
- Industrial & Systems Engineering
   Adjunct Professor

#### **Contact Information:**

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• Phone: (206) 543-0351

Building: MOR 133B



#### Areas of Expertise & Interest:

- Construction, Energy and Sustainable Infrastructure
- Wind Engineering
- Infrastructure Resiliency

# Karl F. Böhringer

PhD, Cornell University, 1997 MS, Cornell University, 1993

### **Website**

In our lab, we work on many aspects of micro and nano electro mechanical systems (MEMS / NEMS). This research tends to be very interdisciplinary, and we have collaborations in biology, chemical engineering, bioengineering, computer science, and other departments. We have built, for example, self-assembling microstructures, biomedical implants, systems for docking of picosatellites, and walking microrobots.

**UW Target Links:** 3, 8, 10

**SDG Links:** 3, 7, 9

#### Departments & Roles:

- <u>Electrical & Computer</u>
   <u>Engineering</u> and <u>Bioengineering</u>
   I Professor
- <u>CEI</u> | Affiliate Faculty

#### **Contact Information:**

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- Phone: 206-221-5177
- Building: 253I ECE



#### Areas of Expertise & Interest:

- Photonics and Nano Devices
- MEMS
- Microfabrication
- Self-assembly
- Microrobotics
- Microfluidics

# Lih Y. Lin

PhD, Electrical Engineering, University of California, LA

### **Website**

Her research projects in UW have involved nanophotonics with solution-processed materials, nanostructure-enhanced laser tweezers, bio-photonics and optical MEMS/NEMS. She has served on the technical program committee and as chair and co-chair of various technical conferences, and has served as guest editor for several journals in the field of photonics. She has over 90 journal publications, 180 conference papers, 5 book chapters and 34 US patents. Lin was a recipient of the MIT Technology Review Award. She is a Fellow of the IEEE and a Fellow of the OSA.

**UW Target Links: 3,8** 

**SDG Links:** 7, 9

#### Departments & Roles:

- <u>Electrical & Computer</u> <u>Engineering | Professor</u>
- <u>Physics</u> | Adjunct Professor

#### **Contact Information:**

- Email: lylin@uw.edu
- Phone: 206-543-2168
- Building: M414 ECE



#### Areas of Expertise & Interest:

- Photonics and Nano Devices
- Condensed Matter Experiment

# M. P. (Anant) Anantram

MSc, Physics, University of Pune, India PhD, Electrical Engineering, Purdue University

### **Website**

Anantram's group at the UW works on the theory, algorithm and application of modeling methods for nanoscale materials and devices. The group's current focus is on fast algorithms to calculate Gless, modeling of electron transport in DNA and multi-scale modeling of memory devices such as phase change and resistive memory devices.

**UW Target Links: 3, 8, 10** 

**SDG Links:** 7, 9

#### Departments & Roles:

- <u>Electrical & Computer</u> Engineering | Professor
- <u>Physics</u> | Adjunct Professor
- <u>CEI</u> | Affiliate Faculty

#### **Contact Information:**

- Email: anantmp@uw.edu
- Phone: 206-221-5162
- Building: M218 ECE



#### Areas of Expertise & Interest:

- Photonics and Nano Devices
- Condensed Matter Theory

# Payman Arabshahi

PhD, Electrical Engineering, 1994 University of Washington MS, Electrical Engineering, 1990 University of Washington

## Website

Arabshahi has been the co-founder of, or advisor to, a number of technology startups. His interests are in entrepreneurship education, innovation readiness, underwater and space communications, wireless networks, data mining and search, and signal processing.

**UW Target Links:** 2, 3, 5, 8

SDG Links: 4, 5, 7, 8, 9, 11, 17

### Departments & Roles:

<u>Electrical & Computer</u>
 <u>Engineering</u> | Associate
 Professor

## Areas of Expertise & Interest:

- Computing and Networking
- Underwater and Space Communications
- Wireless Networks, Power System Optimization
- Smart Grid
- Data Mining and Search
- Signal Processing

#### **Contact Information:**

• Email: paymana@ece.uw.edu

• Phone: 206-221-6990

• Building: 450 ECE

# **Scott Dunham**

PhD, Electrical Engineering, Stanford University, 1985 MS, Electrical Engineering, Stanford University, 1980

## Website

Scott Dunham received a B.S. in **Electrical Engineering from Cornell** University in 1979, and M.S. and Ph.D. degrees in Electrical Engineering from Stanford University in 1980 and 1985. He was a faculty member in the Electrical and Computer Engineering Department at Boston University from 1985 to 1999. In 1999, he joined the Electrical & Computer Engineering Department at the University of Washington, where he is also an adjunct faculty member in Physics and Materials Science & Engineering. His research is focused on the fundamental understanding and modeling of complex materials, nanofabrication processes, and electronic and optoelectronic devices.

**UW Target Links: 3, 8, 10** 

**SDG Links:** 7, 9

### Departments & Roles:

- <u>Electrical & Computer</u> <u>Engineering | Professor</u>
- <u>CEI</u> | Member Faculty

#### **Contact Information:**

Email: dunham@uw.edu

• Phone: 206-543-2189

Building: 218 ECE



### Areas of Expertise & Interest:

- Photonics and Nano Devices
- Power and Energy Systems

# **Shwetak Patel**

PhD, Computer Science, Georgia Institute of Technology, 2008

## **Website**

Shwetak is currently the Washington Research Foundation Entrepreneurship **Endowed Professor in Computer Science** & Engineering and Electrical & Computer Engineering at the University of Washington, where he directs the Ubicomp Lab. His research is in the areas of Human-Computer Interaction, Ubiquitous Computing, and Sensor-Enabled Embedded Systems, with a particular emphasis on the application of computing to health and sustainability. He is a recipient of a MacArthur Fellowship, Sloan Fellowship, Microsoft Research Faculty Fellowship, MIT TR-35 Award, World Economic Forum Young Global Scientist Award, NSF Career Award, the Presidential PECASE award, and the ACM Prize in Computing Award.

**UW Target Links: 3, 5, 8** 

**SDG Links:** 3, 5, 7, 9, 17

### Departments & Roles:

 Computer Science & Engineering and Electrical & Computer Engineering | Washington Research Foundation Entrepreneurship Endowed Professor

#### Contact Information:

- Email: shwetak@cs.washington.edu
- Building: CSE 650



### Areas of Expertise & Interest:

- Fabrication
- Human-Computer Interaction & Accessible Technology
- Wireless & Sensor Systems
- Ubiquitous Computing
- Health
- Ubiquitous Computing
- Sensing
- Human-Computer Interaction
- Embedded Systems

# Industrial & Systems Engineering

## <u>College of Engineering</u> | <u>Website</u>

Industrial & Systems Engineering (ISE) is a branch of engineering that uses mathematical, statistical, and scientific techniques to design, analyze, implement, and improve systems of people, information, and materials. Such systems often involve complex interactions between humans and machines. ISEs strive to ensure that these systems work safely and efficiently.

ISEs are experts at collecting, cleaning, analyzing, and interpreting qualitative and quantitative data. They utilize such data to make predictions about a system's behavior and to make decisions that ultimately improve people's lives. They often rely on computer programming to attain these systems-level and people-oriented objectives in our modern technology-driven society.

#### List of Related Individuals

- Anne Goodchild
- Dorothy Reed
- Youngjun Choe

# **Youngjun Choe**

PhD, Industrial & Operations Engineering, University of Michigan MA, Statistics, University of Michigan

## **Website**

Youngjun Choe is an Assistant Professor of Industrial & Systems Engineering at the University of Washington, Seattle. His research centers around developing statistical methods to infer on extreme events (e.g., natural hazard-induced disasters) using empirical and simulated data. He directs the Disaster Data Science Lab. He received his Ph.D. in Industrial & **Operations Engineering** (concentration: Quality Engineering & Applied Statistics) and M.A. in Statistics from the University of Michigan, Ann Arbor. He holds bachelor's degrees in Physics and Management Science from KAIST in Korea.

**UW Target Links: 3** 

**SDG Links:** 1, 3, 11, 13, 17

### Departments & Roles:

 Industrial & Systems Engineering and <u>Statistics</u> | Assistant Professor

#### **Contact Information:**

Email: ychoe@uw.edu
 (200) 224 2000

Phone: (206) 221-8908

Building: AER 141F



### Areas of Expertise & Interest:

- Applied Statistics & Production Systems
- Computational Statistics
- Stochastic Simulation
- Quality and Reliability Engineering

# Materials Science & Engineering

## **College of Engineering | Website**

Our mission: The mission of the Department is to be recognized as an outstanding student-centered organization that serves the industrial and academic needs of the University, the State of Washington, the nation, and the international community.

The department is organized to achieve its mission by:

- Providing the highest quality education and research programs in materials science and engineering that are at the forefront of national trends and integrating with regional strengths/issues/needs so as to prepare our students to function effectively in the evolving global economy.
- Serving as the focal point and catalyst for developing high quality, coordinated and visionary research and educational programs for materials-intensive students and faculty throughout the University so as to maximize our visibility and elevate the MSE department into the top tier in the nation.
- Strengthening our mentoring at all levels in order to promote the development of a diverse successful group of faculty, students, and staff.

#### List of Related Individuals

- Alex K. Y. Jen
- <u>Eleftheria Roumeli</u>
- Guozhong Cao
- Hong Ma
- <u>lames J. De Yoreo</u>
- <u>I. Devin MacKenzie</u>
- <u>Jihui Yang</u>

- Junlan Wang
- <u>lun Liu</u>
- Lilo D. Pozzo
- Matthew Yankowitz
- Ting Cao
- Xiaodong Xu

# Alex K. Y. Jen

PhD, Chemistry, University of Pennsylvania, 1984

## **Website**

His research centers on the design and synthesis of functional polymers for photonic and energy applications. Jen has been recognized as a Fellow by MRS, ACS, PMSE, OSA, SPIE, and AAAS, and has faculty appointments in Taiwan, China, and Korea. He was on the Board of Directors of the WA Technology Center and is a member of the WA Academy of Sciences. Jen is currently the Lee Shau-Kee Chair Professor of Materials Science and Chair Professor of Chemistry and Materials Science of the City University of Hong Kong, having served as Provost from 2016 to 2020

**UW Target Links: 8, 10** 

**SDG Links:** 7

## Departments & Roles:

- Materials Science & Engineering
   Professor Emeritus
- <u>CEI</u> | Affiliate Faculty

#### **Contact Information:**

• Email: alexjen@cityu.edu.hk



### Areas of Expertise & Interest:

- Solar Energy
- Advanced Energy Materials
- PV Materials & Devices

# **Eleftheria Roumeli**

PhD, Physics, Aristotle University of Thessaloniki MSc, Materials Physics & Technology, Aristotle University of Thessaloniki

## **Website**

Our research focus is on engineering new high-performance polymer nanocomposite materials, and studying their fundamental structure-processing-properties relationships, with emphasis on mechanical and thermal properties.

**UW Target Links:** 3, 6, 8

**SDG Links:** 2, 6, 7, 9, 12, 15

## Departments & Roles:

- Materials Science & Engineering
   Assistant Professor
- Mechanical Engineering | Adjunct Assistant Professor
- <u>CEI</u> | Affiliate Faculty

#### Contact Information:

- Email: eroumeli@uw.edu
- Phone: (206) 616-2832
- Building: ROB 337



### Areas of Expertise & Interest:

- Composite Materials
- Materials Characterization
- Materials Physics
- Polymers
- Biomaterials & Bionanotechnology
- Polymer Nanocomposites
- Plant-based Biocomposite Materials & Biopolymer Physics
- Architected Materials
- Additive manufacturing

# **Guozhong Cao**

PhD, Eindhoven University of Technology, Eindhoven, the Netherlands MS, Chinese Academy of Sciences, Shanghai Institute of Ceramics, Shanghai, China

## Website

Current research is focused mainly on chemical processing, characterization, and applications of nanostructured materials and coatings and devices for energy conversion and storage as well as sensors and actuators.

**UW Target Links:** 3, 8, 10

**SDG Links:** 7, 9

## Departments & Roles:

- Materials Science & Engineering and <u>Chemical Engineering</u> | Boeing-Steiner Professor
- Mechanical Engineering | Adjunct Professor
- Graduate Program Coordinator
- <u>CEI</u> | Member Faculty

#### Contact Information:

Email: gzcao@uw.edu

Phone: (206) 616-9084

• Building: ROB 302M



### Areas of Expertise & Interest:

- Engineering Nano and Microstructures For Excitonic Solar Cells: Dye- and Quantum Dot-sensitized Solar Cells, Inverted Polymer Solar Cells and Perovskite Solar Cells
- Organic-inorganic Hybrids and Coatings For Sensing, Filtration, Corrosion Protection, and Surface Modification
- Template-based Growth of Nanorod, Nanotube, and Nanocable Arrays
- Dielectrics, Ferroelectrics, and Piezoelectrics and Devices
- Electrodes For Electric Double Layer
   Capacitors and Pseudocapacitors
- Design and Controlled Synthesis of Nanostructured Electrodes For Rechargeable Batteries: Alkaline-ion, Metal-oxygen, and Flow Batteries

# **Hong Ma**

Advanced Degree, Topic, School, Year

## **Website**

CEI-related research interests: Organic/polymer materials and surface/interface nanoengineering for high-performance solar cells and low-power flexible electronics.

**UW Target Links: 3, 8, 10** 

**SDG Links:** 7, 9

### Departments & Roles:

- <u>Materials Science & Engineering</u>
   | Research Associate Professor
- <u>CEI</u> | Affiliate Faculty

Areas of Expertise & Interest:

- Solar Energy
- PV Materials & Devices

#### **Contact Information:**

- Email:
- Phone:
- Building:

# J. Devin MacKenzie

PhD, Materials Science and Engineering, University of Florida, 1998 MS, Materials Science and Engineering, University of Florida

## **Website**

Devin MacKenzie's work is centered around the development of new materials, device structures and integrated processes that enable highly efficient roll-to-roll (R2R) processing of devices for energy storage, sensing, and integrated medical systems, enabling applications not well served by conventional semiconductor and lithium energy storage technologies that lack the processing rate, have large carbon footprints and use environmentally damaging materials in subtractive processes.

**UW Target Links:** 3, 7, 8, 10

**SDG Links:** 3, 7, 9

## Departments & Roles:

- Materials Science & Engineering and Mechanical Engineering | Associate Professor
- CEI | Member Faculty

#### **Contact Information:**

- Email: jdmacken@uw.edu
- Phone: (206) 221-0309
- Building: ROB 302J



### Areas of Expertise & Interest:

- Electronic, Optical & Magnetic Materials
- Composite Materials
- Device Structures
- Printed and Flexible Electronics Including Flexible and Ultrathin Displays, Compact Wireless Sensors, Wearable Electronics, and Health Monitoring Devices
- Thin Film Batteries
- Nanomaterials
- Organic Semiconductors
- Emerging Electronic Materials
- Photovoltaics
- Printed/flexible Electronics
- Integrated Medical Systems
- Energy Storage and Sensing
- Roll-to-roll Processing (R2R)

# Jihui Yang

PhD, Physics, University of Michigan, Ann Arbor, Michigan, 2000 MS, Radiological Physics, Wayne State University, Detroit, Michigan, 1994. MS, Physics, University of Oregon, Eugene, Oregon, 1991

## **Website**

Jihui is a Kyocera Professor in MSE and Vice Dean of the College of Engineering. His research focuses on thermoelectric and energy storage materials with an emphasis on the design, synthesis, testing, and understanding of advanced thermoelectric materials and Li-ion battery materials for energy conversion and storage.

**UW Target Links:** 3, 8, 10

**SDG Links:** 7, 9

### Departments & Roles:

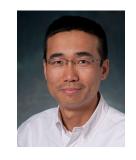
- Materials Science & Engineering
   Kyocera Professor
- <u>College of Engineering</u> | Vice Dean
- <u>CEI</u> | Member Faculty

#### Contact Information:

Email: jihuiy@uw.edu

Phone: (206) 543-7090

• Building: ROB 302F



### Areas of Expertise & Interest:

- Ceramic Processing
- Ceramic Properties
- Electronic, Optical & Magnetic Materials
- Materials Chemistry
- Materials Characterization
- Materials Modeling
- Materials Physics
- Advanced Thermoelectric Materials
- Energy Conversion
- Li-ion Battery Materials
- Energy Storage

# **Jun Liu**

PhD, Materials Science & Engineering, University of Washington Masters, Ceramic Engineering, University of Washington

## **Website**

Jun Liu's main interest is developing fundamental principles to guide materials synthesis, characterization and application of advanced materials for energy, biomedicine and environment, development and deployment of new materials and technologies for electric vehicles, grid scale energy storage and modern communications.

**UW Target Links:** 3, 7, 8, 10

**SDG Links:** 3, 7, 9, 11, 13

## Departments & Roles:

- Materials Science & Engineering |
   Washington Research Foundation
   Innovation Chair in Clean Energy
   and Campbell Chair
- <u>Chemical Engineering</u> | Professor

#### Contact Information:

Email: jliuuw1@uw.eduPhone: (206) 543-2620

Building: ROB 302K



## Areas of Expertise & Interest:

- Ceramic Processing
- Ceramic Properties
- Composite Materials
- Materials Chemistry
- Materials Characterization
- Materials Physics
- Materials Synthesis and Characterizations
- Energy Storage
- Energy Systems

# Lilo D. Pozzo

PhD, Chemical Engineering, Carnegie Mellon University, 2006

## **Website**

Research in the Pozzo group centers on the development, measurement and control of self-assembly processes for soft materials over nanometer and micrometer scales. This manipulation of complex material structures results in novel properties that optimize their use in engineering applications.

**UW Target Links:** 3, 8, 10

**SDG Links:** 3, 7, 9, 17

## Departments & Roles:

- Materials Science & Engineering | Interim Chair & Professor
- <u>Chemical Engineering</u> |
   Boeing-Roundhill Professor for Excellence in Engineering
- <u>CEI</u> | Member Faculty

#### Contact Information:

- Email: dpozzo@u.washington.edu
- Phone: (206) 685-8536
- Building: ROB 302F



### Areas of Expertise & Interest:

- Energy Systems
- Data Science & Molecular Simulation
- Health & Biotechnology
- Advanced Materials & Interfacial Engineering
- Colloidal and Nano Materials
- Polymer Self-Assembly
- Neutron and X-ray Scattering
- Ultrasound and Sonochemistry
- High-Throughput
   Experimentation and
   Laboratory Automation

# **Ting Cao**

PhD, Physics, University of California at Berkeley, 2018

## **Website**

Ting Cao's research employs quantum physics, advanced materials modelling techniques, and high-performance computing to study materials science and condensed matter physics, with special focus on the electronic structures of materials, excited-state phenomena, and light-matter interactions. His current research interest lies in exploring the distinct physical properties of one- and two-dimensional material systems which are potentially useful for future applications. Ting Cao received a Ph.D. degree in physics from the University of California, Berkeley in 2018.

**UW Target Links: 3, 8** 

**SDG Links:** 7, 9

### Departments & Roles:

- <u>Materials Science & Engineering</u>
   | Assistant Professor
- <u>CEI</u> | Affiliate Faculty

#### **Contact Information:**

Email: tingcao@uw.eduPhone: (206) 543-2626

Building: ROB 311



### Areas of Expertise & Interest:

- Electronic, Optical & Magnetic Materials
- Materials Chemistry
- Materials Characterization
- Materials Modeling
- Materials Physics
- Computational Materials
   Science
- Condensed Matter Physics
- Low-dimensional Materials

# **Mechanical Engineering**

## **College of Engineering** | Website

Mechanical engineering is the broadest of all engineering disciplines, and interdisciplinary work is key to our department's success. Our students and faculty work together in collaborative environments, forging partnerships across campus and with government agencies and industry partners. In recent years our research has increasingly expanded in the areas of health technology and energy. This focus has allowed us to diversify our curriculum and is moving the department to the next level in national and international stature.

In addition to health and medicine, the department also has focused research programs in areas such as novel and automated manufacturing, clean and alternative energy, design for the environment, micro and nanotechnology, biomechanics, and advanced manufacturing and materials, to name but a few.

#### List of Related Individuals

- Brian Polagye
- Corie Cobb
- <u>Eleftheria Roumeli</u>
- Guozhong Cao
- <u>J. Devin Mackenzie</u>
- <u>Iohn Kramlich</u>
- <u>loyce Cooper</u>
- Junlan Wang
- Philip Malte

# **Brian Polagye**

PhD, Mechanical Engineering, University of Washington, 2009 MS, Mechanical Engineering, University of Washington, 2005

## **Website**

Brian Polagye's research group focuses on the conversion of marine renewable energy resources (river, tidal, and ocean currents, as well as waves) to mechanical power. One thrust area is optimizing the hydrodynamics and control of conversion systems, primarily through laboratory experiments and field demonstrations. A second thrust area is developing and applying instrumentation necessary to characterize marine energy sites, with emphasis on underwater sound and integrated instrumentation systems.

**UW Target Links:** 3, 8, 10

**SDG Links:** 7, 9, 14, 17

## Departments & Roles:

- Mechanical Engineering
  Associate Professor
- Pacific Marine Energy Center | Director

#### Contact Information:

• Email: bpolagye@uw.edu

Phone: (206) 543-7544

Building: MEB 302



#### Areas of Expertise & Interest:

- Energy & Environment
- Fluids
- Data Science & Machine Learning
- Mechatronics & Robotics
- Experimental and Field Optimization of Marine Renewable Energy Conversion Systems
- Instrumentation Suitable For Characterizing Marine Renewable Energy Environments

## **Corie Cobb**

PhD, Mechanical Engineering, University of California, Berkeley MS, Mechanical Engineering, Stanford University

## **Website**

Professor Cobb's research lies at the intersection of manufacturing, engineered materials, and computational design for printing and patterning of functional materials for clean energy applications. Her research has been funded by grants from DOE, ARPA-E, DARPA and industrial partners. Prior to PARC, Professor Cobb was a mechanical engineer at Applied Materials and held internship positions at Hewlett-Packard, Bell Labs, Google and Toshiba. She has 20 issued United States patents (and additional international patent filings) in the areas of 3D Lithium-ion batteries, 3D printing and high-precision manufacturing.

**UW Target Links: 3, 7, 8, 10** 

**SDG Links:** 7, 9

## Departments & Roles:

- Mechanical Engineering | Professor
- Washington Research
   Foundation Innovation Professor
   in Clean Energy
- <u>CEI</u> | Member Faculty

#### Contact Information:

• Email: clcobb@uw.edu

Phone: (206) 543-5449

Building: MEB 311



### Areas of Expertise & Interest:

- Energy & Environment
- Advanced Materials & Manufacturing
- Additive manufacturing
- Lithium-ion Batteries
- Engineered Materials
- Computational Design
- Stochastic Optimization
- Design Theory and Methodology

# **John Kramlich**

PhD, Mechanical Engineering, Washington State University, 1980 MS, Environmental Engineering, Washington State University, 1975

## **Website**

Prof. Kramlich's two current research interests are (1) development of clean residential cookstoves for the developing world, in conjunction with Prof. Jonathan Posner; and (2) the use of supercritical fluids for synthesis, hazardous materials neutralization, and energy conversion, in conjunction with Prof. Igor Novosselov.

**UW Target Links:** 5, 7, 8, 9, 10

**SDG Links:** 3, 7, 9, 11, 12, 14

## Departments & Roles:

 Mechanical Engineering | Professor and Associate Chair for Academics

#### Contact Information:

Email: kramlich@uw.edu

• Phone: (206) 543-5538

• Building: MEB 319



### Areas of Expertise & Interest:

- Energy & Environment
- Fluids
- Energy Conversion Systems
- Combustion and Pollutants/environmental Control
- Turbulent Reacting Flows
- Biofuel Combustion Properties and Emissions
- Gas Turbine Combustors:
   Alternate Fuels and Emissions
- Biomass Cookstoves
- Reacting Supercritical Fluids

# **Joyce Cooper**

PhD, Civil and Environmental Engineering, Duke University, 1996 MS, Civil and Environmental Engineering, Duke University

## Website

Professor Cooper's background combines environmental assessment with product design and management. Her research interests include the development and enhancement of Design for Environment (DFE) methodologies and models, as related to (1) innovative, sustainable, and concurrent technology development, design, and dissemination; (2) life-cycle assessment (LCA) and environmental performance measurement; (3) Industrial Ecology.

Her industrial experience includes product design and development, manufacturing supervision, quality assurance, life cycle management, pollution prevention site assessments, and facility project coordination. **UW Target Links:** 5, 7, 8, 9, 10

**SDG Links:** 3, 7, 9, 11, 12, 17

## Departments & Roles:

Mechanical Engineering
 Professor Emeritus

#### **Contact Information:**

Email: cooperjs@uw.eduPhone: (206) 543-5040

Building: MEB 304



### Areas of Expertise & Interest:

- Energy & Environment
- Advanced Materials & Manufacturing
- Data Science & Machine Learning
- Life Cycle Assessment
- Design For Environment
- Industrial Ecology
- Data Repositories
- Energy

# **Junlan Wang**

PhD, University of Illinois at Urbana-Champaign, 2002 MS, University of Science and Technology of China, 1997

## **Website**

Bio: Prof. Wang's research and teaching are in the areas of mechanics, materials and manufacturing. She has been recognized by a number of awards including CAREER Award from the National Science Foundation, Hetenyi, Durelli and Frocht Awards from the Society for Experimental Mechanics (SEM), Beer and Johnston **Outstanding New Mechanics** Educator Award from the American Society of Engineering Education (ASEE), and Teaching **Excellence Award from UCR** Bourns College of Engineering.

**UW Target Links:** 3, 8, 10

**SDG Links:** 7, 9

### Departments & Roles:

- Mechanical Engineering | Professor
- Materials Science & Engineering
   Adjunct Professor
- <u>CEI</u> | Affiliate Faculty

#### Contact Information:

- Email: junlan@uw.edu
- Phone: (206) 543-4601
- Building: MEB 208



#### Areas of Expertise & Interest:

- Advanced Materials & Manufacturing
- Energy & Environment
- Health
- Experimental Mechanics
- Thin Films & Multilayers
- Energy Efficient Materials & Coatings
- Biological, Bioinspired & Biomimetic Materials
- Metal Additive Manufacturing
- Nanomechanics & Nanotechnology

# **Philip Malte**

PhD, University of Michigan, 1971 MSAE, University of Michigan, 1966

## **Website**

Professor Malte conducts research on energy and environmental combustion. Studies on low-emission combustion for power generation gas turbines involve the use of laboratory combustion reactors, computational fluid dynamics (CFD), and chemical reactor networks (CRN) to help understand and build predictive capabilities, with emphasis on controlling pollutant emissions.

**UW Target Links:** 3, 5, 7, 8, 9, 10

**SDG Links:** 3, 7, 9, 11, 12

## Departments & Roles:

Mechanical Engineering
 Professor Emeritus

#### **Contact Information:**

Email: malte@uw.eduPhone: (206) 685-2171

• Building: MEB 315



### Areas of Expertise & Interest:

- Energy & Environment
- Low-NOx Gas Turbine Engines
- Wood Waste and Bio-Fuel Combustion
- Alternative Fuels
- Clean Combustion
- Solar Energy Systems

# COLLEGE OF THE ENVIRONMENT

## Website

To truly tap into our problem-solving potential, it's imperative to understand the Earth in its totality and in each of its dimensions. It's a big job. One the University of Washington College of the Environment is tackling head on.

The issues we face today demand a combination of discovery, leadership and an impactful connection with our communities. UW Environment works at this intersection, bridging the divide between scientific disciplines, stakeholders and societies, policymakers and the public. By connecting some of the world's leading educators and researchers with students, practitioners and citizens, UW Environment cultivates communities who work with and learn from each other as they confront the environmental challenges of the 21st century.

## List of Departments

- Aquatic & Fishery Sciences
- Atmospheric Sciences
- Earth & Space Sciences
- Environmental & Forest Sciences
- Marine & Environmental Affairs
- Oceanography
- Program on Climate Change
- Program on the Environment

# **Andrew Shirk**

MS, Environmental Science, Western Washington University

## **Website**

Andrew Shirk is a research ecologist with the UW Climate Impacts Group. In collaboration with state and federal agencies and regional conservation groups, he studies the interacting effects of climate change, development, and natural processes on species and their habitats, with special focus on the demographic and genetic viability of populations, connectivity conservation and habitat modeling. Andrew works with government agencies and regional conservation groups to study and model the impacts of climate change and development on ecological processes that support biodiversity, with particular focus on wildlife and forests

**UW Target Links:** 1, 3, 6

**SDG Links:** 4, 12, 13, 15, 17

## Departments & Roles:

• <u>CIG</u> | Research Scientist

#### **Contact Information:**

• Email: ashirk@uw.edu

Phone: 360-556-9067



### Areas of Expertise & Interest:

- Conservation Biology
- Landscape Ecology
- Population & Landscape
- Genetics Ecological
- Modeling Spatial Analysis

# **Crystal Raymond**

PhD, Ecosystem Analysis, University of Washington

## **Website**

Crystal Raymond has experience working as a climate adaptation specialist within organizations and across multiple sectors. She has worked for the US Forest Service conducting vulnerability assessments and adaptation plans for national parks and forests. She also worked for a public electric utility to assess the vulnerability of energy infrastructure and operations, and prepare for potential climate impacts.

**UW Target Links:** 5, 8

**SDG Links:** 1, 3, 7, 9, 11, 13, 15

## Departments & Roles:

• <u>CIG</u> | Climate Adaptation Specialist

#### **Contact Information:**

• Email: clrfire@uw.edu

Phone: 206-616-4304



### Areas of Expertise & Interest:

- Adaptation Planning
- Vulnerability Assessment
- Forest Ecology and Management
- Fire Ecology and Management
- Energy Sector

# **Darcy Widmayer**

MS, Environmental Conservation, Nelson Institute for Environmental Studies, University of Wisconsin, Madison



## **Website**

Darcy Widmayer is the Communications Manager for the Northwest Climate Adaptation Science Center (NW CASC) and is working to expand its impact across the region. In Darcy's previous role as Private Forestry Outreach Specialist at the Wisconsin Department of Natural Resources, she was responsible for developing and facilitating communications between private landowners and state foresters.

**UW Target Links:** 1, 3, 6, 10

<u>SDG Links:</u> 1, 3, 4, 6, 11, 12, 13, 14, 15, 16, 17

## Departments & Roles:

 <u>CIG</u> and Northwest Climate Adaptation Science Center | Communications Manager

### Areas of Expertise & Interest:

- Strategic communication
- Community outreach
- Project coordination and evaluation
- Partnership building

#### Contact Information:

Email: darcyjw@uw.edu

Phone: 206-221-5689

# **Erica Asinas**

MS, City and Regional Planning, Pratt Institute, New York City

## **Website**

Erica is a research scientist and project manager with the Climate Impacts Group, with expertise in policy and social sciences. Frica received her M S in City and Regional Planning from Pratt Institute in New York City. Her thesis work examined federal and city level coastal adaptation policies and strategies through an equity lens, focusing on how managed retreat can serve as a just transition for historically underserved urban-coastal communities. Outside of the Climate Impacts Group, Erica serves as a resource to diverse nonprofits and community-based groups working to address pressing environmental justice issues in New York and now in the Pacific Northwest.

**UW Target Links: 3, 10** 

**SDG Links:** 1, 3, 6, 11, 13, 14, 17

## Departments & Roles:

• <u>CIG</u> | Research Scientist

#### **Contact Information:**

Email: easinas@uw.edu



### Areas of Expertise & Interest:

- Adaptation planning
- Community resilience
- Coastal adaptation
- Climate policy

# **Guillaume Mauger**

Advanced Degree, Topic, School, Year

## Website

Guillaume Mauger is a research scientist at the UW Climate Impacts Group. Specializing in Climate Science, his work focuses on understanding and adapting to the impacts of climate change on flooding and stormwater in the Pacific Northwest, Guillaume has worked on projects that assess hydrologic changes across a variety of Northwest watersheds, worked to apply climate information in habitat connectivity planning and collaborated with floodplain managers to integrate climate change into their work. In addition to his research. Guillaume serves as a resource to stakeholders that are interested in obtaining and understanding the numerous climate and hydrologic projections that are now available.

**UW Target Links: 3, 10** 

<u>SDG Links:</u> 1, 3, 5, 6, 10, 11, 13, 14, 15, 16, 17

## Departments & Roles:

• <u>CIG</u> | Research Scientist

#### **Contact Information:**

• Email: gmauger@uw.edu



### Areas of Expertise & Interest:

- Climate Science
- Downscaling
- Sea Level Rise
- Flooding

# **Jason Vogel**

PhD, Public Policy, University of Colorado, Boulder MS, Atmospheric Sciences, University of Colorado, Boulder

## **Website**

Jason Vogel is the Deputy Director of the UW Climate Impacts Group (CIG). Before joining the CIG, Dr. Vogel worked as a consultant for twelve years at Stratus Consulting and Abt Associates helping local, state, federal, and international clients address climate change impacts and adaptation. Dr. Vogel's passion is ensuring that the physical and social sciences are useful for solving society's problems. This leads him to engage closely with communities and decision makers as well as scientists and engineers.

**UW Target Links: 3, 10** 

<u>SDG Links:</u> 1, 3, 5, 10, 11, 13, 16, 17

## Departments & Roles:

• <u>CIG</u> | Deputy Director

#### **Contact Information:**

Email: jmvogel@uw.edu



### Areas of Expertise & Interest:

- Policy sciences
- Vulnerability assessment
- Adaptation planning
- International development
- Stakeholder engagement

# **Jason Won**

BS, Computer Engineering & Biochemistry, University of Washington

## **Website**

Jason Won is a programming research consultant for the UW Climate Impacts Group and works on developing software for climate modeling and data analysis. His focus has been enhancing the use of computers in various fields of disciplines by providing solutions that provide quality results faster and more efficiently. He works to apply his knowledge in improving and expanding CIG's simulation and analysis toolsets.

### **UW Target Links: 3**

**SDG Links:** 9, 17

## Departments & Roles:

• <u>CIG</u> | Research Consultant

#### **Contact Information:**

• Email: jswon11@uw.edu

Phone: 206-616-5195



### Areas of Expertise & Interest:

- High-Performance Computing
- Performance Analysis & Tuning
- Data Analysis & Visualizations
- Parallel computation
- Modeling and simulation
- Machine Learning

# **Matt Rogers**

MS, Meteorology, University of Oklahoma

## **Website**

Matt is a research scientist with the Climate Impacts Group. Prior to joining the Climate Impacts Group, he was a member of the Applied Climate Dynamics research group at the University of Oklahoma where his research focused on investigating the atmospheric dynamics of Pacific decadal variability through use of both observation and model-based data. His current work with the Climate Impacts Group includes manipulating climate model data, interpreting meteorological and hydrological data, and physical process modeling.

**UW Target Links: 3** 

**SDG Links:** 1, 3, 11, 13, 17

### Departments & Roles:

• <u>CIG</u> | Research Scientist

#### **Contact Information:**

• Email: rawrgers@uw.edu



### Areas of Expertise & Interest:

- Atmospheric Dynamics
- Model-Based Data
- Climate Models
- Meteorological and Hydrological Data
- Process Modeling

# **Meade Krosby**

PhD, Biology, University of Washington

## **Website**

Meade Krosby is a Senior Scientist with the UW Climate Impacts Group. She is also the University Deputy Director of the Northwest Climate Adaptation Science Center. Dr. Krosby works closely with land and wildlife managers, policy makers and communities to collaboratively understand and address climate impacts on natural systems and the people who depend on them. Her current work includes vulnerability assessment and adaptation planning; large landscape conservation planning for climate resilience; and efforts to build climate adaptation capacity and communities of practice.

**UW Target Links:** 1, 3, 6

**SDG Links:** 1, 3, 4, 11, 12, 13, 15

## Departments & Roles:

- CIG | Senior Scientist
- Northwest Climate Adaptation Science Center | University Deputy Director

#### **Contact Information:**

- Email: mkrosby@uw.edu
- Phone: 206-579-8023



## Areas of Expertise & Interest:

- Conservation Biology
- Vulnerability Assessment
- Adaptation Planning

# Rishi Sugla

PhD, Earth Science, Scripps Institution of Oceanography

## **Website**

Rishi is a research scientist at the University of Washington Climate Impacts Group. His work is transdisciplinary and combines elements of science, marine ecology, environmental justice, and storytelling/communications. Rishi is interested in how historic legacies of inequity and oppression can be addressed throughout the process of creating and implementing climate adaptation plans. He has worked closely with frontline communities struggling against extractive industries and climate impacts to build collective power. Rishi hopes to use his position at the Climate Impacts Group to create new projects and programs that continue to amplify the work and capacity of frontline communities and land and water protectors.

**UW Target Links:** 1, 3, 5, 10

**SDG Links:** 1, 3, 4, 5, 9, 11, 12, 13, 14, 16, 17

## Departments & Roles:

 <u>CIG</u> | Frontline Community Climate Resilience Scientist

#### **Contact Information:**

Email: rsugla@uw.edu



### Areas of Expertise & Interest:

- Climate justice
- Ecophysiology
- Marine biogeography and geology

# **Tess Wrobleski**

BA, Psychology & English, McGill University

## **Website**

Tess Wrobleski is the communications specialist for the Climate Impacts Group. Most recently, Tess worked for the Graduate School at the University of Washington, sharing graduate students' stories with the public and connecting students with resources. Tess draws on her experiences as a community reporter in Maine as well as her background in psychology to inform strategic communications decisions.

### **UW Target Links: 3**

**SDG Links: 16, 17** 

## Departments & Roles:

• <u>CIG</u> | Communications Manager

#### **Contact Information:**

• Email: tessw2@uw.edu

Phone: 206-221-2997



### Areas of Expertise & Interest:

- Strategic Communication
- Writing
- Interviewing

# **Zach Kearl**

Masters, Environmental Policy, University of Washington

## **Website**

Zach is a research scientist with the UW Climate Impacts Group. He has conducted research on water marketing and land use planning in the wildland-urban interface, as well as serving as a policy advisor to the mayor in the City of Portland.

**UW Target Links: 3, 4** 

**SDG Links:** 1, 3, 5, 6, 10, 11, 12, 13, 16

## Departments & Roles:

• <u>CIG</u> | Research Scientist

Areas of Expertise & Interest:

- Climate adaptation & decision making
- Policy science
- Public finance

#### **Contact Information:**

Email: zkearl@uw.edu

# **Zackery Thill**

PhD, Human Geography, University of Oregon Masters, Human Ecology, Lund University, Sweden

## **Website**

Zack is the climate justice research program integration specialist for the Northwest Climate Resilience Collaborative (NCRC), which is a NOAA-funded Regional Integrated Sciences and Assessments (RISA) Program. His research examined the barriers to and possibilities for groups including governmental agencies, Indigenous communities, academics, and NGOs to meaningfully co-produce knowledge on environmental change.

**UW Target Links:** 1, 3, 6, 10

**SDG Links:** 4, 12, 13, 16, 17

## Departments & Roles:

• <u>CIG</u> | Climate Justice Research Program Integration Specialist

#### **Contact Information:**

• Email: zthill@uw.edu



### Areas of Expertise & Interest:

- Environmental Justice
- Science-policy
- Co-production

## **Aquatic & Fishery Sciences**

## **College of the Environment | Website**

Our mission at SAFS is to excel in providing multidisciplinary and experiential learning for undergraduate and graduate students interested in aquatic environments, to conduct groundbreaking research on topics pertinent to understanding and managing these environments, and to communicate our findings to regional, national, and international audiences.

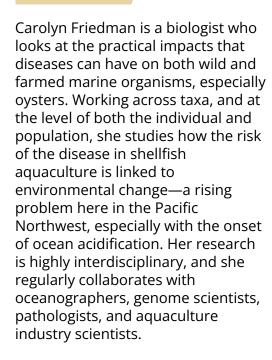
### List of Related Individuals

- Carolyn Friedman
- Daniel Schindler
- <u>lacqueline Padilla-Gamiño</u>
- Jennifer Ruesink
- <u>Julian Olden</u>
- <u>Julia Parrish</u>
- Kristin Laidre
- Terrie Klinger

## **Carolyn Friedman**

Advanced Degree, Topic, School, Year

## Website



**UW Target Links:** 1, 3

**SDG Links:** 6, 12, 13, 14

## Departments & Roles:

 Aquatic & Fishery Sciences | Professor

#### **Contact Information:**

• Email: carolynf@uw.edu

Phone: 206-543-9519



### Areas of Expertise & Interest:

- Salish Sea Ecology
- Resource Management
- Genetics/Genomics
- Invertebrates
- Climate
- Conservation
- Marine Science

## **Daniel E. Schindler**

PhD, Zoology, University of Wisconsin-Madison, 1995 MS, Zoology University of Wisconsin-Madison, 1992

## Website

My research seeks to understand the causes and consequences of ecosystem dynamics. Of particular interest are (1) the effects of changing climate on trophic interactions and ecosystem services provided by aquatic ecosystems, (2) fisheries as large-scale drivers of ecosystem organization, (3) importance of anadromous fishes for linking marine ecosystems to coastal aquatic and riparian systems, and (4) the importance of aquatic-terrestrial coupling in ecosystem organization.

**UW Target Links:** 1, 3

**SDG Links:** 1, 3, 6, 11, 13, 14, 15

## Departments & Roles:

 Aquatic & Fishery Sciences and Biology | Professor

#### Contact Information:

- Email: deschind@u.washington.edu
- Phone: (206) 616-6724



## Areas of Expertise & Interest:

- Conservation Biology
- Evolution & Systematics
- Climate & Global Change
- Freshwater
- Watershed ecology
- Aquatic ecosystem ecology
- Food webs
- Biogeochemistry
- Ecosystem based fisheries management

## Jacqueline Padilla-Gamiño

PhD, Oceanography, University of Hawai'i at Manoa, 2011 MS, Biology, California State University, Northridge, 2005

## **Website**

Jacqueline Padilla-Gamiño studies the ecophysiology and reproductive biology of marine organisms in a changing environment. By combining field and laboratory techniques, she and her lab associates examine the importance of transgenerational effects in acclimatization and local adaptation and investigate the synergistic effects of multiple stressors on coastal ecosystems.

**UW Target Links: 3** 

**SDG Links:** 1, 3, 6, 11, 12, 13, 14

## Departments & Roles:

Aquatic & Fishery Sciences
 Assistant Professor

## Areas of Expertise & Interest:

- Reproductive Biology
- Ocean Acidification
- Marine Invertebrates
- Photophysiology
- Tropical Marine Biology
- Ecology
- Climate & Global Change
- Organismal Biology

#### **Contact Information:**

- Email: jpgamino@uw.edu
- Phone: 206-543-7878

## Julian Olden

Pos D, Limnology, University of Wisconsin, 2006 PhD, Ecology, Colorado State University, 2004 MSc, Zoology, University of Toronto, 2000

## **Website**

Julian Olden is an ecologist exploring the structure and function of freshwater ecosystems in response to environmental change. His research spans the fields of conservation biology, biogeography, invasion ecology and biostatistics. Undergirding all of this is a vision of a world where people understand, value, and conserve freshwater biodiversity, despite humans increasing reliance on vital aquatic resources. Ultimately, he seeks to integrate science-based approaches with on-the-ground management decisions, and actively engages in science communication and citizen science.

**UW Target Links:** 1, 3, 6

**SDG Links:** 1, 3, 4, 6, 11, 12, 13, 15

## Departments & Roles:

Aquatic & Fishery Sciences
 Professor

#### **Contact Information:**

Email: olden@uw.eduPhone: 206-616-3112



## Areas of Expertise & Interest:

- Freshwater ecology
- Conservation
- Invasive species
- Climate & Global change
- Biostatistics
- Water resources
- Science communication

## **Kristin Laidre**

PhD, Aquatic & Fishery Sciences, University of Washington, Seattle, 2003

## **Website**

Kristin Laidre is a marine ecologist who works in one of the coldest, most remote regions on the planet. Her research is field-based, largely empirical, and uses data on the movements, foraging behavior, and life history of Arctic top predators to study behavioral, population, and evolutionary ecology. She is particularly interested in linking individual performance to an animal's selection for habitat resources, and predicting how climate change will affect these relationships.

## **UW Target Links: 3**

<u>SDG Links:</u> 1, 3, 6, 11, 13, 14, 15, 17

## Departments & Roles:

- Aquatic & Fishery Sciences
   Associate Professor
- Polar Science Center and Applied Physics Laboratory | Principal Researcher

#### Contact Information:

Email: klaidre@uw.edu

Phone: 206-616-9030

Building: RTB 501



## Areas of Expertise & Interest:

- Marine mammals
- Marine conservation
- Climate & Global change
- Polar ecology
- Ecology

## **Atmospheric Sciences**

## **College of the Environment** | Website

The Department of Atmospheric Sciences seeks to educate undergraduate and graduate students. Our undergraduate program provides strong preparation in the basic physical sciences and mathematics and prepares students for careers in many fields, including the curriculum required by the National Weather Service. Our graduate students go on to distinguished careers in research laboratories, private enterprise and at universities.

We are proud of the continued excellence of the teaching and research of our faculty, and of the many accomplishments of our students and alumni. Our department enjoys a superlative reputation nationally and internationally, and continues to make important contributions to the understanding of weather, climate and air quality.

### List of Related Individuals

- Abigail Swann
- Adrian Raftery
- Becky Alexander
- Cecilia Bitz
- Christopher (Chris) Bretherton
- Daniel (Dan) Jaffe
- Dargan Frierson
- David Battisti
- <u>Dennis Hartmann</u>
- Edward Blanchard-Wrigglesworth

- Gerard Roe
- Gregory Hakim
- Jeremy Hess
- <u>Joel Thornton</u>
- Ka-Kit Tung
- Kyle Armour
- Nick Bond
- Qiang Fu
- Robert Wood

## **Abigail Swann**

PhD, Earth & Planetary Science, University of California, Berkeley, 2010 MA, Earth & Environmental Sciences, Columbia University, 2005

## Website

Abigail Swann is an atmospheric scientist and ecologist who is interested in the transitions, thresholds, and feedbacks of the coupled ecosystem-climate system, or ecoclimate. More specifically, she works to understand when, where, and how plants influence the climate across a range of spatial and temporal scales. Her theoretical interests lead her to such questions as: how will changes in agricultural area create feedbacks in climate? Or, what processes control the response of climate to vegetation in different regions of the world? As such, her work is global in scale, considering the interactions between terrestrial ecosystems not only on their local environment, but also on other regions connected to the local ecosystem through atmospheric circulation.

**UW Target Links:** 1, 3

**SDG Links:** 13, 14, 17

## Departments & Roles:

 <u>Atmospheric Sciences</u> and <u>Biology</u> | Associate Professor

#### **Contact Information:**

Email: aswann@uw.eduPhone: 206-616-0486

Building: ATG 506



### Areas of Expertise & Interest:

- Ecoclimate
- Biosphere-climate feedbacks
- Climate and ecosystem modeling
- Carbon cycle
- Conservation Biology
- Ecology
- Plant Biology

## **Cecilia Bitz**

PhD, Atmospheric Sciences, University of Washington, 1997 MS, Physics, University of Washington, 1990

## Website

Cecilia Bitz is the chair of the Department of Atmospheric Sciences and a professor who studies the role that sea ice plays in shaping the climate in high latitudes. She is interested not only in our present and future climates, but also climates of the past. She is actively engaged in research on improving prediction of Arctic sea ice and sea ice data assimilation. investigating wave-ice and coupled air-sea-ice interactions that control large-scale climate. As a well-known expert in her field, she leads several projects funded by the National Science Foundation and the National Oceanographic and Atmospheric Administration, and has been called to testify to the U.S. Senate on Arctic climate change.

**UW Target Links: 3** 

**SDG Links:** 6, 13, 14, 15, 17

## Departments & Roles:

<u>Atmospheric Sciences</u> Professor and Chair

#### Contact Information:

Email: bitz@uw.edu Phone: (206) 543-1339

Building: ATG 408



## Areas of Expertise & Interest:

- Sea Ice in the Climate System
- High-Latitude Climate
- Climate Change
- Arctic Sea Ice
- Climate Modeling

# **Daniel (Dan) Jaffe**

PhD, Chemistry, University of Washington

## **Website**

Dan Jaffe is an expert on global transport of pollutants, especially from Asia to the United States. He has published several papers on the influence of background sources on regional and urban air quality. He recently participated on the panel for the National Academy of Science's study on The Significance of Intercontinental Transport of Air Pollutants and was chosen as the Fulbright Distinguished Chair in Environmental Sciences, His research has been funded by the National Science Foundation, NOAA, NASA, EPA and industry partners. Recently, Dan has funded several projects via crowdfunding.

<u>UW Target Links:</u> 1, 3, 5, 7, 9, 10

<u>SDG Links:</u> 3, 11, 12, 13, 14, 15, 17

## Departments & Roles:

- Atmospheric Sciences
   Professor
- <u>Physical Sciences Division UW</u>
   <u>Bothell</u> | Professor & Chair

#### **Contact Information:**

Email: djaffe@uw.eduPhone: 425-352-5357

Building: DISC-452E



### Areas of Expertise & Interest:

- Atmospheric chemistry
- Air pollution
- Long range transport of pollutants
- Photochemistry

## **Dargan Frierson**

PhD, Applied Mathematics, Princeton University, 2005 MS, Applied Mathematics, Princeton University, 2002

## Website

Dargan Frierson is an atmospheric scientist who studies how climate change can alter big, climatic features, like storm tracks, tropical rain bands, or deserts. He uses different types of models to investigate these features' fundamental dynamics. His investigations are not all theoretical, though: he has also shown that condensation on a soda or beer can is not necessarily the sign of cool refreshment that you might think it is. At the University of Washington, Frierson been recognized multiple times for his teaching excellence, and he has also received a National Science Foundation **CAREER Faculty Early Career** Development Award, one of NSF's most prestigious awards for young faculty.

**UW Target Links: 1, 3, 6** 

**SDG Links:** 1, 3, 4, 11, 12, 13, 14, 17

## Departments & Roles:

Atmospheric Sciences Associate Professor

#### Contact Information:

Email: dargan@uw.edu Phone: 206-685-7364

Building: ATG 602



### Areas of Expertise & Interest:

- Atmospheric general circulation
- Water vapor
- Climate change

## **David Battisti**

PhD, Atmospheric Sciences, University of Washington, 1988 MS, Oceanography, University of Washington, 1981

## **Website**

David Battisti, the Tamaki Endowed Chair, is an atmospheric scientist who looks at the natural variation in the global climate system. He is especially interested in understanding how the interactions between the ocean, atmosphere, land and sea ice lead to variability in climate on time scales from a few months to a few decades. He also studies the impact of climate variability and climate change on global food security, and the mechanisms responsible for the remarkable "abrupt" global climate changes evident throughout the last glacial period.

**UW Target Links: 1, 3, 6** 

**SDG Links:** 2, 4, 12, 13, 14, 17

## Departments & Roles:

• <u>Atmospheric Sciences</u> Professor

#### **Contact Information:**

- Email: battisti@uw.edu
- Building: ATG304



## Areas of Expertise & Interest:

- Large-scale atmosphere-ocean dynamics
- Tropical circulation
- Physics of natural variability in Arctic climate
- Climate dynamics
- Paleoclimate

## **Dennis Hartmann**

PhD, Geophysical Fluid Dynamics, Princeton University, 1975

## **Website**

Dennis Hartmann is an atmospheric scientist who studies the atmosphere's role in climate variability and change, and how the atmosphere interacts with the ocean in a changing climate. His principal areas of expertise are atmospheric dynamics, remote sensing, and mathematical and statistical techniques for data analysis. He has been an Aldo Leopold Leadership Fellow, and has received a number of awards throughout his career, including the NASA Distinguished Public Service Medal and the Carl-Gustaf Rossby Research Medal from the American Meteorological Society. He is a member of the US National Academy of Sciences.

**UW Target Links:** 1, 3, 6

**SDG Links:** 4, 12, 13, 14, 17

## Departments & Roles:

<u>Atmospheric Sciences</u>
 Professor

#### **Contact Information:**

• Email: dhartm@uw.edu

Phone: 206-543-7460

Building: ATG710



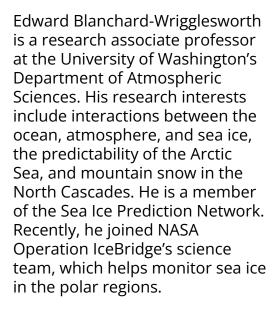
### Areas of Expertise & Interest:

- Climate change
- Dynamic meteorology
- Radiation and remote sensing

# **Edward Blanchard-Wrigglesworth**

PhD, Atmospheric Sciences, University of Washington, 2013 M Phil, Polar & Glacier Studies, University of Cambridge, UK, 2005

## **Website**



**UW Target Links: 1, 3, 6** 

**SDG Links:** 4, 12, 13, 14, 15

## Departments & Roles:

 Atmospheric Sciences | Research Assistant Professor

## Areas of Expertise & Interest:

- Atmosphere-sea ice-ocean interactions
- Arctic Sea ice predictability
- Snow in the Arctic climate system
- Mountain snow in the North Cascades

#### Contact Information:

- Email: ed@atmos.uw.edu
- Phone: (206) 543-5219
- Building: ATG 428

## **Gregory Hakim**

PhD, Atmospheric Science, University at Albany, 1997 MS, Atmospheric Science, University at Albany, 1993

## **Website**

Greg Hakim works to understand what the climate is doing now and will do in the future by reconstructing what it did in the past. To do this, he combs through the historical record for those sparse and noisy proxies of the state of the climate at different times. With those proxies, he is able to get view into the past far beyond the instrumented record, which goes back only about 150 years. Additionally, he also builds models to describe dynamic weather events, such as cyclones and hurricanes.

**UW Target Links: 3** 

**SDG Links:** 1, 3, 11, 13, 14, 16, 17

## Departments & Roles:

• <u>Atmospheric Sciences</u> Professor

#### **Contact Information:**

Email: ghakim@uw.eduPhone: 206-685-2439

• Building: ATG 504



### Areas of Expertise & Interest:

- Synoptic and mesoscale meteorology
- Atmospheric dynamics
- Stratified turbulence
- Paleoclimate

## **Joel Thornton**

PhD, Department of Chemistry, University of California, Berkeley, 2002

## **Website**

Joel Thornton is an atmospheric scientist who studies the impacts of human activities on air quality and climate through changes to the atmosphere's composition and chemistry. His focus is on the processes which regulate the formation and removal of short-lived greenhouse gases such as methane and ozone, and the formation and growth of airborne particulate matter. These atmospheric components, strongly modulated by both human activities and natural processes, have important effects of human and ecosystem health, and impact climate through the greenhouse effect and changes to cloud properties.

**UW Target Links:** 3, 5, 9, 10

**SDG Links:** 3, 8, 11, 12, 13, 14

## Departments & Roles:

• <u>Atmospheric Sciences</u> Professor

### Areas of Expertise & Interest:

- Boundary Layer Surface Interactions
- Cloud Aerosols
- Atmospheric Chemistry
- In situ and laboratory studies of homogeneous and heterogeneous atmospheric chemical processes

#### **Contact Information:**

- Email: thornton@atmos.washington.edu
- Phone: 206-543-4010
- Building: ATG 408



## **Nick Bond**

PhD, Atmospheric Sciences, University of Washington, 1986

## **Website**

Nick Bond has an abiding interest (or obsession) with the weather and climate of the North Pacific and western North America. Past research included documenting the effects of coastal terrain on landfalling storms. Present work involves examining air-sea interactions with tropical cyclones in the western North Pacific, and the atmospheric response to declining sea ice in Alaskan waters. The latter features the collection and analysis of field observations from a research aircraft. On longer time scales and broader spatial scales, he is interested in the causes and effects of climate variations pertaining to marine ecosystems.

**UW Target Links:** 1, 3, 6

<u>SDG Links:</u> 1, 3, 4, 6, 11, 12, 13, 14, 17

## Departments & Roles:

• <u>Atmospheric Sciences</u> | Washington State Climatologist

## Areas of Expertise & Interest:

- Climate
- Marine Science
- Sea Ice
- Coastal Terrain and Landfalling Storms
- Air-Ice Interactions
- Tropical Cyclones

#### **Contact Information:**

- Email: nab3met@uw.edu
- Phone: 206-525-7363
- Building: NOAA Sand Point,
   Building 3, Room 207

# **Qiang Fu**

PhD, University of Utah, 1991

## **Website**

On a nice summer day, clouds can look soft and fluffy and benign, or wispy and thin. But their welcoming appearance belies the significant effects that they can have on the global climate. Those effects are what atmospheric physicist Qiang Fu studies, the seriousness of which we are now starting to understand. Using a mix of satellite and ground-based observations along with numerical modeling and theoretical studies, he explores the ways that clouds modulate the radiative energy budget and feedback to climate system, as well as the ways that the dynamics of the upper atmosphere affect climate change.

**UW Target Links: 3** 

**SDG Links:** 1, 3, 11, 13, 14, 17

## Departments & Roles:

• <u>Atmospheric Sciences</u> Professor

## Areas of Expertise & Interest: • Atmospheric Radiation and

- Atmospheric Radiation and Light Scattering
- Radiative Transfer
- Clouds and Atmospheric aerosols
- Remote sensing
- Climate and climate change

#### **Contact Information:**

- Email: qfu@atmos.washington.edu
- Phone: 206-685-2070
- Building: ATG604

## **Robert Wood**

PhD, Atmospheric Physics, University of Manchester Institute of Science and Technology, UK, 1997



## **Website**

Clouds have fascinated us for thousands of years, but their natural beauty belies a tremendous complexity that continues to elude a complete theoretical understanding. Rob Wood is a physicist who tries to increase that theoretical understanding, studying cloud systems and the meteorological processes that govern them. Using observational data, he builds models of cloud structures and behaviors, exploring the links between clouds and meteorology over the oceans. He also studies how clouds are impacted by aerosol particles produced by both natural processes and human activities.

**UW Target Links: 3** 

**SDG Links:** 11, 14, 17

## Departments & Roles:

Atmospheric Sciences
 Professor

### Areas of Expertise & Interest:

- Boundary layer cloud structure
- Cloud microphysics
- Remote sensing

#### **Contact Information:**

• Email: robwood2@uw.edu

Phone: 206-543-1203

Building: ATG718

## **Earth & Space Sciences**

## **College of the Environment | Website**

Research in our department includes the solid earth, surface processes, geobiology, planetary science, space physics and glaciology. Research centers and programs closely linked to the department -- including the Program on Climate Change, the Astrobiology Program, the Quaternary Research Center, and others, allow for enhanced educational and research experiences. We maintain extensive collaborations with local, regional, and national agencies such as the Washington State Emergency Management Division, the Department of Natural Resources, USGS, NASA and NOAA.

The Department of Earth and Space Sciences offers outstanding disciplinary and interdisciplinary education at both the undergraduate and graduate levels. We emphasize direct field and laboratory experiences at all educational levels, with active and close interactions between faculty and small groups of students. Options within the undergraduate degree include geology, physics, biology, and environmental earth science. In addition, we offer a broad spectrum of natural world and environmentally-oriented general education courses that attract on the order of 3000 students each year.

### List of Related Individuals

- David R. Montgomery
- Edwin Waddington
- Eric Steig
- Gerard Roe
- Howard Conway
- Knut Christianson
- Michelle Koutnik
- Ronald Sletten
- T. I. Fudge

## David R. Montgomery

PhD, Geomorphology, University of California, Berkeley

## **Website**

David Montgomery is a geomorphologist who looks at the process shaping Earth's surface and how they affect ecological systems—and human societies. He has studied everything from the ways that landslides and glaciers influence the height of mountain ranges, to the way that soils have shaped human civilizations both now and in the past. He has worked in mountain ranges throughout the world, from the Cascades in the Pacific Northwest, to the Andes in South America and Tibet and the Himalaya in Central Asia. In addition to his academic work, he has written a number of popular science books, three of which won the Washington State Book Award.

**UW Target Links:** 1, 3, 6, 7

**SDG Links:** 4, 11, 12, 13, 14, 15

## Departments & Roles:

- <u>Earth & Space Sciences</u>
   Professor
- <u>Civil & Environmental</u>
   <u>Engineering</u> | Adjunct Professor
- Astrobiology Program | Participating Faculty

#### Contact Information:

- Email: bigdirt@uw.edu
- Phone: 206-685-2560
- Building: JHN 341



### Areas of Expertise & Interest:

- Geophysical Sciences
- Ecology
- Extreme Environments
- Natural Hazards

## **Edwin Waddington**

PhD, Geophysics, University of British Columbia, Vancouver, 1981

## **Website**

Ed Waddington is a geophysicist who studies problems that arise when geologists try to interpret paleoclimate records from polar ice cores. He has studied ice in Greenland, Alaska, Antarctica, and also, extraterrestrially, on Mars. He and his students measure surface velocities and strain rates on ice sheets using a variety of methods, including GPS. They use ice-penetrating radar to detect layering within the ice, since ice found at different depths may have come from very different places on the surface of the ice sheet, depending on that ice sheet's particular history.

**UW Target Links: 1, 3, 6** 

**SDG Links:** 4, 12, 13, 14, 17

## Departments & Roles:

<u>Earth & Space Sciences</u> |
 Professor Emeritus

#### **Contact Information:**

Email: edw@uw.edu

Phone: 206-543-4585

Building: ATG-715



### Areas of Expertise & Interest:

- Climate
- Geophysical Sciences
- Extreme Environments

# **Eric Steig**

PhD, Geological Sciences, University of Washington, 1996

## Website

Eric Steig, the Department of Earth and Space Sciences Chair, is a glaciologist and isotope geochemist who studies how the climate behaved in the past to learn what it can tell us both about the effects of climate change today, and how it will change in the future. He uses ice core records to study climate variability over thousands of years. He works on the geological history and dynamics of ice sheets, as well as on aspects of atmospheric chemistry, and develops novel laboratory research tools in isotope geochemistry.

**UW Target Links: 1, 3, 6** 

**SDG Links:** 1, 3, 4, 11, 12, 13, 14, 17

## Departments & Roles:

Earth & Space Sciences Professor & Chair

Email: steig@uw.edu Phone: 206-685-3715

Building: JHN 351



### Areas of Expertise & Interest:

- Climate
- **Geophysical Sciences**
- **Environmental Chemistry**
- **Extreme Environments**
- Glaciology
- Isotope geochemistry

Contact Information:

## **Gerard Roe**

PhD, Massachusetts Institute of Technology, 1999

## **Website**

Gerard Roe is earth system scientist who uses glaciers, earth-surface processes, climate dynamics, among other tools to answer his scientific queries. He uses novel methods to probe the earth's past to reconstruct temperature and climate patterns, helping inform the present day atmospheric trends and changes we are seeing globally. He teaches classes that center on earth systems, including mathematical models that can explain earth sciences, geophysics in both fluids and the atmosphere, and earth's climate system.

**UW Target Links:** 1, 3, 6

**SDG Links: 4, 12, 13, 15** 

## Departments & Roles:

- <u>Earth & Space Sciences</u> |
   Professor
- Atmospheric Sciences | Assistant Professor

#### **Contact Information:**

- Email: groe@uw.edu
- Phone: 206-697-3298
- Building: JHN-361



### Areas of Expertise & Interest:

- Climate
- Geophysical Sciences
- Engineering

## **Howard Conway**

PhD, Chemical and Process Engineering, University of Canterbury, New Zealand, 1986



Howard Conway is a glaciologist who uses geophysical methods and models to study how the Antarctic Ice Sheet responds to changes in climate, ocean temperature and sea level. In particular, sectors of the West Antarctic ice sheet are undergoing rapid and dramatic change, but remaining questions are how much and how fast will the ice sheet disintegrate? Complete collapse would raise global sea level by about 3 m, which would have huge societal impact. In addition, he studies glacier-climate interactions with the goal of using the glacial record to interpret past climate. He has studied glaciers in the Pacific Northwest, Alaska, Patagonia, Scandinavia and the Himalaya. He also studies the timing, size, and hazard of snow avalanches in the Pacific Northwest and in New Zealand.

**UW Target Links: 3** 

**SDG Links:** 1, 3, 11, 13, 14, 15, 17

## Departments & Roles:

• <u>Earth & Space Sciences</u> | Research Professor Emeritus

## Areas of Expertise & Interest:

- Climate
- Geophysical Sciences
- Extreme Environments
- Glacier dynamics and histories of glaciers and ice sheets
- Snow avalanche dynamics

#### **Contact Information:**

Email: hcon@uw.eduPhone: 206-685-8085

Building: ATG-702

## **Knut Christianson**

Advanced Degree, Topic, School, Year

## Website

Knut Christianson is an assistant professor in the Department of Earth and Space Sciences, as well as a faculty member in the Future of Ice initiative. His research focuses on integrating field and remote sensing data of ice sheets into models to improve simulations of past and future climate change. His models ultimately allow implementation of sensible climate change mitigation strategies. More recently, Christianson has started to study oceanographic processes occurring proximal to ice sheet margins. He has participated in 16 polar field expeditions to Svalbard, Norway, Greenland, and Antarctica.

**UW Target Links: 1, 3, 6, 10** 

**SDG Links:** 1, 3, 4, 6, 11, 12, 13, 14. 17

## Departments & Roles:

Earth & Space Sciences Associate Professor

### Areas of Expertise & Interest:

- Climate
- **Extreme Environments**
- Marine Science

#### Contact Information:

- Email: knut@uw.edu
- Phone: (206) 543-6223
- Building: JHN 267

## **Michelle Koutnik**

PhD, Geophysics, University of Washington, 2009

## **Website**

Michelle Koutnik is a glaciologist whose research interests include the dynamics of glacier change, the evolution of glaciers and ice sheets over time, and the history of climate and ice on Mars. As part of the UW Department of Earth and Space Sciences' glaciology group, Michelle explores the how glaciers and ice sheets evolve in response to climate change. She has collected data at multiple field locations, including Greenland and Antarctica, and uses that data to better understand and model the processes that affect ice flow. Previously, Michelle was a research associate and graduate research assistant at the UW and a postdoctoral research fellow at the University of Copenhagen.

### **UW Target Links: 3**

**SDG Links:** 1, 3, 11, 13, 14, 15, 17

## Departments & Roles:

Earth & Space Sciences |

Research Associate Professor

#### **Contact Information:**

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• Phone: 206-221-5041

• Building: ATG 717



## Areas of Expertise & Interest:

- Climate
- Geophysical Sciences
- Extreme Environments
- Glaciology
- Planetary Science

## **Ronald Sletten**

Advanced Degree, Topic, School, Year

## Website

Ron Sletten is drawn to the high latitudes. Before he became a researcher, he worked in Prudhoe Bay as a construction manager on the Trans-Alaska Pipeline. Now, as a geochemist, he continues to focus on elements of northern ecosystems—especially permafrost. With permafrost, he looks at the ways the chemical and physical processes of soils are influenced by biological processes. In addition to his work in Alaska, he has done extensive research at other sites in the far north—at Svalbard, for instance, and Devon Island, and also in Greenland, Farther south, he has worked in the Dry Valleys of Antarctica, which are the largest snow-free area on the continent.

## **UW Target Links: 3**

**SDG Links:** 6, 12, 13, 14, 15

## Departments & Roles:

<u>Earth & Space Sciences</u> |
 Research Associate Professor

## Areas of Expertise & Interest:

- Climate
- Geophysical Sciences
- Environmental Chemistry
- Extreme Environments
- Permafrost physical and chemical processes
- Periglacial geomorphology
- Natural water chemistry
- Mars planetary science

#### **Contact Information:**

- Email: sletten@uw.edu
- Phone: 206-543-0571
- Building: JHN-363

## T. J. Fudge

PhD, Earth and Space Sciences, University of Washington Seattle, 2013 MN, Concentration in Finance Bowdoin University of Minnesota, Minneapolis MS, Geology, University of Wyoming Laramie, 2005

## Website

T.J. Fudge studies glaciers and past climate focusing on Antarctic ice cores. He grew up on a small island in California and is drawn to questions about how climate change will impact sea level. Fudge looks at records from the past decades to thousands of years ago that are stored in the ice sheet to understand how our climate system and ice sheets evolve. He chooses to work at the University of Washington because of great colleagues and students and the amazing natural laboratory that is Washington state.

### **UW Target Links: 3**

**SDG Links:** 1, 3, 11, 13, 14, 15, 17

## Departments & Roles:

<u>Earth & Space Sciences</u> |
 Research Associate Professor

#### **Contact Information:**

Email: tjfudge@uw.eduPhone: 206-543-0162

Building:



### Areas of Expertise & Interest:

- Climate
- Geophysical Sciences
- Extreme Environments
- Ice core depth-age scales
- Glacier sliding
- Paleo ice flow conditions
- Glacier mass balance
- Snow and firn densification.

## **Environmental & Forest Sciences**

## **<u>College of the Environment</u>** | Website

Environmental and Forest Sciences is dedicated to generating and disseminating knowledge for the stewardship of natural and managed environments and the sustainable use of their products and services through teaching, research and outreach. Our vision is to provide world-class, internationally-recognized knowledge and leadership for environmental and natural resource issues.

The programs at Environmental and Forest Sciences address the increasingly integrative and interdisciplinary challenges in environmental and natural resources management throughout the world and the need to educate professionals to meet these challenges.

### List of Related Individuals

- Brian Harvey
- Brittany Johnson
- Clare M. Ryan
- David Butman
- <u>Ioshua Lawler</u>
- Kristina Vogt
- Lisa Graumlich
- Peter Kahn
- Phil Levin
- Robert Halvorsen
- Sally Brown

## **Brian Harvey**

PhD, Ecology, University of Wisconsin, Madison MA, Geography, San Francisco State University

## **Website**

Brian Harvey's research focuses on understanding forest disturbances — like fires and insect outbreaks — and how forest structure and function are shaped by disturbances, interactions among disturbances, and climate. His work emphasizes field studies that are integrated with large spatial datasets and analyses, drawing on insights from landscape and community ecology. Over a decade, he has conducted research on the disturbance ecology of forests in coastal California, the Rockies, and the interior Pacific Northwest.

## **UW Target Links: 3**

**SDG Links:** 1, 3, 6, 8, 11, 12, 13, 15, 17

## Departments & Roles:

<u>Environmental & Forest Sciences</u>
 | Assistant Professor

#### Contact Information:

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• Phone: 206-685-9929

• Building: <u>Bloedel 244</u>



## Areas of Expertise & Interest:

- Climate Change and Adaptation
- Conservation Science
- Ecosystem Science
- Fire Science
- Landscape Ecology
- Plant Science
- Remote Sensing and Geoinformatics
- Restoration Ecology
- Sustainable Forest Management

## **Brittany Johnson**

PhD, Hydrology, University of Nevada, Reno, NV MS, Hydrology, University of Nevada, Reno, NV

## Website

Brittany Johnson is a soil scientist and plant ecologist interested in the interactions between climate and ecosystem function. Changes in climate, natural disturbance regimes and human activity drive geologically rapid shifts in the distribution of vegetation and soil nutrient cycling. As climate change alters the physiognomy of landscapes, it is vital to explore the dynamics between soil, plants, organisms, and the atmosphere. Understanding these relationships increases our ability to explain and predict the consequences of ecosystem modification and to develop effective, sustainable land management and mitigation strategies.

## **UW Target Links: 3**

**SDG Links:** 1, 3, 6, 8, 11, 12, 13, **15.17** 

## Departments & Roles:

**Environmental & Forest Sciences Assistant Professor** 

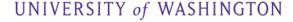
Climate Change and Adaptation

Areas of Expertise & Interest:

- **Ecosystem Science**
- Fire Science
- Soil Science and Hydrology
- Soil chemistry
- Plant-soil interactions
- Forest ecology

#### Contact Information:

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- Phone: 206-543-2730
- Building: Bloedel 218



## Clare M. Ryan

PhD, Natural Resource and Environmental Policy, University of Michigan MS, Natural Resource Policy and Administration, University of Michigan

## **Website**

Clare Ryan is a natural resource policy specialist who looks at the ways that scientific information can be integrated into policy and management decisions. She studies the processes by which policies are made and implemented, ways to foster collaboration in management, and how to address conflicts that can arise when multiple stakeholders participate in decision-making. Before returning to academia, she spent several years as a scientist and manager at both the state and federal level.

## **UW Target Links: 3**

<u>SDG Links:</u> 1, 3, 4, 5, 10, 11, 12, 13, 14, 15, 16, 17

## Departments & Roles:

- <u>Environmental & Forest Sciences</u>
   | Professor & Assistant Director
- <u>Public Policy & Governance</u> and <u>Marine & Environmental Affairs</u> Adjunct Faculty

#### Contact Information:

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Building: Anderson 123H



## Areas of Expertise & Interest:

- Environmental Policy, Economics and Trade
- Nature-Human Interactions
- Urban ecology and management
- Conflict management

## Joshua Lawler

PhD, Ecology, Utah State University MS, Wildlife Ecology, Utah State University

## **Website**

Josh Lawler is an ecologist driven by applied conservation questions and their real-world applications, with climate change at the root. In particular, he is interested in how climate change can drive shifts in plant and animal distributions, and the impacts those shifts have at both the species and the ecosystem level. He uses a combination of field experiments and statistical and simulation modeling techniques, and works with collaborators to design tools that conservation planners can use to assess the impacts that climate change will have on protected landscapes.

**UW Target Links:** 1, 3, 6, 9, 10

<u>SDG Links:</u> 1, 3, 4, 11, 12, 13, 14, 15, 17

## Departments & Roles:

<u>Environmental & Forest Sciences</u>
 | Professor

#### Contact Information:

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## Areas of Expertise & Interest:

- Climate Change and Adaptation
- Conservation Science
- Landscape Ecology
- Nature-Human Interactions
- Wildlife Science
- Landscape ecology
- Conservation biology

## **Kristina Vogt**

PhD, Biology, New Mexico State University MS, Biology, New Mexico State University

## Website

Kristiina Vogt is an expert on carbon and nutrient cycles at the ecosystem level. She works to develop tools that measure conservation efficacy, as well as the impacts of land-uses on altering ecosystem resilience and social and natural system interconnectivities. She has worked everywhere from Indonesia, Iceland, Malaysia, Mexico, Puerto Rico, Brazil, and Belize, to diverse sites in the U.S., including Alaska. She is intrigued by the role that human and natural disturbances play in controlling processes in ecosystems such as species diversity, land-use activities, social resilience and ecosystem sustainability. She has studied the impact of human activities within landscapes and tries to determine which tools most effectively analyze whether our activities will cause systems to become non-sustainable.

**UW Target Links: 1, 3, 6** 

**SDG Links:** 1, 3, 4, 11, 12, 13, 14, 17

## Departments & Roles:

**Environmental & Forest Sciences** Professor

## Areas of Expertise & Interest:

- Conservation Science
- Nature-Human Interactions
- Linking social and natural science
- Reserves

#### Contact Information:

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Building: BLD 296

## **Lisa Graumlich**

Advanced Degree, Topic, School, Year

## Website

Lisa Graumlich is a professor in the School of Environmental and Forest Sciences and dean emeritus of the College of the Environment at the University of Washington. She has devoted her career to studying the causes and impacts of climate change, with a special focus on using paleoecological records such as tree-rings to understand the magnitude of human impacts. She is passionate about science communication, and she speaks frequently on climate change impacts and adaptation. She has testified on long-term climate variability before the U.S. House of Representatives Select Committee on **Energy Independence and Global** Warming and is the president-elect of the American Geophysical Union as of January 1, 2021.

**UW Target Links:** 1, 3, 6

**SDG Links:** 1, 3, 4, 6, 11, 12, 13, 14, 17

## Departments & Roles:

- <u>Environmental & Forest Sciences</u>
   | Professor and Dean Emeritus
- <u>Biology</u> | Adjunct Professor

#### **Contact Information:**

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Phone: 206-221-0908



### Areas of Expertise & Interest:

- Climate
- Conservation
- Ecology
- Resource Management

## **Peter Kahn**

PhD, University of California, Berkeley MS, University of California, Berkeley

### **Website**

Psychologist Peter Kahn is the Director of the Human Interaction with Nature and Technological Systems (HINTS) Lab at the UW, where he explores two trends that are reshaping human existence. One is the rapid degradation of the natural world. The other is the speed of technological development, both in terms of its computational sophistication and pervasiveness. Peter and his team dive into questions that arise out of these trends, such as how interaction with nature (and more wild nature) benefits people physically and psychologically, the psychological effects of interacting with technologies that simulate, mediate, or argument nature, and using deep and meaningful interaction with nature (what he calls interaction pattern design) to revision and contribute to urban sustainability.

**UW Target Links: 3** 

**SDG Links:** 6, 8, 9, 14, 15

### Departments & Roles:

• <u>Environmental & Forest Sciences</u> and Psychology | Professor

## Contact Information:

- Email: pkahn@uw.edu
- Phone: 206-616-9395
- Building: Anderson 123F



### Areas of Expertise & Interest:

- Conservation
- Social Sciences
- Ecopsychology

## **Phil Levin**

PhD, Zoology, University of New Hampshire

## **Website**

Phil Levin is a Professor of Practice at UW and the Lead Scientist for the Nature Conservancy of Washington. In this unique position, his objective is the integration of academic scholarship with practical experience. Levin is a conservation scientist who is interested in bridging the gaps between theory and practice and between social and natural sciences. The main focus of his current work is developing interdisciplinary tools to inform conservation of marine and terrestrial ecosystems and the communities that depend on them.

**UW Target Links:** 1, 3, 6

**SDG Links:** 4, 6, 10, 12, 13, 14, 15, 16, 17

### Departments & Roles:

Environmental & Forest Sciences
 Professor of Practice

### **Contact Information:**

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• Building: BLD 204



### Areas of Expertise & Interest:

- Climate Change and Adaptation
- Conservation Science
- Ecosystem Science
- Environmental Justice
- Environmental Policy, Economics and Trade
- Nature-Human Interactions
- Traditional Ecological Knowledge
- Wildlife Science
- Interdisciplinary conservation science
- Ecosystem-based natural resource management
- Marine and coastal conservation biology
- Marine ecology

# **Sally Brown**

PhD, Agronomy, University of Maryland MS, Agronomy, University of Maryland

## **Website**

Sally Brown is focused on identifying resources in wastes—turning discards from homes into a tool for sustainability. She has worked on studies involving soil health, climate change mitigation, biosolids recycling and wastewater treatment. At the root of her work, she believes that soil amendments, in the form of residuals from different industries (composts, for example), offer the potential to help us to live in a more sustainable manner. Her goal is to turn cities green by making the use and re-use of wastes part of our daily vocabulary.

**UW Target Links:** 1, 3, 5, 6, 9, 10

**SDG Links:** 1, 3, 4, 6, 11, 12, 13, 15

### Departments & Roles:

• <u>Environmental & Forest Sciences</u> | Research Professor

Areas of Expertise & Interest:

- Restoration Ecology
- Soil Science and Hydrology
- Sustainable Forest Management
- In situ remediation of soils
- Use of biosolids
- Phytoremediation of heavy metals

#### Contact Information:

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## **Marine & Environmental Affairs**

## **College of the Environment** | Website

The UW School of Marine and Environmental Affairs educates students about contemporary issues in marine systems, policy, and management, helping them to become tomorrow's leaders and stewards of marine and environmental resources.

Our students hail from a variety of professional backgrounds and locations around the United States and internationally, and arrive at SMEA in different stages of life.

Our faculty are just as diverse in their fields of expertise, working together to deliver a top-notch interdisciplinary curriculum to students and engaging in a range of current research projects.

### List of Related Individuals

- Amy Snover
- Clare M. Ryan
- David Fluharty
- Nives Dolšak
- Patrick Christie
- P. Joshua Griffin
- Ryan Kelly
- Terrie Klinger
- Yoshitaka Ota

# **Amy Snover**

PhD, Analytical/Environmental Chemistry, University of Washington, 1998 MS, Analytical/Environmental Chemistry, University of Washington, 1993

## **Website**

Dr. Amy Snover connects science and decision making to help society prepare for the impacts of climate change. She is Director of the University of Washington Climate Impacts Group, University Director of the Department of the Interior Northwest Climate Adaptation Science Center, and Affiliate Associate Professor in the UW School of Marine and Environmental Affairs. In these roles, she leads innovative efforts to link climate impacts and adaptation science with on-the-ground needs of decision makers from all communities in order to help ensure a climate-resilient world for all.

**UW Target Links:** 1, 3, 5, 6, 10

**SDG Links:** 1, 3, 4, 6, 9, 10, 11, 12, 13, 14, 16, 17

### Departments & Roles:

- Marine & Environmental Affairs
   Affiliate Associate Professor
- <u>CIG</u> and Northwest Climate Adaptation Science Center | Director

#### **Contact Information:**

Email: aksnover@uw.edu

Phone: 206-221-0222



### Areas of Expertise & Interest:

- Climate Adaptation & Decision Making
- Climate Dynamics
- Vulnerability Assessment
- Identifying the time of emergence of management-relevant aspects of climate change
- Defining successful climate change adaptation
- Exploring the role of cities in climate resilience

# **David Fluharty**

PhD, Natural Resource Conservation and Planning, University of Michigan, School of Natural Resources, 1977 MA, Geography, University of Washington, 1972



## Website

David Fluharty, professor and Associate Director for the School of Marine and Environmental Affairs, studies marine resource management and policy. His research and teaching examines ways to take ecosystem-based approaches to the management of fisheries, marine protected areas and in marine spatial planning. He studies the regional effects of climate change on societies in the Pacific Northwest, and with respect to fisheries management in the Arctic and elsewhere. In addition, Fluharty has a distinguished record of public service on issues both national and global.

**UW Target Links: 3** 

**SDG Links:** 1, 3, 6, 11, 12, 13, 14

### Departments & Roles:

Marine & Environmental Affairs
 Associate Professor Emeritus

## Contact Information:

• Email: fluharty@uw.edu

Phone: 206-685-2518

### Areas of Expertise & Interest:

- Conservation
- Resource Management
- Social Sciences

## **Nives Dolšak**

Joint PhD, Public & Environmental Affairs and Political Science, Indiana University, Bloomington, 2000.

### Website

Nives Dolšak is a professor and director of the School of Marine and Environmental Affairs. She studies how common pool resources are governed. She looks at the role of community action, social capital, market-based instruments, as well as traditional regulatory policies. Her research has examined these issues in the context of Washington State, the United States, Eastern and Central Europe, as well as whole world. A special area of focus is on global climate change policies that have been developed and implemented from the local to international level. Regionally she studies collaborative salmon management through Washington Sea Grant funded research, and serves as a member of the Puget Sound Partnership's Science Panel.

**UW Target Links:** 1, 3, 6, 10

<u>SDG Links:</u> 4, 6, 8, 10, 12, 13, 14, 15, 16, 17

### Departments & Roles:

- Marine & Environmental Affairs
   Professor & Director
- <u>Political Science</u> | Adjunct Professor
- <u>International Studies</u> | Affiliate Faculty
- <u>Urban Design & Planning</u> | Affiliate Faculty

#### Contact Information:

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Phone: 206-685-2144

Building: MAR 223 & 111



### Areas of Expertise & Interest:

- Sustainability Science
- Policy Process & Analysis
- Environmental Law & Policy
- Climate Change & Ocean Acidification
- Equity & Environmental Justice

## **Patrick Christie**

PhD, Natural Resources and Environment, University of Michigan, 1999 MS, Conservation Biology University of Michigan, 1993

## **Website**

Patrick Christie is interested in justice and sustainability, in that order. Sustainability without justice is regressive and untenable. He happens to work at the interface of oceans and coastal communities, but also works in other environments. While Patrick started (and continues) to work on protected areas, fisheries management, and coastal management, he now believes, especially in these times, that working in support of visionary environmental justice social movements is both more interesting and more essential than conducting one more technical study resulting in recommendations that are largely ignored when they challenge the status quo.

<u>UW Target Links:</u> 1, 3, 4, 5, 6, 10

<u>SDG Links:</u> 2, 4, 5, 6, 9, 10, 12, 13, 14, 15, 16, 17

### Departments & Roles:

 Marine & Environmental Affairs and International Studies | Professor

#### Contact Information:

Email: patrickc@uw.eduPhone: 206-685-6661

Building: MAR 225



### Areas of Expertise & Interest:

- Environmental Protection & Restoration
- Sustainability Science
- Policy Process & Analysis
- Coastal Zone, Ecosystem & Resource Management
- Climate Change & Ocean Acidification
- Equity & Environmental Justice

# **Ryan Kelly**

PhD, Ecology, Evolution, & Environmental Biology, Columbia University JD, University of California, Berkeley, School of Law

## **Website**

Trained as both an ecologist and a lawyer, Ryan Kelly has a broad set of interests, focused both on hard scientific data and policymakers' use of those data. From the science side, he studies the interplay between geography, ecology, and genetics in marine species. His more applied research joins genetic and ecological research with real-world implementation in law and policy, particularly with respect to environmental monitoring, resource management, endangered species, and ocean acidification. In general, he is drawn to projects that have significant elements of both scientific and policy relevance as we work towards more sustainable use of marine resources.

**UW Target Links:** 1, 3, 4, 6, 10

<u>SDG Links:</u> 1, 2, 3, 4, 6, 11, 12, 13, 14, 15, 16, 17

### Departments & Roles:

- Marine & Environmental Affairs
  Associate Professor
- <u>School of Law</u> | Adjunct Professor

### **Contact Information:**

Email: rpkelly@uw.eduPhone: 206-616-0185

Building: MAR 231



### Areas of Expertise & Interest:

- Sustainability Science
- Environmental Law & Policy
- Climate Change & Ocean Acidification

# **Terrie Klinger**

PhD, Biological Oceanography, Scripps Institution of Oceanography

## **Website**

Terrie Klinger is Co-Director of the Washington Ocean Acidification Center. She is a marine ecologist focused on applying ecological theory to practical management solutions. She studies ecosystem-based approaches to managing natural resources in the ocean, the ecological effects of environmental stressors. such as ocean acidification and habitat loss, and how rocky intertidal communities respond to and recover from disturbance. The Pacific Northwest is her primary study area, including the Puget Sound, the San Juan Archipelago, and the outer coast of Washington, and she maintains a time-series of ecological data at a site in the Gulf of Alaska.

**UW Target Links:** 1, 3, 6

**SDG Links:** 4, 6, 12, 13, 14, 15

### Departments & Roles:

- Marine & Environmental Affairs
  Professor
- Aquatic & Fisheries Sciences | Adjunct Professor
- Washington Ocean Acidification Center | Director

#### Contact Information:

Email: tklinger@uw.edu

Phone: 206-685-2499

Building: MAR 221



### Areas of Expertise & Interest:

- Environmental Protection & Restoration
- Sustainability Science
- Climate Change & Ocean Acidification

## Yoshitaka Ota

Executive Master of Public Administration, University of Washington, 2019 PhD, Anthropology, University College London, 2006 MSc, Social Anthropology, University College London, 1998

### Website

Yoshitaka Ota has a background in social anthropology at the University College London. Yoshi has conducted ethnographic research on various coastal communities. including Palau, UK, Indonesia and Japan, studying the socialization and cultural meanings associated with fishing practices. For the last ten years, he has been engaged in policy research involving coastal indigenous communities, marine spatial planning and human security. Yoshi is also the director of the Nippon Foundation Ocean Nexus Center, an international initiative comprising an interdisciplinary team of 20+ institutes. His core research interest is to understand how to strengthen social equity in ocean governance while we face global environmental changes. His unit is consisted of a team of cross-disciplinary scholars.

**UW Target Links:** 1, 3, 6, 10

<u>SDG Links:</u> 1, 3, 4, 6, 11, 12, 13, 14, 15, 16, 17

### Departments & Roles:

- Marine & Environmental Affairs
   Professor of Practice
- Nippon Foundation Ocean Nexus Center | Director

#### **Contact Information:**

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Building: MAR 131



### Areas of Expertise & Interest:

- Sustainability Science
- Policy Process & Analysis
- Environmental Law & Policy
- Coastal Zone, Ecosystem & Resource Management
- Climate Change & Ocean Acidification

# Oceanography

## **College of the Environment | Website**

The School of Oceanography fosters continued advancement of the ocean sciences, solutions to problems of societal relevance, and public awareness of the marine environment. It is at the forefront of creating knowledge and understanding about the ocean through observation, theory, modeling and technological innovation. The School focuses on learning and discovery, equipping students with knowledge and insights, scholarly methods, scientific tools and communication skills.

UW Oceanography is at the forefront of creating knowledge and understanding about the ocean through observation, theory, modeling and technological innovation.

### List of Related Individuals

- Alex Gagnon
- Curtis Deutsch
- Evelyn Lessard
- <u>lan Newton</u>
- <u>Iulian Sachs</u>
- Kyle Armour
- LuAnne Thompson
- Rebecca Woodgate
- Richard Keil

# **Alex Gagnon**

PhD, Chemistry, California Institute of Technology, 2010

## **Website**

Alex Gagnon is a chemical oceanographer. He uses a geochemical approach to study how ocean acidification impacts calcifying organisms, such as corals, and how it impacts biogeochemical cycles more generally. With a focus on chemical mechanism in oceanography, he applies this small-scale understanding to explain global patterns. Operationally, his lab uses a combination of advanced analytical tools like multi-collector plasma source mass spectrometry and NanoSIMS, together with biological culture and modeling. There is also a field component to many projects including open-water SCUBA, tropical-reef monitoring, and the use of manned or unmanned deep-sea submersibles.

**UW Target Links: 1, 3, 6** 

**SDG Links: 4, 12, 13, 14** 

### Departments & Roles:

Oceanography | Associate
 Professor

### Contact Information:

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Phone: 206- 543-5627

Building: OSB/OCN 409



### Areas of Expertise & Interest:

- Ocean Acidification
- Seawater Chemistry
- Calcifying Organisms
- Biogeochemical Cycles

## **Curtis Deutsch**

PhD, Atmospheric and Oceanic Science, Princeton University, 2003

## Website

Curtis Deutsch's research is aimed at understanding the interactions between climate and ecosystems. He combines numerical models of varying complexity with diverse types of biological and physical data, to discover the ways in which climate produces spatial pattern and temporal variability in ecosystems, and thus influences their basic functioning. Most of this work has focused on biogeochemical cycles in the ocean, with a particular emphasis on the mechanisms that regulate the cycles of nutrients and oxygen over a range of time scales from years to millennia. He also works with terrestrial ecologists to understand how climate influences the patterns of thermal fitness, and their implications for biodiversity in a changing climate.

### Departments & Roles:

- Oceanography | Associate Professor
- Biology | Adjunct Associate Professor

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Phone: 206-543-5189 Building: OCE 309

UNIVERSITY of WASHINGTON

### **UW Target Links: 3**

**SDG Links:** 1, 3, 6, 11, 13, 14

## Areas of Expertise & Interest:

- Oceanography
- Climate & Global Change
- Quantitative Ecology & Modeling

# **Evelyn Lessard**

Advanced Degree, Topic, School, Year

## **Website**

Evelyn Lessard is a biological oceanographer who studies the ecology of marine microzooplankton and phytoplankton (tiny single-cell organisms also called protists) in ecosystems ranging from the subtropics to the polar oceans. Through laboratory, field and modeling studies, she is working to understand the ways in which climate-driven ocean change (e.g., temperature and ocean acidification) alter interactions between smaller species that form the base of the food web, and how these changes affect larger organisms such as krill and fish

**UW Target Links:** 1, 3

**SDG Links:** 1, 3, 6, 11, 13, 14, 15

### Departments & Roles:

• <u>Oceanography</u> | Professor

#### **Contact Information:**

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• Phone: 206-543-8795

Building: MSB 360



### Areas of Expertise & Interest:

- Climate & Global Change
- Ecology
- Marine Science
- Microzooplankton ecology and physiology
- Biological and ecological consequences of ocean change
- Harmful algal bloom dynamics and prediction
- Particular emphasis on coastal upwelling and subarctic ocean ecosystems

## Jan Newton

PhD, Oceanography, University of Washington, 1989 MS, Oceanography, University of Washington, 1984

## **Website**

Jan's expertise is in biological oceanography, and her work focuses on the physical, chemical, and biological dynamics of Puget Sound and coastal Washington, including understanding effects from climate and humans on water properties. She is applying that research on local scales to a global network, the Global Ocean Acidification Observing Network (GOA-ON), which she co-chairs.

**UW Target Links: 1, 3** 

**SDG Links: 13, 14, 16, 17** 

### Departments & Roles:

- Oceanography | Affiliate Assistant Professor
- Applied Physics Lab | Senior Principal Oceanographer

### **Contact Information:**

- Email: newton@apl.washington.edu
- Phone: (206) 543-9152



### Areas of Expertise & Interest:

- Climate
- Geophysical Sciences
- Ecology
- Marine Science

# **Julian Sachs**

PhD, Chemical Oceanography, Massachusetts Institute of Technology-Woods Hole Oceanographic Institution Joint Program, 1997



## **Website**

Julian Sachs is a chemical oceanographer who studies the mechanisms that cause climate to change on timescales ranging from decades to millennia. To do this, he and his lab develop paleoclimate records from sediment cores from throughout the world's oceans and lakes. Molecular fossils and their hydrogen and carbon isotopic ratios are used to reconstruct past temperature, precipitation and biological productivity. Reconstructing natural climate changes in the past provides the means to determine when the modern climate is outside the range of natural variability and improves predictions of how it will change in the future. His lab also researches the effect of ocean acidification on coral reefs. through in situ carbon enrichment experiments in which the impact on reef accretion and ecosystem productivity rates are measured.

**UW Target Links: 3** 

**SDG Links:** 6, 14, 17

### Departments & Roles:

• Oceanography | Professor

### Areas of Expertise & Interest:

- Climate
- Environmental Chemistry
- Marine Science

### **Contact Information:**

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• Phone: 206-221-5630

Building: OSB/OCN 521

# **Kyle Armour**

PhD, Physics, University of Washington, 2007

## **Website**

Kyle Armour studies the dynamics of Earth's climate through the analysis of observations and numerical simulations with both idealized and comprehensive climate models. He is part of the College's Future of Ice initiative, and holds a joint associate professor position in the School of Oceanography and Department of Atmospheric Sciences. His research focuses on understanding recent and future sea ice changes, polar oceanography, and global climate change.

**UW Target Links:** 1, 3, 6

<u>SDG Links:</u> 1, 3, 4, 11, 12, 13, 14, 17

### Departments & Roles:

 Atmospheric Sciences and <u>Oceanography</u> | Associate Professor

#### Contact Information:

- Email: karmour@atmos.uw.edu
- Phone: (206) 685-9525
- Building: ATG708



### Areas of Expertise & Interest:

- Climate dynamics
- Polar oceanography
- Sea ice
- Climate sensitivity
- Geophysical Sciences
- Marine Science

# **LuAnne Thompson**

PhD, Oceanography, Massachusetts Institute of Technology and Woods Hole Oceanographic Institution Joint Program, 1990 MA, Physics, Harvard University, 1986



## **Website**

Oceanic dynamics are one of the keys to understanding climate variability and change. Oceanographer LuAnne Thompson, a Lowell A and Frankie L Wakefield Endowed Professor, uses climate models along with satellite observations to untangle the role that the ocean plays in moving and storing heat and chemicals in the climate system. She is the former Director of the Program on Climate Change at UW. She has also been involved in interdisciplinary collaborations that address the challenges that climate change will bring to natural and human systems.

**UW Target Links: 3** 

**SDG Links:** 1, 3, 6, 11, 13, 14

### Departments & Roles:

- <u>Oceanography</u> | Professor
- <u>Physics</u> | Adjunct Professor

### Areas of Expertise & Interest:

- Climate
- Geophysical Sciences
- Marine Science

#### Contact Information:

- Email: luanne@uw.edu
- Phone: 206-543-9965
- Building: OCN 317

# Rebecca Woodgate

PhD, Oceanography, University of Oxford, 1994

## **Website**

Rebecca Woodgate is a physical oceanographer who specializes in polar research, with particular focus on the circulation of the Arctic Ocean, interactions between sea-ice and the ocean, and the role of the polar oceans in climate. She has worked for many years in the deployment and recovery of moored oceanographic instrumentation in ice-covered waters, and the analysis of both mooring and hydrographic data. Her overarching goals are to understand the physical processes in both Arctic and Antarctic regions; to combine observations with modeling and theoretical results; to work with colleagues in other disciplines to use the physical insight obtained to address interdisciplinary Arctic issues; and to bring the enchantment and importance of the Arctic in our world today to students and the general public via UW courses and outreach.

**UW Target Links:** 1, 3, 6

**SDG Links: 4, 12, 13, 14** 

### Departments & Roles:

- <u>Oceanography</u> | Professor
- Applied Physics Lab | Senior Principal Oceanographer

#### **Contact Information:**

- Email: woodgate@uw.edu
- Phone: 206-221-3268
- Building: Applied Physics Lab



### Areas of Expertise & Interest:

- Polar research
- Circulation of the Arctic Ocean
- Interactions between sea-ice and the ocean
- The role of the polar oceans in climate

## **Richard Keil**

PhD, University of Delaware, 1991

## **Website**

Rick Keil is the director of the School of Oceanography and is interested in applying organic geochemistry to some of the most pressing environmental issues of our time. most especially climate change. He studies the fate of organic matter in aquatic environments, as well as the causes and consequences of oxygen minimum zones throughout the world. In addition to his research, in 2008 Keil started SoundCitizen, a citizen science project that sends Puget Sound residents out to sample the water from various sites throughout the region.

**UW Target Links:** 1, 3, 6, 7

**SDG Links:** 3, 4, 6, 11, 12, 13, 14

### Departments & Roles:

 Oceanography | Professor & Director

### Contact Information:

Email: rickkeil@uw.edu

Phone: 206-616-1947

• Building: OSB/OCN 517



### Areas of Expertise & Interest:

- Marine Microbiology
- Oceanography
- Fate of organic matter in aquatic environments with a current emphasis on proteins, proteomics, metabolomics and in situ sensing and experimentation

# **Program on Climate Change**

## **College of the Environment | Website**

The Program on Climate Change amplifies the University of Washington's exceptional range of expertise in climate related fields. Interaction among faculty through PCC activities promotes the integration of existing observational and modeling efforts within and between individual departments, providing a powerful synthesis approach for addressing the problems of climate change. Through courses, events, and planning for future initiatives, the program unites faculty, graduate students, and more recently undergraduates and off-campus partners, in efforts to understand, mitigate and adapt to climate change.

The PCC mission: to provide a framework of intense cross-disciplinary collaboration that furthers research and education in climate science.

### List of Related Individuals

Becky Alexander

# **Becky Alexander**

PhD, Atmospheric Chemistry, University of California, San Diego, 2002 MS, Physical Chemistry, University of California, San Diego, 1999

## **Website**

Becky Alexander is an atmospheric scientist who studies the feedbacks that arise between climate change and the chemical composition of the atmosphere. She is currently the director of the Program on Climate Change. She looks at the pathways by which atmospheric pollutants form, how those pathways can vary across time and space, and what that means both for present-day air quality and for the future of climate change. To tackle her questions, she does extensive lab work with polar ice cores and atmospheric aerosols, using them to understand how the atmosphere has responded to climate change over the past 100,000 years. She also builds three-dimensional models to see how atmospheric chemistry has responded to climate change over the last 100,000 years.

**UW Target Links: 3** 

**SDG Links:** 1, 3, 11, 13, 14, 17

### Departments & Roles:

- Atmospheric Sciences
   Professor
- <u>Program on Climate Change</u> |
   Director

### **Contact Information:**

Email: beckya@uw.eduPhone: 206-543-0164

• Building: ATG 306



### Areas of Expertise & Interest:

- Paleoclimate
- Atmospheric chemistry
- Aerosols
- Stable isotope geochemistry

## **Program on the Environment**

## **College of the Environment | Website**

We live in an increasingly interconnected world, calling for skilled communication, cooperative decision making and a big-picture understanding of how humans interact with all natural environments, urban, rural and wild.

To understand these complexities, we must know, experience and engage. The University of Washington's prime location enables students to do just this, visiting and learning in stunning natural and urban landscapes. Students in the Environmental Studies program learn from and listen to different scientific, cultural and political perspectives. They collaborate on pressing issues such as climate change, water, energy, food, policy and education. Through this work, they gain the skills and knowledge to inspire and lead change for an equitably sustainable future.

### List of Related Individuals

- Eli Wheat
- Kristi Strauss

## Kristi Strauss

PhD, Aquatic and Fishery Sciences, University of Washington, 2010

## **Website**

Kristi Straus is a lecturer in the College's Environmental Studies program and the recipient of a 2017 University of Washington Distinguished Teaching Award. She is passionate about environmental conservation and effective teaching of environmental topics for students of all ages. Her work focuses on conservation of local marine invertebrates, as well as the science of science education.

**UW Target Links:** 1, 3, 6

<u>SDG Links:</u> 1, 3, 4, 11, 12, 13, 14, 15

### Departments & Roles:

Program on the Environment |
 Associate Teaching Professor &
 Associate Director

### Areas of Expertise & Interest:

- Conservation Science
- Science Education
- Conservation
- Marine Science
- Social Sciences

#### **Contact Information:**

- Email: kmstraus@uw.edu
- Phone: 206-616-3310
- Building: -12F Wallace Hall

## **Eli Wheat**

PhD, Biology, University of Washington, 2010 MA, Education, New York University, 2001

## **Website**

Fli Wheat is a lecturer in the Environmental Studies program and an affiliate faculty with the Food Systems Nutrition and Health Program. He was awarded the College of the Environment's Outstanding Teaching award in 2017 and the Excellence in Teaching Award in 2010. Eli's teaching and research focus on food systems and sustainability. He is currently working on research projects involving carbon sequestration, kelp production and pasture management. Aside from his work as a lecturer, Eli actively pursues a passion for food production. He also owns and operates SkyRoot farm, a 20-acre certified organic farm that integrates livestock and vegetable production on South Whidbey Island. In his spare time, Eli enjoys playing guitar, reading and hanging out with his family.

**UW Target Links: 3, 6** 

**SDG Links:** 2, 6, 14, 15

### Departments & Roles:

 Program on the Environment and <u>Nutritional Sciences</u> |
 Assistant Teaching Professor

#### **Contact Information:**

- Email: elizaw@uw.edu
- Building: 012G Wallace Hall



### Areas of Expertise & Interest:

- Ecology
- Resource Management
- Carbon Sequestration

# Yen-Chu Weng

PhD, Geography, University of Wisconsin-Madison, 2011 MS, Geography, University of Wisconsin-Madison, 2005

## **Website**

Yen-Chu Weng is a lecturer in the College's Program on the Environment. As a geographer, she has always been interested in exploring the connections between human societies and the environment. She received broad training in both the biophysical sciences and the social sciences, and has integrated quantitative, qualitative and GIS methods into her research projects. Her research focuses on the politics of participation in environmental volunteering programs. By comparing perspectives of multiple stakeholders, she examines the role of science, nature and participation in ecological restoration.

**UW Target Links:** 1, 3, 6

<u>SDG Links:</u> 4, 6, 9, 11, 12, 13, 14, 15, 17

### Departments & Roles:

 <u>Program on the Environment</u> & Taiwan Studies | <u>Lecturer</u>

### **Contact Information:**

• Email: yweng@uw.edu

• Phone: 206-616-3310



### Areas of Expertise & Interest:

- Conservation
- Resource Management
- Social Sciences

# HENRY M. JACKSON SCHOOL OF INTERNATIONAL STUDIES

### **Website**

The Jackson School offers leading-edge research in global and area studies. Our internationally prominent faculty represent a range of fields in the social sciences and humanities, including anthropology, economics, geography, history, political science, religion, sociology and gender, women & sexuality studies. Some notable research projects include: the effects of free-trade agreements on human rights; public health and environmental security; nuclear non-proliferation in Asia; civil society in Asia, Latin America and Europe; defense industrialization in China; the relationship between religion and violence; U.S. foreign policy in the Middle East; history of U.S. foreign policy; the Mexican Revolution; political economy of India, post-Soviet politics; and politics of indigenous communities.

### List of Related Individuals

- Benjamin Gardner
- <u>Celia Lowe</u>
- <u>Daniel Abramson</u>
- Danya Al-Saleh
- <u>lose Antonio Lucero</u>
- Lucy |arosz
- Nives Dolšak
- Patrick Christie
- Sabine Lang
- Sara Curran
- Scott L. Montgomery
- Sunila S. Kale
- Yen-Chu Weng

# Danya Al-Saleh, (she/her)

PhD, University of Wisconsin-Madison, Geography, 2021 MA, CUNY Graduate Center, Cultural Anthropology, 2014

### Website

Bio: A feminist geographer with expertise in Environmental Studies and Middle East Studies.

Her role will allow the Jackson School to develop connections with the College of the Environment and Geography as well as many other units that focus on the Middle East and environmental issues. She has studied Arabic in Egypt, Jordan and Qatar, and does her research in Arabic and English.

### **UW Target Links:**

### **SDG Links:**

### Departments & Roles:

 <u>International Studies</u> | Assistant Professor

#### **Contact Information:**

- Email:
- Phone:
- Building:



### Areas of Expertise & Interest:

- Environmental Studies
- Middle East Studies
- Teaches 'The University and Climate Justice" (JSIS 478D/578C), autumn quarter, 2022: will examine the role of universities in upholding the injustices of an extractive fossil fuel-based economy and in producing environmental expertise and labor that facilitated slavery, Indigenous dispossession, and imperialism abroad.

## **Jose Antonio Lucero**

PhD, Princeton University, Department of Politics, 2002 MA, Princeton University, Department of Politics, 1997

## **Website**

losé Antonio Lucero was born in El Paso. Texas, and raised on both sides of the Mexico-US border. His main research and teaching interests include Indigenous politics, social movements, Latin American politics, and borderlands. He has conducted field research in Bolivia, Chile, Ecuador, Mexico, and Peru. In addition to numerous articles, Lucero is the author of Struggles of Voice: The Politics of Indigenous Representation in the Andes (University of Pittsburgh Press, 2008) and the co-editor of the Oxford Handbook of Indigenous Peoples Politics (Oxford University Press, forthcoming). He is currently working on two research projects that examine the cultural politics of (1) conflicts between Indigenous peoples and the agents of extractive industry in Peru and (2) human rights activism, religion, and Indigenous politics on the Mexico-US border.

**UW Target Links:** 1, 3, 4, 6

**SDG Links:** 4, 5, 10, 11, 12, 13, 16

### Departments & Roles:

- <u>International Studies</u> | Associate Professor
- <u>Latin American & Caribbean Studies</u> |
   Chair
- <u>Comparative History of Ideas</u> | Affiliate Faculty
- American Indian Studies and Geography
   Adjunct Associate Professor

#### Contact Information:

- Email: jal26@uw.edu
- Phone: (206) 616-1643
- Building: Thomson 415



### Areas of Expertise & Interest:

- Development
- Identity and Culture
- Indigenous Politics
- Law, Rights, and Governance (LRG)
- Migration, Refugees and Borderlands
- Post/ Colonialism
- Race and Ethnicity
- Religions, Cultures, and Civilizations (RCC)
- Social Movements
- States and Markets
- States, Markets, and Societies (SMS)

## María Elena García

PhD, Anthropology, Brown University, 2001

## **Website**

María Flena García is director of the Comparative History of Ideas and associate professor in the Jackson School of International Studies at the University of Washington. Her work on indigeneity and interspecies politics in the Andes has appeared in multiple edited volumes and journals such as Anthropology Now, Anthropological Quarterly, International Journal of Bilingual Education and Bilingualism, **Journal of Latin American and** Caribbean Anthropology, Latin American Perspectives, and Latin American and Caribbean Ethnic Studies. Her second book project, Dancing Guinea Pigs and Other Tales of Race in Peru, examines the intersections of race, species, and capital in contemporary Peru.

**UW Target Links: 1, 3, 6** 

**SDG Links: 4, 11, 12, 13** 

### Departments & Roles:

- <u>Geography</u> | Adjunct Professor
  - Comparative History of Ideas | Associate Professor & Director
- American Indian Studies and Anthropology | Adjunct
   Associate Professor

#### Contact Information:

- Email: meg71@uw.edu
- Phone: (206) 221-0561
- Building: Padelford B102



### Areas of Expertise & Interest:

- Indigenous
- Urban Studies
- Animal Studies
- Anthropology
- Indigenous
- Latin American

# **Sabine Lang**

PhD, Department of Political Science, Free University Berlin, 1997

## **Website**

Sabine Lang is Professor of International and European Studies at ISIS. She holds the Jean Monnet Chair in Civil Society, Inclusion, and Diversity from the European Union and directs the Center for West European Studies, a Jean Monnet Centre of Excellence. She is also Adjunct Professor in the Departments of Political Science, Germanics, and Gender, Women, and Sexuality Studies. Her work is in comparative politics with a focus on civil society, the public sphere, the nongovernmental sector, and gender politics. Her current research focuses on gendered political representation in the European Union and on EU-level public engagement processes.

**UW Target Links: 3, 4** 

**SDG Links:** 1, 2, 5, 10, 16, 17

### Departments & Roles:

- <u>International Studies</u> | Professor
- Center for West European Studies | Director

### Contact Information:

Email: salang@uw.edu

• Phone: (206) 543 6188

• Building: Thomson 208



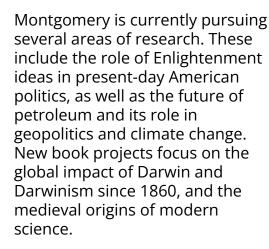
### Areas of Expertise & Interest:

- Gender and Sexuality
- International Relations
- Social Movements
- States, Markets, and Societies (SMS)

# **Scott L. Montgomery**

Advanced Degree, Topic, School, Year

### Website



**UW Target Links:** 3, 5, 8, 9, 10

<u>SDG Links:</u> 5, 7, 8, 9, 11, 12, 16, 17

### Departments & Roles:

• <u>International Studies</u> | Affiliate Faculty Member & Lecturer

### Areas of Expertise & Interest:

- Security, Conflict and Violence
- Technology, Security, and Diplomacy

#### **Contact Information:**

- Email: scottlm@uw.edu
- Phone: (206) 897-1611
- Building: Thomson 201

## Sunila S. Kale

PhD, Government, University of Texas, Austin, 2007

## **Website**

Sunila Kale teaches in the South Asia Studies and International Studies programs. Her research, writing, and teaching focus on Indian politics and the political economy of development.

**UW Target Links: 3, 5** 

**SDG Links:** 5, 9, 10, 16, 17

### Departments & Roles:

 International Studies and South Asia Studies and Comparative History of Ideas | Associate Professor

### Areas of Expertise & Interest:

- Development
- Political Economy
- Technology, Security, and Diplomacy

#### **Contact Information:**

- Email: kale@uw.edu
- Phone: (206) 221 4852
- Building: Thomson Hall 418

## THE GRADUATE SCHOOL

## **Website**

Whether they teach in an inner city public school or research diabetes at the National Institutes of Health, our graduate alumni are changing the way we live. A graduate education gives people the tools and connections they need to make a difference in our communities, from the neighborhoods of Seattle to the towns of Washington and throughout the Pacific Northwest. Chances are, all of us have benefitted from graduate education.

Graduate education encompasses research, study and teaching beyond the bachelor's degree. While undergraduate education leads to a bachelor's degree, graduate education leads to master's degree and doctorate, also called a doctoral degree.

Applied Chemical Science & Technology

Xiaosong Li

Supply Chain Transportation & Logistics

• Anne Goodchild

**Astrobiology** 

David R. Montgomery

Sustainability Management

Timothy Nyerges

## **SCHOOL OF LAW**

## Website

As one of the nation's oldest and leading public law schools, we meld a traditional focus on the rule of law with a modern approach to solving problems and advancing social justice. We actively encourage students to explore their passions and equip them with the intellectual tools and hands-on legal experience they need to be practice-ready lawyers able to work in any field they choose.

Our location in Seattle—a vibrant hotbed of technology, innovation, progressive policymaking, philanthropy and more—provides a real-world learning environment as well as programs and partnerships to support future lawyers and professionals.

### List of Related Individuals

- Gregory Hicks
- Ryan Kelly
- Sanne Knudsen
- Todd Wildermuth

### **Gregory Hicks**

JD, University of Texas, 1978

#### **Website**

Professor Hicks joined the UW law school faculty in 1984. He teaches courses in property, water law, and public land and natural resources law. He came to the law school after four years with the Seattle firm of Perkins, Coie, Stone, Olsen & Williams, and two years as special assistant to the chairman of the U.S. Export-Import Bank.

**UW Target Links: 3, 10** 

**SDG Links:** 6, 12, 13, 16, 17

#### Departments & Roles:

• <u>School of Law</u> | Professor Emeritus

#### **Contact Information:**

Email: gahicks@uw.edu

Phone: (206) 543-5182



#### Areas of Expertise & Interest:

- Property Law
- Water Law

### Sanne Knudsen

JD, University of Michigan, 2002 MS, University of Michigan, 2002

#### **Website**

Professor Knudsen joined the University of Washington School of Law in 2011. She teaches Natural Resources Law, Environmental Law, Administrative Law, and Civil Procedure. Her scholarship focuses on how environmental laws and tort liability frameworks can better reduce or redress long-term and multiple-stressor environmental harms. Her most recent work. entitled "Regulating Cumulative Risk," is forthcoming in the Minnesota Law Review and argues that the public health implications of combined exposures to pesticides and chemicals requires greater regulatory emphasis on cumulative risk assessment.

**UW Target Links:** 3, 4, 10

<u>SDG Links:</u> 3, 5, 6, 10 12, 13, 15, 16

#### Departments & Roles:

 School of Law | Stimson Bullitt Endowed Professor of Environmental Law

#### **Contact Information:**

• Email: knudsen@uw.edu

Phone: (206) 221-7443



#### Areas of Expertise & Interest:

- Administrative Law
- Environmental Law

### **Todd Wildermuth**

PhD, University of Illinois, Urbana-Champaign, 2008 MS, University of Illinois, Urbana-Champaign, 1999

#### **Website**

Dr. Todd A. Wildermuth is the Director of the UW Environmental Law Program. He coordinates UW Law's current environmental curricular offerings, works with other faculty to increase UW's depth and stature in the field, and conducts outreach on behalf of the environmental law program.

**UW Target Links:** 1, 3, 5, 6, 10

**SDG Links:** 4, 9, 12, 13, 15, 16, 17

#### Departments & Roles:

- <u>School of Law</u> | Associate Teaching Professor
- Regulatory Environmental Law & Policy Clinic | Policy Director

#### **Contact Information:**

Email: toddw2@uw.edu

Phone: (206) 221-8980



#### Areas of Expertise & Interest:

- Environmental Law
- Environmental Permitting
- Wildlife Law

### THE INFORMATION SCHOOL

#### **Website**

Our Vision: We envision a world where effective use of information helps everyone discover, learn, innovate, solve problems and have fun. We envision a world free of existential problems. Information changes lives.

Our Mission: We make information work. We prepare information leaders. We research the problems and opportunities of information. We design solutions to information challenges.

#### List of Related Individuals

- Bill Howe
- Chirag Shah
- Clarita Lefthand-Begay
- loel Ross

### **Bill Howe**

PhD, Computer Science, Portland State University, 2007

#### **Website**

I am a co-founder of Urban@UW, and with support from the MacArthur Foundation and Microsoft, I lead UW's participation in the Metrol ab Network. I created a first MOOC on Data Science through Coursera, and I led the creation of the UW Data Science Masters Degree, where I serve as its first Program Director and Faculty Chair. I serve on the Steering Committee of the Center for Statistics in the Social Sciences. My group's research aims to make the techniques and technologies of data science dramatically more accessible, particularly at scale. Our methods are rooted in database models and languages, though we sometimes work in machine learning, visualization, HCI, and high-performance computing. We are an applied, systems-oriented group, frequently sourcing projects through collaborations in the physical, life, and social sciences.

**UW Target Links: 3, 5, 7, 10** 

**SDG Links:** 5, 9, 11, 14, 17

#### Departments & Roles:

- <u>Information School</u> | Associate Professor
- Computer Science & Engineering and Electrical Engineering | Adjunct Professor

#### Contact Information:

Email: billhowe@uw.edu

Phone: 206-685-8746

Building: Mary Gates Hall 310C



#### Areas of Expertise & Interest:

- Data Management
- Data Science for Social Good
- Scientific Databases and Visualization

### Clarita Lefthand-Begay

PhD, Environmental and Occupational Hygiene, University of Washington, 2014 MS, Environmental Health, University of Washington, 2007

#### Website

Clarita Lefthand-Begay is citizen of the Navajo Nation and an assistant professor in the University of Washington's Information School. Her interdisciplinary research focuses on the protections (e.g., tribal codes, laws, guidelines, declarations, etc.) for indigenous knowledge in the United States, tribal water security, and climate health and resiliency. Indigenous knowledge systems are foundational to each of her projects. She is currently the Director of the Tribal Water Security Project, a project that examines the water insecurity challenges faced by tribes in the United States and around the globe. As a researcher and tribal community member, Clarita supports efforts to strengthen tribal wellbeing while respecting and honoring self-determination and cultural revitalization.

**UW Target Links:** 3, 5, 10

**SDG Links:** 1, 3, 5, 6, 9, 10, 11, 13, 15, 16, 17

#### Departments & Roles:

- <u>Information School</u> | Assistant Professor
- American Indian Studies | Adjunct Assistant Professor
- Tribal Water Security Project | Director

#### Contact Information:

Email: clarita@uw.edu

Phone: 206-543-9506

Building: Mary Gates Hall 330G



#### Areas of Expertise & Interest:

- Water Security Research
- Indigenous Knowledge Systems, Governments, and Communities
- Climate, Native Health and Indigenous Knowledge Systems
- Indigenous Knowledge
- Health and Well-Being

### **Chirag Shah**

PhD, Information and Library Science, University of North Carolina, 2010 MS, Computer Science, University of Massachusetts, 2006 MTech, Computer Science and Engineering, Indian Institute of Technology, 2002

#### **Website**

Shah's research involves studies of interactive information retrieval/seeking and recommender systems, addressing various problems with user studies in lab and field, and building computational models with machine learning techniques. He has served as a consultant to the United Nations Data Analytics on various Data Science projects involving social and political issues, peacekeeping, climate change, and energy. He also holds a position of Amazon Scholar, working on cutting-edge research problems on personalization and recommendation with Amazon

**UW Target Links: 3, 5** 

**SDG Links:** 5, 6, 9, 17

#### Departments & Roles:

- <u>Information School</u> | Associate Professor
- Computer Science & Engineering
   Adjunct Associate Professor

#### **Contact Information:**

Email: chirags@uw.edu

Phone: 206-685-6630

Building: Mary Gates Hall 310B



#### Areas of Expertise & Interest:

- Information Retrieval/Seeking
- Data Science
- Personalization and Recommendation
- Human-Computer Interaction

### **Joel Ross**

PhD, Information and Computer Science, University of California, Irvine, 2013 MS, Informatics, University of California, Irvine, 2009

#### **Website**

Joel Ross is an Associate Teaching Professor at the University of Washington Information School, where he teaches courses in web development, mobile application development, software architecture, and introductory programming. While his primary focus is on teaching, his research interests include games and gamification, pervasive systems, computer science education, and social computing. He has also done research on crowdsourcing systems, human computation, and encouraging environmental sustainability. Joel earned his M.S. and Ph.D. in Information and Computer Sciences from the University of California, Irvine.

**UW Target Links:** 1, 2, 3, 5, 6

<u>SDG Links:</u> 3, 4, 8, 9, 11, 12, 13, 17

#### Departments & Roles:

• <u>Information School</u> | Associate Teaching Professor

#### Contact Information:

- Email: joelross@uw.edu
- Phone: 206-685-1622
- Building: Mary Gates Hall 330A



#### Areas of Expertise & Interest:

- Games and Gamification
- Pervasive Systems
- Computer Science Education
- Sociotechnical Information Systems

### SCHOOL OF MEDICINE

#### **Website**

The University of Washington School of Medicine is dedicated to improving the general health and well-being of the public. In pursuit of its goals, the School is committed to excellence in biomedical education, research and healthcare. The School is also dedicated to ethical conduct in all activities. As the pre-eminent academic medical center in our region and as a national leader in biomedical research, we place special emphasis on educating and training physicians, scientists and allied health professionals dedicated to three distinct goals:

- Meeting the healthcare needs of our region, especially by recognizing the importance of primary care and providing service to underserved populations
- Advancing knowledge
- Assuming leadership in the biomedical sciences and in academic medicine

The School works with public and private agencies to improve healthcare and advance knowledge in medicine and related fields of inquiry. It acknowledges a special responsibility to the people in the states of Washington, Wyoming, Alaska, Montana and Idaho, who have joined with it in a unique regional partnership. The School is committed to building and sustaining a diverse academic community of faculty, staff, fellows, residents and students and to assuring that access to education and training is open to learners from all segments of society, acknowledging a particular responsibility to the diverse populations within our region.

#### List of Departments

- Bioengineering (ENGR)
- Biomedical Informatics & Medical Education
- Emergency Medicine
- <u>Medicine</u>
- Microbiology
- Pediatrics

# Biomedical Informatics & Medical Education

#### **School of Medicine** | Website

We are engaged in training, research, and the practice of biomedical informatics and medical education across the breadth of health sciences and health care. Our vision is to unleash the potential for information to improve biomedicine, health and medical education. Our mission is to use biomedical and health data, knowledge and information to improve health and education through research, education and praxis. Our values are to actively foster a supportive collaborative culture of excellence for faculty, staff, and students with emphasis on mentorship, camaraderie, diversity, equity, inclusion, and bridging disciplines.

#### List of Related Individuals

• <u>lon Ilgen</u>

### Jon Ilgen

Emergency Medicine, American Board of Emergency Medicine, 2009

#### **Website**

Jonathan Ilgen, M.D., M.C.R., is a board certified physician in the Emergency Department at Harborview, a UW associate professor of Emergency Medicine and associate director of the UW's Center for Leadership and Innovation in Medical Education, Dr. Ilgen enjoys the challenge of caring for patients of diverse backgrounds and with a wide variety of diseases, supporting them to address their unexpected illnesses. Dr. Ilgen conducts medical education research, and has a particular interest in diagnostic reasoning and assessment.

**UW Target Links: 2, 3, 5** 

**SDG Links:** 3, 4, 5, 9, 17

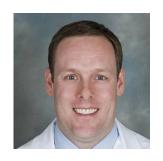
#### Departments & Roles:

- <u>Medicine</u> | Associate Professor
- <u>Biomedical Informatics &</u>
   <u>Medical Education</u> | Adjunct

   Associate Professor

#### **Contact Information:**

Email: ilgen@uw.edu



#### Areas of Expertise & Interest:

- Emergency medicine
- Telehealth services
- Clinical and diagnostic reasoning
- Medical education scholarship
- Assessment

### **Emergency Medicine**

#### **School of Medicine** | Website

The mission of the University of Washington Department of Emergency Medicine is to provide high-quality patient care, medical education, and research.

#### List of Related Individuals

- David Townes
- <u>leremy Hess</u>
- <u>Ion Ilgen</u>
- Kelli O'Laughlin

### **David Townes**

DTM&H, Royal College of Physicians, London School of Hygiene and Tropical Medicine, 2007

# Dovid Tower, Mr. Emissione, Me.

#### **Website**

Dr. Townes has worked in Antarctica, Costa Rica, Ethiopia, Ghana, Guatemala, Haiti, Indonesia, Jordan, Kenya, Malawi, Mozambique, Russia, Senegal, Tanzania, Turkey, the West Indies, and Zambia.

His research interests include response to complex humanitarian emergencies, disease surveillance in humanitarian emergencies, health policy for humanitarian emergencies, refugee and internally displaced populations, and malaria.

#### **UW Target Links: 4**

<u>SDG Links:</u> 1, 3, 5, 10, 11, 12, 13, 16, 17

#### Departments & Roles:

- <u>Emergency Medicine</u> | Professor
- <u>Global Health</u> | Adjunct Professor

#### Contact Information:

- Email: townesd@uw.edu
- Phone: 206-598-7941
- Building: Magnuson Health
   Sciences Building, F Wing

#### Areas of Expertise & Interest:

- Disease Surveillance
- Emergency Medicine
- Humanitarian Relief Logistics
- Infectious Diseases (other than STDs)
- Malaria
- Telemedicine
- Response to complex humanitarian emergencies
- Disease surveillance in humanitarian emergencies
- Health policy for humanitarian emergencies
- Refugee and internally displaced populations

### **Jeremy Hess**

MPH, Emory University MD, Emory University

#### **Website**

Dr. Hess is trained in emergency medicine and global environmental health. His teaching, research and service focus on climate change and health, and he has particular interest in climate change vulnerability and adaptation assessment, surveillance for climate-sensitive health outcomes, developing and implementing interventions to support climate change adaptation in the health sector, and the health impacts of climate change mitigation.

**UW Target Links:** 1, 3, 5, 6, 10

<u>SDG Links:</u> 1, 3, 4, 11, 12, 13, 15, 17

#### Departments & Roles:

- Global Health and Emergency Medicine and Environmental & Occupational Health Sciences | Professor
- Atmospheric Sciences | Adjunct Associate Professor

#### Contact Information:

- Email: jjhess@uw.edu
- Phone: 206-221-4059
- Building: Magnuson Health
   Sciences Building, F Wing



#### Areas of Expertise & Interest:

- Burden of Disease
- Emergency Medicine
- Environmental Health (incl. Climate Change)
- Epidemiology
- Health Interventions
- Climate change health impacts, public health adaptation to climate change
- Health care disaster risk management, health care operations, evidence-based public health
- Early warning systems, health effects of heat exposure

### Kelli O' Laughlin

MPH, Harvard School of Public Health, 2008

#### **Website**

Dr. O'Laughlin is a global health research scientist focused on assessing the health needs of refugee populations and on designing and evaluating refugee-specific interventions to improve care. Presently she is implementing and evaluating an intervention to improve engagement in HIV care for refugees living in Nakivale Refugee Settlement in Uganda (PI; K23MH108440). Dr. O'Laughlin is also investigating an interactive voice response (IVR) telephone-based COVID-19 symptom and exposure surveillance tool among refugees in Uganda. She aims to validate a prediction model with COVID-19 testing. assess knowledge and perceptions of risk and explore barriers and facilitators to risk mitigation strategy adoption among this population (PI; Elrha/R2HC).

#### **UW Target Links:** 3

**SDG Links:** 3, 5, 10, 17

#### Departments & Roles:

• <u>Emergency Medicine</u> and <u>Global</u> <u>Health</u> | Assistant Professor

#### **Contact Information:**

- Email: kolaugh@uw.edu
- Phone: 206-744-2559
- Building: Harborview Medical
   Center

#### Areas of Expertise & Interest:

- Linkage to care in refugee populations
- Burden of Disease
- COVID-19
- Disease Surveillance
- Emergency Medicine
- Health Interventions
- HIV/AIDS
- Infectious Diseases
- Mental Health
- Mobile Health (mHealth)
- Sociobehavioral

### Medicine

#### **School of Medicine** | Website

Teaching: Future physicians and scientists have opportunities to train in a broad range of settings with a diverse patient population and some of the best minds in academic medicine as role models. Our faculty members teach the latest in evidence-based practice as well as the oldest of human values—compassion and respect for patients and their families. Our residencies and fellowships are considered among the best programs in the country.

Healing: Our clinical programs are diverse, offering considerable breadth and depth of expertise in care. Our programs strive to achieve integration with research and training, thus accelerating the transfer and dissemination of new knowledge. Faculty members in our subspecialties provide outstanding specialized care, as well as advancing the horizons of care innovations. Through such specialized facilities as the Heart Institute, the Seattle Cancer Care Alliance, the Northwest Kidney Centers, and others, our physicians make their expertise accessible to patients from around the region, the nation, and the world.

Discovery: From making kidney dialysis possible to winning the Nobel Prize for bone-marrow transplantation, we have a long tradition of leading-edge research that has yielded some of the most important innovations in the history of modern medicine.

Diversity: We are committed to increasing the recruitment, retention, and advancement of faculty, fellows, and residents from groups underrepresented in medicine and promoting an inclusive environment across the department.

#### List of Related Individuals

- Grace John-Stewart
- <u>Jairam R. Lingappa</u>
- <u>loel Kaufman</u>
- <u>Judd Walson</u>
- <u>lune Spector</u>
- Peter M. Rabinowitz

### Joel Kaufman

MD, University of Michigan MPH, University of Washington

#### **Website**

Dr. Kaufman's work integrates epidemiology, exposure sciences, toxicology and clinical medicine. His current research activities are primarily focused on environmental factors in cardiovascular and respiratory disease. He is the principal investigator of a major epidemiological prospective cohort study of air pollution and cardiovascular disease (The Multi-Ethnic Study of Atherosclerosis and Air Pollution, or "MESA Air"). He directs the UW Northlake Controlled Exposure Facility, a facility customized for experimental inhalation toxicology studies on health effects of combustion products, including diesel exhaust.

**UW Target Links:** 3, 5, 9, 10

**SDG Links:** 3, 8, 11, 12, 15

#### Departments & Roles:

 Environmental & Occupational Health Sciences and Epidemiology and Medicine | Professor

#### Contact Information:

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Phone: 206-616-3501

Building: 302, Roosevelt One



#### Areas of Expertise & Interest:

- Clean Air
- Sustainable Communities
- Environmental Health
- Occupational Medicine
- Pollution
- Wildfires

### Microbiology

#### **School of Medicine** | Website

The UW Department of Microbiology was founded in 1915 and the first Ph.D. was awarded in 1930. It quickly became and still remains one of the premier biological science departments in the country. The department has a national reputation for high quality teaching and an international reputation for excellence in research. The department is in the School of Medicine but it is responsible for an undergraduate microbiology major, and a graduate program. More than 30 departmental faculty serve as graduate student research advisors. While the majority of faculty members have research laboratories within the South Lake Union Campus and at the Health Sciences Building, several faculty work at the Fred Hutchinson Cancer Research Center, Seattle Children's Research Institute and at the Northwest Regional Primate Research Center.

#### List of Related Individuals

Mary Lidstrom

### **Pediatrics**

#### **School of Medicine** | Website

Through excellence, innovation and collaboration, we will improve the health of all children and adolescents and reduce inequities by educating the pediatric and physician leaders of the future, advancing research, advocating for children and providing the nation's best primary and specialty pediatric clinical care. In partnership with our health care and academic institutions, we are committed to a diverse and inclusive faculty who can reach their personal and professional goals in a collegial environment.

#### List of Related Individuals

- Grace John-Stewart
- Indi Trehan
- <u>Jairam R. Lingappa</u>
- <u>Judd Walson</u>

### **Indi Trehan**

BS, University of California, Berkeley

#### **Website**

My major academic interests are in the development of a better understanding of the pathophysiology underlying chronic and acute childhood malnutrition, improving the diagnosis and treatment of malnourished children. and improvements in the diagnosis and management of tropical infectious diseases. The majority of my research experience in these domains has come in the conduct of large clinical trials in rural Malawi as well as in smaller hospital-based cohort studies to complement my clinical experience caring for children and adults in austere settings around the world. I serve as an advisor and consultant to UNICEF. Action Against Hunger, Médecins Sans Frontières, the Alliance for International Medical Action, and Friends Without a Border.

**UW Target Links:** 2, 3, 4, 6

**SDG Links:** 2, 3, 4, 5, 6, 11, 12, 16

#### Departments & Roles:

- <u>Pediatrics</u> | Associate Professor
- Global Health and Epidemiology
   Adjunct Associate Professor

#### **Contact Information:**

Email: itrehan@uw.edu



#### Areas of Expertise & Interest:

- Child and Adolescent Health (incl. Pediatrics)
- Child Mortality
- Clinical Mentoring
- Community Health Workers
- COVID-19
- Diarrheal Diseases
- Fhola
- Education and Training
- Emergency Medicine
- Epidemiology
- Health Systems Strengthening and Human Resources Development
- Infectious & Neglected Diseases, Tropical Medicine (incl. Parasites)
- Nutrition, Clean Water, and Food Security
- Research

# DANIEL J. EVANS SCHOOL OF PUBLIC POLICY & GOVERNANCE

#### **Website**

This is a critical time for our nation. The inequitable impacts of the COVID-19 pandemic, the resulting economic disparities, and the pervasive violence experienced by Black, Indigenous, and other communities of color shed new light on the dysfunction of our public institutions and the increasing erosion of trust in our public institutions. The fundamental strengthening of our democratic system will depend on our ability to address racial bias, reinvigorate a shared belief in the sacred work of public service, and rebuild lasting faith in our public institutions.

The Evans School of Public Policy & Governance educates leaders, generates knowledge, and hosts communities to co-create solutions to pressing societal problems.

#### List of Related Individuals

- Alison Cullen
- Ann Bostrom
- Clare M. Ryan
- Craig Thomas
- Michael Kern
- Sara Curran

### **Alison Cullen**

ScD, Environmental Health Science, Harvard University, 1992 MS, Environmental Health Management, Harvard University, 1989

#### Website

Alison Cullen joined the Evans School faculty at University of Washington in 1995. Her research involves the analysis of risks to human health and the environment, decision making in the face of risks which are uncertain or vary across populations, and the application of value of information and distributional techniques. Outside of academia, Cullen is active in risk and exposure assessment projects in the U.S. and internationally. She has held positions in the Water Quality Branch of the U.S. Environmental Protection Agency and served as a technical consultant to many groups, including the U.S. Consumer Product Safety Commission, the State of Washington's Department of Ecology, the City of Seattle's Office of Sustainability, the Alfred P. Sloan Foundation, and the Bill and Melinda Gates Foundation.

<u>UW Target Links:</u> 1, 3, 5, 6, 9, 10

<u>SDG Links:</u> 1, 2, 3, 4, 5, 6, 9, 10, 11, 12, 13, 15, 16, 17

#### Departments & Roles:

- <u>Public Policy & Government</u> |
   Daniel J. Evans Endowed Professor of Environmental Policy
- <u>Environmental & Occupational</u>
   <u>Health Sciences</u> | Adjunct
   Professor

#### Contact Information:

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Building: F200, Magnuson Health
 Sciences Building



#### Areas of Expertise & Interest:

- Sustainable Communities
- Climate Change
- Environmental Health
- Environmental Justice
- Health Equity
- Policy
- Population Health
- Population Health Initiative

### **Ann Bostrom**

PhD, Public Policy Analysis, Carnegie Mellon University, 1990 MBA, Statistics and Information Systems, Western Washington University, 1986

#### **Website**

Ann Bostrom joined the Evans School faculty in 2007. Her research focuses on risk perception, communication, and management; and environmental policy and decision making. She has authored or contributed to numerous publications, including Risk Communication: A Mental Models Approach (Cambridge University Press, 2002), Risk Assessment, Modeling and **Decision Support: Strategic Directions** (Berlin: Springer, 2008), and National Research Council, Institute of Medicine. U.S. EPA Science Advisory Board, and U.S. FPA Board of Scientific Counselors reports. She also serves on the editorial board for Risk Analysis and Environmental Hazards, as Associate Editor for the journal Journal of Risk Research, and reviews for numerous technical journals.

**UW Target Links:** 3, 5, 10

<u>SDG Links:</u> 1, 3, 5, 9, 10, 11, 13, 16, 17

#### Departments & Roles:

- Public Policy & Governance
   Weyerhaeuser Endowed
   Professor in Environmental
   Policy
- <u>CSDE</u> | Research Affiliate

#### Contact Information:

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- Phone: (206) 685-8198
- Building:



#### Areas of Expertise & Interest:

- Demographic Measurements and Methods
- Environments and Populations
- Risk perception, communication, and management
- Environmental policy and decision making under uncertainty

### **Craig Thomas**

PhD, Political Science, University of California, Berkeley, 1997 MPP, Public Policy, University of California, Berkeley, 1988

#### **Website**

Craig Thomas joined the Evans School in 2006, after serving on the faculty at the University of Massachusetts, Amherst. Thomas teaches courses in policy processes, environmental policy, performance management, and research design. His research analyzes collaboration among public, private, and nonprofit partners as an alternative form of governance to centralized planning and command-and-control regulation. He also studies a variety of environmental topics, including climate change, marine fisheries, habitat conservation planning, and watershed management.

**UW Target Links: 3, 10** 

<u>SDG Links:</u> 6, 11, 13, 14, 15, 16, 17

#### Departments & Roles:

<u>Public Policy & Governance</u> |
 Professor & Faculty Council Chair

#### Contact Information:

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- Phone: (206) 221-3669
- Building:



#### Areas of Expertise & Interest:

- Collaborative Governance
- Public Management
- Policy Processes
- Environmental and Natural Resources Policy

### **Michael Kern**

MPA, Public Policy, University of Washington

#### **Website**

Kern has an MPA from the UW Evans School, and more than 30 years of experience in the field of collaborative governance and public policy conflict resolution, through which diverse public and private sector interests reach common ground and develop collaborative solutions to complex, often controversial public policy challenges. Most of this work has been on natural resources issues (such as large-scale environmental clean-up, water and watershed management, salmon and other species restoration, natural disaster recovery and resilience, etc.), but has included a range of other issues (such as land use and growth management planning, health policy, outdoor recreation, transportation, and economic and community development).

**UW Target Links:** 3, 5, 7, 9, 10

<u>SDG Links:</u> 1, 3, 5, 6, 10, 11, 12, 13, 14, 15, 16, 17

#### Departments & Roles:

<u>Public Policy & Governance</u>
 Affiliate Associate Professor

#### **Contact Information:**

Email: mkern@uw.eduPhone: 206.601.4766



#### Areas of Expertise & Interest:

- Collaborative governance and public policy conflict resolution
- Natural resources issues
- Large-scale environmental clean-up
- Land use and growth management planning
- Water and watershed management
- Salmon and other species restoration
- Natural disaster recovery and resilience
- Health policy
- Outdoor recreation, transportation, and economic and community development

### SCHOOL OF PUBLIC HEALTH

#### **Website**

Our Vision is a world of healthy people.

The UW School of Public Health is grounded in teaching, research, and service. Our 10,000 graduates have gone on to transform communities, lead health organizations, and find solutions to emerging public health challenges.

#### List of Departments

- <u>Environmental &</u><u>Occupational Health Sciences</u>
- Epidemiology
- Global Health
- Health Metrics Sciences
- Health Systems & Population
   Health
- Nutritional Sciences

### **Marci Burden**

MA, University of Washington

#### **Website**

Marci joined the Center for Health and the Global Environment (CHanGE) in 2017 as the program's administrative support. Previously she worked in research administration, training grant administration, and graduate student support at a local research non-profit, and has worked in the past as an EMT, a radiology technician, and a production assistant. She has a Bachelor's in Spanish and Master's in Policy Studies. where she focused on global health issues, especially around food aid. She is very happy to be working in Global Health at the UW. She finds the research done by CHanGE to be fascinating and thought-provoking, and loves learning something new every day. Marci enjoys swimming, sewing, reading, watching soccer, and trying new crafts.

**UW Target Links: 3, 6** 

**SDG Links:** 2, 3, 10, 17

#### Departments & Roles:

• <u>CHanGE</u> | Program Manager

#### **Contact Information:**

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Phone: +1 206 543-6342



Areas of Expertise & Interest:

- global health issues
- food aid

# Environmental & Occupational Health Sciences

#### **School of Public Health | Website**

The University of Washington Department of Environmental & Occupational Health Sciences (DEOHS) works to create healthy, safe and sustainable communities by:

- Providing outstanding education to students and working professionals.
- Discovering how the environment affects people's health and well-being.
- Conducting research to prevent and reduce occupational injury and illness.
- Serving communities, workers and employers across
   Washington state and the <u>Pacific Northwest</u>.
- Working in partnership to promote healthy communities and workplaces locally, nationally and globally.

#### List of Related Individuals

- Alison Cullen
- Andrew Dannenberg
- Cory Morin
- Hilary Godwin
- Howard Frumkin
- <u>lennifer Otten</u>
- <u>leremy Hess</u>
- <u>loel Kaufman</u>
- <u>lune Spector</u>
- Karen Levy
- Katrin Burkart

- Kristie Ebi
- Marissa Baker
- Marty Cohen
- Nicole Errett
- Peter M. Rabinowitz
- Sarah Collier
- Scott Meschke
- Tania Busch Isaksen
- <u>Timothy Takaro</u>
- Yona Sipos

### **Andrew Dannenberg**

MD, Stanford University MPH, Johns Hopkins University

#### **Website**

For the past 20 years, his research and teaching have focused on examining the health aspects of community design, including land use, transportation, urban planning, equity, climate change and other issues related to the built environment. He has a particular interest in the use of a health impact assessment as a tool to inform community planners about the health consequences of their decisions. Previously, he served as director of CDC's Division of Applied Public Health Training, as Preventive Medicine Residency director and injury prevention epidemiologist on the faculty at the Johns Hopkins University School of Public Health, and as a cardiovascular epidemiologist at the National Institutes of Health in Bethesda.

**UW Target Links: 3, 7** 

**SDG Links:** 1, 3, 9, 11, 13

#### Departments & Roles:

 Environmental & Occupational Health Sciences and Urban Design & Planning | Affiliate Professor

#### **Contact Information:**

• Email: adannen@uw.edu

• Phone: 404-272-3978 (cell)



#### Areas of Expertise & Interest:

- Sustainable Communities
- Built Environment
- Climate Change
- Environmental Health
- Health Equity
- Population Health
- Risk Assessment
- Public health, including epidemiology and environmental health
- Urban design
- Land-use planning
- Transportation planning
- Architecture
- Climate change
- Equity
- Health impact
- Autonomous vehicles

### **Cory Morin**

PhD, University of Arizona MA, University of Arizona

#### **Website**

He received his PhD from the University of Arizona in Geography (minor in Entomology and Insect Science) with a concentration on climate and environmental influences on the ecology of vectors and vector-borne diseases. Corv recently completed a NASA fellowship at Marshall Space Flight Center focused on applying datasets derived from remotely sensed satellite data to health applications. His research uses data-driven. process-based models to simulate mosquito population and virus transmission dynamics with the aim of identifying climate and meteorological conditions that facilitate epidemics. Cory's recent work has focused on Aedes. transmitted pathogens including the dengue and Zika viruses and incorporating weather and climate forecasts into models for disease prediction.

**UW Target Links: 3** 

**SDG Links:** 1, 3, 11, 13

#### Departments & Roles:

 Environmental & Occupational Health Sciences | Clinical Assistant Professor

#### **Contact Information:**

Email: cwmorin@uw.edu

Phone: 206-616-6571

• Building: 2330A, Roosevelt One



#### Areas of Expertise & Interest:

- Sustainable Communities
- Climate Change
- Infectious diseases

### **Hilary Godwin**

PhD, Stanford University

#### **Website**

Hilary Godwin is dean of the UW School of Public Health and professor in the Department of Environmental & Occupational Health Sciences. She has 15 years of experience as an academic leader with expertise in interdisciplinary collaborative research on nanotoxicology and the chemistry of lead poisoning and its impact on public health. She is trained in chemistry and biophysics, and has supervised research programs in mechanistic toxicology and environmental health for more than 20 years. Dean Godwin previously served as associate dean for academic programs as well as chair of environmental health sciences for the Fielding School of Public Health at the University of California, Los Angeles.

**UW Target Links:** 1, 3, 5, 9, 10

<u>SDG Links:</u> 3, 5, 6, 8, 10, 11, 12, 13, 16, 17

#### Departments & Roles:

- <u>Environmental & Occupational</u> <u>Health Sciences</u> | Professor
- School of Public Health | Dean

#### Areas of Expertise & Interest:

- Sustainable Communities
- COVID-19
- Chemical hazards
- Children's Health
- Climate Change
- Community-engaged Research
- Environmental Health
- Toxicology

#### **Contact Information:**

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- Phone: 206-685-7430
- Building: 221A, Hans Rosling Center

### **Howard Frumkin**

DrPH, Harvard University MPH, Harvard University MD, University of Pennsylvania

#### **Website**

Dr. Frumkin is an internist, environmental and occupational medicine specialist and epidemiologist. His research interests include public health aspects of the built environment, climate change, energy policy and nature contact.

**UW Target Links: 3, 10** 

**SDG Links:** 1, 3, 10, 11, 13, 16, 17

#### Departments & Roles:

<u>Environmental & Occupational</u>
 <u>Health Sciences</u> | Professor
 <u>Emeritus</u>

### Areas of Expertise & Interest:

- Sustainable Communities
- COVID-19
- Built Environment
- Climate Change
- Environmental Health
- Environmental Justice
- Health Equity
- Policy
- Population Health
- Population Health Initiative

#### **Contact Information:**

- Email: frumkin@uw.edu
- Phone: 206-897-1723
- Building: Suite 100, Roosevelt One

### Jennifer J. Otten

PhD, University of Vermont RD, Massachusetts General Hospital MS, Tufts University

#### Website

Dr. Jennifer Otten is an Associate Professor in Environmental and Occupational Health Sciences and faculty researcher with the UW Center for Public Health Nutrition. She also serves as the Food Systems Director and core faculty in the Nutritional Sciences Program and as co-director of Livable City Year. Dr. Otten received her BS in Nutritional Sciences from Texas A&M University, her MS in Nutrition Communications from Tufts University and her PhD in Animal, Nutrition and Food Sciences from the University of Vermont. She also completed a postdoctoral research fellowship at the Stanford Prevention Research Center in the Stanford University School of Medicine. She completed her dietetic internship at Massachusetts General Hospital, Boston.

**UW Target Links:** 3, 6, 9, 10

**SDG Links:** 2, 3, 11, 12, 13, 17

#### Departments & Roles:

- <u>Environmental & Occupational</u>
   <u>Health Sciences</u> | Associate
   Professor
- Health Systems & Population
   Health | Adjunct Associate
   Professor

#### Contact Information:

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• Phone: (206) 221-8233

• Building: Raitt Hall 306-C



#### Areas of Expertise:

- Nutritional Science
- Food Science
- Safe Food
- Sustainable Communities
- Nutrition
- Policy
- Population Health

### June Spector

MD, Yale University MPH, Johns Hopkins University

#### **Website**

Dr. Spector is a physician-scientist with a focus on the prevention and management of adverse health outcomes related to heat exposure and other climate-related hazards in working populations. She is actively engaged in interdisciplinary research to evaluate health benefits of conservation interventions to inform progress toward sustainable development and climate goals. She has been a faculty member at the University of Washington since 2012 and holds appointments in the Department of Environmental & Occupational Health Sciences (DEOHS) and Medicine (General Internal Medicine). She is the Director of Occupational & Environmental Medicine at the University of Washington and Assistant Chair for Occupational Medicine Partnerships in DEOHS.

**UW Target Links:** 3, 5, 6, 9, 10

<u>SDG Links:</u> 1, 2, 3, 8, 11, 12, 13, 15, 17

#### Departments & Roles:

- <u>Environmental & Occupational</u>
   <u>Health Sciences</u> | Associate
   Professor & Assistant Chair
- <u>Medicine</u> | Associate Professor

#### **Contact Information:**

Email: spectj@uw.eduPhone: 206 897-1979



#### Areas of Expertise & Interest:

- Clean Air
- Safe Workplaces
- Sustainable Communities
- Agricultural health and safety
- Climate Change
- Environmental Health
- Occupational Health
- Occupational Medicine
- Pollution
- Wildfires

### **Karen Levy**

PhD 2007, UC Berkeley MPH 2006, UC Berkeley MSc 2002, UC Berkeley

#### **Website**

My group carries out research on the ecology and epidemiology of enteric (food and waterborne) diseases. We use environmental microbiology and environmental epidemiology methods to study water quality, food safety, and the impact of climate and land use change on the transmission of diarrheal diseases.

**UW Target Links:** 1, 3, 6

**SDG Links:** 2, 3, 4, 5, 6, 8, 11, 12, 13, 16, 17

#### Departments & Roles:

- <u>Environmental & Occupational</u>
   <u>Health Sciences</u> | Associate
   Professor
- Global Health | Adjunct Associate Professor

#### **Contact Information:**

- Email: klevyx@uw.edu
- Building: Rm 261, Hans Rosling Center



#### Areas of Expertise & Interest:

- Clean Water
- Safe Food
- Sustainable Communities
- COVID-19
- Children's Health
- Climate Change
- Community-engaged Research
- Environmental Health
- Infectious diseases
- Microbiome

### Kristie Ebi

PhD, University of Michigan MPH, University of Michigan MS, Massachusetts Institute of Technology

#### **Website**

Kristie L. Ebi is professor of environmental and occupational health and of global health at the University of Washington. She has been conducting research and practice on the health risks of climate variability and change for over 20 years. Her research focuses on the impacts of and adaptation to climate variability and change, including on extreme events, thermal stress. foodborne safety and security and vector-borne diseases. She focuses on understanding sources of vulnerability, estimating current and future health risks of climate change and designing adaptation policies and measures to reduce the risks of climate change in multi-stressor environments.

**UW Target Links:** 3, 6, 10

**SDG Links:** 1, 2, 3, 6, 10, 11, 13, 17

#### Departments & Roles:

 Environmental & Occupational Health Sciences and Global Health | Professor

### Areas of Expertise & Interest:

- Clean Air
- Clean Water
- Safe Food
- Sustainable Communities
- Climate Change
- Policy
- Population Health
- Risk Assessment

#### **Contact Information:**

- Email: krisebi@uw.edu
- Phone: 206-543-8440
- Building: 2330, Roosevelt One

## **Marissa Baker**

PhD, University of Washington MS, University of Washington

## Website

Dr. Baker's current research mostly centers on occupational experiences of vulnerable or underrepresented groups. During the COVID-19 pandemic, she has been working closely with a variety of worker organizations, government and industry partners to characterize physical and mental health outcomes experienced by workers due to the pandemic, characterize their risk perceptions and needs and propose and evaluate interventions for safe work. Dr. Baker also studies the experiences of women in the workplace.



**SDG Links:** 3, 8

#### Departments & Roles:

<u>Environmental & Occupational</u>
 <u>Health Sciences</u> | Assistant
 Professor

#### Contact Information:

- Email: bakermg@uw.edu
- Phone: 206-616-4709
- Building: 150-C, Roosevelt One



#### Areas of Expertise & Interest:

- Safe Workplaces
- COVID-19
- Chemical hazards
- Occupational Health
- Occupational Safety
- Risk Assessment

# **Marty Cohen**

ScD, Harvard University SM, Harvard University

## **Website**

Dr. Cohen is Teaching
Professor in the Department of
Environmental & Occupational
Health Sciences, Assistant
Chair for Stakeholder
Engagement and Director of
the Field Research and
Consultation Group. He is a
certified industrial hygienist
and certified safety
professional.

**UW Target Links:** 5, 9, 10

**SDG Links:** 3, 6, 8, 11, 12, 15, 17

### Departments & Roles:

<u>Environmental & Occupational</u>
 <u>Health Sciences</u> | Teaching
 Professor & Assistant Chair

### Areas of Expertise & Interest:

- Safe Workplaces
- Chemical hazards
- Occupational Health
- Occupational Safety
- Policy
- Risk Assessment
- Service
- Wildfires

#### **Contact Information:**

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- Phone: 206-616-1905
- Building: Suite 100, Roosevelt One

## **Nicole Errett**

Post-Doctoral Research Fellowship, University of British Columbia PhD, Johns Hopkins University MSPH, Johns Hopkins University

## Website

Dr. Nicole Frrett's research focuses on the development, implementation and health impacts of policies and programs that aim to build resilience in the context of public health emergencies, disasters and climate change. She works closely with public health practitioners, emergency managers, community-based organizations, and others to design and implement policy-relevant research that contributes to real-world solutions for pressing disaster, climate and health problems. Her research leverages qualitative and survey methods, and she frequently collaborates on interdisciplinary teams.

**UW Target Links: 3** 

**SDG Links:** 1, 3, 11, 13, 15, 17

### Departments & Roles:

- <u>Environmental & Occupational</u>
   <u>Health Sciences</u> | Assistant
   Professor
- Health Systems & Population
   Health | Adjunct Assistant
   Professor

#### Contact Information:

- Email: nerrett@uw.edu
- Building: 150J, Roosevelt One



#### Areas of Expertise & Interest:

- Sustainable Communities
- COVID-19
- Climate Change
- Community-engaged Research
- Environmental Health
- Policy
- Population Health Initiative
- Wildfires

## **Peter M. Rabinowitz**

MD, University of Washington MPH, Yale University

## Website

Dr. Peter Rabinowitz is Professor of **Environmental and Occupational Health** Sciences and Director of the UW Center for One Health Research. The center explores linkages between human, animal and environmental health in a "One Health" paradigm, including: zoonotic infectious diseases at the human-animal interface, animals as "sentinels" of environmental health hazards and clinical collaboration between human health care providers and veterinarians in a species-spanning approach. A goal of the center is to serve as an incubator and organizer of research, training and clinical activities at the University of Washington related to the human-animal-ecosystem interface. The Center also manages the Occupational Health at the Human Health Interface research training program.

**UW Target Links: 3, 6** 

**SDG Links:** 2, 3, 5, 6, 8, 11, 15

#### Departments & Roles:

- Environmental & Occupational Health Sciences and Global Health | Professor
- <u>Epidemiology</u> and <u>Medicine</u>
   Adjunct Professor

#### Contact Information:

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Building: Suite 100, Roosevelt One



#### Areas of Expertise & Interest:

- Safe Workplaces
- Sustainable Communities
- COVID-19
- Agricultural health and safety
- Climate Change
- Infectious diseases
- Microbiome
- Occupational Health
- Occupational Medicine
- One Health

## Sarah M. Collier

PhD, Cornell University

## Website

Core faculty in food systems, nutrition, and health within the Nutritional Sciences Program. Dr. Collier is trained in plant genetics and soil science, and much of her research has focused on agricultural sustainability. She completed her PhD in Plant Breeding at Cornell University, where she was a recipient of both the Munger/Murphy Award and the Barbara McClintock Award. She also received a competitive NSF Graduate Research Fellowship, and an interdisciplinary NSF Science, Engineering, and Education for Sustainability Postdoctoral Fellowship to support her research and outreach related to agricultural climate change mitigation and adaptation at the University of Wisconsin-Madison.

**UW Target Links: 3, 6** 

**SDG Links:** 1, 2, 3, 11, 13, 15

## Departments & Roles:

<u>Environmental & Occupational</u>
 <u>Health Sciences</u> and <u>Nutritional</u>
 Sciences | Assistant Professor

#### **Contact Information:**

- Email: scollier@uw.edu
- Phone: (206) 221-2542
- Building: Raitt Hall 331-A



### Areas of Expertise:

- Safe Food
- Sustainable Communities
- Climate Change
- Environmental Health
- Nutrition

## **Scott Meschke**

JD, University of Kansas PhD, University of North Carolina MS, Indiana University

## Website

Dr. Meschke is an environmental and occupational health microbiologist, specializing in the fate, transport, detection and control of pathogens in environmental media (air, water, food and surfaces). He is Associate Chair and Graduate Program Coordinator for the UW Department of Environmental & Occupational Health Sciences.

**UW Target Links:** 3, 5, 6, 9, 10

**SDG Links:** 2, 3, 6, 11, 13, 14, 15, 17

### Departments & Roles:

- <u>Environmental & Occupational</u>
   <u>Health Sciences</u> | Professor &
   Associate Chair
- <u>Civil & Environmental</u> <u>Engineering</u> | Adjunct Professor

#### Contact Information:

- Email: jmeschke@uw.edu
- Phone: 206-221-5470
- Building: 2337, Roosevelt One



#### Areas of Expertise & Interest:

- Clean Air
- Clean Water
- Safe Food
- COVID-19
- Environmental Health
- Infectious diseases

## Tania Busch Isaksen

PhD, University of Washington MPH, University of Washington

## Website

Tania Busch Isaksen is Associate Teaching Professor and the Undergraduate Program Coordinator for the Department of Environmental & Occupational Health Sciences (DEOHS). In addition to her teaching and administrative responsibilities, she maintains an active, practice-based research portfolio focused on public health outcomes associated with extreme heat and wildfire smoke exposures; risk communication methods; climate change-related public health adaptation planning and response, and sustainable materials management. Tania has over 25 years of environmental public health experience working in local public, private, and academic settings.

#### **UW Target Links: 3**

<u>SDG Links:</u> 1, 3, 6, 8, 11, 12, 13, 15

### Departments & Roles:

<u>Environmental & Occupational</u>
 <u>Health Sciences</u> | Associate
 Teaching Professor

#### **Contact Information:**

Email: tania@uw.eduPhone: 206-685-4919

• Building: 255-B, Hans Rosling Center



#### Areas of Expertise & Interest:

- Clean Air
- Safe Workplaces
- Sustainable Communities
- COVID-19
- Climate Change
- Community-engaged Research
- Environmental Health
- Occupational Health
- Pollution
- Risk Assessment
- Wildfires

# **Timothy K. Takaro**

MPH, Epidemiology, University of North Carolina, 1985 MS, Toxicology, University of Washington, 1996

## Website

Dr. Takaro is a physician-scientist trained at the University of Washington, Occupational and Environmental Medicine Program. His work is directed primarily toward determining if linkages exist between occupational or environmental exposures and disease and finding public health based preventive solutions where such hazards exist. Research interests are in gene-environment interactions in immunologically-based lung disease and fibrosis, indoor-air hazards, surveillance and field use of biomarkers for medical surveillance and risk assessment with mixed exposures. His practice includes nuclear weapons workers with beryllium and other pulmonary exposures, and children and adults with asthma and other chemically related illness.

**UW Target Links:** 3, 5, 8, 9, 10

**SDG Links:** 3, 6, 7, 8, 9, 11, 12, 17

## Departments & Roles:

<u>Environmental & Occupational</u>
 <u>Health Sciences</u> | Clinical
 Professor

#### Contact Information:

Email: ttakaro@sfu.ca

#### Areas of Expertise & Interest:

- Clean Air
- Clean Water
- Sustainable Communities
- Chemical hazards
- Environmental Health
- Health Equity
- Infectious diseases
- Policy
- Pollution
- Population Health
- Population Health Initiative

# **Yona Sipos**

PhD, University of British Columbia (Canada); Integrated Studies in Land and Food Systems MSc, University of British Columbia (Canada); Forest & Conservation Sciences, Forestry

## Website

Dr. Sipos works at the intersection of food systems, community engaged scholarship, sustainability, and equity. Her teaching and research center community and regional scales. Previously, she developed a model for transformative sustainability learning at post-secondary institutions. She has contributed to food policy councils and food system reports in Canada and the US. Dr. Sipos was program director for the Chesapeake Foodshed Network, a regional initiative across six states and Washington, DC, developing learning opportunities and work groups across the food system while advancing an emphasis on community ownership and equity. Dr. Sipos' expertise in food systems and sustainability education is complemented by her background in plant biology, soil ecology, agroforestry, and community engagement.

**UW Target Links:** 1, 3, 4, 6, 9

<u>SDG Links:</u> 1, 2, 3, 4, 10, 11, 12, 13, 15, 17

#### Departments & Roles:

<u>Environmental & Occupational</u>
 <u>Health Sciences</u> | Professor
 <u>Emeritus</u>

#### Contact Information:

• Email: ysipos@uw.edu

• Phone: (206) 616-2680

Building: Raitt Hall 306-A



### Areas of Expertise:

- Safe Food
- Sustainable Communities
- COVID-19
- Agricultural health and safety
- Community-engaged Research
- Environmental Health
- Nutrition
- Policy

# **Epidemiology**

## **School of Public Health | Website**

The UW Department of Epidemiology centers itself around the values of research, education, and service. Our mission is built on these three pillars.

Research: To advance knowledge regarding the distribution, occurrence and outcome of disease in human populations by maintaining a strong and diverse interdisciplinary research program with outstanding faculty and students.

Education: To train future leaders in the field of epidemiology through excellent master's and doctoral degree programs, and educate others through undergraduate and graduate level courses on epidemiologic topics.

Service: To provide professional service in epidemiology through work with federal, state, and local health agencies and other organizations in conducting collaborative research and offering technical assistance.

#### List of Related Individuals

- Adam Drewnowski
- Anjum Hajat
- Grace John-Stewart
- Indi Trehan
- <u>lanet Baseman</u>
- <u>leff Stanaway</u>
- <u>loel Kaufman</u>
- <u>ludd Walson</u>
- Peter M. Rabinowitz
- Steven Goodreau

# **Anjum Hajat**

PhD, Epidemiology, University of North Carolina, 2010 MPH, Epidemiology, International Health, University of Michigan, 1998

## **Website**

Dr. Haiat's current research interests look at understanding the social and environmental stressors that disproportionately impact disadvantaged populations and how these stressors impact a variety of health outcomes. a research area that may have implications for understanding the underlying causes of health disparities. She was awarded a NIH K99/R00 Career Development Award to study the intersection of psychosocial stressors and air pollution on CVD. She also conducts research on the impacts of financial instability and precarious work on health outcomes. These upstream factors are critical to better understanding population health. In addition, Dr. Hajat is interested in biomarkers that are impacted by social and environmental stressors; this line of research aims to gain a better understanding of the mechanisms by which social stressors cause disease. Lastly, she is interested in applying novel epidemiologic methods to her research.

**UW Target Links: 3** 

**SDG Links:** 1, 3, 5, 8, 16

### Departments & Roles:

• <u>Epidemiology</u> | Associate Professor

#### **Contact Information:**

- Email: anjumh@uw.edu
- Building: Health Sciences F-250E



#### Areas of Expertise & Interest:

- Cardiovascular & Metabolic Disease
- Environmental & Occupational Health
- Epidemiologic Methods
- Social Determinants of Health

# **Janet Baseman**

PhD Epidemiology, University of Washington, 2005 MPH Epidemiology, University of Texas (Houston)

## **Website**

Dr. Baseman's research centers around applied epidemiology in public health practice, strategies for improving disease surveillance systems, and public health informatics. She is also adjunct faculty in the Department of Health Services and is a member of the Northwest for Public Health Practice (NWCPHP) Research Team.

**UW Target Links:** 3, 5

**SDG Links: 3, 9, 17** 

### Departments & Roles:

- <u>Epidemiology</u> | Professor
- Health Systems & Population
   Health | Adjunct Professor
- <u>School of Public Health</u> | Associate Dean

#### Contact Information:

- Email: jbaseman@uw.edu
- Phone: 206-616-1495



#### Areas of Expertise & Interest:

- Infectious Diseases
- Public Health Practice
- Applied epidemiology in public health practice
- Informatics
- Infectious disease epidemiology
- Surveillance
- Coronavirus/Covid-19
- Emerging diseases
- Epidemics
- Pandemics
- Disease outbreaks

## **Global Health**

## **School of Public Health | Website**

VISION: Achieve sustainable, quality health globally.

MISSION: Our mission is to improve health for all through research, education, training, and service; to understand and address the causes of disease and health inequities at multiple levels; and to collaborate with partners to develop and sustain locally-led, quality health systems, programs and policies.

#### List of Related Individuals

- David Townes
- Grace John-Stewart
- Indi Trehan
- <u>Jairam R. Lingappa</u>
- <u>leff Stanaway</u>
- <u>leremy Hess</u>
- lessica Kaminsky
- <u>Judd Walson</u>
- <u>Julian Marshall</u>
- <u>Julie Rajaratnam</u>

- Karen Levy
- Katherine Foster
- Katrin Burkart
- Kelli O'Laughlin
- Kristie Ebi
- Marci Burden
- Peter M. Rabinowitz
- Sara Curran
- Simon Hay
- Yanfang Su

# **Grace John-Stewart**

PhD, Epidemiology, University of Washington, 2000 MPH, Epidemiology, University of Washington, 1995 MD, Medicine, University of Michigan, 1987

## Website

Grace John-Stewart MD, PhD is a Professor in the Departments of Global Health, Medicine, Epidemiology and Pediatrics at University of Washington. Her research focuses on advancing infectious diseases research in women. adolescents and children, as part of a collaborative research in Kenya. This work has included clinical trials. molecular epidemiology, implementation science, and large-scale evaluations. She is Co-Director of the UW Center for Global Health of Women. Adolescents and Children (UW Global WACh), an Associate Director of UW/Fred Hutch Center for AIDS Research (CFAR), and a member of the Kenya Research and Training Center.

#### **UW Target Links: 3**

**SDG Links:** 3, 4, 5, 8, 16

## Departments & Roles:

 Global Health and Epidemiology and Medicine and Pediatrics | Professor

#### **Contact Information:**

Email: gjohn@uw.edu

Phone: 206-543-4278

Building: Global Center for
 Integrated Health



#### Areas of Expertise & Interest:

- Child and Adolescent Health (incl. Pediatrics)
- HIV/AIDS
- Infectious Diseases
- Maternal Child Health (incl. Reproductive Health)
- TF
- Molecular epidemiology
- Clinical trials
- HIV research
- HIV co-infections (TB, CMV, EBV)

# Jairam R. Lingappa

PhD, Harvard University MD, University of California, San Francisco

## **Website**

Since joining the UW faculty, he has collaborated with Drs. Connie Celum and lared Baeten within the Department of Global Health International Clinical Research Center to conduct HIV-1 prevention clinical trials and observational studies in African heterosexual HIV-1 discordant couples. More recently, he has focused on conducting translational research studies to understand the pathogenesis of HIV-1 sexual transmission and particularly to identify host biological correlates for risk of HIV-1 infection. In this context he collaborates with numerous international researchers to apply genomics, proteomics and microbiome laboratory studies with state-of-the-art statistical analyses to identify factors that may be of particular relevance for public health interventions.

**UW Target Links: 3** 

**SDG Links: 3, 5** 

## Departments & Roles:

- Global Health and Medicine Professor
- <u>Pediatrics</u> | Adjunct Professor
- Fred Hutchinson Cancer Research Center | Affiliate Investigator

#### Contact Information:

- Email: lingappa@uw.edu
- Phone: 206-520-3822
- Building: International Clinical
   Research Center



#### Areas of Expertise & Interest:

- COVID-19
- Epidemiology
- Genomics
- HIV/AIDS
- Infectious Diseases
- Infectious Diseases (other than STDs)

# **Judd Walson**

MD, Tufts University, 2000 MPH, Tufts University, 2000

## **Website**

Dr. Walson is an infectious disease physician and the Vice Chair of the Department of Global Health and a Professor of Global Health, Medicine, Pediatrics and Epidemiology. He has extensive experience working in research, public health programming, policy development, product development and clinical practice. His research focuses on interventions to improve child survival, growth and development Africa and South-Asia. He collaborates with ministries of health. NGO's and academic partners in Bangladesh, Benin, Burkina Faso, India, Kenya, Malawi, Nepal, Pakistan, Thailand and Uganda.

**UW Target Links: 3, 6** 

**SDG Links:** 2, 3, 4, 5, 6, 8, 11, 16

#### Departments & Roles:

- <u>Global Health</u> | Professor and Vice Chair
- Medicine and Pediatrics | Professor
- <u>Epidemiology</u> | Adjunct Professor

#### Contact Information:

Email: walson@uw.edu

Phone: 206-685-8254



#### Areas of Expertise & Interest:

- Child and Adolescent Health (incl. Pediatrics)
- Child Mortality
- Diarrheal Diseases
- Epidemiology
- Infectious Diseases
- Infectious Diseases (other than STDs)
- Malaria
- Maternal Child Health (incl. Reproductive Health)
- Mortality
- Neglected Diseases, Tropical Medicine (incl. Parasites)
- Trop. Med (incl. Parasites)

# **Julie Rajaratnam**

PhD, Population, Family and Reproductive Health, Bloomberg School of Public Health, Johns Hopkins University



## **Website**

Julie Rajaratnam is the Director of Monitoring, Evaluation, and Learning at PATH. She has over ten years of experience in global health research, monitoring and evaluation that includes designing, developing and implementing methods, instruments, and evaluations that measure and inform improvements in global health policies and programs. In addition to leading a team of measurement professionals, Julie represents PATH as a founding member of the Bridge Collaborative, an initiative to catalyze multi-sectoral solutions to global challenges such as climate change, food insecurity, pollution, and poverty alleviation.

**UW Target Links: 3, 6** 

**SDG Links:** 1, 2, 3, 6, 11, 13, 16, 17

### Departments & Roles:

- <u>Global Health</u> | Clinical Assistant Professor
- PATH | Director, Monitoring, Evaluation, and Learning

#### Contact Information:

- Email: 206-285-3500
- Phone: jrajaratnam@path.org
- Building: PATH

#### Areas of Expertise & Interest:

- Implementation Science
- Leadership and Organizational Development
- Metrics and Evaluation
- Modeling
- Nutrition, Clean Water, and Food Security
- Social Determinants of Health

# **Yanfang Su**

ScD, Global Health & Population, Harvard University

## **Website**

Dr. Yanfang Su's career goal is to contribute to the improvement of health through targeted decision-making and tailored interventions and implementations based on the most in-depth, accurate, and up-to-date evidence possible. Dr. Su has applied spatiotemporal methods to health and published papers in the Lancet and the Lancet Public Health. Dr. Su specializes in health system strengthening, and her published work covers topics relating to financial/economic evaluation, program impact evaluation, and application of advanced quantitative research methods to impact evaluation. Topics and health conditions on which she has past experience working on include CVD, tuberculosis, malaria, HIV, primary health care, and long-term care, all of which can serve as tracers in evaluating health systems.

**UW Target Links:** 3

**SDG Links:** 3, 5, 17

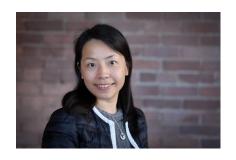
#### Departments & Roles:

Global Health | Acting Assistant
 Professor

#### **Contact Information:**

Email: yfsu@uw.edu

• Phone: 206-744-7785



#### Areas of Expertise & Interest:

- Cardiovascular Disease
- Health Policy

## **Health Metrics Sciences**

## <u>School of Public Health</u> | <u>Website</u>

Vision: All people living long lives in full health.

Mission: The Department of Health Metrics Sciences (HMS) applies innovative, multidisciplinary and comprehensive health metrics science to critical health problems and their drivers, and collaborates worldwide in pursuit of policy impact, change in practice, and dissemination of information to improve health for all people. HMS advances the field and the Academy through nurturing and training the next generation of diverse and high-potential scientists and leaders with mentorship by renowned faculty, and with access to top tier data, resources, infrastructure, and networking strategies.

#### List of Related Individuals

- <u>leff Stanaway</u>
- Katrin Burkart
- Simon Hay
- <u>Vin Gupta</u>

# **Jeff Stanaway**

PhD, Epidemiology, University of Washington, 2013 MPH, Family and Child Health , University of Arizona, 2008

## **Website**

Jeff Stanaway, PhD, MPH, is Assistant Professor of Health Metrics Sciences at the Institute for Health Metrics and Evaluation (IHME) at the University of Washington. He is part of the research team for the landmark Global Burden of Disease and Geospatial Analysis. In this role, he models morbidity and mortality from enteric diseases, rabies, dengue, trachoma, and the hepatitides. His research focuses on macro-epidemiology with a special interest in understanding connections between the physical environment (e.g., climate and land cover) and the spatiotemporal distribution of disease and how these connections may inform surveillance and research.

#### **UW Target Links: 3**

**SDG Links:** 1, 3, 11, 13

### Departments & Roles:

- <u>Health Metrics Sciences</u> and <u>Global Health</u> | Assistant Professor
- <u>Epidemiology</u> | Adjunct Assistant Professor

#### Contact Information:

- Email: stanaway@uw.edu
- Phone: 206-897-3818
- Building: Institute for Health
   Metrics and Evaluation



### Areas of Expertise & Interest:

- Burden of Disease
- Environmental Health (incl. Climate Change)
- Epidemiology
- Infectious Diseases (other than STDs)
- Metrics and Evaluation
- Waterborne Diseases
- Environmental health (incl. climate change)
- Epidemiology
- Metrics and evaluation

## **Katrin Burkart**

Dr. rev. nat. (equivalent to PhD), Humboldt-Universität zu Berlin Diploma (equiv. to MSc), Humboldt-Universität zu Berlin

## Website

Dr. Burkhart is a geographer and climate scientist and is an Assistant Professor of Health Metrics Sciences at the Institute for Health Metrics and Evaluation (IHME) at the University of Washington. In this role, she works on the Global Burden of Disease (GBD) project, conducting research on environmental risks and methods to include exposure to suboptimal temperature. Dr. Burkart is also working on projections of future temperature-related mortality under climate and population change scenarios. In addition to accounting for rising temperatures, she is particularly interested in incorporating the dynamics of global change, especially demographic and epidemiological change as well as urbanization into her estimations and projections.

**UW Target Links: 3** 

**SDG Links:** 1, 3, 11, 13, 17

#### Departments & Roles:

- <u>Health Metrics Sciences</u>
   Assistant Professor
- Global Health and Environmental
   Occupational Health Sciences
   Adjunct Assistant Professor

#### Contact Information:

Email: katburk@uw.edu



#### Areas of Expertise & Interest:

- Modeling non-optimal temperature exposure as a risk factor within the Global Burden of Disease study
- Faculty lead for air pollution and occupational risk factors

# **Simon Hay**

DSc, Epidemiology, University of Oxford, 2014 DPhil, Zoology, University of Oxford, 1996

## Website

Simon I Hay, DPhil, DSc, FMedSci, was elected to the Board of Trustees of the RSTMH in 2012 and served as its 52nd President (2013-2015). Prof. Hay has received numerous awards, notably the Back Award of the Royal Geographical Society (2012) for research contributing to public health policy, and the Bailey K. Ashford Medal (2013) and the Chalmers Medal (2015) of the ASTMH and the RSTMH respectively, for distinguished work in tropical medicine. He was elected to the fellowship of the Academy of Medical Sciences in 2015. Prof. Hay received the "10 to End" innovator prize in 2019 from Malaria No More, for innovation helping to make the end of malaria possible in our lifetimes; specifically using "big data" and geospatial science to work to end malaria and other diseases.

#### **UW Target Links: 3**

<u>SDG Links:</u> 2, 3, 5, 6, 8, 11, 13, 16, 17

#### Departments & Roles:

- <u>Health Metrics Sciences</u> Professor
- <u>Global Health</u> | Adjunct Professor

#### **Contact Information:**

Email: sihay@uw.eduPhone: 206-897-2878



#### Areas of Expertise & Interest:

- Burden of Disease
- Child Mortality
- Diarrheal Diseases
- HIV/AIDS
- Malaria
- Neglected Diseases, Tropical Medicine (incl. Parasites)
- Pulmonary Diseases and Pneumonia
- TB

# **Vin Gupta**

MD, Columbia University, Vagelos College of Physicians & Surgeons Masters, International Relations, University of Cambridge Masters, Public Administration, Kennedy School of Government, Harvard

## Website

Clinically active as a Pulmonary/Critical Care physician, Dr. Gupta's research has focused on several important issues in global public health. He previously was a full-time Assistant Professor with the Institute for Health Metrics and Evaluation (IHME) and the Department of Health Metrics Sciences (HMS) from 2018-2020. During this time, Dr. Gupta helped lead a large research portfolio examining the global burden of non-communicable diseases using the most advanced epidemiologic methods. These efforts were primarily funded by Bloomberg Philanthropies and focused on attributable disease from tobacco use globally, with particular focus on Mexico, Brazil, China, and Indonesia. A secondary area of focus included assessing the impact of environmental health considerations (e.g., air pollution) on chronic respiratory disease.

**UW Target Links: 3, 10** 

**SDG Links: 3, 8, 13, 17** 

## Departments & Roles:

<u>Health Metrics Sciences</u> |
 Affiliate Assistant Professor

#### **Contact Information:**

• Email: vgupta@uw.edu



#### Areas of Expertise & Interest:

- Non-communicable diseases
- Attributable disease from tobacco use
- Environmental health considerations on chronic respiratory disease
- Air pollution
- International emergency health crisis response capabilities
- Public health through community-based initiatives
- Workplace health and safety protocols
- Health policy

# **Health Systems & Population Health**

## **School of Public Health | Website**

Our Vision of the Future: We envision a future where systems effectively, efficiently, and equitably promote the health of all populations.

Our Mission: To work with partners in public health and health care to prepare leaders, design solutions, and conduct innovative research that is translated into practice and policy.

#### List of Related Individuals

- <u>lanet Baseman</u>
- <u>lennifer Otten</u>
- Michelle Johnson-Jennings
- Nicole Errett

## **Nutritional Sciences**

## **School of Public Health | Website**

Our Vision: Resilient food systems providing safe, adequate, and culturally appropriate food and nutrition to promote health and wellness in just and sustainable ways for people and the planet.

Our Mission: To prepare future leaders in nutritional sciences and food systems who will apply their knowledge and skills to address issues in population health locally, regionally, nationally, and globally.

#### List of Related Individuals

- Adam Drewnowski
- Eli Wheat
- Sarah Collier
- Yona Sipos

## **Adam Drewnowski**

PhD, Psychology, Rockefeller University, 1977 MA, Biochemistry, Oxford University (UK), 1971

## **Website**

Dr. Adam Drewnowski's interests are in nutritional epidemiology, socioeconomic determinants of obesity and diet-related chronic disease, relation between diet quality and diet cost, and sustainable nutrition security as it relates to climate change. He has developed new value metrics to study nutrient density, affordability, and carbon footprint of individual foods and total diets. Dr. Drewnowski is the Director of the Center for Public Health Nutrition and UW Center for Obesity Research (UWCOR) and was visiting professor at the University of Paris (2012-13).

**UW Target Links: 3, 6** 

SDG Links: 2, 3

### Departments & Roles:

- <u>Epidemiology</u> | Professor
- <u>Nutritional Sciences</u> | Director

#### **Contact Information:**

- Email: adamdrew@uw.edu
- Phone: (206) 543-8016
- Building: 305B, Raitt Hall



#### Areas of Expertise & Interest:

- Obesity and Social Disparities in Diets and Health
- Nutritional Epidemiology
- Physical Activity, Obesity & Diabetes
- Social Determinants of Health

## SCHOOL OF SOCIAL WORK

## **Website**

As members of the University of Washington School of Social Work, we commit ourselves to promoting social and economic justice for poor and oppressed populations and enhancing the quality of life for all. We strive to maximize human welfare through:

- Education of effective social work leaders, practitioners and educators who
  will challenge injustice and promote a more humane society, and whose
  actions will be guided by vision, compassion, knowledge and disciplined
  discovery, and deep respect for cultural diversity and human strengths.
- Research that engenders understanding of complex social problems, illuminates human capacities for problem-solving, and promotes effective and timely social intervention.
- Public service that enhances the health, well-being, and empowerment of disadvantaged communities and populations at local, national, and international levels.

We embrace our position of leadership in the field of social work and join in partnership with others in society committed to solving human problems in the twenty-first century.

#### List of Related Individuals

Michelle Johnson-Jennings

# Michelle Johnson-Jennings

PhD, University of Wisconsin, Madison

## **Website**

Dr. Michelle Johnson-Jennings, a Choctaw Nation-enrolled tribal member, joins the faculty on June 1, 2021, as professor and director of the division of environmentally based health and land-based healing at the Indigenous Wellness Research Institute, Her therapeutic expertise lies in working with Indigenous communities and decolonizing healing while rewriting narratives of trauma through land-based healing. She has partnered with many international and national Indigenous nations, organizations and communities to prevent substance abuse, food addiction and obesity. She co-developed health interventions rooted in ancestral guidelines to encourage a renewed commitment to health and the revitalization of medicine, food and land-based practices.

**UW Target Links: 3** 

**SDG Links: 3** 

### Departments & Roles:

<u>School of Social Work</u> and <u>Health</u>
 <u>Systems & Population Health</u> |
 <u>Professor</u>

#### Contact Information:

Email: drmjj@uw.edu
 Phone: 206-616-8561

• Building: Room 203



#### Areas of Expertise & Interest:

- Indigenous Health and Psychology
- Epidemiology
- Addiction Medicine
- Psychological and Behavioral Aspects of Healthcare

## **UW TACOMA**

## Website

Vision: The University of Washington Tacoma fosters a thriving and equitable society by educating diverse learners and expanding knowledge through partnership and collaboration with all our communities.

Mission: As an urban-serving university, we:

- Expand access to higher education in an environment where every student has the opportunity to succeed
- Foster scholarship, research and creativity to address the challenging problems of our time and place
- Partner and collaborate for common good
- Catalyze the economic and social vitality of the region

## List of Schools/Departments

- Culture, Arts & Communications
- School of Education
- Science & Mathematics
- Social & Historical Studies

## **Culture, Arts & Communications**

## **UW Tacoma** | Website

Welcome to the Culture, Arts and Communication (CAC) at the University of Washington Tacoma. In the division of CAC, our coursework is interdisciplinary and rooted in culture, examining both historical contexts and the changing world we live in. Our majors will help prepare you for careers in television and digital media, publishing and public relations, secondary and higher education, museum work, the arts, and many other related fields. With us, your education will provide you with the tools for lifelong enrichment and learning.

#### List of Related Individuals

- Beverly Naidus
- Ellen Moore

# **Beverly Naidus**

MFA, Intermediate Art, Nova Scotia College of Art & Design, 1978

## **Website**

Much of my work has focused on the challenges of living in the world today, from the struggle to heal racism and fear of difference to the damage of the environment caused by rampant consumerism. Lalso create art about dreams, nightmares and visions for the future. I work in many mediums (from drawing & painting to digital photography and audio installations), sometimes doing "contact improvisation" with scavenged materials. The content often determines the form. Much of my work is interactive, inviting the audience to share a story about a similar topic. I'm currently working on a series of mixed media works about the radioactivity coming from Fukushima and some projects focusing on climate change.

**UW Target Links: 3, 4** 

**SDG Links:** 3, 5, 10, 11, 16, 17

#### Departments & Roles:

• <u>Culture, Arts and</u> <u>Communication - Tacoma</u> Professor Emeritus

#### Contact Information:

• Email: bnaidus@uw.edu



### Areas of Expertise:

- Impact of racism
- Climate change and multiple forms of systemic oppression
- Remediation and reconstructive visions
- The challenges of living in the world today

## **Ellen Moore**

PhD, Communications, University of Illinois, 2010 MA, Forensic Anthropology, University of Tennessee, Knoxville

## **Website**

My research closely parallels the courses I have created and taught at UW Tacoma. My latest book - Journalism, Politics, and the Dakota Access Pipeline: Standing Rock and the Framing of Injustice (Routledge, 2019) explores the #NODAPL movement through the lens of environmental justice. Focused on framing research and interviews with the Standing Rock Sioux Tribe, the book is a natural progression from my environmental communication course TCOM 310. My first book – Landscape and the Environment in Hollywood Film: the Green Machine (Palgrave, 2017) makes a clear case for considering ecological issues as a key part of intersectionality in cultural studies. It was from the ideas in this book that my new course (TCOM 312) was created.

**UW Target Links:** 1, 3, 4, 6

**SDG Links:** 4, 5, 10, 12, 13, 16

### Departments & Roles:

<u>Culture, Arts and</u>
 <u>Communication - Tacoma</u>
 Teaching Professor

#### **Contact Information:**

- Email: melle@uw.edu
- Phone: (253) 324-8268
- Building: Russell T. Joy 214D



## Areas of Expertise:

- Race Representation
- Ecological Issues

## **School of Education**

## *UW Tacoma* | Website

Mission: The mission of the University of Washington Tacoma School of Education is to prepare ethical and reflective educators who transform learning, contribute to the community, exemplify professionalism, and promote diversity.

Vision: Educate, Empower, Excel.

#### List of Related Individuals

Michelle Montgomery

## **Science & Mathematics**

## <u>UW Tacoma</u> | <u>Website</u>

The division of Sciences and Mathematics offers degrees in Mathematics, Environmental Sustainability, Environmental Sciences and Biomedical Sciences.

Our curriculum, internship opportunities and research maintain local community ties while exploring global perspectives, leading to excellent career opportunities for graduating students.

Our Environmental Sciences and Sustainability program takes advantage of the Puget Sound being in our own front yard.

Our new Biomedical Sciences degree began Autumn 2016. We currently have over 100 confirmed newly admitted students planning to be biomedical sciences majors, making biomed the 5th largest major in terms of entering students, in our first year of the degree!

#### List of Related Individuals

- <u>Julie Masura</u>
- Tom Koontz
- Peter Selkin

# Julie Masura

MS, Geology, Washington State University, 1998

## **Website**

Iulie Masura is a lecturer of Geoscience in Interdisciplinary Arts & Sciences at University of Washington Tacoma (UW Tacoma). As a lecturer, she teaches in the freshman core and several environmental science and studies courses for the Division of Science and Math. Her graduate work as a sedimentologist has led her to work as a research assistant studying harmful algal blooms in Puget Sound and estuarine processes in Barkley and Clayoquot Sounds on the west coast of Vancouver Island. Her field work has expanded to determining the concentrations of microplastics in the waters of the Pacific Northwest. Iulie involves several students in her research work as well as partners with many environmental education groups throughout the region.

**UW Target Links:** 1, 3, 5, 6, 9, 10

<u>SDG Links:</u> 4, 9, 11, 12, 13, 14, 15, 17

### Departments & Roles:

Science & Mathematics - Tacoma
 Associate Teaching Professor

#### 0

#### Areas of Expertise & Interest:

- Harmful algal blooms
- Estuarine processes
- Microplastics
- Environmental education
- Distance Learning

#### **Contact Information:**

• Email: jmasura@uw.edu

• Phone: 253-692-4317

Building: Science 102A

## **Tom Koontz**

PhD, Public Policy, Indiana University, 1997 MPA, Environmental Policy and Natural Resource Management, Indiana University, 1993

## **Website**

Lview environmental social sciences as comprising interdisciplinary fields focusing on human institutions, decisions and behaviors that affect and are affected by the environment. Understanding the human dimensions allows better use of science in decision making about complex phenomena such as global climate change, multi-level watersheds and ecosystem management to promote sustainability. My research program focuses on three primary areas: (1) collaborative environmental governance and sustainability, (2) climate change and (3) ecosystem management policy.

**UW Target Links:** 3, 7, 10

**SDG Links:** 6, 9, 12, 13, 15, 16, 17

### Departments & Roles:

Science & Mathematics - Tacoma
 I Professor

#### **Contact Information:**

Email: koontz31@uw.edu

Phone: 253-692-4311

Building: Garretson Woodruff

#### Pratt 411



- Environmental policy
- Human systems and institutions
- Natural systems, forests, watersheds and the global climate
- Collaborative environmental management
- Social sciences
- Collaborative environmental governance and sustainability
- Stakeholder participation and community-based natural resource management
- Forest policy
- Watershed management
- Climate change and ecosystem management policy

### **Social & Historical Studies**

#### **UW Tacoma** | Website

The SIAS division of Social and Historical Studies (SHS) covers social science and humanities courses in the following majors and concentrations:

- History
- Ethnic, Gender, and Labor Studies
- IAS Global Studies concentration

As a student in SHS, you will Investigate diverse experiences and conditions over time and place to provide a common framework, paying particular attention to race, class, ethnicity and gender, and to how people shape their destinies.

Investigate diverse experiences and conditions over time and place to provide a common framework, paying particular attention to race, class, ethnicity and gender, and to how people shape their destinies.

#### List of Related Individuals

Michelle Montgomery

# **Michelle Montgomery**

PhD, Language, Literacy, and Sociocultural Studies, University of Mexico, 2010 MA, Bioethics, University of Washington Seattle, 2013 MPP, Plant Pathology, North Carolina State University, 2001

#### Website

Dr. Michelle Montgomery (enrolled Haliwa Saponi/descendant Eastern Band Cherokee) is an Associate Professor of American Indian Studies and Ethnic. Gender, and Labor Studies in the School of Interdisciplinary Arts and Sciences at the University of Washington, Tacoma. She is also the Assistant Director for the Office of Undergraduate Education, and the Indigenous Curriculum and Community advisor for the School of Education. Dr. Montgomery's research focuses on Indigenizing and decolonizing the climate justice narrative, environmental ethics connected to Indigenous Peoples' identities, and eco-critical race theory to eliminate racial and environmental oppression.

**UW Target Links:** 1, 3, 4, 6

<u>SDG Links:</u> 4, 5, 10, 11, 12, 13, 16, 17

#### Departments & Roles:

- <u>Social & Historical Studies -</u>
   <u>Tacoma</u> | Associate Professor & SHS Chair
- School of Education Tacoma |
   Adjunct Associate Professor &
   Indigenous Community &
   Curriculum Advisor

#### Contact Information:

- Email: montgm2@uw.edu
- Phone: 253-692-4671
- Building: Russell T. Joy 214H



#### Areas of Expertise & Interest:

- Indigenizing and decolonizing the climate justice narrative
- Environmental ethics connected to Indigenous Peoples' identities
- Eco-critical race theory
- Elimination of racial and environmental oppression

### **Peter Selkin**

PhD, Earth Sciences, Scripps Institute of Oceanography, University of California, San Diego, 2003

#### **Website**

As a geophysicist who studies the magnetic properties of earth materials. my scholarship and teaching are at the boundary between geophysics and mineralogy. Magnetic particles are nearly ubiquitous in geological and environmental materials; by understanding the properties of magnetic materials, we can distinguish sediment sources, identify environmental conditions and trace depositional processes. The focus of my work is on examining the processes that form magnetic particles, and the significance of these particles in both sediments and igneous rocks, especially as regards orientation distributions of minerals in rocks and sediments.

#### **UW Target Links:** 3

**SDG Links:** 13, 15, 17

#### Departments & Roles:

<u>Social & Historical Studies -</u>
 <u>Tacoma</u> | Associate Professor

#### **Contact Information:**

• Email: paselkin@uw.edu

Phone: 253-692-5819Building: Science 208

#### Areas of Expertise & Interest:

- Magnetic properties of earth materials
- Geophysics and mineralogy
- Sediment sources
- Environmental conditions
- Depositional processes
- Soils, sediments and airborne dust
- Distributions of minerals in rocks and sediments
- Magnetic anisotropy
- Past climate change
- Magmatic processes
- Magnetic proxies for paleoclimate and pollution

### **UW BOTHELL**

#### Website

UW Bothell holds the student-faculty relationship to be paramount. We provide access to excellence in higher education through innovative and creative curricula, interdisciplinary teaching and research, and a dynamic community of multicultural learning.

- Serve college-age and established adult students, as well as the community at large, by providing access to a premier institution of higher education.
- Emphasize and develop critical thinking, writing, and information literacy, in order to graduate students with life-long learning skills.
- Actively recruit and support outstanding faculty scholars with a passion for communication.
- Build an inclusive and supportive community of learning and incorporate multicultural content
  and diverse perspectives on ethnic and racial groups, gender, sexual orientation, social class,
  and special needs.
- Encourage and support collaborative, interdisciplinary, and cross-program initiatives.
- Provide quality curricula by making use of the best of educational technology in support of teaching and learning.
- Attract and support an internationally diverse student body and a nationally recognized faculty and staff.
- Create and support excellence in student services, academic services such as library, writing center, computing services, and physical facilities.
- Foster productive relationships with the employment community and promote a strong public service commitment.

#### List of Schools/Departments

- Interdisciplinary Arts & Sciences
- Science, Technology, Engineering
   & Math

## Interdisciplinary Arts & Sciences

#### **UW Bothell** | Website

The School of Interdisciplinary Arts & Sciences provides a rigorous liberal arts education that draws connections across academic disciplines and links classroom learning to practical experience across diverse fields and sectors. As a faculty and staff, we inspire our students to engage creatively and ethically with the concerns of the region and the world. We dedicate ourselves to integrative research and creative practice, innovative and effective pedagogy, and dynamic curricula that prepare students to live and work in environments that are diverse and complex. We recognize, reflect on, and challenge unequal relations of power and privilege in our curriculum, scholarship and community partnerships. As part of a public university, we seek to build an inclusive and just community of students, faculty, and staff.

#### List of Related Individuals

- Avery Cook Shinneman
- Benjamin Gardner
- <u>lennifer Atkinson</u>
- Jin-Kyu Jung
- Margaret Redsteer
- Martha Groom
- Phoebe Barnard
- Santiago Lopez
- Shannon Cram

# **Avery Cook Shinneman**

PhD, Geology, University of Minnesota

#### **Website**

My research interests are focused on developing records of recent and long-term changes in the environment, especially in aquatic systems, arising from shifts in climate and land-use. Using biological and geochemical archives in lake sediment cores, I develop reconstructions of paleo-ecological changes. These reconstructions can be used to answer a variety of questions about natural variability in ecological systems, changes in these systems after anthropogenic disturbances, and the efficacy of restoration efforts

#### **UW Target Links: 3**

**SDG Links:** 1, 3, 11, 13, 14, 15

#### Departments & Roles:

<u>Interdisciplinary Arts & Sciences -</u>
 <u>Bothell</u> | Associate Teaching
 Professor

#### Contact Information:

• Email: alcs@uw.edu



#### Areas of Expertise & Interest:

- Climate- and land-use related environmental change, especially in aquatic systems
- Paleo-ecological changes
- Natural variability in ecological systems, anthropogenic disturbances, and the efficacy of restoration efforts

## **Benjamin Gardner**

PhD, Geography, University of California, Berkeley MES, School of Forestry and Environmental Studies, Yale University

#### **Website**

My research engages political questions and theoretical debates, contributing to scholarship on 1) the cultural politics of the environment, 2) political economy of development, and 3) the post-colonial state. I have published in edited book volumes and peer reviewed journals about gender and development, land rights and transnational investment, and the links between community, landscapes, and activism. Through ethnographic research on the transnational and trans-local aspects of development, my work brings to light the grounded struggles that give shape to so-called global phenomena.

**UW Target Links: 3, 4** 

<u>SDG Links:</u> 5, 8, 10, 11, 12, 15, 16, 17

#### Departments & Roles:

- <u>Interdisciplinary Arts & Sciences -</u>
   <u>Bothell</u> | Faculty Coordinator
- <u>International Studies</u> | African Studies Program Chair
- Geography | Adjunct Associate Professor
- <u>CEP</u> | Faculty Affiliate

#### Contact Information:

- Email: gardnerb@uw.edu
- Phone: 425-352-3591
- Building: UW2 314



#### Areas of Expertise & Interest:

- Cultural politics of the environment
- Political economy of development
- Post-colonial state
- Gender and development
- Transnational and trans-local aspects of development
- Social media of tourism influences conservation ideas and policies
- Land rights and transnational investment
- Links between community, landscapes, and activism

### **Jennifer Atkinson**

(she/her)

PhD, English Language and Literature, University of Chicago MA, English Language and Literature, University of Chicago

#### **Website**

In recent years my research has turned toward the emotional and mental health. impacts of climate disruption and ecological loss. I am currently working on a book titled An Existential Toolkit for the Climate Crisis (co-edited with Sarah Jaquette Ray) that explores strategies for helping young people navigate the emotional toll of climate breakdown. In tackling the intersecting crises of racial injustice, climate change, pandemics, and ecological degradation, we believe that our challenge today is to ensure that students don't just have the content they need to address these issues, but that they also have the existential tenacity to stay engaged in climate solutions and navigate the long emergency ahead.

**UW Target Links:** 1, 3, 4, 6

SDG Links: 3, 4, 5, 8, 10, 11, 12, 13, 15, 16

#### Departments & Roles:

<u>Interdisciplinary Arts & Sciences -</u>
 <u>Bothell</u> | Associate Teaching
 Professor

#### **Contact Information:**

• Email: jenwren@uw.edu

Phone: 773-350-8364

Building: Husky Hall 1316



#### Areas of Expertise & Interest:

- Environmental Humanities
- Emotional and mental health impacts of climate disruption and ecological loss
- Racial injustice, climate change, pandemics, and ecological degradation intersection
- Eco-anxiety
- Environmental fantasy literature

# Jin-Kyu Jung

PhD, Geography, State University of New York at Buffalo MUP, Urban Planning, State University of New York at Buffalo

#### **Website**

I am an urban geographer/planner whose interdisciplinary research focused on developing new ways of critical, qualitative, and creative possibilities of Geographic Information Sciences (GIS) and geographic visualization in understanding socio-spatial processes and politics of urban space and community. On the one hand, I continuously explore the importance of power and politics as well as the complexities of race, class, gender and sexualities in cities, and ask how the shaping of these categories effectively complicates urban geographical knowledge. On the other hand, my research offers epistemological and methodological innovations in digital spatial technologies that expand the critical and qualitative capabilities of GIS and geographic visualization.

**UW Target Links:** 1, 3, 4, 7

<u>SDG Links:</u> 1, 5, 8, 9, 10, 11, 13, 16, 17

#### Departments & Roles:

- <u>Interdisciplinary Arts & Sciences -</u>
   <u>Bothell</u> | Associate Professor
- Geography | Adjunct Associate Professor

#### **Contact Information:**

• Email: jkjung5@uw.edu

Phone: 425-352-3724

Building: UW2-226



#### Areas of Expertise & Interest:

- Geographic Information Sciences (GIS) and geographic visualization
- Socio-spatial processes and politics of urban space and community
- Power and politics
- Complexities of race, class, gender and sexualities in cities
- Innovations in digital spatial technologies
- Urban space and community
- Big Data
- Class
- Ethnicity
- Research Methods
- Spatial inequality and urban poverty
- Smart urbanism

### Margaret H. Redsteer

PhD, Trace Element Geochemistry/Geosciences, Oregon State University MS, Sedimentary Processes/Earth Sciences, Montana State University

#### Website

I examine aspects of global change that include interactions of different landscape processes including erosion by wind and water, and how changing vegetation communities and climate can influence these processes and exacerbate geologic hazards. In the southwest, I have examined aspects of drought and increasing aridity that have not been well quantified, including seasonal changes to surficial processes and ecologic conditions. This work requires detailed geomorphologic mapping, sediment sampling, seasonal vegetation surveys, and meteorological monitoring, but also requires investigations of land use history and policy.

**UW Target Links:** 1, 3, 4, 6, 7, 10

**SDG Links:** 1, 2, 3, 4, 5, 6, 9, 10, 11, 12, 13, 15, 16, 17

#### Departments & Roles:

<u>Interdisciplinary Arts & Sciences -</u>
 <u>Bothell</u> | Assistant Professor

#### **Contact Information:**

- Email: mredst@uw.edu
- Building: UW1-248



#### Areas of Expertise & Interest:

- Global change
- Landscape processes
- Erosion by wind and water
- Changing vegetation communities
- Geologic hazards
- Drought and increasing aridity
- Geomorphologic mapping
- Land use history and policy
- Indigenous knowledge
- Marginalized populations, agriculture, grazing, and infrastructure
- Sediment sampling
- Seasonal vegetation surveys
- Meteorological monitoring

### **Martha Groom**

PhD, Zoology, University of Washington MS, Zoology/Tropical Conservation & Development, University of Florida

#### **Website**

My scholarship emphasizes conservation of biodiversity - both wild species and ecosystems, across agricultural and urban/urbanizing landscapes, as well as in more remote places. I have studied pollination of wildflowers and crop plants, seeking to improve pollination success as landscapes change. In collaboration with Jaime Collazo and a great group of graduate students, we investigated the influence of land use history on bird communities in Puerto Rico. More than 98% of the forest cover of Puerto Rico was removed in the last century, yet few bird species went extinct, perhaps because the birds used traditional coffee plantations. We found that shaded coffee plantations contain more bird species that enjoy higher breeding success than do areas with other agricultural practices.

**UW Target Links:** 1, 3, 6, 7

**SDG Links:** 2, 4, 11, 12, 13, 15, 16

#### Departments & Roles:

- Interdisciplinary Arts & Sciences -Bothell | Professor
- <u>Biology</u> | Adjunct Professor

#### **Contact Information:**

• Email: groom@uw.edu

Phone: 425-352-5410

Building: UW1-130



#### Areas of Expertise & Interest:

- Conservation of biodiversity
- Wild species and ecosystems, across agricultural and urban/urbanizing landscapes, as well as in more remote places
- Pollination of wildflowers and crop plants
- Influence of land use history on bird communities
- Sustainable conservation practices
- Conservation and environmental justice
- Improvements in conservation education

### **Phoebe Barnard**

PhD, Animal Ecology, Uppsala University, 1994 MS, Zoology, University of the Witwatersrand, 1990

#### **Website**

I've worked on diverse sustainability and biodiversity issues, large and small -- from ecoregional and national biodiversity and climate change strategic planning, policy and implementation, and the global status and trends of ecosystems and their ability to support human health, livelihoods and wellbeing (in the Millennium Ecosystem Assessment), to ecological vulnerability and adaptation of endemic birds of the fynbos biome.

**UW Target Links:** 1, 3, 6, 7, 10

<u>SDG Links:</u> 1, 3, 4, 5, 10, 11, 12, 13, 15, 16, 17

#### Departments & Roles:

<u>Interdisciplinary Arts & Sciences -</u>
 <u>Bothell</u> | Professor

#### Areas of Expertise:

- Ecoregional biodiversity
- Climate change strategic planning, policy, and implementation
- Global ecosystem trends
- Ecosystem impact on human health and wellbeing
- Ecological vulnerability

#### Contact Information:

- Email: lbennett@u.washington.edu
- Phone: +1 360 914 2307 (cell)

### Santiago Lopez

PhD, Geography and the Environment, University of Texas at Austin MA, Geography, Arizona State University

#### Website

The focus of my research comes from my longstanding fascination with our changing environment and with the use of technologies to monitor these changes. A significant part of my work concentrates on an interdisciplinary field of inquiry commonly labeled as land change science to seek answers to challenging such as what kinds of land use and land cover changes are occurring and why, and what are the consequences of these changes for biogeochemical cycling, ecosystem functioning and services, and human welfare. My work also spans over the human and physical dimensions of global change and lies at the intersection between climate and land use change. The thread that runs through all my research is its theoretical and empirical base in geographic information science (GISc).

**UW Target Links:** 1, 3, 4, 7

<u>SDG Links:</u> 1, 3, 9, 10, 11, 13, 15, 17

#### Departments & Roles:

- <u>Interdisciplinary Arts & Sciences -</u>
   <u>Bothell</u> | Associate Professor
- Geography | Adjunct Associate Professor

#### **Contact Information:**

• Email: cslopez@uw.edu

Phone: 425-352-3393

Building: UW2-333



#### Areas of Expertise & Interest:

- Land change science
- Biogeochemical cycling
- Human and physical dimensions of global change
- Intersection of climate and land use change
- Geographic information science (GIS)
- Transformative geospatial knowledge
- Spatial and social theory
- Spatial technologies
- Remote sensing
- Environment
- Science and technology
- Ecosystem functioning and services
- Human welfare
- Socio-environmental geography
- Latin America
- Pacific Northwest

# Science, Technology, Engineering & Math

#### **UW Bothell** | Website

Our mission is to support and promote excellence in STEM research, scholarship, and education through commitment to our core values.

#### Our core values are

- COLLABORATION across disciplines and among students, faculty, staff, and community partners,
- OPPORTUNITIES for all students to succeed and become effective critical thinkers,
- RIGOR in the development of research that is globally recognized and serves our students and society, and
- ENGAGEMENT through challenging and active learning experiences and enriching student-faculty interactions.

#### List of Related Individuals

- Cynthia Chang
- Daniel (Dan) laffe
- Eric Salathé

# **Cynthia Chang**

PhD, Ecology & Evolutionary Biology, Yale University

#### **Website**

Her research examines the causes and consequences of plant diversity across multiple levels of diversity—from population to ecosystem scales. Her research combines observational field studies, greenhouse experiments, and statistical and simulation models to answer questions in plant community ecology.

**UW Target Links:** 3, 6

**SDG Links:** 2, 13, 15

#### Departments & Roles:

Science, Technology, Engineering
 Math - Bothell | Associate
 Professor

#### Contact Information:

• Email: cynchang@uw.edu

• Phone: 425-352-5123

Building: UWBB-107J



#### Areas of Expertise & Interest:

- Plant diversity across multiple levels of diversity
- Observational field studies
- Plant community assembly after disturbance on Mount St. Helens volcano
- Restoration in UW Bothell urban wetlands
- Relationship between genetic diversity, ecosystem function, and response to climate change with Arabidopsis thaliana
- Greenhouse experiments
- Plant community ecology

### **Eric Salathé**

PhD, Geology & Geophysics, Yale University

#### **Website**

Dr. Salathé conducts research on regional climate change and the impacts of climate change on human and natural systems. This research supports climate impacts applications in many fields including air quality, hydrology, agriculture, and human health with a focus on the U.S. Pacific Northwest. His current research focuses on how local weather and land-surface processes can affect the regional response to the increased risk of flooding as a result of climate change.

**UW Target Links: 1, 3** 

**SDG Links:** 1, 2, 3, 6, 11, 13

#### Departments & Roles:

<u>Science, Technology, Engineering</u>
 <u>& Math - Bothell</u> | Associate
 Professor

#### Contact Information:

• Email: salathe@uw.edu

Phone: 425-352-3226

Building: DISC-352J



#### Areas of Expertise & Interest:

- Regional climate change
- Impacts of climate change on human and natural systems
- Climate impacts
   applications in air quality,
   hydrology, agriculture, and
   human health
- Local weather and land-surface processes affecting regional response to risk of flooding

### **Shannon Cram**

PhD, Geography, University of California, Berkeley, 2015 MA, Geography, University of Oregon

#### Website

At its heart, my research examines complex relations between nature, science, and power. I am interested in what it means to reckon with an increasingly contaminated world and how particular ways of knowing and regulating toxic materials condition our very definitions for health, safety, and security in the United States. My scholarly work explores the embodied politics of toxicity, contributing to interdisciplinary conversations about waste and wasting with a particular attention to the co-production of science and social life. This concern with how power circulates in and through understandings of science, environment, and body is central to my teaching and scholarship.

**UW Target Links: 3, 5, 9, 10** 

**SDG Links:** 3, 11, 12, 17

#### Departments & Roles:

- <u>Interdisciplinary Arts & Sciences -</u>
   <u>Bothell</u> | Associate Professor
- <u>Geography</u> | Adjunct Professor

#### **Contact Information:**

- Email: scram@uw.edu
- Building: UW2-309



#### Areas of Expertise:

- Regulating toxic materials impact
- Politics of toxicity
- Co-production of science and social life
- Environmental cleanup
- Nuclear waste cleanup

### **APPENDIX: SLIDE TEMPLATES**

[Slide templates for future additions]

- > Individual Expert
- > Student Organization
- > Multidisciplinary Institute
- > College / School
- > <u>Department</u>



# Expert Name [Template] (pronouns/if shared)

Advanced Degree, Topic, School, Year

Portrait

#### Website

Bio:

**UW Target Links:** 

**SDG Links:** 

Departments & Roles:

Department [Link] | Position

Contact Information:

- Email:
- Phone:
- Building:

Areas of Expertise & Interest:

•

# Student Organization Name [Template]

Website | Home College/School (if applicable)

Logo (if applicable)

#### Purpose

Major Accomplishments, Yearly Events and Traditions, Past/Present Projects - This can also be an image from the organization at work

#### How to Connect:

- Email:
- Twitter Handle
- Facebook Page
- Instagram Handle
- YouTube Channel
- Other]

**UW Target Connections:** 

## **Institute Name [Template]**

Website | Campus Location | Home College/School

Logo

Mission/Values/Vision:

Portrait

Institute Head

Position
Contact Info
(Link if relevant)

Brief Bio (from Website):

Office Contact Info:

- Email
- Phone
- Box #:
- Campus:

**UW Target Connections:** 

# **Institute Name (cont.) [Template]**

Logo

#### Website | Faculty

Portrait	Individual Position(s)	Port	rait	Individual Position(s)	F	Portrait	Individual Position(s)
Portrait	Individual Position(s)	Port	crait	Individual Position(s)	F	Portrait	Individual Position(s)
Portrait	Individual Position(s)	Port	crait	Individual Position(s)	F	Portrait	Individual Position(s)
Portrait	Individual Position(s)	Port	crait	Individual Position(s)	וט	NIVERS	SITY of WASHINGTON

# College / School Name

Website

Description / Mission

#### List of Departments

Department [Linked to Slide]

### **Department Name**

College / School [Link to Slide] | Website

Description / Mission

List of Related Individuals

• Name [Linked to Slide]