



PROGRAM ON THE ENVIRONMENT

UNIVERSITY of WASHINGTON

Spring 2020

CAPSTONE SYMPOSIUM

Wednesday, May 27, 2020
Online, 4:30 – 6:30 pm

The Capstone experience is a three-course series (ENVIR 490, 491, 492) centered on a quarter-long project-based internship with a community site partner. Capstone sites range from community-based non-profits and government agencies to faculty research projects and private sector initiatives. With the mentorship of a faculty advisor and the support of the site supervisor, students gain valuable hands-on experience, explore career possibilities, and build a wide spectrum of professional communication skills.

Share your thoughts on Twitter

Students will be live-tweeting all sessions so if you miss one, follow the updates. If you tweet, we encourage you to share what you learn and use the hashtag, #POEcap.



Scan QR code to view capstone abstracts

4:30 pm

WELCOME & OVERVIEW

4:40 – 5:30 pm

**POSTER SESSION I – Education & Outreach, Food Systems,
Planning & Justice**

**TECHNOLOGY AS SCIENCE COMMUNICATION TOOL TO BENEFIT
ENVIRONMENTAL EDUCATION**

Session: Poster I, Breakout Room #1

Pranav Bhardwaj*, @pranavbhardwaj_, Program on the Environment, Earth & Space
Science, University of Washington

Site Supervisor: Melissa Fleming, Stillwaters Environmental Center

Faculty Advisor: Drew Gorman-Lewis, Earth & Space Sciences, University of
Washington

**EVOLVING COMMUNICATION: HOW ENVIRONMENTAL OUTREACH MUST
CHANGE WITH ITS AUDIENCE**

Session: Poster I, Breakout Room #2

Jackelyn Briseno Arceo*, @BrisenoArceo, Program on the Environment, University of
Washington

Site Supervisor: Jenny Heins, Sustainable Ballard

Faculty Advisor: Stanley Asah, School of Environmental and Forest Sciences, University
of Washington

**JOURNEY TO THE CENTER OF NATURE: CHILDREN'S CONNECTION TO THE
OUTDOORS**

Session: Poster I, Breakout Room #3

Sammy Chu*, @sammychu14, Program on the Environment, University of Washington

Site Supervisor: Hallie Sykes, Oxbow Farm and Conservation Center

Faculty Advisor: Peter Kahn, College of the Environment, HINTS Director, University of
Washington

**IMPACTS OF NITROGEN FIXING TREE INCORPORATION IN CACAO
AGROFORESTRY SYSTEMS**

Session: Poster I, Breakout Room #13

Duke Clinch*, @ClinchDuke, Program on the Environment, University of Washington

Site Supervisor: Samantha Zwicker, Hoja Nueva

Faculty Advisor: Eli Wheat, Program on the Environment, University of Washington

**HOW NEWS ORGANIZATIONS CAN INCREASE THEIR TWITTER CLOUT AND
FIGHT CLIMATE CHANGE**

Session: Poster I, Breakout Room #4

Conor Courtney*, @conor_courtney, Program on the Environment, Journalism,
University of Washington

Site Supervisor: Viccy Salazar, United States Environmental Protection Agency, Region
10

Faculty Advisor: Erika Schultz, Department of Communication, University of
Washington

COMPUTER TECHNOLOGY'S ROLE IN LOCALIZING FOOD SYSTEMS

Session: Poster I, Breakout Room #14

Emily Forsberg*, @emilyforsberg6, Program on the Environment, Community Environment and Planning, University of Washington

Site Supervisor: James Maiocco and Bernice Alora, Barn2Door

Faculty Advisor: Branden Born, Urban Design and Planning, University of Washington

ENGAGING COMMUNITIES THROUGH ONLINE TOOLS IN GREEN INFRASTRUCTURE

Session: Poster I, Breakout Room #5

Jessica Garcia*, @JessicaG253, Program on the Environment, University of Washington

Site Supervisor: Emma Vowels, Stewardship Partners

Faculty Advisor: Yen-Chu Weng, Program on the Environment, University of Washington

GREEN GENTRIFICATION: THE HIDDEN INJUSTICE BEHIND GREENING COMMUNITIES

Session: Poster I, Breakout Room #19

Shawn Imamura*, @SImamura0811, Program on the Environment, University of Washington

Site Supervisor: Karuna Poole, Green Seattle Partnership

Faculty Advisor: Tim Billo, Program on the Environment, University of Washington

COMMUNITY GARDENS AND RESOURCES – COMPLETING THE LOOP

Session: Poster I, Breakout Room #15

Claire Kasinadhuni*, @CKasinadhuni, Program on the Environment, University of Washington

Site Supervisor: Erika Kinno, Resource Recovery, King County Wastewater Treatment Division

Faculty Advisor: Sally Brown, School of Forest Resources, University of Washington

VISUAL COMMUNICATION IN THE AMAZON: PERSPECTIVES AND KNOWLEDGE ON RAINFOREST DEGRADATION

Session: Poster I, Breakout Room #6

Diana Kawczynski*, @KawczynskiDiana, Program on the Environment, University of Washington

Site Supervisor: Samantha Zwicker, Hoja Nueva

Faculty Advisor: Karen Litfin, Political Science, University of Washington

ENVIRONMENTAL EDUCATION: THE POWER OF RIBBITING DRAWINGS

Session: Poster I, Breakout Room #7

Ashley Lee*, @ashleylee_98, Program on the Environment, University of Washington

Site Supervisor: Hallie Sykes, Oxbow Farm & Conservation Center

Faculty Advisor: Jessica Thompson, College of Education, University of Washington

HOW URBAN SYSTEMS SHAPE CITIES: ENHANCING PUBLIC LIFE THROUGH GREEN STORMWATER INFRASTRUCTURE

Session: Poster I, Breakout Room #20

Stefan Mahler*, @Stef_Mahler, Program on the Environment, University of Washington

Site Supervisor: Hailey Mackey, Board & Vellum

Faculty Advisor: Jenn Engelke, Landscape Architecture, University of Washington

DIFFERENTIAL INSTRUCTION IN THE CONTEXT OF ENVIRONMENTAL EDUCATION

Session: Poster I, Breakout Room #8

Emily Minkus*, @EmilyMinkus, Program on the Environment, University of Washington

Site Supervisor: Hallie Sykes, Oxbow Farm and Conservation Center

Faculty Advisor: Jessica Thompson, College of Education, University of Washington

BRING THE OCEAN TO THE COUNTRY: HOW KELP AMENDMENTS ON GRASSLANDS CAN SEQUESTER CARBON

Session: Poster I, Breakout Room #16

Chrina Munn*, @chrinamunn, Program on the Environment, University of Washington

Site Supervisor: Eli Wheat, Skyroot Farm

Faculty Advisor: Brittany Johnson, Environmental and Forest Science, University of Washington

COMPONENTS INVOLVED WITH A SUCCESSFUL SMALL-SCALE RURAL WATER SUPPLY SYSTEM IN DEVELOPING COMMUNITIES

Session: Poster I, Breakout Room #21

Alex Peck*, @AlexpeckUW, Program on the Environment, Economics, University of Washington

Site Supervisor: Danielle Bogardus, Connect-3

Faculty Advisor: Sergey Rabotyagov, Environmental and Forest Sciences, University of Washington

ADDING ANIMALS TO ECOSYSTEMS: THE CASE FOR MANAGED LIVESTOCK GRAZING

Session: Poster I, Breakout Room #17

Bela Sanchez*, @bela8299, Program on the Environment, University of Washington

Site Supervisor: Eli Wheat, SkyRoot Farm

Faculty Advisor: Doug Collins, Center for Sustaining Agriculture and Natural Resources, Washington State University

DIGGING DEEPER: FEMALE IDENTITY IN SUSTAINABLE AGRICULTURE

Session: Poster I, Breakout Room #18

Natalie Schwartz*, @Natalie38477311, Program on the Environment, University of Washington

Site Supervisor: Kim Murchison, Clark Fork Organics

Faculty Advisor: Eli Wheat, Program on the Environment, University of Washington

EXAMINATION OF WESTERN WASHINGTON RESIDENTS' BEHAVIORS,
PERCEPTIONS, AND AWARENESS OF WILDFIRE.

Session: Poster I, Breakout Room #9

Ethan Sedgemore*, @EsedgemoreUW, Program on the Environment, University of Washington

Site Supervisor: Ashley Blazina, Washington State Department of Natural Resources

Faculty Advisor: Clare Ryan, School of Environmental and Forest Sciences, University of Washington

SIGNAGE SCIENCE: WHAT MAKES A SIGN EFFECTIVE?

Session: Poster I, Breakout Room #10

Melinda Skipworth*, @MelindaSkipwor1, Program on the Environment, University of Washington

Site Supervisor: Maggie Brown, Cedar Grove

Faculty Advisor: Kristi Straus, Program on the Environment, University of Washington

PLACEMAKING IN PRESCHOOLS

Session: Poster I, Breakout Room #11

Kaelyn Thede*, @KaelynThede, Program on the Environment, Community, Environment and Planning, University of Washington

Site Supervisor: Sarah Heller, Fiddleheads Forest School

Faculty Advisor: Tim Billo, Program on the Environment, University of Washington

DEVELOPING INTERPERSONAL SKILLS THROUGH NATURE-BASED
LEARNING

Session: Poster I, Breakout Room #12

Molly Thompson*, @mollllythompson, Program on the Environment, University of Washington

Site Supervisor: Carrie Guess, Wildflowers Preschool

Faculty Advisor: Alexa Schreier, Program on the Environment, University of Washington

5:30 – 5:40 pm BREAK

**5:40 – 6:30 pm POSTER SESSION II – Policy & Regulation, Science & Restoration,
Sustainability & Business**

LINKING SALMON AND HUMAN HEALTH: COMMUNICATING THE SERVICES
OF HABITAT RESTORATION

Session: Poster II, Breakout Room #11

Fiona Cromarty*, @fionacromarty1, Program on the Environment, University of Washington

Site Supervisor: Mara Zimmerman, Executive Director, Coast Salmon Partnership

Faculty Advisor: Eric Morel, Department of English, University of Washington

CLEARING MUDDY WATERS: INVESTIGATING THE VIABILITY OF MARKET-BASED INSTRUMENTS AS A TOOL FOR WATER QUALITY IMPROVEMENT

Session: Poster II, Breakout Room #1

Regina Durst*, @rsdurst, Program on the Environment, University of Washington

Site Supervisor: Hannah Clark, American Farmland Trust

Faculty Advisor: Dr. Nives Dolšak, School of Marine and Environmental Affairs, University of Washington

EFFECTIVE TRANSBOUNDARY MANAGEMENT IN THE SALISH SEA: AN EVALUATION OF THE JOINT STATEMENT OF COOPERATION

Session: Poster II, Breakout Room #2

Kristina Foltz*, @KristinaFoltz, Program on the Environment, University of Washington

Site Supervisor: Lisa Chang, United States Environmental Protection Agency, Region 10

Faculty Advisor: Thomas Leschine, School of Marine and Environmental Affairs, University of Washington

A STEP IN THE RIGHT DIRECTION: URBAN FOREST RESTORATION AND PREVENTING SOCIAL TRAILS

Session: Poster II, Breakout Room #12

Karly Lampard*, @larlykampard, Program on the Environment, University of Washington

Site Supervisor: Lisa McGinty, Friends of Lincoln Park

Faculty Advisor: Jim Fridley, School of Environmental and Forest Sciences, University of Washington

HOW SCALES MEASURE UP: A LOOK AT JUVENILE SALMON SCALES AS AN INDICATOR OF LENGTH & GROWTH

Session: Poster II, Breakout Room #13

Kerriane McCarthy*, @KerrianeMcCar1, Program on the Environment, University of Washington

Site Supervisor: Beth Sanderson and Jennifer Gosselin, National Oceanic and Atmospheric Administration

Faculty Advisor: Mark Scheuerell, School of Aquatic and Fishery Sciences, University of Washington

3 WAYS TO RESTORE, MAINTAIN, AND IMPROVE CITIES Session: Poster II, Breakout Room #14

Perla G. Moran*, @Perlam2uw, Program on the Environment, Environmental and Forest Sciences, University of Washington

Site Supervisor: Forest Steward Karuna Poole, Green Seattle Partnership

Faculty Advisor: Tim Billo, Program on the Environment, University of Washington

COMMUNICATION IS KEY: AN ASSESSMENT OF OUTREACH AND
COMMUNICATION TO AID ALASKAN TRIBES IN THEIR SOLID WASTE
MANAGEMENT EFFORTS

Session: Poster II, Breakout Room #3

Lauren Neroutsos*, @Lneroutsos, Program on the Environment, Department of
Communication, University of Washington

Site Supervisor: Angel Ip, United States Environmental Protection Agency, Region 10

Faculty Advisor: Kristi Straus, Program on the Environment, University of Washington

WAYS TO USE COLLEGE ATHLETICS AS A PLATFORM FOR SUSTAINABILITY

Session: Poster II, Breakout Room #19

Avie Niece*, @AvieNiece, Program on the Environment, University of Washington

Site Supervisor: Karen Baebler, Assistant Director for Sport Operations, University of
Washington

Faculty Advisor: Brian McCullough, Management, Sustainability in Sport Business,
Seattle University

DATABASE DEVELOPMENT FOR TRACKING REGIONAL QUALITY
ASSURANCE AND SCIENCE

Session: Poster II, Breakout Room #4

Ashton Pieris*, @PierisAshton, Program on the Environment, University of Washington

Site Supervisor: Donald Brown, United States Environmental Protection Agency, Region
10

Faculty Advisor: Ann Bostrom, Evans School of Public Policy & Governance, University
of Washington

INCENTIVES COULD BE THE KEY TO MORE GREEN BUILDING

Session: Poster II, Breakout Room #20

Jeremy Pilgrim-Stoppel*, @stoppeljeremy, Program on the Environment, University of
Washington

Site Supervisor: Jenny Heins, Northwest EcoBuilding Guild Green Home Tour Organizer

Faculty Advisor: Sergey Rabotyagov, Environmental Economics, University of
Washington

THE UNSEEN EFFECT OF COASTAL CONTAMINATION

Session: Poster II, Breakout Room #15

Felix Reinhold*, @FelixReinhold2, Program on the Environment, University of
Washington

Site Supervisor: Jody Frewin, Umvoto Africa

Faculty Advisor: Brooke K. Sullivan, Department of Landscape Architecture, University
of Washington

TRIBAL CLIMATE ADAPTATION: RESTRUCTURING U.S. GOVERNMENT SUPPORT

Session: Poster II, Breakout Room #5

Sophia Romanelli*, @RomanelliSophia, Program on the Environment, Global Health, University of Washington

Site Supervisor: Vicky Salazar and Sarah Frederick, United States Environmental Protection Agency, Region 10

Faculty Advisor: Joshua Griffin, American Indian Studies, University of Washington

INVISIBLE CHEMICAL DANGER IN CHILD CARE FACILITIES

Session: Poster II, Breakout Room #6

Andrew B. Simpson*, @drewsimp842, Program on the Environment, University of Washington

Site Supervisor: Dr. Arthur Wendel: CDC, ATSDR, CSPECE

Faculty Advisor: Vanessa Galaviz, Department of Environmental and Occupational Health Sciences, University of Washington

SHOWING BIG BUSINESS THAT ON-SITE WASTE MANAGEMENT ISN'T A WASTE OF TIME

Session: Poster II, Breakout Room #21

James Stein*, @jstein_official, Program on the Environment, University of Washington

Site Supervisor: Lindsey Engh, Engh Group

Faculty Advisor: Catherine De Almeida, Department of Landscape Architecture, University of Washington

CHANGING PLANS IN A CHANGING CLIMATE: USING ENVIRONMENTAL PLANS TO UNDERSTAND TRIBAL CLIMATE ADAPTATION PRIORITIES

Session: Poster II, Breakout Room #7

Julie Tolmie*, @Julie.Tolmie, Program on the Environment, University of Washington

Site Supervisor: Vicky Salazar and Sarah Frederick, United States Environmental Protection Agency, Region 10

Faculty Advisor: Meade Krosby, Climate Impacts Group, University of Washington, and Northwest Climate Adaptation Science Center

IMPROVING COLLABORATION IN A LARGE SCALE FORESTATION PROJECT: WASHINGTON 20 YEAR FOREST PLAN

Session: Poster II, Breakout Room #8

Baljinnyam Tovuudorj*, @BaljinnyamTovu1, Program on the Environment, University of Washington

Site Supervisor: Amy Ramsey, Washington Department of Natural Resources

Faculty Advisor: Alexa Schreier, Program on the Environment, University of Washington

HOW CAN WE MAKE GRANT FUNDING PROGRAMS MORE EFFICIENT?

Session: Poster II, Breakout Room #9

Sam Warkentin*, @Sam_Warkentin2, Program on the Environment, University of Washington

Site Supervisor: Vicky Salazar and Michelle Wilcox, United States Environmental Protection Agency Region 10

Faculty Advisor: Kristi Straus, Program on the Environment, University of Washington

HUMAN WILDLIFE CONFLICT IN THE PERUVIAN AMAZON

Session: Poster II, Breakout Room #16

Kera Zegar*, @kszegar, Program on the Environment, University of Washington

Site Supervisor: Samantha Zwicker, Hoja Nueva

Faculty Advisor: Aaron Wirsing, School of Environmental and Forest Sciences, University of Washington

HOW TO LEARN BELUGA WHALES COMMUNICATION WITHOUT TALKING TO THEM

Session: Poster II, Breakout Room #17

Alice Zheng*, @aliceqzuw, Program on the Environment, University of Washington

Site Supervisor: Manuel Castellote, National Oceanic and Atmospheric Association

Faculty Advisor: Kristi Straus, Program on the Environment, University of Washington

HOW TO UTILIZE VOLUNTEER RESOURCES IN LARGE-SCALE RESEARCH AND MONITORING

Session: Poster II, Breakout Room #18

Cole Zwierzynski*, @ColeZwierzynski, Program on the Environment, University of Washington

Site Supervisor: Lauren Kuehne, University of Washington

Faculty Advisor: Tim Billo, Program on the Environment, University of Washington

WE THANK YOU

To all faculty advisors, site supervisors, Program on the Environment staff and to the audience for your support. We could not have done any of this without you!