

Confronting Frontiers, Borders, and Boundaries



2015 Annual Conference

June 24 - 27, 2015
San Diego, California

Hosted by

UC San Diego



Fast Food Happiness – performance by The SciArt 6, AEES 2014 Conference

Invited Artists presenting and discussing their work as part of AEES panels.

Thursday, June 25

- 11:00am Ben Cosgrove, *Untitled [music]* (Session A-3)
- 2:00pm Toby Smith [present via video] *An AOSIS in the Pacific: Quenching Cooperation or Diluted Deals?* (Session B-5)
- 4:00pm Eve André Laramée, *Artistic Research is a Power Tool: Tracking the Legacy of Nuclear Power* (Session C-13)

Friday, June 26

- 9:00am Victoria Vesna and Claudia Jacques, *Waterbodies.org* (Session D-6)
- 11:00am Ash Eliza Smith, *Edgeland Futurism* (Session E-6)

Mealtime Roundtable Discussion

Thursday, June 25, 12:30pm – 2:00pm

(Session R-3, *Café Ventanas*)

Developing an AEES Lifetime Achievement Award in Environmental Arts (Kim Smith, Facilitator)

Performance

Friday, June 26, 7:30pm

Institute of the Americas Plaza

Awake, a new play written and performed by Jennifer Joy

Film Night

Thursday, June 25, 7:30pm – 10:30pm

Hojel Auditorium and Deutz, Institute of the Americas

Film showings and discussion by filmmakers and directors. Organized by Monty Hempel

Artist Slideshow

Thursday, June 25, 10:00am – 6:00pm

Arango Foyer, Institute of the Americas

Friday, June 26, 6:00pm – 7:30pm

Deutz, Institute of the Americas

Panels and workshops contain additional presentations integrating art and science for the environment.

Mission

The Association for Environmental Studies and Science (AESS) is an independent faculty-and-student-based professional association in higher education, designed to serve the needs of environmental scholars and scientists who value interdisciplinary approaches to research, teaching, and problem-solving.

Founded in 2008, the Association seeks to provide its members with the latest environmental information and tools to create better courses, strengthen research, develop more satisfying careers, harness the power of a collective voice for the profession, and enjoy each other's company at national and regional meetings.

A major aim of AESS is to encourage interdisciplinary understanding of environmental science, policy, management, ethics, history, and all of the other vital contributions of traditional disciplines. From its beginning, the Association has been envisioned as a community of environmental scholars and scientists, not a confederation of disciplines. Fundamental to its members' embrace of higher education is the notion that broad advances in environmental knowledge require disciplinary, interdisciplinary, and transdisciplinary approaches to research and learning.

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www.aess.info

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Welcome

President



Welcome to the 2015 Annual Conference, *Confronting Frontiers, Borders, and Boundaries*. Many of this year's panels will focus on the implications of this year's theme, assessing the implications of geographic, cultural, and disciplinary frontiers, borders, and boundaries in terms of our work as environmental scholars, teachers, and practitioners. Such topics will continue to pose both challenges and opportunities for our discipline throughout the rest of this century and beyond.

I believe that a provocative and engaging conference is in store for all of us. It showcases the talents of our diverse field, encompassing the humanities and social and natural sciences. The program includes two keynote addresses, the first by one of the most respected ocean researchers in our field, and the second by a US Congressman who has worked tirelessly on critical environmental issues in the trying environment of Washington. Additionally, we offer panels and roundtable sessions, workshops, and field trips, an expanded version of our "film night," and art performances, along with awards, evening events, and lots of opportunities for informal conversation, networking and collaboration.

There are many people who deserve our heartfelt thanks for their terrific work to make this conference a success. Initially I want to thank a team of talented individuals on the AESS **Program Committee**, who were guided by our outstanding Program Chair, **Nancy Rich**, who has taken on this yeoman task twice on behalf of AESS. The Program Committee had both the enviable, and daunting, task of reviewing the most proposals in the history of the conference. Also, special thanks to **Nicole Bilsley**, an alumna of our host institution, who did a remarkable job serving as our site coordinator, tackling all of the moving parts of conference logistics, including registration, food, housing and rooms for conference events. I'd also like to recognize the work of **Ellen Esch**, who coordinated this year's extensive field trip program, as well as **Kim Smith**, **Elizabeth Demaray**, **Jennifer Joy**, and **Monty Hempel** who developed the wonderful artistic component of the conference, which will be interwoven throughout the program in the next few days.

Many thanks also to **Kate O'Neill** and the Awards Committee for organizing the processes for selection of this year's recipient of the Freudenburg Lifetime Achievement, **Professor Walter "Tony" Rosenbaum**, and for selection of this year's recipient of the award for the most outstanding student paper delivered at the conference. **Carolyn Anthon** (AESS Program Coordinator at the National Council for Science and the Environment) and Sheila Emilo at the University of Vermont Conference Services have worked tirelessly behind the scenes to ensure smooth operation of the technical aspects of the conference. I also want to recognize **David Blockstein** and the National Council for Science and the Environment for their continued support of AESS, as well the **AESS Board of Directors** for assistance with strategic planning and fundraising efforts associated with the conference. Special recognition in this context is accorded to **John "Skip" Laitner**, AESS's President-Elect, for his frequent trips to the conference venue to coordinate with conference organizers. There are a number of major financial sponsors whose generous support helped make this year's conference program possible, and you will find their names listed throughout the program. Finally, thank you to the University of California at San Diego for serving as our host for this year's conference, and special recognition to Jane Teranes, Associate Director of the undergraduate program in Earth Science at the Scripps Institution of Oceanography at UC San Diego.

I continue to believe that AESS has an important role to play in helping to ensure that environmental studies and sciences programs flourish in the United States and globally in a time of unprecedented environmental challenge to our generation and future generations. These programs, in turn, occupy a critical place in the academy, helping to educate students who will ultimately become policymakers and involved citizens. They also help to engender an ethic of compassion and respect for both human and non-human beings, and help learners to develop interdisciplinary perspectives that will stand them in good stead whatever career path they pursue.

It has been my distinct honor to serve as AESS's President over the past few years. I want to encourage everyone to stay engaged in our organization's work, recruit colleagues and students for AESS, submit your best work to our journal, and consider serving on an AESS committee or our board. On behalf of the AESS Board of Directors, welcome to my home state, the Golden State. Enjoy the conference!

A handwritten signature in black ink, appearing to read "WB", followed by a long horizontal flourish.

Wil Burns
President, AESS

Site Coordinator



Nicole Bilsley
UC San Diego Alumna
AESS 2015
Conference Site Coordinator

Welcome to the University of California, San Diego! Your site team of active students, faculty, and alumni are pleased to welcome you to our home. It is an honor and pleasure to host the AESS 2015 Conference. We look forward to providing an environment in which our diverse conference delegation can breach the boundaries of their affiliated institutions, unite their interdisciplinary strengths, and collaborate as a community to address environmental issues.

San Diego provides an ideal environment to delve into the discussion of confronting borders, frontiers, and boundaries. Our international border brings cultural diversity, our numerous universities and research institutions push forward the frontiers of science, and the boundaries that delineate the multiple ecological and geological environments give our city its own unique fingerprint. From tours of our infamous breweries to kayaking the waves of the shores, we hope you enjoy your stay with us.

Welcome to San Diego, UC San Diego, and welcome to AESS 2015!

Program Chair



Nancy Rich
Environmental Biology
Springfield Technical
Community College
AESS 2015 Program Chair

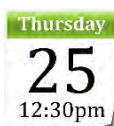
With over 95 sessions, the 2015 AESS conference brings depth and focus to our interdisciplinary approaches to the human/environment interface. This year's theme, "Confronting Frontiers, Borders, and Boundaries," plays out in sessions on transboundary pollution, environmental equity and representation, international connections and collaborations, and teaching across disciplines.

You will find a rich mosaic of ideas as presenters push the boundaries of interdisciplinary approaches as effective tools for research, teaching, and change. You will see increasing strength in particular sites of integration such as health and environment; food, water and energy linkages; the role of behavior and attitudes in shaping environmental problems and solutions; linking of social and ecological systems; and the integration of the arts and sciences. International presenters, and presenters involved with Indigenous nations in our midst, add a wealth of experience and perspective to our conference this year. The Arts Committee brings you the work of visual and performing artists who demonstrate the power of integrating these disciplines with science.

Your program committee this year includes Aileen Guzman, Mercedes Quesada-Embid, Devin Judge-Lord, Curt Gervich, Mary Collins, Song Gao, and Diana Watts, with assistance from Ken Shockley. On behalf of the Program Committee, we welcome you—new-comers and long-timers—and invite you to join in, meet your colleagues, and help AESS keep its reputation for warmth and friendliness. And pace yourself—there's so much on every day, and the final day of presentations is as remarkable as the first!

Arts Committee

The 2015 AESS conference continues to showcase work in the environmental arts. AESS has always recognized that the arts play a vital role in spanning academic disciplines, engaging a wide array of audiences and engendering innovation in environmental studies and sciences. For "Confronting Frontiers, Borders, and Boundaries" we once again issued a special call for artists to participate in panel discussions. By inviting environmental artists to be part of these discussions, we aim to help our membership appreciate the innovative work being done in this field, understand how art can contribute to a better understanding of environmental problems, and learn how artists can collaborate effectively with scientists and other scholars. We have also included a special movie night to feature documentaries and other films by our members. Finally, we are excited to feature a staged reading of Jennifer Joy's new play, *Awake*, a drama centering on interfaith themes, following the banquet. This reading features AESS members in starring roles. Faith communities have an important role to play in the struggles around climate change, and this play explores the spiritual foundation for action.



The Arts Committee this year included Kim Smith, Jennifer Joy, Elizabeth Demaray, and Monty Hempel. Kim and Elizabeth will be holding a roundtable discussion at 12:30pm on Thursday June 25, at Café Ventanas, to identify innovative ways to support the arts at AESS. Please join them!

Acknowledgements

The AESS 2015 conference was made possible by the hard work of many staff and volunteers.

Special thanks to:

Wil Burns, AESS President, Forum for Climate Engineering Assessment, American University

John “Skip” Laitner, AESS President Elect, Economic and Human Dimensions Research Associates

Board of Directors:

Mike Finewood, Chatham University

Greg Mohr, Santa Barbara County (retired) and University of California Santa Barbara

Stephanie Kaza, University of Vermont

Katie Purvis-Roberts, Claremont College

Leslie Gray, Santa Clara University

Rich Wallace, Ursinus College

Kazuhiro Sonoda, Heritage University

Abby Lindsay, American University

Committee Chairs:

Kate O’Neill, Awards Committee

Ken Wilkening, Nominations Committee

Alan D. Christian and **David M. Hassenzahl**, Outreach and Membership Committee

Raul Pacheco-Vega, Professional Development Committee

Mike M. Gunter, Jr., Professional Publications Committee

Nancy Rich, Program Committee

Kim Smith, **Elizabeth Demaray**, **Jennifer Joy**, and **Monty Hempel** - Arts Committee

National Council for Science and the Environment (NCSE) Staff, especially:

David Blockstein, Senior Scientist, CEDD Executive Secretary

Sudeep Vyapari, Associate Executive Director

Carolyn Anthon, AESS Program Coordinator

AESS Program Committee Members:

Nancy Rich (Chair), Environmental Biology, Springfield Technical Community College

Mary B. Collins, National Socio-Environmental Synthesis Center, University of Maryland

Song Gao, Math, Science and Technology, Nova Southeastern University

Curt Gervich, Environmental Science, SUNY Plattsburgh

Aileen Guzman, Ateneo de Manila University

Devin Judge-Lord, Governance, Environment, & Markets (GEM) Initiative, Yale University

Mercedes Quesada-Embid, Sustainability Studies, Colorado Mountain College

Diana Watts, Business, Trinity Washington University

With assistance from **Kenneth Shockley**, UB Sustainability Academy, SUNY Buffalo

University of California San Diego Site Team:

Nicole Bilsley, Site Coordinator, UC San Diego Alumna

Kate Jirik, Logistics Committee (Volunteer Coordinator and General Logistics), UC San Diego

Ellen Esch, Logistics Committee (Field Trip Coordinator), UC San Diego

Leslie Nanninga, Logistics Committee (On-Campus Housing Schedule Coordinator), UC San Diego Alumna

Jane Teranes, UC San Diego, Environmental Systems Department

Anita Neubarth, UC San Diego, Conference Services

Julie Meola, UC San Diego, Catering

Diana Rodriguez, UC San Diego, Institute of the Americas

Sheila Emilo, University of Vermont Conference and Event Services

All conference volunteers.

Special thanks to **Donna Kowal**, (Program Coordinator, Pace Academy for Applied Environmental Studies, Pace University), for graphic design and innumerable acts of kindness.

Sponsors

We are grateful to all of our sponsors for their support of the conference.

Platinum Sponsor



The University of Vermont Environmental Program
www.uvm.edu/envprog

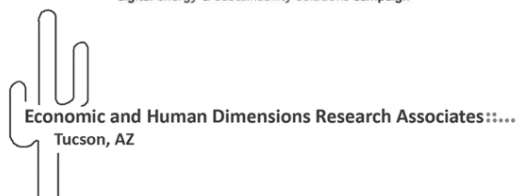
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www.advanced.jhu.edu/envprograms



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www.raponline.org



RANEPА
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Colorado Energy Group
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CRC Press - Taylor & Francis Group
www.crcpress.com

AESS@UC San Diego: Contacts, Wireless & FAQs

Contacts

Emergency Numbers:



Dialing 911 from a cell phone will reach the nearest California Highway Patrol, and not the UC San Diego Campus police.

Campus Police: (858) 534-4357 (Non-Emergency / General Assistance)

Conference staff: Conference staff will be available throughout the conference at the registration table at the Institute of the Americas (IOA).

On-Site Coordinator: Nicole (Niki) Bilsley, (949) 241-5300, aess2015onsite@gmail.com

On-Campus Housing: Questions regarding your on-campus housing and on-campus housing contact after hours during conference: UC San Diego Conference Services/Village Conference Services Desk (858) 534-4165.

Nearest Hospital: Thornton Hospital, 9300 Campus Point Drive, La Jolla, CA 92037, (858) 657-7000
<http://health.ucsd.edu/locations/Pages/thornton.aspx>

Emergency medical care is available 24 hours a day at Sulpizio Cardiovascular Center (adjacent to UC San Diego Thornton Hospital, approximately 1.8 miles away from campus) at 9434 Medical Center Drive, La Jolla CA, 92037, (858) 657-7600

Internet Access

On-Campus Housing: Internet access is included in your conference stay. Each person will have an Ethernet jack in their room. We suggest you bring an Ethernet cable to connect to the Internet. Wireless will be available in most of the housing areas, but is not the primary network. Once you are connected and open your browser, you will be directed to a ResNet "Authentication" website with the option to register as a Guest on the residential network (ResNet).

Main Campus: For wireless internet access on the main campus, the **UCSD-GUEST** wireless network will only require agreeing to the AUP.

Technical Assistance: For any questions or problems with the network, please call ResNet at (858) 534-2267. Additional information, including steps for the requirements listed above can be found on the ResNet website at <http://resnet.ucsd.edu/conf>.

FAQs

Q: Where is the nearest ATM?

A: At the Price Center (see campus map). Includes Bank of America, Chase, USE Credit Union, and Wells Fargo

Q: When are parking permits required?

A: Parking Permits are required on campus from Monday to Friday, 7:00am to 11:00pm. **Parking Permits are not required on weekends.** Parking permits may be purchased inside the two parking structures, Pangea and Hopkins (see campus map, inside back cover). Day passes are \$8. Unfortunately, they have to be purchased daily. No refunds will be issued for any unused permits regardless of cause. More details at <http://transportation.ucsd.edu/parking/visitor/index.html#Pay-Station>.

Q: I got a parking ticket! Can you help me?

A: Conference Services is unable to assist with parking citations. Parking space designations and posted restrictions are strictly enforced on our campus and violations may result in parking citations. For more information, please visit the Parking & Transportation website <http://transportation.ucsd.edu/citations/index.html>. You may also email them directly at citation@ucsd.edu.

Q: Are there any grocery stores nearby?

A: Yes! Ralps, 8657 Villa La Jolla Dr La Jolla, CA 92037, (858) 597-1550
 Whole Foods Market, 8825 Villa La Jolla Dr La Jolla, CA 92037, (858) 642-6700
 Trader Joe's, 8657 Villa La Jolla Dr La Jolla, CA 92037, (858) 546-8629

Q: Where can I work out? Is there a pool?

A: Guests may purchase a daily or weekly "Guest Rec Pass" to access recreational facilities on the UC San Diego campus. Facilities include: RIMAC, Canyonview pool and the Main Gym. To purchase a pass or find out more information, please contact UC San Diego Recreation at (858) 534-4037 or visit UC San Diego Recreation. You may also visit RIMAC Arena Reception Desk located a short walk from The Village. Please mention that you are staying in the Guest Housing Program at The Village when inquiring/buying a pass. (Note: Guest Rec Passes are only available to visitors aged 18 years or older.

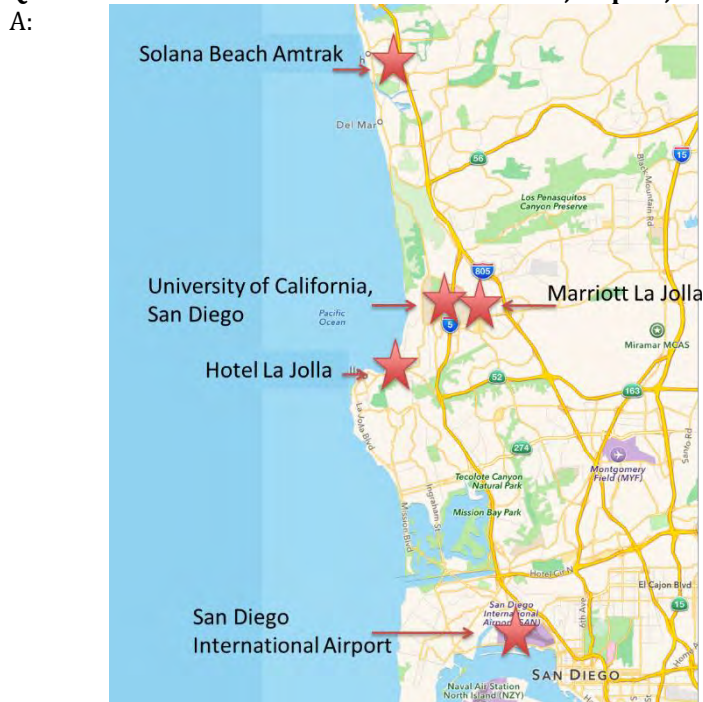
Q: Where can I request extra towels?

A: You may request an extra Towel Set at The Village Conference Service Center front desk. A fee may apply.

Q: I have a maintenance concern. Whom should I contact?

A: Please contact The Village Conference Service Center at (858) 534-4165 with your concern so that a work order can be placed.

Q: Where are we in relation to the ocean, airport, and hotels?



What's in Store

People often come to conferences as much for meeting other people and networking as for formal sessions. AESS has earned a reputation over the years as a friendly and warm gathering, and we are grateful to all for continuing this tradition. We extend our welcome to those who are here for the first time and to those who are returning; to those from close by—on both sides of the border—and to those from as far away as Malta, Australia, The Philippines, Korea, and Sweden.

AESS is a great place to meet new people, find old friends, talk over job opportunities and your latest book. The Message Board and Networking Area in the IOA Plaza are for you to leave messages, post your resume, job opening, or book announcement, meet for coffee. If you want company or a recommendation for Thursday night's "dinner on your own," come to the registration area to meet like-minded people.

Sessions

Sessions are presentation panels unless otherwise indicated. If there is a session you particularly want to hear, we urge you to arrive early to get a seat as some rooms are "seminar" size rather than large classrooms.

Presentation Panels

Presentation panels are designed for presentation of research or other scholarly AESS-related endeavors. In general, they consist of four presenters who are each allotted approximately 20 minutes to speak, followed by questions and answers or discussion.

Discussion Symposia

Discussion symposia are designed for focused discussion on a selected topic. Playing off the original ancient Greek symposia, the emphasis is on in-depth intellectual exchange. Opening remarks are appropriate but it is not expected that participants will deliver a formal presentation.

Workshops (Wednesday only)

Workshops are interactive (as opposed to lecture-based) and have a formal educational or professional development component. Content may include presentations, discussions, exercises, formal training, or other methods of promoting heuristic goals. Workshops are expected to have clear goals and outcomes.

Mealtime Roundtables

Mealtime roundtables are designed to foster open discussion around a topic of general and collective interest to the AESS community. Anyone can join a roundtable. Roundtables are scheduled during mealtimes, either breakfast or lunch, at the designed conference dining location, where they will have a table set aside. They are led by the coordinator listed in the program book.

Poster Session (Thursday)

Poster presenters will be on hand during the Poster Session to converse informally about their work.

Exhibitors

Exhibitors include publishers, universities, organizations, and others. They bring a wealth of information, book samples, and much more. We hope you will take the time to visit them all! This is a great opportunity to speak personally with, say, a publisher about your upcoming book project, or with a graduate school about their admissions criteria, or about the projects and approaches (and job opportunities?) of non-profits.

AESS Business Meeting

AESS members are invited to a members-only Reception and Business Meeting to discuss current and future directions of the organization. Please come, listen, and share your ideas.

International Studies Association/Environmental Studies Section Lunch for Young Scholars

A special lunch (new this year) for young scholars interested in the international arena.

The Arts at AESS and Film Night

See listings on the inside front cover and enjoy these rich offerings.

And awards, banquet, keynotes, field trips, and much more.

Conference at a Glance

Wednesday, June 24		
9:00am - 12:00pm	Morning Workshops	Center Hall – Various Rooms
12:00pm	Lunch	Café Ventanas
2:00pm - 5:00pm	Afternoon Workshops (CEDD and AESS)	Center Hall – Various Rooms with exception of workshop W-8, which is in Deutz at Institute of the Americas (IOA)
5:00pm - 7:00pm	Opening Reception (CEDD, CCAP, AESS)	IOA Plaza
7:00pm - 8:30pm	Welcome and Opening Keynote	Hojel Auditorium at IOA
Thursday, June 25		
6:30am - 8:00am	Early Morning Bird Walk	Meet in front of Café Ventanas
7:30am	Breakfast & Roundtable Discussions	Café Ventanas
7:30am	JESS Editorial Board meeting (<i>Board members only</i>)	Deutz at IOA
8:00am - 10:00am	Exhibitors set up	Arango Foyer at IOA
9:00am - 10:30am	Plenary Session	Hojel Auditorium at IOA
10:00am - 6:00pm	Exhibitors Open & Artist Slideshow	Arango Foyer at IOA
10:30am	Coffee & Snack Break	IOA Plaza
11:00am - 12:30pm	Session A	Center Hall – Various Rooms with exception of session A-1, which is in Hojel Auditorium at IOA
12:30pm - 2:00pm	Lunch & Roundtable Discussions	Café Ventanas
12:30pm - 2:00pm	International Studies Association/AESS Lunch for Young Scholars	Deutz at IOA
2:00pm - 3:30pm	Session B	Center Hall – Various Rooms
3:30pm	Coffee & Snack Break	IOA Plaza
4:00pm - 5:30pm	Session C	Center Hall – Various Rooms
5:45pm	AESS Reception & Business Meeting (<i>all AESS members invited</i>)	IOA Plaza followed by Hojel Auditorium
7:00pm	Dinner on your own	On your own
7:30pm - 10:30pm	Film Night (<i>free and open to the public</i>)	Hojel Auditorium and Deutz at IOA
Friday, June 26		
7:30am	Breakfast & Roundtable Discussions	Café Ventanas
7:30am	JESS Meeting with AESS Board (<i>Board members only</i>)	Deutz at IOA
9:00am - 10:30am	Session D & Presentations by Student Award Finalists	Center Hall – Various Rooms
10:30am	Coffee & Snack Break	IOA Plaza
10:30am - 7:30pm	Exhibitors Open	Arango Foyer at IOA
11:00am - 12:30pm	Session E	Center Hall – Various Rooms
12:30pm - 5:30pm	Box Lunch & Field Trips	IOA Plaza
5:30pm - 7:30pm	Exhibitors & Artist Slideshow	Arango Foyer at IOA
6:00pm - 7:30pm	Poster Session (set up at 5:30 PM)	Deutz at IOA
7:30pm - 10:00pm	Banquet, Presentation of Freudenburg Lifetime Achievement Award, Performance	IOA Plaza
Saturday, June 27		
7:30am	Breakfast	Café Ventanas
7:30am	AESS Board Meeting (<i>Board Members only</i>)	Deutz at IOA
9:00am - 10:30am	Session F	Center Hall – Various Rooms
10:30am	Coffee & Snack Break	IOA Plaza
11:00am - 12:30pm	Session G	Center Hall – Various Rooms
12:30pm	Lunch & Closing Keynote Address	IOA Plaza followed by Hojel Auditorium
2:00pm	Adjourn	

Workshops Overview (Wednesday)

Wednesday Morning Workshops (AESS) 9:00am – 12:00pm		Wednesday Afternoon Workshops (CEDD and AESS) 2:00pm – 5:00pm	
W-1 Creating Connections to Nature for Human and Ecological Wellness through Biophilia and Art <i>Center Hall, Room 201</i>		W-6 Getting Published: Preparing Manuscripts for Journal Submission <i>Center Hall, Room 201</i>	
W-2 CapUWorks A Campus Model for Environmental Education and Engagement <i>Center Hall, Room 203</i>		W-7 Redressing Partnership with Cross-border Indigenous Communities in Environmental Problem-solving <i>Center Hall, Room 203</i>	
W-3 Planning the Power Dialog: State-Level Climate Engagement <i>Center Hall, Room 205</i>		W-8 Presentation Skills for Scientists: An Improv Workshop <i>Deutz at Institute of the Americas</i>	
W-4 A 2.0 Tool for Preparing Students to Play Climate Chess - The Climate Web <i>Center Hall, Room 207</i>		W-9 Building a Community of Practice around Online and Blended Learning in Environmental Studies and Sciences <i>Center Hall, Room 207</i>	
W-5 Making Campuses Green and Gold? A Political Ecology Workshop on the Technopolitics of Higher Education Spaces <i>Center Hall, Room 217A</i>		W-10 Read for the Earth: Bringing Energy and Climate Education to College Students (CEDD/AESS workshop) <i>Center Hall, Room 217A</i>	
		W-11 Developing Leaders of Interdisciplinary Environmental and Sustainability Academic Programs: Building Program Support, and Facilitating Program Change (CEDD/AESS workshop) <i>Center Hall, Room 217B</i>	
		W-12 How to Get Faculty Who Have Expertise on Different Aspects of Food-Energy-Water (FEW) Systems to Overcome Barriers (Intellectual, Cultural, Institutional, Disciplinary) to Collaborate (CEDD/AESS workshop) <i>Center Hall, Room 218</i>	
		W-13 Innovative Forum on Edible Cities: Emerging Models of Resilient Urban Food-Systems (CEDD/AESS workshop) <i>Center Hall, Room 220</i>	

Mealtime Roundtables (Thursday and Friday)

Thursday Breakfast Roundtables 7:30am – 8:30am <i>Café Ventanas</i>		Thursday Lunch Roundtables 12:30pm – 1:30pm <i>Café Ventanas</i>		Friday Breakfast Roundtables 7:30am – 8:30am <i>Café Ventanas</i>	
R-1 Crossing Community Boundaries With Service Learning		R-3 Developing an AESS Lifetime Achievement Award in Environmental Arts		R-6 Frontiers in Scholarship: What Defines “Excellence” in an Interdisciplinary Academic Career?	
R-2 Managing the Transition to Faculty Positions in Environmental Studies and Sciences		R-4 Deep Decarbonization Pathways for Russia by the Year 2050		R-7 Two Peas in a Pod: Brainstorming Opportunities to Tear Down Boundaries between the Environment and Human Health	
		R-5 Food, Energy and Water - Challenges and Opportunities			

Sessions Overview (Thursday – Plenary, A, B, C)

Plenary Panel: 9:00am – 10:30am		
America's Future: Environmental Research and Education for a Thriving Century: A Decadal Vision for Environmental Research and Education at NSF <i>Hojel Auditorium at Institute of the Americas (IOA)</i>		
Session A 11:00am – 12:30pm	Session B 2:00pm – 3:30pm	Session C 4:00pm – 5:30pm
A-1 Discussion of America's Future: Environmental Research and Education for a Thriving Century: A Decadal Vision for Environmental Research and Education (Discussion Symposium) <i>Hojel Auditorium at IOA</i>	B-1 Pedagogies of Environmental Justice: Responding to the Changing Faces and Places of ESS Students <i>Center Hall, Room 202</i>	C-1 Community-Based Learning Part 2: Assessing Student Learning Outcomes and Community Impacts <i>Center Hall, Room 202</i>
A-2 Building Networks, Communities, and Partnerships: Case Studies in University Based Approaches to Advance Sustainability <i>Center Hall, Room 202</i>	B-2 Energy Transition <i>Center Hall, Room 201</i>	C-2 Activism and Environmental Justice <i>Center Hall, Room 201</i>
A-3 Art and Science <i>Center Hall, Room 201</i>	B-3 Environmental Psychology, Justice, and Spirituality <i>Center Hall, Room 203</i>	C-3 Energy Transition Barriers <i>Center Hall, Room 203</i>
A-4 Cross-scale Water Issues <i>Center Hall, Room 203</i>	B-4 International and Domestic Policy Linkages: Environmental Impacts <i>Center Hall, Room 204</i>	C-4 Living and Dying in the Anthropocene <i>Center Hall, Room 205</i>
A-5 ESS: Teaching for Complexity and Environmental Justice <i>Center Hall, Room 205</i>	B-5 Islands and Ecology <i>Center Hall, Room 206</i>	C-5 Marine and Coastal Conservation <i>Center Hall, Room 204</i>
A-6 Greening the City <i>Center Hall, Room 204</i>	B-6 Transitions in Social and Ecological Systems: From Cities to Smallholders <i>Center Hall, Room 208</i>	C-6 How Many Is Too Many? The Environmental Argument for Reducing Immigration into the United States: Author Meets Critics Panel (Discussion Symposium) <i>Center Hall, Room 206</i>
A-7 Urban Adaptation to Climate Change <i>Center Hall, Room 207</i>	B-7 Community-Based Learning Part 1: Challenges & Unpredictabilities of Making the Community Our Classroom <i>Center Hall, Room 223</i>	C-7 Cross-boundary Connections in Sustainable Stormwater Policy and Management (Discussion Symposium) <i>Center Hall, Room 207</i>
A-8 Gender and Environment <i>Center Hall, Room 206</i>	B-8 Planning and Documenting Your Interdisciplinary Career (Discussion Symposium) <i>Center Hall, Room 205</i>	C-8 Engaging Outside of the Academy: A Discussion on Facilitating Collaborative Research with Aboriginal and Non-Aboriginal Communities (Discussion Symposium) <i>Center Hall, Room 208</i>
A-9 MyMcKenzie: Discovering, Sharing, and Conserving the McKenzie River <i>Center Hall, Room 208</i>	B-9 JESS Special Issue on American Food Resilience, Part 2: The Dynamics of Food Supply Crises <i>Center Hall, Room 207</i>	C-9 Multi-Disciplinary Approaches to Mitigating Environmental Health Challenges <i>Center Hall, Room 217A</i>
A-10 Ecological Science Fiction and Sustainability Transitions Panel (Part 1) <i>Center Hall, Room 217A</i>	B-10 Examining the Effectiveness of Green Infrastructure/Low Impact Development in Addressing Complex Environmental Problems Related to Stormwater and Energy <i>Center Hall, Room 217A</i>	C-10 Advancing the Integration of Earth System Science within Environmental Studies Curricula: Insights from Complex Systems Theory (Discussion Symposium) <i>Center Hall, Room 223</i>
A-11 JESS Special Issue on American Food Resilience, Part 1: Climate change <i>Center Hall, Room 218</i>	B-11 ESS and Sustainability: Navigating differences and similarities (Part 1) (Discussion Symposium) <i>Center Hall, Room 218</i>	C-11 Extending the Knowledge Frontier: New Questions, Tools and Knowledge Management Systems (Discussion Symposium) <i>Center Hall, Room 217B</i>
A-12 Activism: Gaining Traction by Engaging Attitudes <i>Center Hall, Room 220</i>	B-12 Confronting the Boundaries of Science and Society (Discussion Symposium) <i>Center Hall, Room 224A</i>	C-12 Understanding and Communication of Change in the Arctic (Discussion Symposium) <i>Center Hall, Room 218</i>
A-13 The Economic, Policy, and Academic Implications of the Proposed EPA Clean Power Plan (Discussion Symposium) <i>Center Hall, Room 217B</i>	B-13 Overcoming Uncertainty: Innovative, Interdisciplinary Strategies for Climate and Hazard Planning in Southern California <i>Center Hall, Room 220</i>	C-13 Alternatives to Fossil Fuels <i>Center Hall, Room 224A</i>
	B-14 Understanding and Implementing the UN Post-2015 Sustainable Development Agenda (Discussion Symposium) <i>Center Hall, Room 217B</i>	C-14 Status Quo, Conflict, and Innovation in the ESS Curriculum (Discussion Symposium) <i>Center Hall, Room 220</i>

Sessions Overview (Friday – D, E)

Session D 9:00am – 10:30am		Session E 11:00am – 12:30pm	
D-1 Sustainability Education Across Boundaries: A Pedagogy of Complexity <i>Center Hall, Room 217A</i>		E-1 Academics and Operations: Campus as a Living Learning Lab for Sustainability <i>Center Hall, Room 220</i>	
D-2 Utilizing Experiential Learning to Engage Underrepresented Minority Students in the Environmental and Natural Resources Fields <i>Center Hall, Room 204</i>		E-2 Broadening Participation in Environmental Biology - Exploring What Works (Discussion Symposium) <i>Center Hall, Room 202</i>	
D-3 Environmental Health <i>Center Hall, Room 201</i>		E-3 ESS and Sustainability: Integrative Concepts and Methods <i>Center Hall, Room 217A</i>	
D-4 Marine Conservation as a Wicked Problem <i>Center Hall, Room 203</i>		E-4 Sustainability and Smallholder Farming and Forestry <i>Center Hall, Room 204</i>	
D-5 Metaphors for the Anthropocene <i>Center Hall, Room 206</i>		E-5 Sustainability and Economics in Industry and Organizations (Part 1) <i>Center Hall, Room 217B</i>	
D-6 Water: Adaptive Management for a Wicked Problem <i>Center Hall, Room 205</i>		E-6 Transboundary Environmental Governance on the San Diego/Tijuana Border <i>Center Hall, Room 201</i>	
D-7 Presentations by Finalists in Graduate Student Award Competition <i>Center Hall, Room 207</i>		E-7 Communities as a Foundation to Sustainable Development (Discussion Symposium) <i>Center Hall, Room 206</i>	
D-8 Synthesis: A Research Approach for Studying Socio-Environmental Systems <i>Center Hall, Room 217B</i>		E-8 Confronting Age Boundaries: Generational Change and the Role of Senior Citizens in Saving the Planet (Discussion Symposium) <i>Center Hall, Room 203</i>	
D-9 Leadership in Interdisciplinary Research and Education <i>Center Hall, Room 218</i>		E-9 Revisioning the Anthropocene <i>Center Hall, Room 205</i>	
D-10 JESS Special Issue on American Food Resilience, Part 3: The Role of Local and Regional Food Systems <i>Center Hall, Room 208</i>		E-10 Transcending Barriers to Engagement: Connecting with Stakeholders and Decision-makers in the California Current <i>Center Hall, Room 207</i>	
D-11 ESS and Sustainability: Navigating differences and similarities (Part 2) (Discussion Symposium) <i>Center Hall, Room 223</i>		E-11 Border-Crossing Pedagogies: Should the World be Our Classroom? <i>Center Hall, Room 208</i>	
D-12 Application of Supply Chain Analyses to Assess Indirect Vulnerability to Climate Change: An Assessment of Different Critical Inputs and Outputs of Metro Manila <i>Center Hall, Room 224A</i>		E-12 Advancing Environmental Research with Q Methodology <i>Center Hall, Room 218</i>	
D-13 The Role of the Environmental Humanities in Interdisciplinary Environmental and Sustainability Programs (Discussion Symposium) <i>Center Hall, Room 220</i>		E-13 Urban Agriculture at the Frontiers of Food Access <i>Center Hall, Room 223</i>	
D-14 Repowering a Sustainable San Diego County Economy through a Comprehensive Renewable Energy Plan (Discussion Symposium) <i>Center Hall, Room 224B</i>		E-14 Facing the Reality of Ocean Acidification and Doing Something About It (Discussion Symposium) <i>Center Hall, Room 224A</i>	
		E-15 Reflecting on 30 Years of Collaborative Teaching Across Disciplines in the Graduate Program on the Environment at The Evergreen State College (Discussion Symposium) <i>Center Hall, Room 224B</i>	

Sessions Overview (Saturday – F, G)

<div> <div>Session F</div> <div>9:00am – 10:30am</div> </div> <div> <div>Session G</div> <div>11:00am – 12:30pm</div> </div>	
F-1 Using Case Studies to Break Down Barriers in Students' Understanding of Social-Environmental Systems <i>Center Hall, Room 201</i>	G-1 Fisheries <i>Center Hall, Room 201</i>
F-2 Retooling Student Engagement with Environment through Empowering Education <i>Center Hall, Room 202</i>	G-2 Consumer Energy Interfaces Lab: Creating and Investigating Community-Level Eco-Feedback <i>Center Hall, Room 203</i>
F-3 Fossil Fuel Policy: Air, Water and Health Impacts <i>Center Hall, Room 203</i>	G-3 Interdisciplinary Avenues to Expanding Awareness of Human-Environment Interconnections (Discussion Symposium) <i>Center Hall, Room 205</i>
F-4 Neuroscience <i>Center Hall, Room 204</i>	G-4 Perception Creates Reality on the Border: Border Walls and the Environmental Impacts of Ideology <i>Center Hall, Room 207</i>
F-5 Sustainability and Economics in Industry and Organizations (Part 2) <i>Center Hall, Room 206</i>	G-5 Geoengineering: The New Frontier of Climate Policy Making? <i>Center Hall, Room 217A</i>
F-6 Teaching Political Ecology <i>Center Hall, Room 205</i>	G-6 Preparing Change Agents: Teaching to the BIG Question with First and Second Year Experiences <i>Center Hall, Room 218</i>
F-7 Debating Carbon Offsets <i>Center Hall, Room 207</i>	G-7 Relationships Between Animal Welfare and Environmental Sustainability <i>Center Hall, Room 204</i>
F-8 Ecological Science Fiction and Sustainability Transitions Panel (Part 2) <i>Center Hall, Room 217A</i>	G-8 Campus Sustainability <i>Center Hall, Room 217B</i>
F-9 Redesigning ESS Programs for the Anthropocene (Discussion Symposium) <i>Center Hall, Room 217B</i>	G-9 ESS Pedagogy: Art and Science <i>Center Hall, Room 220</i>
F-10 Wildlife <i>Center Hall, Room 208</i>	
F-11 Confronting the Boundaries: A Bio-physical Economic Assessment of Lake Buhi, Camarines Sur <i>Center Hall, Room 218</i>	
F-12 Regenerating Wetlands to Support Biodiversity and Human Welfare <i>Center Hall, Room 223</i>	
F-13 Collaborative Research <i>Center Hall, Room 220</i>	

Keynote Speakers



Margaret Leinen

Director

Scripps Institution of Oceanography

University of California, San Diego

“Our Changing Oceans”

Wednesday, June 24, 2015 – 7:00pm

Hojel Auditorium at Institute of the Americas

Margaret Leinen, a highly distinguished national leader and oceanographer, was appointed the eleventh director of Scripps Institution of Oceanography at UC San Diego in July 2013. She also serves as UC San Diego's vice chancellor for marine sciences and dean of the School of Marine Sciences. She joined UC San Diego in October 2013.

Leinen is an award-winning oceanographer and an accomplished executive with extensive national and international experience in ocean science, global climate and environmental issues, federal research administration, and non-profit startups. She is a researcher in paleo-oceanography and paleo-climatology. Her work focuses on ocean sediments and their relationship to global biogeochemical cycles and the history of Earth's ocean and climate.

Leinen leads UC San Diego's ocean, earth, and atmospheric sciences research and education programs at Scripps Oceanography, the foremost environmental research institution that addresses the most pressing environmental problems facing our planet, provides the knowledge necessary to address these challenges, and teaches the next generation of science leaders.

<http://scrippsscholars.ucsd.edu/mleinen/biocv>



Congressman Scott Peters

United States Representative

52nd District of California

“How Congress Can Impact Climate Change”

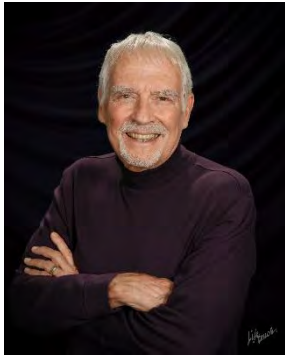
Saturday, June 27, 2015 – 12:30pm

Institute of the Americas Plaza followed by Hojel Auditorium

Congressman Scott Peters serves California's 52nd Congressional District. Scott Peters is a civic leader who has made improving the quality of life in San Diego his life's work. He is a problem solver with a record of bringing people together to get results. In Congress he currently serves on the House Armed Services Committee & the House Judiciary Committee. His career in public service has included serving as San Diego's first City Council President, serving as a San Diego Port Commissioner, and chairing the San Diego Unified Port District, which manages the state tidelands in and around San Diego Bay. Scott earned his undergraduate degree from Duke University magna cum laude, Phi Beta Kappa, and worked as an economist for the United States Environmental Protection Agency before attending New York University School of Law.

<http://scottpeters.house.gov>

AESS Lifetime Achievement Award



**AESS is honored to present the
2015 William R. Freudenburg Lifetime Achievement Award
to
Walter A. Rosenbaum
Editor-in-Chief
Journal for Environmental Studies and Sciences
Director Emeritus, Bob Graham Center for Public Service
Professor of Political Science Emeritus
University of Florida**

The winner of the 2015 William R. Freudenburg Lifetime Achievement Award is Walter Rosenbaum, or Tony, as he is known to his friends and colleagues. The Lifetime Achievement Award seeks to recognize and advance the spirit of AESS co-founder, the late Professor William R. Freudenburg, whose seminal work on the causes of environmental degradation helped to shape our contemporary discipline. Through this award, AESS honors members of the profession who have also devoted their lives to strengthening our field and fostering outreach to critical decision makers and the public. Tony is nominated for his role as a leader, and indeed founder, of contemporary US environmental politics and policy. He earned his Ph.D. in Political Science from Princeton and worked for the University of Florida, where he is now Emeritus Professor. In addition he has held positions with the Environmental Protection Agency, Harvard University, the Everglades Restoration Project, and many other organizations and endeavors aimed at rational environmental policy.

Today, Tony is the Editor-in-Chief of AESS's flagship journal, *The Journal of Environmental Studies and Sciences*, published by Springer. Perhaps one of his most important achievements was to write the first environmental policy textbook—fairly unthinkable at the time in the discipline, but now in its 9th edition. His latest book is *American Energy: The Politics of 21st Century Policy* in 2014 for CQ Press. He has educated students, policy makers, and colleagues across disciplines for decades, and has not only reshaped the field from the beginning, but has opened the way for future environmental scholars to work across disciplines. It is a great pleasure to honor this outstanding member of our field by awarding him the 2015 William R. Freudenburg Lifetime Achievement Award.

Arts and the Environment

The arts play a vital role in spanning academic disciplines, engaging a wide array of audiences and engendering innovation in environmental studies and sciences. For Confronting Frontiers, Borders, and Boundaries we once again issued a special call for artists to participate in panel discussions. By inviting environmental artists to be part of these discussions, we aim to help our membership appreciate the innovative work being done in this field, understand how art can contribute to a better understanding of environmental problems, and learn how artists can collaborate effectively with scientists and other scholars.



Photo provided by E. Demaray

Roundtable Discussion

Thursday
25
12:30pm

The Arts Committee will be holding a roundtable discussion at 12:30pm on Thursday June 25, at Café Ventanas, to identify innovative ways to support the arts at AEES. Please join us!

Panel Artists

Thu - Fri
25
26

In recognition of these unique capacities, AEES is pleased to present artists working in multiple disciplines. This year **Eve Andrée Laramée, Ash Eliza Smith, Ben Cosgrove, Claudia Jacques, Victoria Vesna, Jennifer Joy**, and (by video) **Toby Smith** will be joining our panels and presenting art work in a wide range disciplines. *[Find specific sessions on the inside cover of the program and in the 'Presenter Index'.]*

Film Night – Free and Open to the Public

Thursday
25
7:30pm

Film night has been organized by **Monty Hempel**, University of Redlands. Several filmmakers and producers will be present for informal discussion. Refreshments will be served. Films will be shown in Hojel Auditorium and Deutz at Institute of the Americas.

[See detailed conference schedule for exact time and locations for each film.]

Performing Arts

Friday
26
7:30pm

The AEES Arts Committee also plans to have a staged reading of the play ***Awake***, a drama centering on interfaith themes, following the banquet. This reading features AEES members in starring roles. Faith communities have an important role to play in the struggles around climate change, and this play explores the spiritual foundation for action.

Invited Artists

Ben Cosgrove



Ben Cosgrove is a touring composer, multi-instrumentalist, and essayist whose diverse body of work reflects his deep interests in landscape, ecology, and the expression of place. *Field Studies*, a recent and highly praised collection of his geographically-inspired instrumental music, was independently released in 2014 and Ben has since performed across 45 states in support of the project. From 2012 to 2014 he was the Signet Artist-in-Residence Fellow at Harvard University, and he has also held residencies and fellowships at Acadia National Park, Isle Royale National Park, Middlebury College, the Vermont Studio Center, and the Sitka Center for Art and Ecology. Ben lives in New England. For more information, please visit www.bencosgrove.com.

Claudia Jacques



A Brazilian-American interdisciplinary artist, designer, educator and researcher, Claudia Jacques holds an MFA in Computer Art and is currently a PhD candidate [ADB] at the Planetary Collegium, University of Plymouth, UK. Under Professors Roy Ascott and Søren Brier, she is researching space-time aesthetics in the user-information-interface relationship through the lens of Cybersemiotics. Intersecting art, technology and science, she designs interactive hybrid art and information environments that aim to explore perceptions of space-time and the digital-physical in the pursuit of human consciousness. She collaborates with many artists exhibiting and presenting both in the U.S. and abroad. She has published in *Leonardo*, *TEK s*, *Art & Engine*, etc., and serves as Art Editor for *Cybernetics and Human Knowing* journal. Jacques is also a participant with three other scholars in a 2014-16 NEH Collaborative Research Project based at Roosevelt University in Chicago. She teaches studio, digital and communication arts. claudiajacques.com

Jennifer Joy



Jennifer Joy is a NYC-based performer, writer and trainer with a passion for environmentalism and science. Her solo show, *The Physics of Love*, weaves the deeply ecological Universe Story into one woman's comic search for love. She is also the artistic director for The SciArt6, a performance troupe that creates work around environmental science. She was commissioned by the Inter-Religious EcoJustice Network of Connecticut to write a play reflecting communities of faith and climate change. Her work has been seen at theatres and colleges across the country, including Highways (Santa Monica); Emerging Artists' Theatre, Laurie Beechman Theatre, and Fresh Fruit Festival (NYC); Jon Sims Center, The Marsh, Josie's Cabaret and Red Dora's Café (San Francisco); University of Redlands, Scripps College, SUNY Potsdam, Rochester Institute of Technology, University of Connecticut, Alfred College and more. She has performed standup comedy at New York Comedy Club, Broadway Comedy Club, Ochi's at Comix and more. Her training work includes improv workshops that teach communication and creativity skills to scientists and others, and workshops in which participants use science to create art. For more on Jennifer's work, see jenniferjoyonline.com.

Eve Andrée Laramée



Eve Andrée Laramée is currently a Professor and Chair of the Department of Art at Pace University in New York City. Laramée is an environmental and ecological artist working at the confluence of art and science. She has exhibited throughout the United States, Europe, Asia and the Middle East, including amongst other institutions, the Venice Biennale, Mass MOCA, Massachusetts Institute of Technology (MIT), and the New Museum of Contemporary Art, New York. Her work is included in the collections of the MacArthur Foundation, the Museum of Modern Art, New York, The Fogg Art Museum of Harvard University. Laramée's research investigates the impact of nuclear power and fossil fuels on ecosystems, climate and human health. Current projects focus on the problem of radioactive waste which persists throughout geological time. Sources are uranium mining, nuclear weapons and energy production/decommissioning, and nuclear accidents. She has collaborated with physicists, hydrologists, geologists, biogeographers, and ecologists. Her art-and-science projects catalyze positive social change by promoting an awareness of environmental health issues and by directly involving communities. The outcomes share innovative thinking, extending the ways in which cultures imagine, create and understand.

Ash Eliza Smith



Ash Eliza Smith is an artist, musician and educator who incorporates strategies of play, speculation and embodied research into her work and pedagogy in performance, photography, video, text, sound, dance, theater, installations and games. She is currently a lecturer and the Associate Director for Art and Technology in Sixth College at UC San Diego. She previously worked as a producer, director and cinematographer for clients including VICE and The Creator's Project, Creative Time, MoMA, and the Nobel Peace Center in Oslo, Norway. Smith has worked with Schools Without Borders in Havana, Cuba and has participated in the Hemispheric Institute of Performance and Politics in NYC and Brazil. Ash received an MA from New York University, Tisch School of the Arts in Performance Studies and an MFA from UC San Diego's Visual Arts program.

Toby Smith



Toby Smith is based in London and works internationally on projects concerning landscape, environment, industrial and science stories. Toby graduated with a Masters in Contemporary Photography from London College of Communication in 2008. This was after spending time employed both in the British Army Infantry and 2 years working across Africa utilizing his bachelors degree in Environmental Science. His focus now lies on large-scale photography and research projects for editorial publication, exhibition, communication and advocacy. He is represented globally by Reportage by Getty Images. Notable projects include a study of hydroelectricity and landscape in Scotland, renewable energy technology across China and India, illegal logging and mining in Madagascar, a review of the worldwide commercial space industry and walking the entire proposed London to Birmingham rail line. Toby embraces a range of traditional photography and innovate video techniques tailored to the subject matter. Moving between large format photography for exhibition and print, full production video for broadcast and also Ultra HD Time Lapse or animation for web and new-media usage. Toby also has a special interest in the online mapping and geo-location of his research leading to grants from National Geographic, The Royal Photographic Society and partnerships with NGO's on numerous field trips. His work is exhibited internationally and editorial clients include National Geographic, GEO, The Sunday Times Magazine, TIME, Fortune, The New York Times, Guardian, Intelligent Life and Stern. Broadcast credits include the BBC Natural History Unit, Al Jazeera, Sky News, BBC Radio 4 and BBC World Service.

Victoria Vesna



Victoria Vesna, Ph.D., is a media artist and Professor at the UCLA Department of Design |Media Arts and Director of the Art|Sci center at the School of the Arts and California Nanosystems Institute (CNSI). Her work can be defined as experimental creative research that resides between disciplines and technologies. With her installations she explores how communication technologies affect collective behavior and how perceptions of identity shift in relation to scientific innovation. Victoria has exhibited her work in over twenty solo exhibitions, more than seventy group shows, has been published in excess of twenty papers and gave 100+ invited talks in the last decade. North American editor of *AI & Society*, Victoria edited *Database Aesthetics: Art in the age of Information Overflow*, Minnesota Press, 2007 and *Context Providers: Conditions of Meaning in Media Arts* (co-edited with Christiane Paul and Margot Lovejoy). Intellect Press, 2011. victoriavesna.com

Chronological Schedule

Wednesday, June 24

Morning Workshops (AESS)

9:00am – 12:00pm
Center Hall

W-1 Creating Connections to Nature for Human and Ecological Wellness through Biophilia and Art
Center Hall, Room 201

Facilitators

- **Sonja Bochart**, SmithGroupJJR, Sonja.Bochart@smithgroupjjr.com
- **Judith Kruger**, Judith Kruger Studio, judy@judithkruger.com
- **Richard Piacentini**, Phipps Conservatory and Botanical Gardens, richard@hipps.conservatory.org

W-2 CapUWorks | A Campus Model for Environmental Education and Engagement
Center Hall, Room 203

Facilitators

- **Cheryl Schreader**, Capilano University, cheryl@schreader.ca
- **Susan Doig**, Capilano University, sdoig@capilanou.ca

W-3 Planning the Power Dialog: State-Level Climate Engagement
Center Hall, Room 205

Facilitators

- **David E. Blockstein**, National Council on Science and the Environment, david@cedd.org
- **Eban Goodstein**, Bard Center for Environmental Policy, ebangood@bard.edu

W-4 A 2.0 Tool for Preparing Students to Play Climate Chess - The Climate Web
Center Hall, Room 207

Facilitator

- **Mark C. Trexler**, The Climatographers, mark@climatographer.com

W-5 Making Campuses Green and Gold? A Political Ecology Workshop on the Technopolitics of Higher Education Spaces
Center Hall, Room 217A

Facilitator

- **Ingrid L. Nelson**, University of Vermont, ilnelson@uvm.edu

Lunch

12:00pm
Café Ventanas

Afternoon Workshops (CEDD and AESS)

2:00pm – 5:00pm
Center Hall
(with the exception of W-8, which is in Deutz at Institute of the Americas)

W-6 Getting Published: Preparing Manuscripts for Journal Submission
Center Hall, Room 201

Facilitators

- **Kim Smith**, Carleton College, ksmith@carleton.edu
- **Walter (Tony) Rosenbaum**, University of Florida, Tonyros@ufl.edu

W-7 Redressing Partnership with Cross-border Indigenous Communities in Environmental Problem-solving
Center Hall, Room 203

Facilitators

- **Jacqueline Maximillian**, University of Idaho, jackiem@uidaho.edu
- **Afatchao Kodjotse**, University of Idaho, afatchao@uidaho.edu

W-8 Presentation Skills for Scientists: An Improv Workshop
Deutz at Institute of the Americas

Facilitator

- **Jennifer Joy**, Independent Artist, jjoy@jenniferjoyonline.com

W-9 Building a Community of Practice around Online and Blended Learning in Environmental Studies and Sciences

Center Hall, Room 207

Facilitators

- **Liam Phelan**, University of Newcastle, Australia, Liam.Phelan@newcastle.edu.au
- **Jennifer Bernstein**, University of Hawaii, jennifer.bernstein@gmail.com
- **Raul Pacheco-Vega**, Centro de Investigacion y Docencia Economicas, raul.pacheco-vega@cide.edu

W-10 Read for the Earth: Bringing Energy and Climate Education to College Students

(CEDD/AESS workshop)

Center Hall, Room 217A

Facilitators

- **David E. Blockstein**, National Council for Science and the Environment, david@cedd.org
- **Geoff Haines-Stiles**, Passport to Knowledge, ghs@passporttoknowledge.com

Presenters

- **Arnold J. Bloom**, University of California, Davis, ajbloom@ucdavis.edu
Online Education about Climate Change
- **David Hassenzahl**, Chico State University, dhassenzahl@csuchico.edu
An Introduction to CAMEL: Climate Adaptation and Mitigation E-Learning
www.CAMELclimatechange.org

W-11 Developing Leaders of Interdisciplinary Environmental and Sustainability Academic Programs: Building Program Support, and Facilitating Program Change

(CEDD/AESS workshop)

Center Hall, Room 217B

Facilitators

- **Rod Parnell**, Northern Arizona University, roderic.parnell@nau.edu
- **David Gosselin**, University of Nebraska-Lincoln and Council of Environmental Deans and Directors, dgosselin2@unl.edu

Discussant

- **Mitch Thomashow**, Independent Scholar and President Emeritus, Unity College, mitchellthomashow@gmail.com

W-12 How to Get Faculty Who Have Expertise on Different Aspects of Food-Energy-Water (FEW) Systems to Overcome Barriers (Intellectual, Cultural, Institutional, Disciplinary) to Collaborate

(CEDD/AESS workshop)

Center Hall, Room 218

Facilitators

- **Richard H. Moore**, The Ohio State University, moore.11@osu.edu
- **Serpil Guran**, Rutgers EcoComplex, guran@aesop.rutgers.edu

W-13 Innovative Forum on Edible Cities: Emerging Models of Resilient Urban Food-Systems

(CEDD/AESS workshop)

Center Hall, Room 220

Facilitator

- **Sudeep Vyapari**, The National Council for Science and the Environment, svyapari@ncseonline.org

Opening Reception

5:00pm – 7:00pm

Institute of the Americas Plaza

Welcome and Opening Keynote

7:00pm – 8:30pm

Hojel Auditorium at Institute of the Americas

President's Opening Welcome

- **Wil Burns**, AESS President
Co-Executive Director, Forum for Climate Engineering Assessment

Keynote: Our Changing Oceans

- **Margaret Leinen**, Director, Scripps Institution of Oceanography, UC San Diego

Thursday, June 25

Early Morning Bird Walk with David Blockstein

6:30am – 8:00am

Meet in front of Café Ventanas

Breakfast & Roundtable Discussions

7:30am – 8:30am

Café Ventanas

R-1 Crossing Community Boundaries With Service Learning

(Mealtime Roundtable, Café Ventanas)

Facilitator

- **Pamela Herring**, University of Texas at Brownsville, pamela.herring@utb.edu

R-2 Managing the Transition to Faculty Positions in Environmental Studies and Sciences

(Mealtime Roundtable, Café Ventanas)

Facilitators

- **Susan Caplow**, University of Montevallo, scaplow@montevallo.edu
- **Barry R. Muchnick**, Yale University, brmuchnick@smcm.edu

Journal for Environmental Studies and Sciences (JESS) Editorial Board meeting

7:30am

Deutz at Institute of the Americas

Exhibitors set up

8:00am – 10:00am

Arango Foyer at Institute of the Americas

Plenary Panel

9:00am – 10:30am

Hojel Auditorium at Institute of the Americas

America's Future: Environmental Research and Education for a Thriving Century: A Decadal Vision for Environmental Research and Education at NSF

Facilitator

- **David E. Blockstein**, National Council for Science and the Environment, david@cedd.org

Presenters

- **Diane E. Pataki**, National Science Foundation, dpataki@nsf.gov
Environmental Programs at the National Science Foundation (NSF) and the FY16 Budget Request
- **David E. Blockstein**, Council of Energy Research and Education Leaders, National Council for Science and the Environment, and NSF's Advisory Committee for Environmental Research and Education, david@cedd.org
A Decadal Vision for Environmental Research and Education at NSF

Discussants

- **Veerabhadran Ramanathan**, Scripps Oceanographic Institute, UC San Diego, vramanathan@ucsd.edu
- **Mitch Thomashow**, Independent Scholar and President Emeritus, Unity College, mitchellthomashow@gmail.com
- **Yolanda Moses**, University of California, Riverside, yolanda.moses@ucr.edu

The National Science Foundation (NSF) Advisory Committee for Environmental Research and Education (ACERE) is drafting a 10 year vision for ERE at NSF. The Vision document will update previous ERE reports over the past decade. The working title of this document due in spring 2015 is "America's Future: Environmental Research and Education for a Thriving Century." The report will include:

- Understanding the challenges and opportunities of complex environmental systems.
- Designing the future: science, engineering, humans and control.
- Securing the future with sustaining the future with a sound environment.
- Enabling the future: big/small data; infrastructure.

The AESS conference will be one of the first public presentations of the report. This plenary presentation will include responses from AESS members from different components of environmental research and education - life science, geophysical science, social science and humanities. All conference participants will have an opportunity to participate in Q & A in the plenary discussion or in the follow up discussion symposium facilitated by Dr. Blockstein.

Exhibitors Open

10:00am – 6:00pm

Arango Foyer at Institute of the Americas

Artist Slideshow

Images of works by AEES 2015 Featured Artists

10:00am - 6:00pm

Arango Foyer at Institute of the Americas

Coffee & Snack Break

10:30am

Institute of the Americas Plaza

Session A

11:00am - 12:30pm

Center Hall

(with the exception of A-1, which is in Hojel Auditorium at Institute of the Americas)

A-1 Discussion of America's Future: Environmental Research and Education for a Thriving Century: A Decadal Vision for Environmental Research and Education
(Discussion Symposium)

Hojel Auditorium at Institute of the Americas

This session will be an open discussion of America's Future: Environmental Research and Education for a Thriving Century: A Decadal Vision for Environmental Research and Education at NSF. It will follow the plenary presentation of this report of NSF's Advisory Committee on Environmental Research and Education. All conference participants are invited to discuss the report, opportunities for implementation at NSF and the implications for their programs.

Facilitator

- **David E. Blockstein**, National Council for Science and the Environment, david@cedd.org

A-2 Building Networks, Communities, and Partnerships: Case Studies in University Based Approaches to Advance Sustainability
Center Hall, Room 202

Presenters

- **Chair: Gary Silverman**, UNC Charlotte, gsilver1@uncc.edu
- **Seaton Tarrant**, University of Florida, seatonius@ufl.edu
Building Collaborative Interdisciplinary Research for Sustainability in Higher Education
- **Linda Vakunta**, Project 1808, University of Wisconsin-Madison, lindavak@gmail.com
Multinational School-Community-University Partnerships: Education and Capacity Building for Sustainability and Global Citizenship
- **Martha Richmond**, Suffolk University, mrichmond@suffolk.edu
Collaborations to Protect Children from Environmental Lead in Boston
- **Nicole D. Peterson**, UNC Charlotte, NPeterson@uncc.edu. Co-authors: Helen Hilger, Robert Boyer, Brett Q. Tempest, Thomas A. Gentry, Gary S. Silverman
The Integrated Network for Social Sustainability: A Collaborative Approach to Strengthen Sustainability's Neglected Third Leg

A-3 Art and Science

Center Hall, Room 201

Presenters

- **Chair: Lissy Goralnik**, Oregon State University, lissy.goralnik@oregonstate.edu. Co-authors: Michael Paul Nelson, Oregon State University, mpnelson@oregonstate.edu; Leslie Ryan, University of Oregon, lryan@uoregon.edu; and Hannah Gosnell, Oregon State University, gosnellh@geo.oregonstate.edu
Arts and Humanities Efforts in the Long-Term Ecological Research (LTER) Network: Understanding Perceived Values and Challenges
- **Elizabeth Albert**, St. John's University, alberte@stjohns.edu
Horse Bones and Black Mayonnaise: A Brief History of Transboundary Pollution in New York City's Watery Frontiers
- **Leslie Ryan**, University of Oregon, lryan@uoregon.edu
Performing Agriculture: The "Survival Pieces" of Artists Helen and Newton Harrison
- **Ben Cosgrove**, Sitka Center for Art and Ecology, ben@bencosgrove.com
Untitled [music]

A-4 Cross-scale Water Issues*Center Hall, Room 203***Presenters**

- **Chair: Kyle D. Brown**, Lyle Center - Cal Poly Pomona University, kdbrown@cpp.edu. Co-author: Kathleen Farley, San Diego State University Department of Geography, kfarley@mail.sdsu.edu *From Degeneration to Regeneration? Inquiry into the Environmental, Social and Economic Viability of California's Salad Bowl and Central Valley*
- **Kyle Walsh**, San Diego State University Department Of Geography, ylwash@gmail.com *Open Houses on the Open Range: Rangeland Conversion in San Luis Obispo County*
- **Gilberto Verdugo**, Lyle Center-Cal Poly Pomona University, gilbertov001@gmail.com *From Degeneration to Regeneration? Inquiry into the Environmental, Social and Economic Viability of California's Salad Bowl and Central Valley*
- **Tershia d'Elgin**, Author, tdelgin@gmail.com *The Spoils of Trans-Water Footprint Forgetfulness*

A-5 ESS: Teaching for Complexity and Environmental Justice*Center Hall, Room 205***Presenters**

- **Chair: Christopher M. Bacon**, Santa Clara University, cbacon@scu.edu
- **Brinda Sarathy**, Pitzer College, brinda_sarathy@pitzer.edu *Enacting Environmental Justice through the Undergraduate Classroom: The Transformative Potential of Community Engaged Partnerships*
- **Gwen D'Arcangelis**, Cal Poly Pomona, gdarcangelis@csupomona.edu *Enacting Environmental Justice through the Undergraduate Classroom: The Transformative Potential of Community Engaged Partnerships*
- **Lance Neckar**, Pitzer College, lance_neckar@pitzer.edu *Water, Infrastructure and Sustainability: Who Owns What Rain?*
- **Graham Bullock**, Davidson College, grbullock@davidson.edu *Confronting Issue Borders and Disciplinary Boundaries: The Role of Environmental Studies Foundation Courses*
- **David Driesen**, Syracuse University College of Law, ddriesen@law.syr.edu *A Conceptual Approach to Environmental Law as a Foundation for Teaching Environmental Policy*

A-6 Greening the City*Center Hall, Room 204***Presenters**

- **Chair: Patrick Hurley**, Ursinus College, phurley@ursinus.edu. Co-author: Marla R. Emery, Northern Research Station, U.S. Forest Service, Burlington, Vermont, marla.r.emery@gmail.com *Looking up and out: Finding Food Security Beyond Gardens and Cultivars in the City*
- **Sister Damien Marie Savino**, University of St. Thomas, savinod@stthom.edu *"Border Crossings" Through Urban Gardening*
- **Jess Vogt**, Furman University, jessica.vogt@furman.edu. Co-authors: Richard Hauer, Burnell Fischer *The challenging and rewarding relationship between urban forestry and interdisciplinary environmental studies programs*
- **Sarah K. Mincey**, Indiana University, skmincey@indiana.edu. Co-authors: Jess Vogt, Shannon Lea Watkins, Sarah Widney, Rachael Bergmann, Lynn Westphal, Sean Sweeney *Neighborhood and Nonprofit Urban Forestry Frontiers: Results of a 5-City Study*

A-7 Urban Adaptation to Climate Change*Center Hall, Room 207***Presenters**

- **Chair: Yehuda L. Klein**, Brooklyn College and NOAA-CREST, yklein@brooklyn.cuny.edu. Co-authors: Hildegaard Link, CUNY Graduate Center, hildegaardl@earthlink.net; Jose Pillich, CUNY Graduate Center and NOAA-CREST, pillich@gmail.com *Factors Impacting Urban Energy Use: Micro Climates and Patterns of Habitation*
- **Kimberly Lucke**, Chatham University, Kimberly.Lucke@gmail.com *Urban Responses to Climate Change*
- **Greg McLauchlan**, University of Oregon, gmclauch@uoregon.edu *Evaluating the Path to Urban Sustainability: The Case of Eugene, Oregon*
- **Alisa Zomer**, Yale School of Forestry and Environmental Studies, alisa.zomer@yale.edu *Beyond city limits: Influencing a Global Urban Agenda*

A-8 Gender and Environment*Center Hall, Room 206***Presenters**

- **Chair: Lydia A. Dixon**, University of Colorado, lydia.dixon@colorado.edu. Co-author: Jason C. Neff *Assessing Student Attitudes toward Environmental Science and Environmental Problems: Is there a Gender Gap?*
- **Judit Hersko**, jhersko@csusm.edu *The Polar Archives of Anna Schwartz*
- **Sarah M. Johnson**, Colorado State University - Pueblo, sarah.johnson@csupueblo.edu. Co-author: Marc E. Pratarelli *Global Feminism and Environmental Awareness: A Logical Union*

A-9 MyMcKenzie: Discovering, Sharing, and Conserving the McKenzie River*Center Hall, Room 208***Presenters**

- **Chair: Kathryn A. Lynch**, Environmental Leadership Program, University of Oregon, klynch@uoregon.edu. Co-author: Peg Boulay *The MyMcKenzie Learning Initiative*
- **Peg Boulay**, Environmental Leadership Program, University of Oregon, boulay@uoregon.edu *MyMcKenzie: Stream Stewardship Projects*
- **Aylie Baker**, Environmental Leadership Program, University of Oregon, aylieb@uoregon.edu. Co-author: Kathryn A. Lynch *MyMcKenzie: River Stories Projects*
- **Jenny Crayne**, Environmental Leadership Program, University of Oregon, jcrayne@uoregon.edu. Co-author: Kathryn A. Lynch *MyMcKenzie: Environmental Education Projects*

A-10 Ecological Science Fiction and Sustainability Transitions Panel (Part 1)*Center Hall, Room 217A***Presenters**

- **Chair: Kate O'Neill**, University of California at Berkeley, kmoneill@berkeley.edu *Ecological Science Fiction and Sustainability Transitions: A Review*
- **Kerry Shea**, Saint Michael's College, kshea@smcvt.edu *'They Say We Don't Listen to Our World': Sheri Tepper's Anti-Humanist Vision*

Discussant

- **Tamara Ho**, UC Riverside, tamara.ho@ucr.edu

A-11 JESS Special Issue on American Food Resilience, Part 1: Climate change*Center Hall, Room 218***Presenters**

- **Chair: Gerry Marten**, EcoTipping Points Project, gerrymarten@hawaii.rr.com *An Overview of the JESS Special Issue on American Food Resilience*
- **Laura Lengnick**, Warren Wilson College, lengnick@warren-wilson.edu *The Vulnerability of the U.S. Food System to Climate Change*
- **Dan Keppen**, Family Farm Alliance, dankeppen@charter.net *The 2014 Drought and Water Management Policy Impacts on California's Central Valley Food Production*
- **Michelle Miller**, University of Wisconsin, mmmille6@wisc.edu *The Power of Story for Adaptive Response: Marshaling Individual and Collective Initiative to Create More Resilient and Sustainable Food Systems*

A-12 Activism: Gaining Traction by Engaging Attitudes*Center Hall, Room 220***Presenters**

- **Chair: Crista L. Straub**, Unity College, cstraub@unity.edu. Co-author: Jessica E. Leahy *Theoretical Implications of Household Environmental Behavior Change Using a Private Well Water Testing Context*
- **Francis Eanes**, University of Wisconsin-Madison, feanes@wisc.edu *Rethinking Our Boundaries: Examining Bioregional Identities and Place Attachment as Factors Influencing Environmental Behavior in Great Lakes Coastal Communities*
- **Stacy Rosenberg**, SUNY Potsdam, rosenbsr@potsdam.edu *Promoting Climate Resilient Coastal Watersheds: Engaging Landowners in Climate Adaptation Strategies*
- **Valerie Rountree**, University of Arizona, vroutree@email.arizona.edu *Re-framing Climate Change to Reduce Emissions: Perceptions on Energy Efficiency in Tucson, Arizona*

A-13 The Economic, Policy, and Academic Implications of the Proposed EPA Clean Power Plan (Discussion Symposium)

Center Hall, Room 217B

Facilitator

- **John “Skip” A. Laitner**, Economic and Human Dimensions Research Associates, EconSkip@gmail.com

Discussants

- **Shahid Sheikh**, Intel and the Digital Energy and Sustainability Solutions Campaign, shahid.a.sheikh@intel.com
- **Jim Lazar**, Regulatory Assistance Project, jlazar@raponline.org

Lunch & Roundtable Discussions

12:30pm – 1:30pm

Café Ventanas

R-3 Developing an AESS Lifetime Achievement Award in Environmental Arts

(Mealtime Roundtable, Café Ventanas)

Facilitator

- **Kim Smith**, Carleton College, ksmith@carleton.edu

R-4 Deep Decarbonization Pathways for Russia by the Year 2050

(Mealtime Roundtable, Café Ventanas)

Facilitator

- **John “Skip” A. Laitner**, AESS President-Elect and consultant to the Russian Presidential Academy of National Economy and Public Administration (RANEPa)

Discussants

- **Oleg Lugovoy**, RANEPa, olugooy@gmail.com
- **Vladimir Potashnikov**, RANEPa, potashnikov.vu@gmail.com
- **Andrey Polbin**, RANEPa, apolbin@gmail.com
- **Vera Barinova**, RANEPa, Barinova@iep.ru
- **Tatiana Lanshina**, RANEPa, Lanshina@ranepa.ru

R-5 Food, Energy and Water - Challenges and Opportunities

(Mealtime Roundtable, Café Ventanas)

Facilitator

- **David E. Blockstein**, National Council for Science and the Environment, david@cedd.org

International Studies Association/Environmental Studies Section Lunch for Young Scholars

12:30pm – 2:00pm

Deutz at Institute of the Americas

The ISA/ESS invites young scholars interested in the international arena to a special lunch to meet scholars who integrate international studies and environmental studies. John O. Niles, director of the Carbon Institute, and lecturer at the University of California San Diego, will speak on “International Academic Partnerships and Climate Change.” A box lunch will be served. No fee, but advance registration is recommended to hold your place.

Session B

2:00pm – 3:30pm

Center Hall

B-1 Pedagogies of Environmental Justice: Responding to the Changing Faces and Places of ESS Students

Center Hall, Room 202

Presenters

- **Chair: Amy Knisley**, Warren Wilson College, aknisley@warren-wilson.edu
*Am *I* Environmental? Privileging ‘Privilege’ in Environmental Policy Instruction*
- **Nancy Rich**, Springfield Technical Community College, nrich@antioch.edu
When Students are from Environmentally Unjust Urban Communities: Implications for ESS Teaching
- **Sasha Adkins**, Antioch University New England, sasha.adkins18@gmail.com
Making ESS Relevant—Pedagogical Implications of Class Background
- **Priya Verma**, California Polytechnic University, pverma@calpoly.edu. Co-authors: Karen Vaughan, Elvira Pulitano, Katherine Martin, James Garrett, Douglas D. Piirto
Integrating Indigenous Knowledge and Western Science into Forestry, Natural Resources, and Environmental Programs

B-2 Energy Transition*Center Hall, Room 201***Presenters**

- **Chair: James E. Wilcox**, Rensselaer Polytechnic Institute, wilcox3@rpi.edu
Energy Democracy in America? Competing Imaginaries of Sustainable Energy Transitions
- **Devin Judge-Lord**, Devin.JL@gmail.com
Revisiting the Democratic Case for Environmental Offset Markets
- **John Wickham**, University of Texas at Arlington, wickham@uta.edu
Sustainability: Global Population, Wealth Distribution, & Energy
- **George Messinis**, Victoria Institute of Strategic Economic Studies, George.Messinis@vu.edu.au
Revisiting environmental Kuznets curves (CO2 and SO2) with endogenous breaks modeling for individual OECD countries

B-3 Environmental Psychology, Justice, and Spirituality*Center Hall, Room 203***Presenters**

- **Chair: Thomas Joseph Doherty**, Lewis & Clark Graduate School / Sustainable Self, LLC, tdoherty@lclark.edu
Frontiers in Environmental Psychology: Views from the Ivory Tower and the Green Tower
- **Sarah Lashley**, Centre College, sarah.lashley@centre.edu
They're Not Like Us: Identity, Affiliation, and Collaboration in Environmental Justice Conflicts
- **Lai Ying Yu**, Tufts University, laiying.yu@gmail.com, *The Politics of Environmental Justice and Art: Reading Lorraine Hansberry's A Raisin in the Sun*
- **Amanda Baugh**, California State University Northridge, amanda.baugh@csun.edu
Environmental Attitudes in Religious Communities: A Case from Multi-ethnic Los Angeles
- **Cybelle T. Shattuck**, University of Michigan, scybelle@umich.edu
Crossing the Boundary from Faith to Action

B-4 International and Domestic Policy Linkages: Environmental Impacts*Center Hall, Room 204***Presenters**

- **Chair: Abby Lindsay**, MA, American University, abby.lindsay@american.edu. Co-author: Sikina Jinnah
Environmental Norm Diffusion through Trade Agreements: A New Wave of Environmental Conditionality

- **Richard Mbatu**, University of South Florida – St. Petersburg, mbatu@mail.usf.edu
Linking the global to the national: An application of the international pathways model to examine the influence of international environmental agreements on Cameroon's forest policy
- **Remi Piet**, Qatar University, Remi.Piet@qu.edu.qa
GCC countries' Investments in Food Security Programs in the Middle East and Africa: Challenges and Opportunities
- **Alisa Zomer**, Yale School of Forestry and Environmental Studies, alisa.zomer@yale.edu. Co-author: Angel Hsu
Does measurement matter? Assessing policy impact of the Environmental Performance Index

B-5 Islands and Ecology*Center Hall, Room 206***Presenters**

- **Chair: Lea Kannar-Lichtenberger**, Sydney College of Fine Arts - University of Sydney, leakannar@bigpond.com
There Be Dragons: Human Impact on the Unique Environments of the Galapagos and Lord Howe Islands
- **Michael Schwebel**, Monmouth University and New Jersey Sea Grant Consortium, MSchwebe@monmouth.edu
An AOSIS in the Pacific: Quenching Cooperation or Diluted Deals?
- **Toby Smith**, University of Cambridge Conservation Research Institute - University of the Arts London, toby@shootunit.com
Madagascar, A Treasured Island
- **Lamont (Monty) Hempel**, University of Redlands, hempel@redlands.edu
The Last Invasion: Lessons from Palau

B-6 Transitions in Social and Ecological Systems: From Cities to Smallholders*Center Hall, Room 208***Presenters**

- **Chair: Chad Boda**, Lund University Centre for Sustainability Studies (LUCSUS), chad.boda@lucsus.lu.se
- **Sanjeev Poudel**, Women in Environment (WE), sanjeevdevs@gmail.com
Outcomes of Migration on Sustainable Livelihoods: Case Study of Mali Village of Nepal
- **Diana Tamale Kyazike**, YCWU, ycwuganda@yahoo.com
Vulnerability and effects of climate change to older people in Africa

- **Sandra Valencia**, Lund University Centre for Sustainability Studies (LUCSUS), sandra.valencia@lucsus.lu.se. Co-author: Chad Boda *Challenges and Opportunities of Studying Socio-Ecological Transition Zones*
- **Emma Li Johansson**, Lund University Department of Physical Geography & Ecosystem Sciences and Lund University Centre of Excellence for Integration of Social and Natural Dimensions of Sustainability (LUCID), emma.johansson@nateko.lu.se *Local perceptions of land use change in Tanzania: Using participatory art to reveal the past, present, and future*

B-7 Community-Based Learning Part 1: Challenges & Unpredictabilities of Making the Community Our Classroom

Center Hall, Room 223

Presenters

- **Chair: Francis Eanes**, University of Wisconsin-Madison, feanes@wisc.edu
- **Jane L. Wolfson**, Towson University, jwolfson@towson.edu *Challenges and Opportunities of Utilizing the Model in Community-based Learning*
- **Seaton Tarrant**, University of Florida, seatonius@ufl.edu *Land Use Controversy and the Politics of Student Activism*
- **Julie A. Maxson**, Metropolitan State University, julie.maxson@metrostate.edu *Collaboration for Soil Lead Testing in Community Gardens: a Model for Strong Institutional Support*
- **Keith McDade**, Lenoir-Rhyne University, keith.mcdade@lr.edu *Confronting the Boundaries of a Curriculum: Core Competencies, Program Assessment, and the Management of an MS Program in Sustainability Studies*

B-8 Planning and Documenting Your Interdisciplinary Career

(Discussion Symposium)

Center Hall, Room 205

Presenters

- **Facilitator: David Hassenzahl**, California State University at Chico, dhassenzahl@gmail.com
- **Stephanie Kaza**, University of Vermont, skaza@uvm.edu
- **Kathleen Purvis-Roberts**, W.M. Keck Science Department of Claremont McKenna, Pitzer and Scripps Colleges, KPurvis@kecksci.claremont.edu
- **Nancy Mathews**, University of Vermont, nancy.mathews@uvm.edu

B-9 JESS Special Issue on American Food Resilience, Part 2: The Dynamics of Food Supply Crises

Center Hall, Room 207

Presenters

- **Chair: Gerry Marten**, EcoTipping Points Project, gerrymarten@hawaii.rr.com *The Dynamics of Food System Collapse: Lessons from Crises*
- **Krystyna Stave**, University of Nevada, Las Vegas, krystyna.stave@unlv.edu *A System Dynamics Perspective on Food System Vulnerabilities in Highly Developed Countries: Insights from a Three-stage Conceptual Model*
- **Andrew George Huff**, EcoHealth Alliance, Huff@ecohealthalliance.org *How Resilient is the United States Food System to Influenza Pandemic and What Can Be Done to Improve Resilience?*

B-10 Examining the Effectiveness of Green Infrastructure/Low Impact Development in Addressing Complex Environmental Problems Related to Stormwater and Energy

Center Hall, Room 217A

Presenters

- **Chair: Katherine Meierdiercks**, Siena College, kmeierdiercks@siena.edu *Assessment of the Effectiveness of Green Infrastructure at Improving Water Quality and Reducing Flooding at the Watershed-Scale*
- **Michael H. Simpson**, Antioch University New England, msimpson@antioch.edu *The Role of Green Infrastructure to Mitigate Vulnerability of Water Conveyance Infrastructure Due to a Higher Frequency of More Extreme Precipitation Events*
- **Hildegaard Link**, CUNY Grad Center, hildegaardl@earthlink.net. Co-author: Yehuda L. Klein *The Economics of Green Infrastructure as a Demand Management Strategy*
- **Zahra Golshani**, University of Illinois at Urbana-Champaign, golshani@gmail.com *Residents' Preferences for Adoption of Low Impact Development Practices*

B-11 ESS and Sustainability: Navigating differences and similarities (Part 1)

(Discussion Symposium)

*Center Hall, Room 218***Facilitators**

- **Moderator: Leslie Gray**, Santa Clara University, lgray@scu.edu
- **Christopher M. Bacon**, Santa Clara University, cbacon@scu.edu
- **Kenneth Shockley**, University at Buffalo – SUNY, kennethshockley@gmail.com
- **Julie Nash**, University of Vermont, Julie.Nash@uvm.edu

B-12 Confronting the Boundaries of Science and Society

(Discussion Symposium)

*Center Hall, Room 224A***Facilitators**

- **Moderator: Tricia A. Dutcher**, tmynster@hotmail.com
- **Beth Karlin**, University of California Irvine, bkarlin@uci.edu
- **Candice Carr Kelman**, School of Sustainability, Arizona State University, candice.carr.kelman@asu.edu
- **Paul Manson**, Hatfield School of Government, Portland State University, mansonp@pdx.edu

B-13 Overcoming Uncertainty: Innovative, Interdisciplinary Strategies for Climate and Hazard Planning in Southern California*Center Hall, Room 220***Presenters**

- **Chair: Jeff Crooks**, Tijuana River National Estuarine Research Reserve, jcrooks@trnerr.org
Preparing for Climate Change in a Binational Watershed
- **Juliette Hart**, University of Southern California Sea Grant, jahart@usc.edu
AdaptLA
- **Kim Serrano**, University of California, Irvine, krserra1@uci.edu
FloodRISE
- **Qing Miao**, Syracuse University, qmiao@syr.edu
The Role of Technological Innovation and Social Learning in Disaster Risk Reduction: Evidence from a Cross-National Study on Earthquake Losses

B-14 Understanding and Implementing the UN Post-2015 Sustainable Development Agenda

(Discussion Symposium)

*Center Hall, Room 217B***Facilitators**

- **Magdalena Muir**, AINA, makmuir@ieels.com
- **Wil Burns**, Forum for Climate Energy Assessment, Wil@feronia.org

Discussant

- **Ira Feldman**, University of Pennsylvania and Green Track Strategies, ira@greentrack.com

Coffee & Snack Break*3:30pm**Institute of the Americas Plaza***Session C***4:00pm – 5:30pm**Center Hall***C-1 Community-Based Learning Part 2: Assessing Student Learning Outcomes and Community Impacts***Center Hall, Room 202***Presenters**

- **Chair: Francis Eanes**, University of Wisconsin-Madison, feanes@wisc.edu
- **John Berg**, Suffolk University, johnnberg@verizon.net
Issues in Assessing the Outcomes of a Community-Based Research Project
- **Karen Mumford**, University of Wisconsin Eau Claire, mumforkg@uwec.edu
Multi-level Assessment of Community Engagement Experiences: Assessing Student-, Program- and Community-Level Outcomes
- **David Gosselin**, University of Nebraska-Lincoln, dgosselin2@unl.edu
Preparing Students for the Future through Research-based Service Learning in the Community
- **Martha Richmond**, Suffolk University, mrichmond@suffolk.edu
Assessing Experiential Learning in a Senior Capstone Course Examining Impacts of Environmental Lead on Children in Underserved Boston, MA, Communities

C-2 Activism and Environmental Justice*Center Hall, Room 201***Presenters**

- **Chair: Brinda Sarathy**, Pitzer College, brinda_sarathy@pitzer.edu
- **Travis L. Williams**, Virginia Tech, TravisWPhD@gmail.com
Superfunding Silicon Valley: Anti-Toxics Activism, Technical Expertise, and the Politics of Remediation
- **Heather E. Campbell**, Claremont Graduate University, heather.campbell@cgu.edu. Co-authors: Adam Eckerd, Yushim Kim
Trying to Solve the Environmental Justice Problem: Insight from Agent-Based Modeling
- **Jennifer Liss Ohayon**, University of California, Santa Cruz, johayon@ucsc.edu
Negotiating Absences of Data and Publics: Implications for Translating Environmental Justice into Superfund Policy
- **Ayse Nal**, University of Washington, aysenal@uw.edu
Local Environmental Resistance Movements in Turkey: The Case of Rize

C-3 Energy Transition Barriers*Center Hall, Room 203***Presenters**

- **Chair: Patricia M. DeMarco**, Carnegie Mellon University, Institute for Green Sciences, demarcop6@gmail.com
Three Institutional Barriers to Moving toward Sustainable Practices in Energy, Food, and Chemical Products
- **Ryan Winn**, College of Menominee Nation, rwinn@menominee.edu
Solar Energy System Performance Estimation and Analysis for Making Better Investment Decisions
- **Aiden Irish**, Lyle Center for Regenerative Studies, aideni89@gmail.com
Political Culture Barriers to Sustainable Transportation Development

C-4 Living and Dying in the Anthropocene*Center Hall, Room 205***Presenters**

- **Chair: Mohammed Rabbi**, Valley Forge Military College, MRabbi@vfmac.edu
Perspectives on Planetary Boundaries: A Framework of Safe Operating Space for Humanity in a Changing Planet
- **Mark L. Hineline**, UC San Diego, mhineline@ucsd.edu
Phenology - A Mindful Approach to Climate Change

- **Lisa E. Bloom**, University of California, Los Angeles, lbloom2@mindspring.com
Archives of Knowledge and Endangered Objects in the Anthropocene : Amy Balkin's "A People's Archive of Sinking and Melting"
- **André Francisco Pilon**, University of São Paulo, gaiarine@usp.br
Building an Ecosystemic Model of Culture: Consequences for Public Policies, Research and Teaching Programmes

C-5 Marine and Coastal Conservation*Center Hall, Room 204***Presenters**

- **Chair: George Busenberg**, Soka University of America, gbusenberg@soka.edu
Presidential Nature Conservation and the American National Monuments
- **Simone Pulver**, UC Santa Barbara, pulver@es.ucsb.edu. Co-author: Sherise Saavedra.
Marine Versus Terrestrial Conservation in Papua New Guinea: The Effects of Issue Characteristics on NGO Organizing
- **Diana Mitsova**, Florida Atlantic University, dmitsova@fau.edu. Co-authors: Ravi Shankar, Francis McAfee
Mobile GIS Applications for Coastal Planning
- **Julie Nash**, University of Vermont, julie.nash@uvm.edu. Co-author: Laurent Cartier
Fostering Environmental Collaborations in the Marine Cultured-Pearl Industry

C-6 How Many Is Too Many? The Environmental Argument for Reducing Immigration into the United States: Author Meets Critics Panel

(Discussion Symposium)

*Center Hall, Room 206***Facilitators**

- **Chair: Kenneth Shockley**, University at Buffalo – SUNY, kennethshockley@gmail.com
- **Philip Cafaro**, author of *How Many Is Too Many? The Progressive Argument for Reducing Immigration into the United States* (University of Chicago Press, 2015), Philosophy Department, Colorado State University, philip.cafaro@colostate.edu

Discussants

- **Amy Knisley**, Warren Wilson College, aknisley@warren-wilson.edu
- **Chaone Mallory**, Philosophy Department, Villanova University, chaone.mallory@villanova.edu
- **Ben Zuckerman**, Department of Physics and Astronomy, UCLA, ben@astro.ucla.edu
- **Stuart Hurlbert**, Biology Department, San Diego State University, hurlbert@mail.sdsu.edu

C-7 Cross-boundary Connections in Sustainable Stormwater Policy and Management

(Discussion Symposium)

Center Hall, Room 207

Presenters

- **Chair: Michael Finewood**, Chatham University, mfinewood@chatham.edu
- **Katherine Meierdiercks**, Siena College, kmeierdiercks@siena.edu
The Role of Colleges and Universities in Overcoming Barriers to Green Infrastructure and Other Sustainable Stormwater Initiatives
- **Sara Powell**, Nine Mile Run Watershed Association, sarap@ninemilerun.org
Nine Mile Run: Restoration and Stormwater Challenges in Pittsburgh, PA
- **Andrea Armstrong**, Utah State University, armstrong.usu@gmail.com
Stormwater Governance without Substantive Meaning? Organization Motives and Local Stormwater Policy in Utah

C-8 Engaging Outside of the Academy: A Discussion on Facilitating Collaborative Research with Aboriginal and Non-Aboriginal Communities

(Discussion Symposium)

Center Hall, Room 208

Facilitators

- **Moderator: Annie Booth**, University of Northern British Columbia, Annie.Booth@unbc.ca
- **Scott Green**, University of Northern British Columbia, Scott.Green@unbc.ca
- **Adam Kokotovich**, University of Minnesota, koko0013@umn.edu
- **Bruce Muir**, EMS Consultants, enviro4alba@yahoo.ca

C-9 Multi-Disciplinary Approaches to Mitigating Environmental Health Challenges

Center Hall, Room 217A

Presenters

- **Chairs: Christine Vatovec**, University of Vermont, cvatovec@uvm.edu; **Caroline Scruggs**, University of New Mexico, cscruggs@unm.edu
- **Christine Vatovec**, University of Vermont, cvatovec@uvm.edu. Co-authors: Patrick Phillips, USGS; Emily Van Wagoner; Bret Turner
Pharmaceutical Waste as an Environmental Contaminant: Seeking Points of Intervention
- **Caroline Scruggs**, University of New Mexico, cscruggs@unm.edu. Co-authors: Katie Zemlick; Bruce Thomson
Direct Potable Water Reuse: Confronting Scientific Frontiers and Social and Legal Boundaries

- **Anandi van Diepen-Hedayat**, Portland State University, av5@pdx.edu
Synthesizing Two Applied Research Frameworks to Understand Urban Riverine Access to Pacific Lamprey: The Case of Willamette Falls, Oregon

C-10 Advancing the Integration of Earth System Science within Environmental Studies Curricula: Insights from Complex Systems Theory

(Discussion Symposium)

Center Hall, Room 223

Facilitators

- **Moderator: Jessica M. Kleiss**, Lewis & Clark College, jkleiss@lclark.edu
- **Kate O'Neill**, Roanoke College, oneill@roanoke.edu
- **Jennifer Wells**, California Institute of Integral Studies, jlw350@gmail.com

C-11 Extending the Knowledge Frontier: New Questions, Tools and Knowledge Management Systems

(Discussion Symposium)

Center Hall, Room 217B

Facilitators

- **Moderator: John "Skip" A. Laitner**, Economic and Human Dimensions Research Associates, EconSkip@gmail.com
- **Ed Passerini**, University of Alabama (retired), passerini321@gmail.com
- **Mark C. Trexler**, The Climatographers, mark@climatographer.com

C-12 Understanding and Communication of Change in the Arctic

(Discussion Symposium)

Center Hall, Room 218

Facilitators

- **Moderators: Magdalena Muir**, AINA, makmuir@ieels.com; and **Peter J. Jacques**, University of Central Florida, peter.jacques@ucf.edu

C-13 Alternatives to Fossil Fuels

Center Hall, Room 224A

Presenters

- **Chair: Tanja Srebotnjak**, Harvey Mudd College, tsrebotnjak@gmail.com
- **William Ascher**, Claremont McKenna College, william.ascher@cmc.edu
Deepening Understanding of Environmental Tradeoffs of Alternative Energy Sources

- **Robert Mason**, Temple University, rmason@temple.edu
The Fukushima Crisis: Civil Society and Policy Transitions in Japan and Beyond
- **Eve Andrée Laramée**, Pace University, elaramee@pace.edu
Artistic Research is a Power Tool: Tracking the Legacy of Nuclear Power

C-14 Status Quo, Conflict, and Innovation in the ESS Curriculum

(Discussion Symposium)
Center Hall, Room 220

Facilitators

- **Moderator: James D. Proctor**, Lewis & Clark College, jproctor@lclark.edu
- **Richard L. Wallace**, Ursinus College, rwallace@ursinus.edu
- **Jennifer Bernstein**, University of Hawaii, jennifer.bernstein@gmail.com
- **Michael Maniates**, Yale-NUS College, Singapore, michael.maniates@yale-nus.edu.sg
- **Eric B. Kennedy**, Arizona State University, ericbkennedy@asu.edu

AESS Reception and Business Meeting

5:45pm – 7:00pm

Institute of the Americas Plaza followed by Hojel Auditorium

All AESS members are invited to hear ideas and share thoughts about current and future directions for AESS.

Dinner on Your Own

7:00pm

Tip from the Program Chair: AESS is a great place to meet new people. If you're looking to meet new people for dinner, come to the Registration area at the Institute of the Americas at 7:00pm. Or meet over refreshments and a film or two at Film Night, before or after dinner.

Cafe Ventanas is open for those who want to purchase a meal in the dining hall.

Film Night

7:30pm – 10:30pm

Free and Open to the Public

Hojel Auditorium and Deutz, Institute of the Americas

Several filmmakers and producers will be present for informal discussion. Refreshments served.

Organizer: Monty Hempel, University of Redlands, monty_hempel@redlands.edu

Screening Room 1

Hojel Auditorium at Institute of the Americas

- 7:30pm
OIL & WATER (55 min.); discussion with filmmaker **Francine Strickwerda**, and **Hugo Lucitante**, Ecuadorian Cofan representative. The true story of two boys coming of age as they each confront one of the world's worst toxic disasters.
www.oilandwaterdocumentary.com/about
- 9:00pm
PAD YATRA: A GREEN ODYSSEY (72 min.). A Green Odyssey: the adventure of 700 people trekking across the Himalayas with a call to save the planet's "3rd Pole," a glacial region now devastated by the climate chaos associated with global warming. www.padyatrafilm.com

Screening Room 2

Deutz at Institute of the Americas

- 7:30pm
THE POWER OF ONE VOICE (52 min.). A 50-Year Perspective on the Life of Rachel Carson.
www.powerofonevoicefilm.com
- 8:45pm
THE EIGHTH BILLION (9 min.); discussion with filmmaker Monty Hempel. Examines the intersection of human population growth and the decline of wild places and creatures.
www.blueplanetunited.org/2014/08/01/the-eighth-billion
- 9:00pm
FROM BILLIONS TO NONE (57 min.). The Passenger Pigeon's Flight to Extinction.
www.billionstonone.com
- 10:15pm
RACING EXTINCTION Preview (6 min.). Short clips from a new movie by Academy Award winning director Louie Psihoyos. The film will be released this fall. Louie Psihoyos assembles a team of artists and activists on an undercover operation to expose the hidden world of endangered species and the race to protect them against mass extinction.
www.racingextinction.com

Friday, June 26

Breakfast & Roundtable Discussions

7:30am – 8:30am

Café Ventanas

R-6 Frontiers in Scholarship: What Defines “Excellence” in an Interdisciplinary Academic Career?

(Mealtime Roundtable, Café Ventanas)

Facilitator:

- **Caroline Scruggs**, University of New Mexico, cscruggs@unm.edu

R-7 Two Peas in a Pod: Brainstorming Opportunities to Tear Down Boundaries between the Environment and Human Health

(Mealtime Roundtable, Café Ventanas)

Facilitator:

- **Christine Vatovec**, University of Vermont, cvatovec@uvm.edu

JESS Meeting with AESS Board

7:30am

Deutz at Institute of the Americas

For JESS and AESS Board members only.

Session D & Presentations by Student Award Finalists

9:00am – 10:30am

Center Hall

D-1 Sustainability Education Across Boundaries: A Pedagogy of Complexity

Center Hall, Room 217A

Presenters

- **Chair: Nancy J. Manring**, Ohio University, manring@ohio.edu
- **Will Focht**, Oklahoma State University, will.focht@okstate.edu. Co-author: Steven A. Kolmes
Sustainability Education: A Supradisciplinary, Complexity-based Curricular Framework

- **Susan Caplow**, University of Montevallo, scaplow@montevallo.edu
How Does Interdisciplinary Teaching Differ by Discipline? An Exploration of Experiences at University of Montevallo
- **Jeffrey Ayres**, Saint Michael's College, jayres@smcvt.edu. Co-author: Jonathan Silverman
Building Disciplinary Bridges and Crossing International Borders: The Environmental Study of Sustainable Places in Vermont and Wales
- **Jessica Templeton**, London School of Economics, J.B.Templeton@lse.ac.uk. Co-authors: Max Hnska-Ahy, Neil McLean
Multidisciplinary Teaching in the Social Sciences: Addressing the Challenges of Epistemological Pluralism

D-2 Utilizing Experiential Learning to Engage Underrepresented Minority Students in the Environmental and Natural Resources Fields

Center Hall, Room 204

Presenters

- **Chair: Kazuhiro Sonoda**, Heritage University, sonoda_k@heritage.edu
- **Jessica L. Black**, Heritage University, black_j@heritage.edu. Co-author: Kazuhiro Sonoda
Maximizing University Assets to Engage and Retain Hispanic and Native American Students in Culturally Responsive, Community-based Research: Biochar as a Soil Amendment for a Water-stressed Agricultural Community
- **Aaron Hegde**, California State University, Bakersfield, aaronhegde@gmail.com
Real-world Simulations and Agriculture Classes: A Case Study
- **John F. Cabra**, State University of New York, Buffalo State, cabrajf@buffalostate.edu
Proposing Appreciative Inquiry to Supplement Applied Learning

D-3 Environmental Health

Center Hall, Room 201

Presenters

- **Chair: David J.X. Gonzalez**, Yale University, School of Forestry & Environmental Studies, david.j.x.gonzalez@yale.edu. Co-author: Luis Fernandez
Trends of Mercury Exposure in the Peruvian Amazon: A Systematic Review of Mercury Concentration Studies of Humans and the Environment
- **Joanna Ory**, UC Santa Cruz, jory@ucsc.edu
Reducing Water Pollution from Herbicides through Sustainable Agriculture: An Examination of Agricultural Practices and Farmer Learning

- **Jillian Girard**, Portland State University, jgirard@pdx.edu
Addressing Wicked Problems: When Boundaries Don't Exist and Change Happens
- **Jennifer H. Allen**, Portland State University, jhallen@pdx.edu
Addressing Wicked Problems: When Boundaries Don't Exist and Change Happens

D-4 Marine Conservation as a Wicked Problem

Center Hall, Room 203

Presenters

- **Chair: Simone Borg**, University of Malta, simone.borg@um.edu.mt. Co-author: Alan Deidun
Enhancing Cross Border Conservation: An Implementation Agreement under the 1982 Convention on the Law of the Sea (UNCLOS) for the Conservation of Sedentary Species on the Continental Shelf and the Deep Sea Bed
- **Wil Burns**, Forum for Climate Engineering Assessment, wil@feronia.org
Climate Change's "Evil Twin": The Ramifications of Ocean Acidification and Potential International Responses
- **Richard L. Wallace**, Ursinus College, rwallace@ursinus.edu
Is U.S. Marine Mammal Conservation a Wicked Problem?
- **Tarsha Eason**, US EPA, eason.tarsha@epa.gov. Co-authors: Ahjond S. Garmestani, Heriberto Cabezas
Early Warning of Regime Shifts in Ecological Systems

D-5 Metaphors for the Anthropocene

Center Hall, Room 206

Presenters

- **Chair: Philip D. Brick**, Whitman College, brick@whitman.edu
Rethinking Conservation in the Anthropocene: Castor Canadensis as Leitmotif
- **Rasmus Karlsson**, Ume University, rasmus.karlsson@umu.se
Three metaphors for global sustainability
- **Hee-Yoon Kim**, Hankuk University of Foreign Studies, heeyoon.sarah.kim@gmail.com
Geoengineering: Beyond Green Thinking?
- **Bertrand G. Guillaume**, Max Planck Institute for the History of Science (Germany), bguillaume@mpiwg-berlin.mpg.de
Technological Hubris and the Earth System: Limits beyond Boundaries?
- **Corinne M. Donly**, California Institute of Integral Studies, corinnedonly@gmail.com
Towards an Eco-Narratology: Rethinking Crisis by Resisting Conclusion

- **Victor Petit**, University of Technology, Troyes (France), victor.petit@utt.fr
Technological Hubris and the Earth System: Limits beyond Boundaries?

D-6 Water: Adaptive Management for a Wicked Problem

Center Hall, Room 205

Presenters

- **Chair: Victoria Vesna**, UCLA, vv@ucla.edu. Collaborator: **Claudia Jacques**, SUNY Westchester Community College, cj@claudiajacques.org
Waterbodies.org
- **Brandon Rudroff**, University at Buffalo – SUNY, brudroff@buffalo.edu
Examining the Role of Antecedent Values in the Practice of Adaptive Management
- **Rodrigo De Freitas Espinoza**, UC Berkeley, rfespinoza@gmail.com
The Water Paths: Challenges in the International Debates in Question
- **Elena Maggioni**, University of Southern California, maggioni@usc.edu
Groundwater Management across Borders and Climate Change Adaptation

D-7 Presentations by Finalists in Graduate Student Award Competition

Center Hall, Room 207

Each year AESS gives two awards for AESS Graduate Student Presentations, one for best presentation, and the second for best poster. Graduate students on the shortlist of four abstracts for the presentation award give their presentations at this session (in addition to the panel they are already on). Come support the next generation of AESS scholars!

- **Chair: Kate O'Neill**, University of California at Berkeley, kmoneill@berkeley.edu

D-8 Synthesis: A Research Approach for Studying Socio-Environmental Systems

Center Hall, Room 217B

Presenters

- **Chair: Judy Che-Castaldo**, National Socio-Environmental Synthesis Center (SESYNC), jchecastaldo@sesync.org
- **William Burnside**, National Socio-Environmental Synthesis, bburnside@sesync.org
What is Socio-Environmental Synthesis, and Why Is It Useful for Understanding Environmental Issues?
- **Mary Collins**, National Socio-Environmental Synthesis Center (SESYNC), mcollins@sesync.org
Challenges to Consider When Conducting Socio-Environmental Synthesis?

- **Judy Che-Castaldo**, National Socio-Environmental Synthesis Center (SESYNC),
jchecastaldo@sesync.org
Socio-Environmental Synthesis Case Study: Recovery under the U.S. Endangered Species Act
- **Jampel Dell'Angelo**, National Socio-Environmental Synthesis Center, jdellangelo@sesync.org
Working Together: Research and Water Governance on Mount Kenya

D-9 Leadership in Interdisciplinary Research and Education

Center Hall, Room 218

Presenters

- **Chair: Deana D. Pennington**, University of Texas at El Paso, ddpennington@utep.edu
Integrating Knowledge in Interdisciplinary Environmental and Sustainability Teams
- **Shirley Vincent**, National Council for Science and the Environment, svincent@ncseonline.org
Three Perspectives on Interdisciplinary Environmental and Sustainability Program Leadership: An Analysis of the Views of Program Leaders
- **Rod Parnell**, School of Earth Sciences & Environmental Sustainability, Northern Arizona University, Roderic.Parnell@nau.edu
Meshing Top Down and Bottom Up Decision-making in Campus Sustainability Programs
- **David Gosselin**, dgosselin2@unl.edu
Preparing Students for Collaborative Leadership: Lowering the Walls and Crossing Boundaries Using Business-based Professional Assessments to Develop Interdisciplinary Teams
- **Liam Phelan**, University of Newcastle, Liam.Phelan@newcastle.edu.au. Co-authors: Bonnie McBain, Paul Brown, Valerie Brown, Iain Hay, Richard Horsfield, Ros Taplin, Daniella Tilbury
What Do Graduates from Environmental Programs Need to Know? What Do They Need to Be Able to Do?

D-10 JESS Special Issue on American Food Resilience, Part 3: The Role of Local and Regional Food Systems

Center Hall, Room 208

Presenters:

- **Chair: Gerry Marten**, EcoTipping Points Project, gerrymarten@hawaii.rr.com
An overview of results from the JESS special issue on food resilience and their implications for ways to leverage improvement
- **Laura Lengnick**, Warren Wilson College, lengnick@warren-wilson.edu
Metropolitan Food Webs: A Resilient Solution to the Climate Change Challenge?

- **Nancy Creamer**, North Carolina State University, ncreamer@ncsu.edu
The Local Food Movement, Public-private Partnerships, and Food System Resiliency

D-11 ESS and Sustainability: Navigating differences and similarities (Part 2)

(Discussion Symposium)

Center Hall, Room 223

Facilitators

- **Chair: Leslie Gray**, Santa Clara University, lcgray@scu.edu
- **David Hassenzahl**, Chico State University, dhassenzahl@gmail.com
- **Michael Berger**, Simmons College, michael.berger@simmons.edu
- **Cathy Middlecamp**, University of Wisconsin-Madison, chmiddle@wisc.edu
- **James D. Proctor**, Lewis & Clark College, jproctor@lclark.edu

D-12 Application of Supply Chain Analyses to Assess Indirect Vulnerability to Climate Change: An Assessment of Different Critical Inputs and Outputs of Metro Manila

Center Hall, Room 224A

Presenters

- **Chair: Maria Aileen Guzman**, Ateneo de Manila University, mguzman@ateneo.edu
An Application of Supply Chain Analyses to Assess Indirect Vulnerability to Climate Change: An Assessment of the Water Supply Chain of Metro Manila
- **Abigail Marie T. Favis**, afavis@ateneo.edu
An Application of Supply Chain Analyses to Assess Indirect Vulnerability to Climate Change: An Assessment of the Waste Management Chain of Metro Manila
- **Charlotte Kendra Z. Gotangco**, Ateneo de Manila University, kgotangco@ateneo.edu
An Application of Supply Chain Analyses to Assess Indirect Vulnerability to Climate Change: An Assessment of the Rice Supply Chain of Metro Manila
- **Marion Lara L. Tan**, Ateneo de Manila University, mltan@ateneo.edu
An Application of Supply Chain Analyses to Assess Indirect Vulnerability to Climate Change: An Assessment of the Energy Supply Chain of Metro Manila

D-13 The Role of the Environmental Humanities in Interdisciplinary Environmental and Sustainability Programs

(Discussion Symposium)

Center Hall, Room 220

Facilitator

- **Chair: Sarah K. Mincey**, Indiana University, skmincey@indiana.edu

Discussants

- **Stephanie Kaza**, University of Vermont, skaza@uvm.edu
- **Jim Capsheew**, Indiana University, jcapsheew@indiana.edu
- **Seaton Tarrant**, University of Florida, Sustainability Studies, seatonius@ufl.edu

D-14 Repowering a Sustainable San Diego County Economy through a Comprehensive Renewable Energy Plan

(Discussion Symposium)

Center Hall, Room 224B

Facilitators

- **Chair: John "Skip" A. Laitner**, Economic and Human Dimensions Research Associates, EconSkip@gmail.com
- **Kat A. Donnelly**, Empower Efficiency, kdonnelly@empowerefficiency.com
- **Noah Alvey**, San Diego County, noah.alvey@sdcounty.ca.gov
- **Ryan Keller**, Economic and Human Dimensions Research Associates, rkeller310@gmail.com

Coffee & Snack Break

10:30am

Institute of the Americas Plaza

Exhibition Open

10:30am – 7:30pm

Arango Foyer at Institute of the Americas

Session E

11:00am – 12:30pm

Center Hall

E-1 Academics and Operations: Campus as a Living Learning Lab for Sustainability

Center Hall, Room 220

Presenters

- **Chairs: Nancy Mathews**, University of Vermont, nancy.mathews@uvm.edu; **Cathy Middlecamp**, University of Wisconsin-Madison, chmiddle@wisc.edu
- **Meaghan C. Smith**, The California State University, msmith@calstate.edu
The Campus as a Living Learning Lab (CALL) Initiative: Partnering Faculty and Facilities Management Staff
- **Timothy D. Lindstrom**, University of Wisconsin-Madison, tlindstrom@wisc.edu
Bridging Campus Operations & Academics: Teaching & Learning about Campus Lighting Upgrades
- **Gary J. Hawley**, University of Vermont, gary.hawley@uvm.edu
The Greening of Aiken: A Campus and School Partnership at the University of Vermont

Discussants

- **John H. Perkins**, The Evergreen State College, PerkinsJ@evergreen.edu
- **Thomas Bryan**, University of Wisconsin-Madison, tbryan@wisc.edu

E-2 Broadening Participation in Environmental Biology - Exploring What Works

(Discussion Symposium)

Center Hall, Room 202

Facilitators

- **Chair: John F. Cabra**, State University of New York, Buffalo State, cabrajf@buffalostate.edu
Broadening Participation in Environmental Biology - Exploring What Works
- **Kazuhiro Sonoda**, Heritage University, Sonoda_k@heritage.edu
- **Jessica L. Black**, Heritage University, black_j@heritage.edu

E-3 ESS and Sustainability: Integrative Concepts and Methods

Center Hall, Room 217A

Presenters

- **Chair: Debbie Kasper**, Hiram College, kasperdv@hiram.edu
An Integrated Theoretical Framework for Socio-Environmental Studies
- **Peter Smallwood**, University of Richmond, psmallwo@richmond.edu. Co-author: Stephen Nash, University of Richmond
Advocating Policy as an Educational Tool for Environmental Studies Students

- **Kate O'Neill**, Roanoke College, oneill@roanoke.edu.
Co-author: Daniel D. Richter
The Earth's Critical Zone as an Integrating Theme for Undergraduate ES Courses: Case Study at the Calhoun Critical Zone Observatory
- **Richard Shearman**, Rochester Institute of Technology, richard.shearman@rit.edu
The Environmental Sciences and Ethical Thinking

E-4 Sustainability and Smallholder Farming and Forestry

Center Hall, Room 204

Presenters

- **Chair: Krystyna Stave**, University of Nevada – Las Vegas, krystyna.stave@unlv.edu. Co-authors: Travis Reynolds, Alemayehu Wassie, Tizezew Sisay
What Community Perspectives on the Roles and Rules of Church Forests in Northern Ethiopia Suggest about Conservation Mechanisms
- **Laura Leticia Vega-Lopez**, Universidad Autonoma Chapingo, Mexico, lauralv02@hotmail.com. Co-authors: Emilio Galdeano-Gomez, Laura Piedra-Munoz, Jose Adolfo Zepeda-Zepeda
Efficient Use of Water in Agriculture Model: The Case of Family Farms in Southeast Spain
- **Jose Adolfo Zepeda-Zepeda**, Universidad Autonoma Chapingo, Mexico, zepeda_1@hotmail.com. Co-author: Jesus Hernandez-Rubio
The Socio-Economic Factors and Ecology in Agrarian systems: The Case of Family Farms in Southeast Spain

E-5 Sustainability and Economics in Industry and Organizations (Part 1)

Center Hall, Room 217B

Presenters

- **Chair: Sarah Carvill**, University of California, Santa Cruz, scarvill@ucsc.edu
Financialization Tastes like Spotted Owls: Understanding Divestment in Northern California's Redwood Timber Industry
- **Susan Kask**, Warren Wilson College, skask@warren-wilson.edu. Co-author: Laura Lengnick
Walking Our Talk: Decisionmaking for Sustainability
- **Devin Judge-Lord**, Yale Program on Forest Policy and Governance, Devin.JL@gmail.com. Co-authors: Benjamin Cashore, Constance McDermott
Understanding Change in Forest Certification Standards, at National and International Levels

E-6 Transboundary Environmental Governance on the San Diego/Tijuana Border

Center Hall, Room 201

Presenters

- **Chair: Carolina Prado**, UC Berkeley, c.prado@berkeley.edu
Transborder Movements and Governance on the Tijuana-San Diego Border
- **Kristine T. Taniguchi**, San Diego State University, kristaniguchi@yahoo.com. Co-authors: Napoleon Gudino, Trent Biggs, Carlos Castillo, Eddy Langendoen, Ron Bingner, Encarnacion Taguas, Douglas Liden, Yuan Yongping
Trans-border Hydrology and Sediment Budget of Los Laureles Canyon, Tijuana, MX: Towards Impact Assessment and Mitigation
- **Mark Howe**, International Boundary and Water Commission, mlhowe1@hotmail.com
Archeology, History and Environment at USIBWC: How All work together through the History of the United States - Mexican Border
- **Ash Eliza Smith**, UC San Diego, aes002@ucsd.edu
Edgeland Futurism

E-7 Communities as a Foundation to Sustainable Development

(Discussion Symposium)

Center Hall, Room 206

Facilitators

- **Chair: John "Skip" A. Laitner**, Association for Environmental Studies and Science, skip@energystresstest.com
- **Ed Passerini**, University of Alabama (retired), passerini321@gmail.com
- **Matthew T. McDonnell**, Economic and Human Dimensions Research Associates, matthew.t.mcdonnell@gmail.com
- **Stephanie Pincetl**, UCLA Center for Sustainable Urban Systems, spincetl@ioes.ucla.edu

E-8 Confronting Age Boundaries: Generational Change and the Role of Senior Citizens in Saving the Planet

(Discussion Symposium)

Center Hall, Room 203

Facilitators

- **Chair: Ken Wilkening**, University of Northern British Columbia, ken.wilkening@unbc.ca
- **Mark J. O'Gorman**, Maryville College, mark.ogorman@maryvillecollege.edu
Natural Security and Elder Energy: Reimagining How Elderly Americans Improve Climate Change in Communities

- **David Hassenzahl**, Chico State University, dhassenzahl@gmail.com
- **Gerry Marten**, East-West Center, gerrymarten@hawaii.rr.com
- **Katherine W. Robinson**, University of South Carolina, kwrobin@mailbox.sc.edu

E-9 Revisioning the Anthropocene

Center Hall, Room 205

Presenters

- **Chair: Kimberly Carfore**, California Institute of Integral Studies, kimberly.carfore@gmail.com
Planetary Difference under Erasure: A Post-Structural & Critical Analysis of the Anthropocene
- **David Steinrueck**, California Institute of Integral Studies, dsteinrueck@gmail.com
Immanence and Environmental Ethics
- **Becca Tarnas**, California Institute of Integral Studies, TinuvielOma@gmail.com
Towards An Imaginal Ecology
- **Sam Hinds**, California Institute of Integral Studies, SamTMFM@gmail.com
The Role of Art and Media in Revisioning the Anthropocene

E-10 Transcending Barriers to Engagement: Connecting with Stakeholders and Decision-makers in the California Current

Center Hall, Room 207

Presenters

- **Chair: Ashley Erickson**, Center for Ocean Solutions, ashleye1@stanford.edu
- **Eric Hartge**, Center for Ocean Solutions, ehartge@stanford.edu
Enhancing Agency Capacity as a Boundary Organization
- **Aaron Strong**, Emmett-Interdisciplinary Program in Environment & Resources, Stanford University, alstrong@stanford.edu
Overcoming Barriers to Incorporating Ecosystem Services into Coastal Management: The Case of Coastal Ecosystem Carbon Storage in California
- **Elena Finkbeiner**, Center for Ocean Solutions, elenamf@stanford.edu
Barriers and Opportunities for Stakeholder Engagement in Mexican Small-scale Fisheries
- **Dan Reineman**, Emmett-Interdisciplinary Program in Environment & Resources, Stanford University, d2r@stanford.edu
Surfers as Scientists: Connecting Stakeholders to Resource Management with Citizen-science

E-11 Border-Crossing Pedagogies: Should the World be Our Classroom?

Center Hall, Room 208

Presenters

- **Chairs: Adela Ramos**, Pacific Lutheran University, ramosam@plu.edu; **Sergia Hay**, Pacific Lutheran University, haysk@plu.edu
- **Sergia Hay**, Pacific Lutheran University, haysk@plu.edu
A Defense of Classrooms
- **Matthew Vitz**, University of California, San Diego, mvitz@ucsd.edu
Beyond Borders: Approaches to Fusing Environmental Politics and Environmental History
- **Adela Ramos**, Pacific Lutheran University, ramosam@plu.edu
Writing and Reading Animals: Care and Critical Inquiry in the Composition and Literature Classroom

E-12 Advancing Environmental Research with Q Methodology

Center Hall, Room 218

Presenters

- **Chair: Abby Lindsay**, American University, abby.lindsay@american.edu
- **Will Focht**, Political Science, Oklahoma State University, will.focht@okstate.edu
Q Theory, Method and Technique
- **James S. Gruber**, Department of Environmental Studies, Antioch University New England, jgruber@antioch.edu
Q-Sort Application to Sustainable Forestry- Natural Resource Management
- **Marissa Matsler**, Toulon School of Urban Studies and Planning, Portland State University, a.marissa.matsler@pdx.edu
Using Q-methodology to Explore Ecological Restoration Worldviews in Practice
- **Jeffrey Jenkins**, Department of Environmental Studies, University of California Santa Cruz, jsjenkin@uscs.edu
Rare Earth and the Minerals That Lie Beneath: Competing Perspectives of Nature between Multiple Use Access and Extractive Resource Development in Wyoming's Black Hills

E-13 Urban Agriculture at the Frontiers of Food Access

Center Hall, Room 223

Presenters

- **Chair: Lucy Diekmann**, Santa Clara University, ldiekmann@scu.edu
Promoting Home Food Gardens for Community Benefit: A Case Study from California's Silicon Valley

- **Patrick Hurley**, Ursinus College,
phurley@ursinus.edu
Finding Food Security beyond Gardens and Cultivars in the City
- **Antoinette WinklerPrins**, Johns Hopkins University, antoinette@jhu.edu
Global Urban Agriculture: Convergence of Theory and Practice between North and South
- **Leslie Gray**, Santa Clara University, lgray@scu.edu
The Barriers to and Benefits of Urban Agriculture in North America
- **Chenin Treftz**, University of Nevada, Reno, chenin.treftz@gmail.com
Hydroponics: One Step Backward and Two Steps Forward for Sustainable Food Production in Arid and Urban Environments

E-14 Facing the Reality of Ocean Acidification and Doing Something About It

(Discussion Symposium)
Center Hall, Room 224A

Facilitators

- **Moderator: Bob Greene**, Thorium Energy Alliance of Silicon Valley, bobgreenephd@gmail.com
- **Alex Cannara**, Thorium Energy of Silicon Valley, cannara@sbcglobal.net
- **Ripudaman Malhotra**, SRI International, ripudaman.malhotra@sri.com

E-15 Reflecting on 30 Years of Collaborative Teaching Across Disciplines in the Graduate Program on the Environment at The Evergreen State College

(Discussion Symposium)
Center Hall, Room 224B

Facilitators

- **Moderator: Martha Henderson**, The Evergreen State College, mhenders@evergreen.edu
- **Kevin Francis**, The Evergreen State College, francisk@evergreen.edu
- **Kathleen Saul**, University of Delaware, saulk@evergreen.edu
- **Erin Martin**, The Evergreen State College, ellise@evergreen.edu
- **Shangrila Joshi Wynn**, The Evergreen State College, wynns@evergreen.edu

Box Lunch & Afternoon Field Trips

12:30pm – 5:30pm

Institute of the Americas Plaza

Field trip participants should pick up their box lunches and meet their trip leader in the IOA Plaza between 12:30pm and 12:50pm. Trip leaders will show participants where their bus is (in front of the Plaza and down some steps). **Buses will leave at 1:00pm.**

T-1 Tijuana River National Estuarine Research Reserve Tour

T-2 Natural History and Resource Management at Torrey Pines State Reserve

T-3 Stuart Art Collection: Walking Tour of UC San Diego's Site-Specific Works

T-4 Award-winning Green Energy: UC San Diego's Microgrid

T-5 San Diego Roots Sustainable Food Project: Farm and Educational Center Tour *[cancelled]*

T-6 Kayak Tour of La Jolla Cove

T-7 San Diego's Multiple Species Conservation Program: Planning for Smart Growth and Environmental Protection

T-8 Craft Breweries of San Diego

T-9 Photovoltaic-powered Electrical Training Facility Tour *[cancelled]*

T-10 Coast to Cactus Ecosystem Tour

Exhibitors

5:30pm – 7:30pm

Arango Foyer at Institute of the Americas

Artist Slideshow

Images of works by AESS 2015 Featured Artists

5:30pm – 7:30pm

Arango Foyer at Institute of the Americas

Poster Session (set up at 5:30pm)

6:00pm - 7:30pm

Deutz at Institute of the Americas

P-1 Correlates of Native and Invasive Ant Abundance and Richness in Central California Urban Gardens

- Rhianna Hruska, The Evergreen State College, hrurhi22@evergreen.edu. Co-authors: Stacy Philpott, Peter Bichier

P-2 Measuring Sustainability: Microbreweries

- Kelly Krusoe, Rollins College, kkrusoe@rollins.edu

P-3 The Re-Integration of Learning Styles into STEM Research Through the Context of Solar Energy and Climate Literacy

- Ryan Winn, College of Menominee Nation, rwinn@menominee.edu

P-4 A Typology of Citizen Science Programs: How Does the Nature of the Resource Being Monitored Influence Program Methods and Outcomes?

- Sarah Chase, San Diego State University, schase@rohan.sdsu.edu. Co-author: Arielle Levine

P-5 Using Art as a Medium for Communicating Research: Lessons from The Social Rules Project

- Paul F. Steinberg, Harvey Mudd College, paul_steinberg@hmc.edu

P-6 Cultural Landscapes of Coastal Baja California Sur: Stability Amidst Change

- Antoinette WinklerPrins, Johns Hopkins University, antoinette@jhu.edu. Co-authors: Gerardo Bocco, Pablo Alvarez, Ileana Espejel

P-7 Development of the Carbon Athletic Conference

- Sadie L. Stuart, Allegheny College, stuartsl@allegheny.edu

P-8 Learning, Place, and Ethics: An Arts, Humanities, and Environmental Science Interpretive Experience in the HJ Andrews Experimental Forest

- Lissy Goralnik, Oregon State University, lissy.goralnik@oregonstate.edu. Co-author: Michael Paul Nelson

P-9 Interannual Variability of Summertime Aerosol Optical Depth over East Asia During 2000-2011: A Potential Influence from El Niño Southern Oscillation

- Yikun Liu, University of Pennsylvania, liuyikun@sas.upenn.edu. Co-authors: Junfeng Liu, Shu Tao

P-10 Teaching Environmental Research by Doing It in an Entry-level Course

- Eric Pallant, Allegheny College, epallant@allegheny.edu. Co-authorz: Beth Choate; Brittany Davis; Ben Haywood; Casey Bradshaw-Wilsone

P-11 Salience of Changing Environmental Conditions to Traditional Resource-based Recreation: Ice Fishing in Upstate New York

- Matthew J. Porter, Siena College, mj31port@siena.edu. Co-author: Jean Mangun

P-12 Bridging Disciplines to Offer an Interdisciplinary Certificate of Study in Sustainable Food Systems

- Melissa Burlingame, Northern Illinois University, mburlingame@niu.edu

P-13 A Temporal Consideration of the Efficacy of Education-Based Solutions to Environmental Challenges

- Yoon Soo Shin, The Hotchkiss School, suzyshin1010@gmail.com

P-14 Civic and Moral Responsibility for Diverse, Equitable, Healthy, and Sustainable Communities

- Robert W. Franco, Kapi'olani Community College, University of Hawaii, bfranco@hawaii.edu

P-15 Natural Systems Design for Transboundary Ecosystem Conservation

- Oscar Romo, Alter Terra, oromo@ucsd.edu. Co-author: Jennifer Hazard

P-16 Modeling the Relationship between Conflict, Health of the Environment, and Quality of Life

- Sarah J. Becker, US Army Corps of Engineers, Sarah.J.Becker@usace.army.mil
Co-authors: Michelle C. Hamilton, Swathi Veeravalli, Demetra Voyadgis, Heather A. Speight

P-17 A Cross-country Analysis of the Impact of Climate Change on the Water-Energy Nexus

- Yehuda L. Klein, Brooklyn College and NOAA-CREST, yklein@brooklyn.cuny.edu. Co-authors: M. Hildegaard Link, Shivani Sharma

P-18 Mercury Exposure and Risk Among Women of Childbearing Age in Urban Communities of Madre de Dios, Peru

- David J.X. Gonzalez, Yale University, School of Forestry and Environmental Studies, david.j.x.gonzalez@yale.edu

P-19 Comparison of Carbon Sequestration Methodologies in Texas

- Suzzanne Gamboa, St. Edward's University, sgamboa@stedwards.edu
Erica Joelson, St. Edward's University, ejoelson@stedwards.edu. Co-authors: Michael Wasserman, Christina McGlew

P-20 "How l'eau Can They Go?" A Time Series Analysis of Cooperation in the Equitable Management, Use, and Allocation of Transboundary Freshwater Resources in the Middle East

- Kuyer J. Fazekas, Jr., Wright State University, kuyer.fazekas@gmail.com

P-21 Seeing is Believing: Exploring Land Use/Land Cover Change in the Southern Piedmont using Virtual Field Trips

- Kate O'Neill, Environmental Studies Program, Roanoke College, oneill@roanoke.edu
Co-author: Daniel D. Richter

P-22 Teaching the Food System from an Institutional Perspective

- Diana Watts, Trinity Washington University, wattsd@trinitydc.edu

P-23 Numerical Modeling of Latest Pleistocene Glacier Mass Balance and Ice Flow in Baker Creek, Great Basin National Park, Nevada

- Agnes M. Link-Harrington, SUNY Geneseo, aml28@geneseo.edu
Co-author: Benjamin J.C. Laabs

P-24 Effects of Altered Precipitation on Ecosystem Processes in Coastal Sage Scrub

- Ellen Esch, University of California San Diego, eesch@ucsd.edu
Co-author: Elsa Cleland

P-25 Reliable Sources: Increasing Ecological Literacy for Non-science Majors through Analysis of Scholarly and Popular Articles

- Jean Mangun, Siena College, jmangun@siena.edu

P-26 Understanding Energy as Work Rather Than Commodities Merely Sold on the Market

- John "Skip" A. Laitner, Economic and Human Dimensions Research Associates, EconSkip@gmail.com

P-27 Enrichment of Environmental Science and Climate Change Education through Urban Forest Tree Inventory

- Shobha Sriharan, Virginia State University, sriharan@vsu.edu
Co-authors: Nasser Ghariban, Gregory E. Frey, Marcus M. Comer

Banquet, Presentation of Freudenburg Lifetime Achievement Award, Performance

7:30pm – 10pm

Institute of the Americas Plaza

Performance of "Awake," a new play by Jennifer Joy

Presentation of Freudenburg Lifetime Achievement Award to Walter A. Rosenbaum, Editor-in-Chief, Journal for Environmental Studies and Sciences; Director Emeritus, Bob Graham Center for Public Service, Professor of Political Science Emeritus, University of Florida

Saturday, June 27**Breakfast**

7:30am – 8:30am

*Café Ventanas***AESS Board Meeting (Board members only)**

7:30am – 9:00am

Deutz at Institute of the Americas

Session F

9:00am – 10:30am

Center Hall

F-1 Using Case Studies to Break Down Barriers in Students' Understanding of Social-Environmental Systems

Center Hall, Room 201

Presenters

- **Chair: Cynthia Wei**, National Socio-Environmental Synthesis, cwei@sesync.org
Enhancing Student Understanding of Socio-environmental Systems with Interdisciplinary Synthesis and Case Studies
- **Kate Mulvaney**, kate.mulvaney@gmail.com. Co-authors: Simone Pulver, Clare Ryan, Yen-Chu Weng
Using System Maps to Analyze Complex Social-environmental Issues: A Case Study of Geoduck Aquaculture in the Puget Sound
- **Simone Pulver**, University of California - Santa Barbara, pulver@es.ucsb.edu
Critical Thinking Using a Socio-environmental Framework
- **Emilie Stander**, Raritan Valley Community College, emilie.stander@raritanval.edu. Co-author: Myla Aronson
Designing an Urban Green Infrastructure Network: Balancing Biodiversity and Stakeholder Needs
- **Dustin Mulvaney**, San Jose State University, dustin.mulvaney@sjsu.edu
Energy Literacy Activities to Explore Socioecological Vulnerability and Resilience in Renewable Energy Transitions
- **Yen-Chu Weng**, University of Washington, yweng@uw.edu
Using System Maps to Analyze Complex Social-environmental Issues: A Case Study of Geoduck Aquaculture in the Puget Sound
- **Clare M. Ryan**, University of Washington, cmryan@uw.edu
Using System Maps to Analyze Complex Social-environmental Issues: A Case Study of Geoduck Aquaculture in the Puget Sound

F-2 Retooling Student Engagement with Environment through Empowering Education

Center Hall, Room 202

Presenters

- **Chair: Nirav S. Patel**, Cornell University, nsp6@cornell.edu. Co-author: Richard C. Stedman
Renewable Energy Education: Does It Impact Students' Perception of Climate Change? Does Environmental Education Alter Students' Attitudes towards Environment?

- **Mark Collins**, University of Pittsburgh, mookie@pitt.edu
Sustainability Flash Lab—or "Why is There a Furnace in the Middle of the Classroom?"
- **Ian Peisner**, University of Utah, ian.peisner@utah.edu
Teaching for Psychological Wellbeing: Collective Action Roles and Student Empowerment
- **Kirk S. Lawrence**, St. Joseph's College, klawrence@sjcny.edu. Co-authors: S. Suzanne Franck; David Moisan
Contributing to Environmental Public Policy: A Survey on Single-Use Plastic Bags

F-3 Fossil Fuel Policy: Air, Water and Health Impacts

Center Hall, Room 203

Presenters

- **Chair: Tanja Srebotnjak**, Harvey Mudd College, tsrebotnjak@gmail.com. Co-author: Miriam Rotkin-Ellman
Pollution and Health Threats Associated with Oil and Gas Development in California
- **Todd Metcalfe**, Syracuse University, tmetcalf@syr.edu
Local Effects of Regulation on Global Pollutants: What Health Benefits Can Be Attributed to the Regional Greenhouse Gas Initiative and Who Benefits?
- **Laura Stroup**, Saint Michael's College, lstroup@smcvt.edu
Expansion of U.S. Energy Production: Greener or Just Meaner?
- **Nick Schroeck**, Wayne State University Law School, nschroeck@wayne.edu
Petcoke in an urban transnational environment: A community based participatory model

F-4 Neuroscience

Center Hall, Room 204

Presenters

- **Chair: Elan Liss Ohayon**, Green Neuroscience Laboratory, NeuroInx Research Institute, ohayon@greenneuro.org. Co-author: Ann Lam
The Ecology of Green Neuroscience: On the Judicious Breakdown and Construction of Boundaries, Borders and Firewalls
- **Ann Lam**, Green Neuroscience Laboratory, NeuroInx Research Institute, lam@greenneuro.org. Co-author: Elan Liss Ohayon
Integrating the Neurosciences into Social and Environmental Landscapes
- **Russell A. Butkus**, University of Portland, butkus@up.edu
Epigenetics, Environmental Exposures, and the Common Good

- **Steven A. Kolmes**, University of Portland, kolmes@up.edu
Epigenetics, Environmental Exposures, and the Common Good
- **Nik Sawe**, Stanford University, sawe@stanford.edu.
Co-author: Anshuman Sahoo
The Neuroscience of Environmental Decision-Making

F-5 Sustainability and Economics in Industry and Organizations (Part 2)

Center Hall, Room 206

Presenters

- **Chair: Georgia Piggot**, University of British Columbia, gpiggot@mail.ubc.ca
The Institutional Logics Behind Organizational Greening Efforts
- **Steven Gable**, Trinity Washington University, gablesteven@hotmail.com
An Aristotelian Synthesis of Environmental Responsibility and Corporate Profitability
- **Diana Watts**, Trinity Washington University, wattsd@trinitydc.edu
The Sustainable Corporation: From Villain to Hero?

F-6 Teaching Political Ecology

Center Hall, Room 205

Presenters

- **Chair: Richard L. Wallace**, Ursinus College, rwallace@ursinus.edu
- **Teresa Lloro-Bidart**, California State University, Chico, tlloro-bidart@csuchico.edu
Teaching the Political Ecology of Environmental Knowledge Production with Citizen Science
- **Michael Finewood**, Chatham University, finewood@gmail.com
Teaching and Learning the Political Ecology of Water Through Community-Based Projects
- **Patrick Hurley**, Ursinus College, phurley@ursinus.edu
Confronting Landscapes of Privilege and Greening Uneven Development
- **Laureen Elgert**, Worcester Polytechnic Institute, lelgert@wpi.edu
Producing Sustainability through Eco-labels: Teaching Critical Social Science Approaches to Knowledge and Governance through Political Ecology

F-7 Debating Carbon Offsets

Center Hall, Room 207

Presenters

- **Chair: Abby Lindsay**, American University, abby.lindsay@american.edu

- **Mark C. Trexler**, The Climatographers, mark@climatographer.com
Carbon Offsets: End or Means?
- **Aaron Strong**, Emmett Interdisciplinary Program in Environment and Resources, alstrong@stanford.edu
Offsets in Practice and Offsets Emergent: What Scientific Criteria Are Used to Judge the Environmental Integrity of Offsets?
- **Cecilia Danks**, Rubenstein School of Environment and Natural Resources, University of Vermont, cdbanks@uvm.edu
Institutional Preferences for Carbon Offsets
- **Celina Szymanski**, Appalachian State University, szymanskicl@email.appstate.edu. Co-authors: Tatyana Ruseva, Eric Marland, Jason Hoyle, Gregg Marland, Tammy Kowalczyk, and Laurel Bates
Participation in California's Forest Carbon Offset Program: Motivations and Barriers

F-8 Ecological Science Fiction and Sustainability Transitions Panel (Part 2)

Center Hall, Room 217A

Presenters

- **Chair: Kate O'Neill**, University of California at Berkeley, kmoneill@berkeley.edu
- **Alastair Iles**, University of California, Berkeley, iles@berkeley.edu
Sameness and Diversity in Making Transitions to Sustainability: Insights from Ecological Science Fiction
- **Irene Morrison**, UC Riverside, mmorr013@ucr.edu
Combating Malthus in the classroom with Atwood's MaddAddam
- **Ronnie D. Lipschutz**, UC Santa Cruz, rlipsch@ucsc.edu
Utopia or Catastrophe? Reflections on the 40th Anniversary of Ecotopia's Publication

Discussant

- **Michael Maniates**, Yale-NUS College, Singapore, michael.maniates@yale-nus.edu.sg

F-9 Redesigning ESS Programs for the Anthropocene

(Discussion Symposium)

Center Hall, Room 217B

Facilitators

- **Moderator: Jon Rosales**, St. Lawrence University, jrosales@stlawu.edu
- **Susan Caplow**, University of Montevallo, scaplow@montevallo.edu
- **Tee Guidotti**, University of Ottawa, tee.guidotti@gmail.com
- **Liam Phelan**, University of Newcastle, Liam.Phelan@newcastle.edu.au

F-10 Wildlife*Center Hall, Room 208***Presenters**

- **Chair: Jeff Yule**, Louisiana Tech University, jyule@latech.edu
Reconciling Late Pleistocene, Anthropocene, and Other Extinction Labels: Navigating Extinction Borders and Why that Navigation Matters
- **Peter Kimball Brewitt**, Wofford College, brewittpk@wofford.edu
Return of the Red Wolf
- **Gautam Sethi**, Bard Center for Environmental Policy, sethi@bard.edu
Slow Loris Trade in Vietnam: Examining Drivers and Trade Networks
- **Ajay Sarangdevot Singh**, The Ohio State University, singh.353@osu.edu
Can We Assess Our Tolerance of Grey Wolves? A Presentation of Results of a National Survey
- **Katherine Orrick**, Columbia University, kdo2110@columbia.edu
Roads and African Elephants in a Small South African Reserve: Understanding the Impacts of Roads on Space Use of Wildlife

F-11 Confronting the Boundaries: A Bio-physical Economic Assessment of Lake Buhi, Camarines Sur*Center Hall, Room 218***Presenters**

- **Chair: Maria Aileen Guzman**, Ateneo de Manila University, mguzman@ateneo.edu
- **Jayson Baldesco**, jayson_baldesco@yahoo.com. Co-authors: M. Guzman, J. R. Unson, S. Salmo, T. Perez, J. Plopenio
Assessment of the Fish Abundance and Distribution of Lake Buhi
- **Alvin Baloloy**, alvin.quibbler@yahoo.com. Co-authors: M. Guzman, S. Salmo, J. R. Unson, T. Perez, J. Plopenio
Plankton Species and Lake Productivity
- **Carissa Quintana**, carissapquintana@gmail.com. Co-authors: M. Guzman, J. R. Unson
Community Beliefs about Reasons for Fish Kills
- **Alyana Rodriguez**, yani.patrice@gmail.com. Co-authors: M. Guzman, K. Gotangco
Simulation and Modeling of Rain Events to Determine Nutrient Run-off into Lake Buhi

F-12 Regenerating Wetlands to Support Biodiversity and Human Welfare*Center Hall, Room 223***Presenters**

- **Chair: Joseph Vincent Siry**, Rollins College, jsiry@rollins.edu
All Wetlands Are Treasures But Coastal Wetlands Are Defenses Against the Sea
- **Kristen Van Hooreweghe**, SUNY Potsdam, vanhookl@potsdam.edu
Hurricane Sandy's Devastating Consequences for Jamaica Bay
- **Amber L. Pitt**, Bloomsburg University, amberlpitt@gmail.com
Wildlife Ecology and the Clean Water Act: Amphibian Movements and Habitat Use Indicate Biological Connectivity Among Water Bodies
- **Amy Knisley**, Warren Wilson College, aknisley@warren-wilson.edu
Which Waters Is Waters? An Epistemological Face-Off Between Science and the Law

F-13 Collaborative Research*Center Hall, Room 220***Presenters**

- **Chair: Whitney Lash Marshall**, SUNY-ESF, wglash@esf.edu. Co-author: Kenneth Shockley
Navigating Complexity and Overcoming Barriers to Collaboration in Interdisciplinary Research Team
- **Kenneth Shockley**, University at Buffalo – SUNY, kennethshockley@gmail.com. Co-authors: Whitney Lash Marshall; Paul Hirsch
Contribution and Collaboration: Shared Projects and Shared Values
- **Adam Kokotovich**, University of Minnesota, koko0013@umn.edu
Protecting Wild Rice from Genetic Engineering: A Collaboration to Reconceive Scientific Research

Coffee & Snack Break*10:30am**Institute of the Americas Plaza*

Session G

11:00am – 12:30pm
Center Hall

G-1 Fisheries

Center Hall, Room 201

Presenters

- **Chair: Jennifer E. Telesca**, Pratt Institute, jtelesca@pratt.edu
- **Peter J. Jacques**, University of Central Florida, peter.jacques@ucf.edu
The Political Economy of Fishery Collapse
- **Adam Kokotovitch**, University of Minnesota, koko0013@umn.edu. Co-author: David Andow
How to Prevent Harm: Exploring Conflicts within Invasive Asian Carp Management
- **Jennifer E. Telesca**, Pratt Institute, jtelesca@pratt.edu
"Save Bluefin Tuna Now!": Narratives of Crisis in the Quest for Environmental Justice

G-2 Consumer Energy Interfaces Lab: Creating and Investigating Community-Level Eco-Feedback

Center Hall, Room 203

Presenters

- **Chair: Angela Sanguinetti**, University of California, Davis, angelasanguinetti@gmail.com
- **Kiernan Salmon**, University of California, Davis, kmsalmon@ucdavis.edu
Campus Eco-Feedback Systems
- **Justin Woodjack**, University of California, Davis, jwoodjack@gmail.com
SESEME: A Social Energy Sensing Monument
- **Tim Stapleton**, University of California, Davis, tkstapleton@ucdavis.edu
Practice What You Preach: Eco-feedback for Energy Researchers

G-3 Interdisciplinary Avenues to Expanding Awareness of Human-Environment Interconnections

(Discussion Symposium)
Center Hall, Room 205

Facilitators

- **Moderator: Gary Silverman**, UNC Charlotte, gsilver1@unc.edu
- **Barbara Goldoftas**, Clark University, bgoldoftas@gmail.com
- **Christine Vatovec**, University of Vermont, cvatovec@uvm.edu

- **Bhavna Shamasunder**, Occidental College, bhavna@oxy.edu
- **Sally M. Kane**, University of New South Wales, School of Community Medicine and Public Health, smkane55@gmail.com

G-4 Perception Creates Reality on the Border: Border Walls and the Environmental Impacts of Ideology

Center Hall, Room 207

Presenters

- **Chair: Stefanie Herweck**, University of Texas Pan American, herwecksr@utpa.edu
The Extinction of Experience in a Border Security Zone
- **Scott Nicol**, South Texas College, annikadel@hotmail.com
Waiving Environmental Laws in the Border Zone: The Privileging of Enforcement over Ecosystems
- **Jill Holslin**, San Diego State University, jholslin01@gmail.com
Paths and Edges: Global South Itineraries and the Border Wall in Tijuana-San Diego
- **Ruth Wallen**, Goddard College, rwallen@ucsd.edu
Staying in Place: Appropriate Boundaries in the San Diego/Tijuana Region

G-5 Geoengineering: The New Frontier of Climate Policy Making?

Center Hall, Room 217A

Presenters

- **Chair: Wil Burns**, Forum for Climate Engineering Assessment, wil@feronia.org
Climate Geoengineering and Considerations of Intergenerational Equity
- **Mark Trexler**, The Climatographers, mark@climatographer.com
Geoengineering: Risk or Risk Management? Depends on Your Baseline
- **Simon Nicholson**, American University, simon.nicholson@american.edu
Why the Silence? Environmental NGOs, SRM, and Implications for Climate Politics
- **Michael Thompson**, Forum for Climate Engineering Assessment, michael@dcgeoconsortium.org.
Why the Silence? Environmental NGOs, SRM, and Implications for Climate Politics
- **Rachael Somerville**, American University, rs6495a@student.american.edu
Why the Silence? Environmental NGOs, SRM, and Implications for Climate Politics

G-6 Preparing Change Agents: Teaching to the BIG Question with First and Second Year Experiences

Center Hall, Room 218

Presenters

- **Chair: Robert W. Franco**, Kapi'olani Community College, University of Hawaii, bfranco@hawaii.edu
- **Krista Hiser**, Kapi'olani Community College, University of Hawaii, hiser@hawaii.edu
Preparing Change Agents: English 100 and Postapocalyptic Literature
- **Carl Jennings**, Kapi'olani Community College, University of Hawaii, cjenning@hawaii.edu
Preparing Change Agents: Creative and Interdisciplinary Thinking
- **Wendy Kuntz**, Kapi'olani Community College, University of Hawaii, wkuntz@hawaii.edu
Preparing Change Agents: Environment and Ecology

G-7 Relationships Between Animal Welfare and Environmental Sustainability

Center Hall, Room 204

Presenters

- **Chair: Susan Caplow**, University of Montevallo, scaplow@montevallo.edu
Specifying the Value-belief-norm Framework for Animal-themed Education
- **Jane I. Dawson**, Connecticut College, jidaw@conncoll.edu
Climate and CAFOs: Opportunities and Obstacles for Cooperation among the Environmentalist, Animal Welfare and Sustainable Agriculture Movements
- **Emily Vincent**, DePauw University, emilyvincent_2015@depauw.edu
The Feral Cat Conundrum: Assessing the Science and Ethics of Trap-Neuter-Return
- **Stephen Vrla**, Michigan State University, svrla@msu.edu
The Values of Animals in Education: The Hidden Curriculum of the BIG Zoo Lesson

G-8 Campus Sustainability

Center Hall, Room 217B

Presenters

- **Chair: Eric Pallant**, Allegheny College, epallant@allegheny.edu. Co-authors: Kelly Boulton, Casey Bradshaw Wilson
How to Save 10% on the All-college Electric Bill
- **Jeffrey Cooper DePew**, Webster University, jcdepew@earthlink.net
The Validity of Bio-Retention Ponds as 'Natural Areas'; Transboundary Pollution Mitigation; and Sources of Environmental Education and Research

- **Ariel R. Marsh**, California State Polytechnic University Pomona, a.marsh2010@gmail.com
Zero Waste Basketball Season: A Grassroots Effort
- **Beth Choate**, Allegheny College, bchoate@allegheny.edu. Co-authors: Brittany Davis, Ian Carbone, Eric Pallant
Water Pong Works

G-9 ESS Pedagogy: Art and Science

Center Hall, Room 220

Presenters

- **Chair: Kaye Savage**, Wofford College, savageks@wofford.edu. Co-author: Kristofer M. Neely
Art & Earth: A STEAM Course Collaboration
- **Vikki L. Rodgers**, Babson College, vrodgers@babson.edu. Co-author: Danielle Krcmar
Bridging the Boundaries of Art, Science, and Business: Integrating Botanical Art Perspectives into a Science Class for Business Students
- **Monty Hempel**, University of Redlands, monty_hempel@redlands.edu
The Eighth Billion
- **Peg Boulay**, Environmental Leadership Program, University of Oregon, boulay@uoregon.edu. Co-authors: Katie Lynch, Davita Flowers-Shanklin
Images and Imagination: Photography in the Classroom and Community
- **David Storey**, Boston College, storeyd@bc.edu
Integrating Multiple Perspectives on Environmental Problems: An Experiment in Environmental Pedagogy and the Value of Philosophy for Environmental Studies

Lunch & Closing Keynote

12:30pm

Institute of the Americas Plaza followed by Hojel Auditorium

How Congress Can Impact Climate Change

- **Congressman Scott Peters**, United States Representative, 52nd District of California

Adjourn

2:00pm

Exhibitors

AESS thanks all of our exhibitors. Please support them by visiting their displays, purchasing a book, picking up literature, learning about their programs!

Location: Arango Foyer at the Institute of the Americas (IOA)

Hours: Thursday, June 25
10:00am - 6:00pm

Friday, June 26
10:30am - 7:30pm

Cornell University Press | www.cornellpress.cornell.edu

University of Michigan - School of Natural Resources and Environment | www.snre.umich.edu

The MIT Press | www.mitpress.mit.edu

National Council for Science and the Environment | www.ncseonline.org

Scientists and Environmentalists for Population Stabilization | www.populationstabilization.org

Springer | www.springer.com

The University of Vermont Environmental Program | www.uvm.edu/envprog

Yale School of Forestry & Environmental Studies | www.environment.yale.edu

Artists Slideshow | *Images of works by AESS 2015 Featured Artists*

Environmental Art and Sciences Grab Bag

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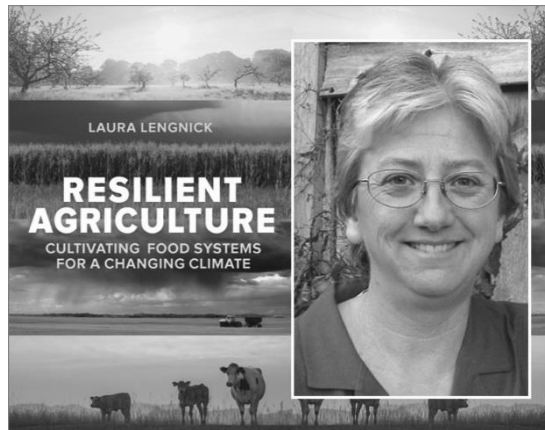
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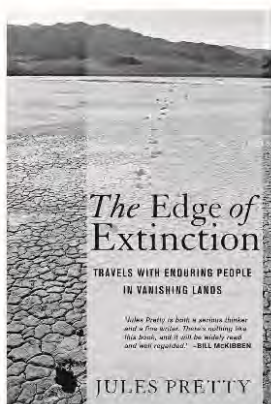
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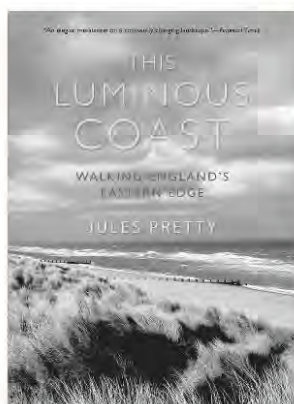
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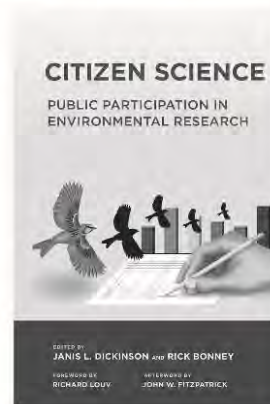
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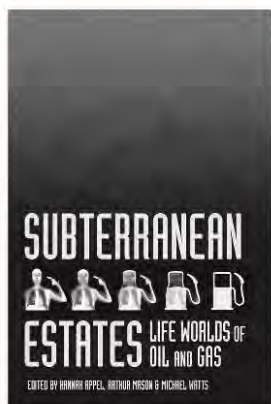
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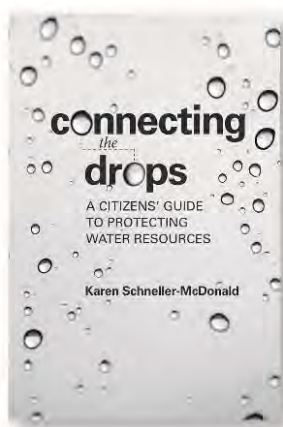
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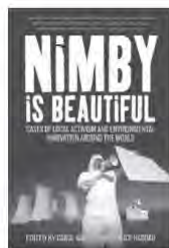
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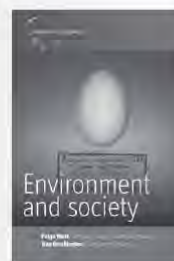
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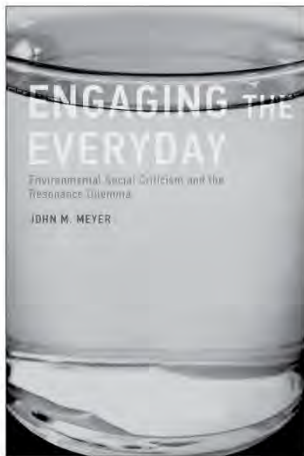
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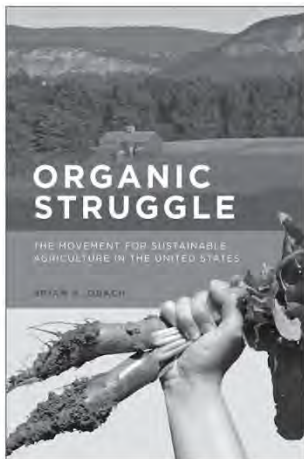
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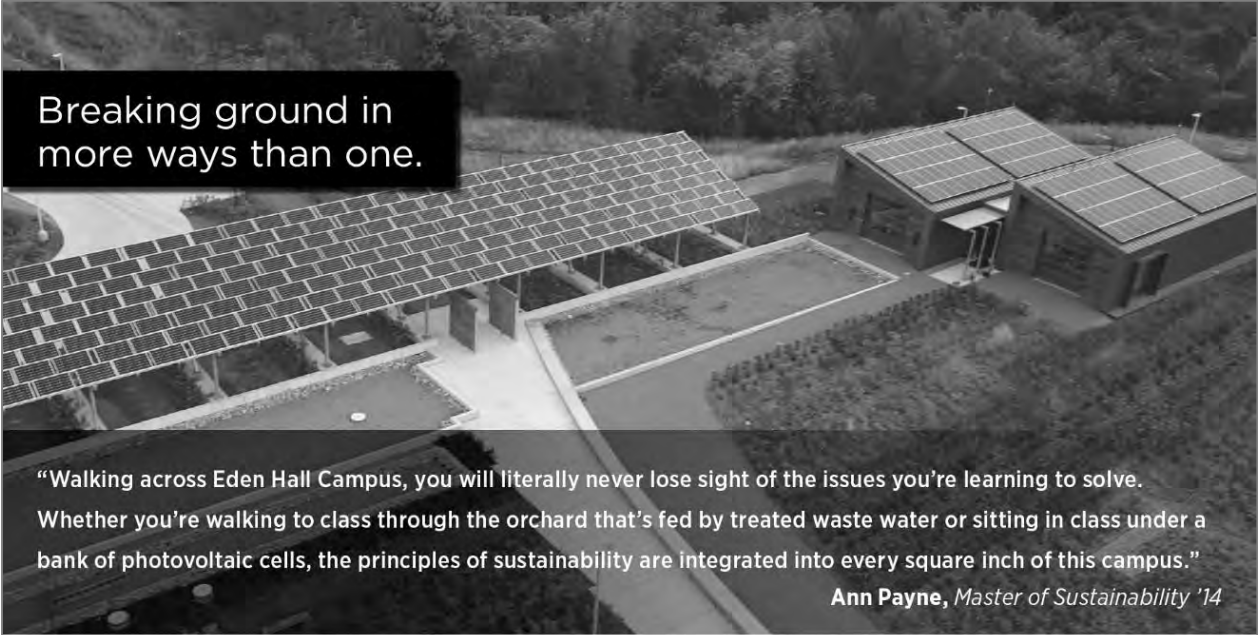
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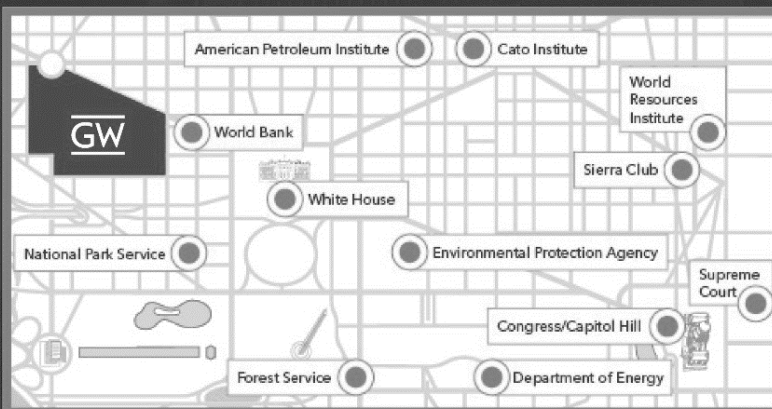
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Through high-impact internships and the acquisition of practical technical skills, alumni are not only prepared for graduate school, but also for careers in diverse industries including private environmental consulting firms; local, state, and federal agencies; environmental education; public administration; and outdoor recreation, among others.

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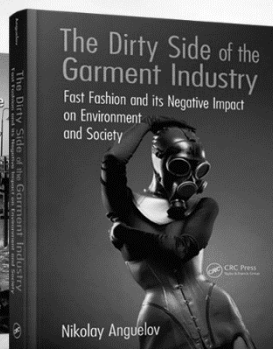
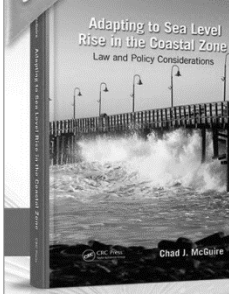
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NOTES

NOTES

Campus Map Legend

Get the UC San Diego campus in the palm of your hand by visiting this site from any device:

<http://m.ucsd.edu>, or download the app at <http://mobile.ucsd.edu>. The **Maps** tool allows you to search for campus buildings, pinpoint them on the map, view photos, and get directions. The **Shuttles** tool has real-time location and estimated arrivals of campus shuttle buses, including on- and off-campus routes.

Just want to view the searchable campus map? Visit <http://www.maplink.ucsd.edu>.

For **public transportation**, see tips below for using Google Maps.



On-Campus Housing Check In (The Village at Torrey Pines West #3, 2202 Scholars Drive North)
The Village Conference Services Desk



Conference Registration and Check In (Institute of the Americas, 10111 N Torrey Pines Road)
Location of AESS Conference Headquarters, bag check, Coffee Breaks, Receptions, Banquet, Exhibitors, and Arts Display. Institute of the Americas, Hojel Auditorium/ IOA Plaza/ Deutz Conference Room



Workshops and Sessions (Center Hall, South end of Library Walk)
This building has a concrete ball sculpture in front and is located between Price Center and Gilman drive on Library Walk. .



Mealtime Roundtable Discussions and Dining Hall (Café Ventanas)
This is the only dining hall where those staying in on-campus residence halls can redeem their pre-paid meals, cash and credit card accepted for non-inclusive meals and off-campus residing conference participants.



E = Pangea Parking Structure (permit required, purchased in structure)

F = Hopkins Parking Structure (permit required, purchased in structure)



Price Center (several fast food options; ATMs and UC San Diego bookstore are located here)



Best bus stops from Hotel La Jolla and Marriott La Jolla using Metropolitan Transit System (SDMTS)

SDMTS Bus Directions From Hotels





From the Hotel La Jolla, use Google Maps to find best bus number/route. Take the “North Torrey Pines & La Jolla Shores Drive” stop.



From the Marriott La Jolla, use Google Maps to find best bus number/route Take the “Gilman Drive & Eucalyptus Grove Lane” or “Gilman Drive & Meyers Drive” bus stops.

From these stops to The Village (on-campus residences) or Institute of the Americas (conference headquarters), it is a 10-15 minute walk, or 10 minute shuttle ride on the campus “L” (Loop) shuttle picking up on the north side of Gilman Drive.

Bus Tips

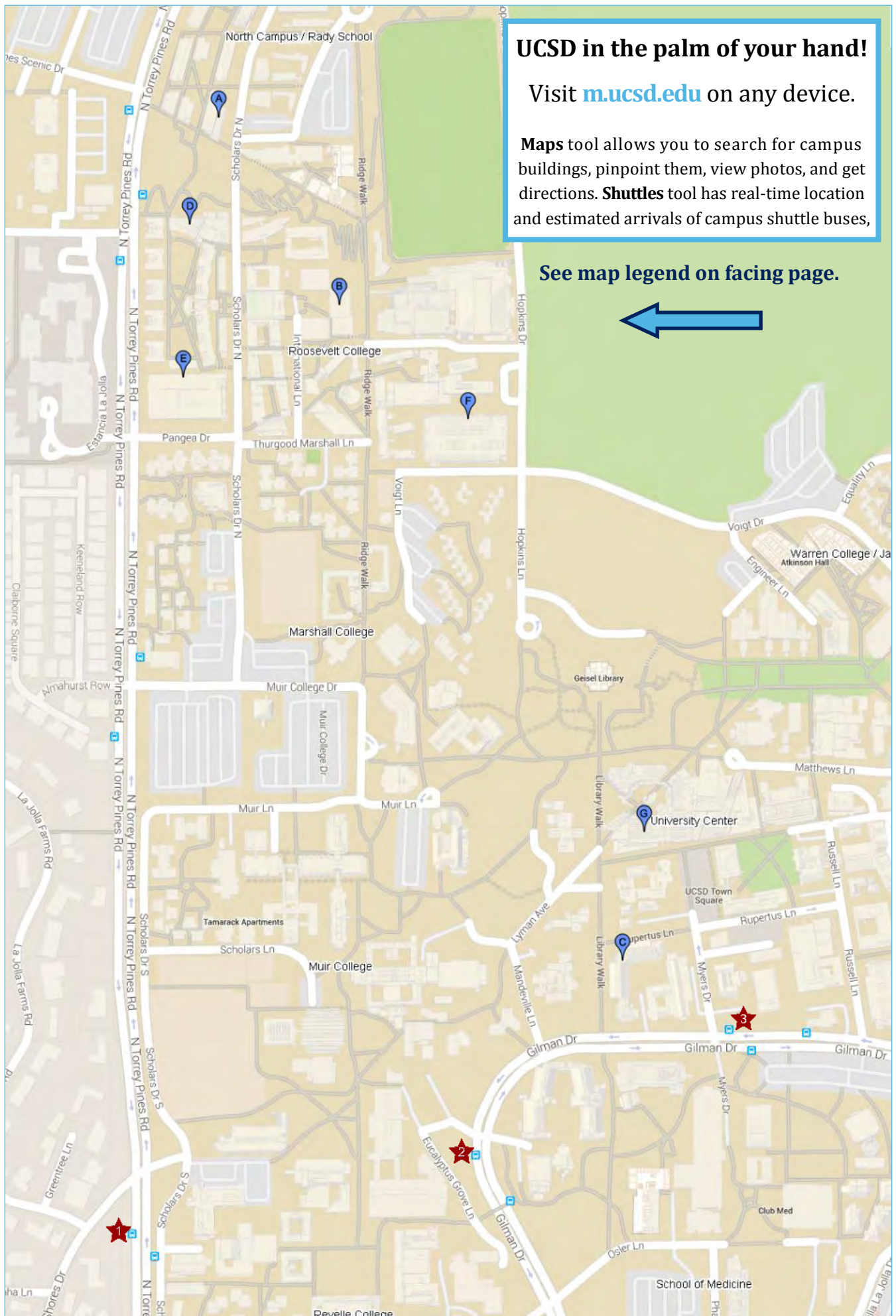
- **Buses only take cash.** No change will be given greater than rounding up to the nearest dollar. Day passes can be purchased on the bus if you will be making multiple trips.
- Use **Google Maps public transportation feature** to plan your journey. Go to www.google.com/maps. Click on Directions.  Click on the “transit” icon.  Enter the address of your starting and ending point. Google Maps does identify Institute of the Americas, San Diego Marriot La Jolla, and Hotel La Jolla without the address. This will give you the bus number to take, as well as walking directions once on campus. The full journey from hotels to IOA should not take longer than 30 minutes with bus and walking. Bus information can also be found on www.sdmts.com/mtscr/BusRoutes.aspx.

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Visit m.ucsd.edu on any device.

Maps tool allows you to search for campus buildings, pinpoint them, view photos, and get directions. **Shuttles** tool has real-time location and estimated arrivals of campus shuttle buses,

See map legend on facing page.





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Front Cover: Mount Diablo, Contra Costa County, California, USA. View is to the south-southeast from Concord, California, approximately 14 miles (22 km) distant. Source: U.S. Army Corps of Engineers Digital Visual Library, accessed en.wikipedia.org/wiki/Mount_Diablo.



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