

Environmental Studies

SPRING 2017

From the Chair's Desk:

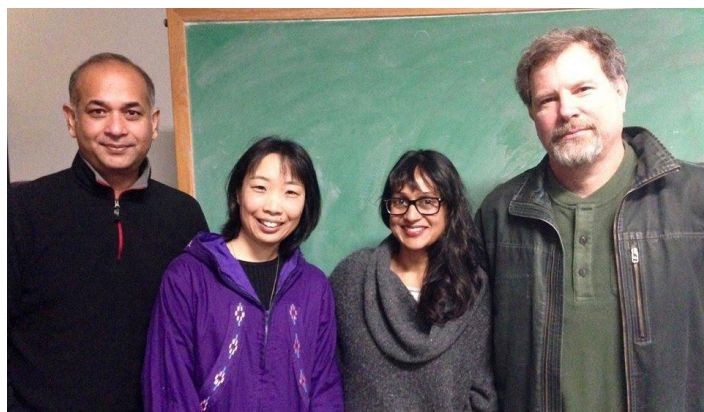
BY MD RUMI SHAMMIN, ASSOCIATE PROFESSOR AND CHAIR, ENVIRONMENTAL STUDIES PROGRAM

2016-17 has been a year of several milestones for the Environmental Studies Program. Bev Burgess, our administrative assistant for 25 years, retired at the beginning of the year. Bev was the rock that anchored the various facets of our interdisciplinary program for many years, and she supported many generations of students, faculty, and staff with her calm, caring, and composed demeanor (see articles on page 16 and 17 for more on Bev). While Bev will be dearly missed, she will remain a lifelong member of the Environmental Studies Program.

The departure of Bev left the program in a transitional state for several months until Rosalind Soltow joined us in March 2017 as a permanent replacement. We welcome Rosalind as the newest member of the ES family. In spring 2017, Oberlin College awarded tenure and promotion to full professor to Karl Offen. We offer our hearty congratulations. Karl brings a wealth of experience to Oberlin and adds valuable curricular expertise in geography and political ecology. Two of our core faculty members, Professors John Petersen and Janet Fiskio, have been on sabbatical leave. We hope their leaves offered them time and space to advance their scholarship, and we look forward to welcoming them back in the fall. At the same time, Assistant Professor Swapna Pathak is scheduled to be on junior faculty leave in 2017-18, and we wish her a productive time away.

Our wonderful student representatives, Natalia Garcia-Sanabria and Hyacinth Parker, are graduating this semester, with new student leadership, Skyler Davis and Ifunanya Ezimora, taking over. We thank Hyacinth and Natalia for their excellent service and look forward to working with Sky and Ify next year.

The Environmental Studies Program is scheduled to undergo a comprehensive program review in fall 2017. We plan to take a deeper look at our curriculum and staffing and set goals for future developments to continue to strive to be the best undergraduate environmental studies program in the country. Finally, in spring 2017, the Environmental Studies Program Committee revised its learning goals to reflect the changing landscape of our faculty and environmental



ENVS Faculty members Md Rumi Shammin, Chie Sakakibara, Swapna Pathak, and Karl Offen (John Petersen '88 and Janet Fiskio were on leave).

challenges at large. The new learning goals are:

- The environmental studies major equips students with the knowledge, intellectual tools, and learning experiences necessary to understand the causes and consequences of our environmental challenges, and to develop a more sustainable relationship between humankind, in all its diversity, and the rest of the natural world.
- The program emphasizes critical thinking, community engagement, problem-solving, design of solutions, and skill-building that rely on an interdisciplinary synthesis of the natural sciences, social sciences, and humanities, including the arts and expressive culture.
- The major seeks to provide both breadth, through its core requirements, and depth, through the pathway and capstone requirements.
- Our majors pursue careers in a broad range of professional and academic fields.

Spring is always a time of joy and sadness as we both congratulate and bid farewell to our graduating seniors. This year we have 52 environmental studies majors and 13 minors expected to graduate—the largest cohort ever. We wish you success and hope that your Oberlin education has prepared you well for your future endeavors. You will forever be part of Oberlin's environmental studies family!

Exploring Indigenous Environmentalism: Students Visit Alaska for Community Collaboration and Adaptation to Climate Change

BY LIV ROAK '17, KILEY PETERSEN '17, AND PAULUS VAN HORNE '17

From November 20-26, 2016, three students in environmental studies, Kiley Petersen '17, Liv Roak '17, and Paulus van Horne '17, traveled with Assistant Professor Chie Sakakibara to Utqiagvik, Alaska—the northernmost community of the United States—to initiate a conversation with community leaders, educators, traditional knowledge experts, and youth on indigenous environmentalism focusing on climate change, human rights, political ecology, and cultural resilience. Sakakibara began working closely with the community as a graduate student, and now, as a faculty member at Oberlin, strives to develop a collaborative network between the college and the indigenous Iñupiaq community with student involvement. Here is a reflection of their recent immersion into the Arctic community:

While in Utqiagvik, we, the Oberlin crew, kept a hectic pace to introduce ourselves and participate in community events. Everywhere we went, we were welcomed with overwhelming kindness, support, generosity, and hospitality. Our visit began with a collaborative presentation at the North Slope Borough Department of Wildlife Management,

where we observed preschool Iñupiaq immersion classes, talked with local high school students, learned about the Iñupiat Heritage Center and Iñupiat History, Language, and Culture (IHLC) Commission, met with North Slope Borough Mayor Harry Brower, and were interviewed for a KBRW morning program. We also spent time with Aaron Fox, director of the Center for Ethnomusicology at Columbia University, who leads the community-partnered Iñupiaq music heritage repatriation project with Sakakibara. The highlight of our visit was our spontaneous incorporation into the serving crew at the Utqiagvik Presbyterian Church on Thanksgiving. The bowhead whale is a cornerstone of the Iñupiaq culture, and it is shared and consumed within the community with utmost respect. It was our honor to hand out muktuk (bowhead whale blubber), quaq (bowhead meat), and aqikkaak (bowhead whale tail or flippers) during the feast, and more importantly, to be recognized at the Eskimo dance that followed that evening. We were blessed to receive multiple invitations for every meal; we had the privilege of enjoying the great diversity of Native food from the land, sky, and ocean.



Assistant Professor Chie Sakakibara, Liv Roak '17, Kiley Petersen '17, and Paulus van Horne '17 with the Kiita Learning Community in Barrow, Alaska.



We were also delighted to initiate a repatriation process of historical photographs taken in the community by George and Nettie MacGinitie from 1948 to 1950. George and Nettie worked at the Naval Arctic Research Laboratory (NARL) as biologists, and George served as NARL director. The 85 photographs that depict the Iñupiaq residents and their subsistence activities were inherited by Oberlin alumna

Mary Ferm '74. Ferm contacted Sakakibara last summer after reading the ENVS newsletter to discuss the potential homecoming of the photos. As it turned out, many of the photos captured various moments of the late community leaders and elders, as well as the infant phases of many residents who still call Utqiagvik home. By the time we gave the final community presentation, many of the faces in the photographs were identified. We anticipate an exciting collaboration between Oberlin and the Utqiagvik community until the photos are eventually sent to the Iñupiat Heritage Center and returned to the homes of the people in the photos and their descendants.

It is our sincere hope that this collaborative community-partnered project will synthesize our research and community voices to draw a holistic picture of Iñupiaq cultural resilience in the face of climate change. This fieldwork was funded by the Arthur Blank Fellowships, Doris Baron Environmental Studies Student Grants, Jerome Davis Social Sciences Research Awards, Educational Plans and Policies Committee Teaching Grant, and Faculty Grant-In-Aid Program at Oberlin College. We are grateful for the logistical support provided by the North Slope Borough Department of Wildlife Management and thankful to the whaling families that kept us company with them so generously throughout the visit. We heartily look forward to returning to our Alaska home before too long.

Above, top: Petersen, Roak, and van Horne being interviewed at local radio station KBRW. Bottom: Roak, van Horne, and Petersen in front of a bowhead whale skull.

THE ENVIRONMENTAL STUDIES PROGRAM

Speakers and Events

September 8, 2016—**Rigoberto Ordoñez**, a Mayan indigenous community leader and educator from Copal Aa, Alta Verapaz, Guatemala, presented “Land, Water and Education in Indigenous Guatemala,” about the struggle for autonomous education and land rights in his community.

October 6-8, 2016—ENVS faculty members **John Petersen**, **Rumi Shammin**, **Swapna Pathak**, and emeritus **David Orr** served as moderators and participants in several events for the conference “After Fossil Fuels: The Next Economy,” hosted by Oberlin College. The first day's events were held in the A.J. Lewis Center for Environmental Studies.

October 26, 2016—**Cheri Honkala**, director and cofounder of the Poor People's Economic Human Rights Campaign, presented “Ending Poverty: Through Power not Pity,” about recent major climate developments and possible future directions in light of changing national and international contexts.

October 26, 2016—**Michael Silvers**, assistant professor of ethnomusicology at the University of Illinois at Urbana-Champaign, presented “Sustainable Resources, Local Meaning, Labor, and Global Trade: Brazilian Carnauba Wax at the Dawn of Recorded Sound,” related to the sustainability of natural materials used in the construction of musical instruments and other music technologies.

November 9, 2016—Students **Zia Kandler '16**, **Ava Nicolai '16**, and **Megan Curiel '16** presented their research sponsored by the Doris Baron Student Research Fund.

November 15, 2016 – Ethnomusicologist **Rebekah Moore** of AtAmerica: The United States Cultural Center in Indonesia, presented “Music and Environmental Activism: Spotlight on Indonesia.”

November 30, 2016—ENVS faculty members **Karl Offen**, **Swapna Pathak**, and **Chie Sakakibara** participated in a post-election panel discussion, “Environmental Implications of New Administration in the U.S.,” on the topics of domestic energy and climate change policy, the future of the Paris agreement and the COP process, and indigenous peoples and climate change.

December 1-2, 2016—**Children of the Wild**, an ensemble theater group that does post-industrial and environmental justice-based theater and film, presented “The Wastelands—Song and Film Excerpts,” followed by community workshops intended to increase bodily and extra-sensory awareness that extends to the environment.

February 2017—**Maria Williams**, professor of Alaska native studies at the University of Alaska-Anchorage, visited Oberlin in to receive the Bettman Family Fellowship of Environmental Studies.

March 2017—**Aaron Fox**, professor of ethnomusicology, Columbia University, visited Oberlin to meet ENVS students in He discussed community-partnered projects involving indigenous communities for cultural repatriation and environmental activism against colonialism.

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Environmental Dashboard: Real-Time Resource-Use Feedback and Social Psychology Promotes Community Transformation

BY JOHN PETERSEN '88

As regular readers of the ES newsletter are aware, Environmental Dashboard (ED) is a technology and approach developed at Oberlin that is designed to make flows of water and energy through buildings and whole communities and environmental conditions visible, engaging, and teachable while also linking these to pro-environmental and pro-community decision-making (www.environmentaldashboard.org). This year, Oberlin's ED project continued to focus equally on research, development, and implementation. On the research side, the last year saw three related papers, all with student coauthors, make it through the peer review process:

- Shane Clark*, John Petersen, Cindy Frantz, Deborah Roose, Joel Ginn*, Danny Rosenberg-Daneri*. 2017. "Teaching systems thinking to 4th and 5th graders using Environmental Dashboard display technology." Published in *PlosOne*.

- John Petersen, Danny Rosenberg-Daneri*, Cindy Frantz, and Md Rumi Shammin. 2017. "Environmental Dashboard: Fostering pro-environmental and pro-community thought and action through feedback." Book chapter in: Leal Filho et al., (eds). *Handbook of Theory and Practice of Sustainable Development in Higher Education*. Springer.

- Greg Trencher, G., Danny Rosenberg-Daneri*, K. McCormick, T. Terada, John Petersen, M. Yarime and B. Kiss. 2016. "The role of students in the co-creation of transformational knowledge and sustainability experiments: Experiences from Sweden, Japan and the USA." Book

chapter in: W. Leal and L. Brandli. (eds.) *Engaging Stakeholders in Education for Sustainable Development at University Level*. Springer.

Led by Cindy Frantz, Rumi Shammin, and me, students in the research group have been working on a range of projects that build on prior work. For example, this year Alyssa Hemler '17 (ENVS major) coordinated an ongoing study designed to assess how the process of being interviewed and having content featured publically on the "Community Voices" component of ED influences perception of self-efficacy and leadership and other metrics that assess views towards community and the environment. Jiaqing Zhao '17 (PSYC and ECON) served as the group's statistical assistant. Jiaqing has played the central role in analyzing studies designed to assess the impact of exposure to "empathetic gauges." These are visualizations that employ animated characters and visual environments that respond to a dynamic stream of data on resource flows. Empathetic gauges are explicitly designed to stimulate emotional responses that motivate pro-environmental or pro-community thought and behavior. Over the last three years we have conducted studies in the Oberlin and Bexley public schools, in which Oberlin kids were exposed to Flash the Energy Squirrel and Wally Walleye (water use). The exciting conclusions are that students with prolonged exposure to these characters exhibit significantly higher levels of sadness in response to high levels of electricity and water use in their school, stronger association of characters with resource use, and a more collective view of resource consumption (i.e. use of "we" to



Teachers from Cleveland, Toledo, Akron, and Oberlin public schools came together for February 2017 workshop on teaching and learning with Environmental Dashboard.



Above: Oberlin City School children participated in the Ecolympics Torch Relay. Left: Environmental Dashboard project manager Augustus Arthur with Oberlin's Office of Environmental Sustainability's Bridget Flynn.

describe resource consumption in their school). The fact that students in Prospect Elementary's fifth grade "feel the pain" of resource consumption in their schools may help explain why these children continue to exhibit dramatic reductions in resource use (often greater than 30 percent) in response to resource-reduction competitions among schools.

Jiaqing has also been working with us to evaluate the impact of exposure to Environmental Dashboard digital signage among the larger Oberlin community. Some neat preliminary results are there, too. Ifunanya Ezimora '19 (ENVS and ECON) continued to take the lead on a longitudinal study designed to assess the impact of initiatives taken in association with the Oberlin Project (including Environmental Dashboard) on the attitudes and behaviors of Oberlin community members. For the last year (including a

summer fellowship) Ify has worked to design and conduct a follow-up to a 2012 survey conducted in the communities of Oberlin and Berea (Berea serves as the control community). Analysis is just starting now, but we hope to use this assessment to better understand the impact of community transformation initiatives.

A separate team of students, led by ED project manager Augustus Arthur, has done much to further develop and implement ED technology. Timothy Robert-Fitzgerald '19 (CSCI) spent last summer with us and continued to work this year to completely redevelop Citywide Dashboard and the Empathetic Gauges in a way that will make it easier for other communities to adopt—indeed they are already in use by Oberlin and Cleveland public schools. Jeremy Feinstein '19 is developing software that allows a commercially available lighting product—the LiFX bulb—to function as an environmental orb that glows different colors based on current levels of electricity and water consumption relative to normal levels of use. Tim and Jeremy will continue their work this summer with funding from an EPA grant through Lucid (a company founded by ENVS grads Vladi Shunturov '05, Michael Murray '03, and Gavin Platt '06).

Olivia Vasquez '20 (ENVS and CSCI) has contributed to managing the orbs used in all Oberlin dorms, but has focused her work on developing a series of introductory visuals for Citywide Dashboard that connect activities within individual communities to global scale changes and pro-community and pro-environmental initiatives. Olivia will also be building on this work as a dashboard research fellow this summer. We are pleased to have our 2017 team of summer research fellows further augmented by Ethan Ableman '18 (PSYC), who will focus on statistical analysis and research, and Kate Little '18 (ENVS and ENGL), who will focus on Community Voices and environmental education (see below).

On the college campus, sustainable technology manager Darrel Tremaine has worked closely with the rest of the ED team and with Oberlin's Office of Environmental Sustainability and the student-led Green Edge Fund to significantly expand and improve the reliability of monitoring and display technology on campus. Over the last year he led efforts to add heating, as well as electricity and water metering, to many of the larger academic buildings. The goal is to have high-resolution metering of all flows of water, electricity, natural gas, and heat energy on campus. Through exercises that Darrel, Augustus, Rumi, and I developed for ENVS 101 and for Rumi's energy and society class, students used real-time data from this system to gain a better understanding of relationships between management, human behavior, and the impact of the built environment on the natural world.

As we write, we are in the middle of playing a key role

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Oberlin Project Begins New Chapter

BY SEAN HAYES, EXECUTIVE DIRECTOR OF THE OBERLIN PROJECT

The original vision for the Oberlin Project was generated in discussions with college and city officials in the spring of 2009, in the wake of the worst economic crisis since the 1930s. Throughout that year of uncertainty, Oberlin Project organizers discussed how the city and the college might collaborate on a temporary organization with a lifespan of four to six years to build a resilient and sustainable economy that would serve the people of Oberlin, respond to the looming challenges of rapid climate change, and advance the cause of justice for which the Oberlin community is known. Their efforts have been widely successful to date and have reached intended milestones on schedule.

While the Oberlin Project's work will continue far into the future, it will follow its planned timeline and close its central office in summer 2017. The project's work will continue through enhanced efforts of partner organizations (City of Oberlin, Oberlin College) that have made its goals central to their mission and operations; through organizations working to grow the local food and farm economy (Oberlin Food Hub), improve local housing especially for low and moderate income families (Zion CDC's Affordable Green Housing Initiative, POWER), and create an environmentally-educated public (Oberlin Environmental Dashboard); and through organizations that it has helped launch (Oberlin College Carbon Management Fund, Lorain County Solar Co-op, SHIFT).

The Oberlin Project's central office opened in 2010. Its mission was to initiate changes in the community's conversations, ideas, and sense of possibility—and then get out of the way. The aim of the Oberlin Project was to advance: (1) sustainable local prosperity; (2) climate neutrality; (3) education; (4) the local food economy; and (5) collaboration with similar efforts in the region and across the nation. The project intended to link the good work of many people into a larger effort in which each

part reinforced the others and built a stronger Oberlin community.

In its first eight years, the Oberlin Project achieved a long list of accomplishments. It has been instrumental in developing the City Climate Action Plan and played a major role in Oberlin's selection as both a C-40 City and a White House "Climate Action Champion" city. The project was a collaborator on major projects including the development of the 11-acre solar array and the building of the Peter B. Lewis Gateway Center. It helped to introduce sustainability into the local public schools curriculum.

Project staff have played a critical role in city, college, and community energy planning and helped to grow the Farmer's Market and the local food economy. They helped to organize the first major conference in the Gateway Center. Throughout the past eight years, they have articulated a practical vision of a sustainable, prosperous, and resilient Oberlin, demonstrating that substantial change is achievable when a dedicated community embraces such a vision.

Our staff appreciates the many people who have helped make this work possible, including the supporting foundations and private donors. We thank the dedicated members of our advisory board and our committees, who believe that what happens in this historic city can serve as a model for the wider world. We helped to launch the necessary transition to sustainability by articulating a vision and implementing the first practical steps toward that future. In the second phase of our work ahead, we will count on the ongoing commitment of Oberlin's college, public schools, city administration and council, religious organizations, business community, civic organizations, and citizens to further the effort to make Oberlin a practical example of sustainable prosperity, foresight, and civic engagement.

ES PROGRAM EVENTS, continued

March 3, 2017—**Karen Florini '79**, U.S. deputy special envoy for climate change under President Barack Obama, presented "Climate: What's New, What's Next."

March 8, 2017—Artist and art historian **Edward Hummingbird** of Albuquerque's Southwestern Indian Polytechnic Institute presented lectures in conjunction with Assistant Professor Chie Sakaibara's teaching exhibition, "Exploring Reciprocity: Power of Animals in Non-Western Art," at the Allen Memorial Art Museum.

March 30, 2017—Native American activist **Madonna Thunder Hawk and Beth Castle** of Denison University presented "Environmental Activism and Standing Rock," addressing Standing Rock activism and future perspectives.

April 28, 2017—**Women of Color Speak Out**, a group of four women-of-color activists who work to bring an intersectional framework to the mainstream climate movement, presented a session to unite multiple student groups who each focus on different issues of social and environmental justice.

Update from ESPC Student Reps

BY: NATALIA GARCIA-SANABRIA '17 AND HYACINTH PARKER '17

HYACINTH AND NATALIA HERE! While we already have one foot out the door as we prepare to graduate on May 22, we wanted to use this newsletter to express our enjoyment of being the ESPC student reps and to



Hyacinth Parker '17 and Natalia Garcia-Sanabria '17 meet Arnold Schwarzenegger at the After Fossil Fuels Conference.

communicate our deep gratitude to the members of ESPC. Serving on ESPC has been a great way to spend the past year and a half. We have developed meaningful relationships with the core faculty and will look back fondly at the meetings, panels, and events where we got to know them better. Advisor Wars was definitely a highlight of our experience. It was fantastic watching Rumi and Swapna duke it out during tug of war and observing Karl's dexterity and balance as he won the egg race. We had so much fun that day, and we hope the tradition continues.

We will both be moving onto new experiences after graduation. Hyacinth will be moving to Indonesia through the Shansi Fellowship, and Natalia will begin her new marketing job at Pure Growth Organics in New York City. While we look forward to the new adventure, we want to say a final thanks to everyone in the ESPC program who has made our experiences at Oberlin so amazing. Taking our places are Ifunanya Ezimora '19 and Skyler Davis '18. We know they will be great student reps, and we look forward to hearing how they have contributed to the program.

Environmental Dashboard, CONT.

in coordinating the third highly successful Ecolympics competition among the four Oberlin Public schools. Jennifer Krakower '17 (ENVS) and Natalia Garcia-Sanabria '17 (ENVS) worked closely with Environmental Dashboard project manager Augustus Arthur in orchestration. This has included supervising students in ENVS 101 in delivering mini-lessons to students in each of the public schools. Natalia and Jen played an instrumental role in the visual redesign and outreach for new community calendar software that will allow sponsoring organizations in Oberlin easy access to promoting community events through dashboard digital signage installed throughout the community. Also on the communications front, Madeline Moran '18 (ENVS and ARTS), has continued to play a key role in the overall project as our social media coordinator.

One of our biggest initiatives this year has been a collaboration with Oberlin, Cleveland, Toledo, and Akron public schools to install ED technology and then develop new curricular materials that leverage its educational value in the classroom. With valuable editorial contributions

from summer fellow Julie Murphy '17 (RELG, ECON, and ENVS minor), we applied for and received a highly competitive grant from the Ohio EPA's Environmental Education Fund for a "Pilot Integration of Environmental Dashboard in Ohio: Teacher Training and Curriculum Development." This pilot seeks to expand curricular integration in four school districts that have already installed or are in the process of installing dashboard metering technology. We are using teacher workshops to first create expertise in ED technology and then to engage teachers in developing and testing lessons that emphasize authentic and active student learning experiences and community engagement. The goal is to align resulting instructional units with learning goals and Ohio standards and to teach "systems thinking" skills in the process. These will be hosted on a searchable database accessible to the growing number of schools across the country that are using ED technology. In February 2017, with the able assistance of Natalia and Jen (see last paragraph), we hosted our first workshop from teachers from these districts.

AJLC: A Year in Review

BY BENJAMIN HOBBS, AJLC FACILITY MANAGER

THE ADAM JOSEPH LEWIS CENTER, home to the Environmental Studies Program, had an outstanding last 12 months. Energy consumption decreased from the previous year and our solar generation increased. The building also underwent several small upgrades, designed to improve the aesthetics and functionality of the space.

The AJLC was designed to be a net exporting building with respect to electricity. In fact, there is a David Orr quote on the newly installed display wall in the AJLC atrium that states, “Buildings can be designed to give more than they take.” Over the last 12 months both the roof and the carport solar arrays generated just shy of 149,000 kWh of electricity for use in the building. The AJLC used a little under 104,000 kWh over the same time period. This represents a net excess of almost 45,000 kWh, a 43 percent production overage. During the best solar months of the year, May through August, the arrays produced between 250 percent and 350 percent of the electrical needs of the building.

Several building upgrades were completed during the past year. With the help of the Oberlin College Office of Communications, a new feature wall was installed in the atrium of the AJLC during the fall semester. The wall and Dashboard alcove was painted, and the original small vinyl lettering indicating the building’s name and philosophy was replaced with raised metal lettering, giving the entire entrance of the building a more finished look. This spring, new certified



Cradle-to-Cradle blinds were installed in several classrooms, the Environmental Studies Information Center, and every faculty and staff office door.

A Year in the Life of the Living Machine Staff

BY JENN FEIGIN '18 AND MORGAN STEIN '18

AJLC team members were busy as bees this past year. Our team expanded: we welcomed two new members, and two returned from studying abroad. This year the team put a large focus on allowing student researchers to experience and teach each other the many procedures and activities that we do throughout the year. Teaching new staff is a way of promoting a well-rounded comprehension of the AJLC and its many functions. These include introduction to new Living Machine lab techniques and maintenance procedures, AJLC grounds work, and AJLC tours. We’ve also sought to emphasize greater communication by setting up Google forms that allow

AJLC workers to update Ben Hobbs and John Petersen of lab findings and activities in real time.

The academic cycle brought about some changes. The much loved and longtime environmental studies administrative assistant Bev Burgess retired, and we welcomed replacements Ryan Scholthauer in the fall and Rosalind Soltow at the start of the spring semester. Additionally, two team members, Oriene Shiel '18 and Maggie Musante '18, were abroad during the year, studying in Japan, New York, and Paris.

Early last fall, students began preparing to harvest the hazels. It was clear that the nut production was far higher

than the previous year, however, some bird and mammal species may have gotten to the nuts first; several of us witnessed a very active harvest by our local squirrels, which lead to a reduced hazel count compared to the year prior. Discussion with Philip Rutter, the developer of these strains of hazelnuts, led to more vigilant plans for a preemptive human harvest that we hope might minimize loss this coming year.

The community garden produced an especially large amount of vegetables this year, and the AJLC team helped to harvest large yields of kale, Patty Pan squash, and Swiss chard throughout the fall. Toward the end of the fall semester, the grounds team planted bulbs and garlic in the garden beds near the annex, putting the rest of the beds to sleep for the winter. In addition, the students worked with Ben Gammie, a local owner of Quarry Hill Orchards, who generously taught students how to prune the apple trees in the AJLC orchard. Throughout the year, students regularly trimmed the hearty vegetation in the Living Machine and contributed to multiple collective and fun “cut-a-thons” in order to make way for new growth in the beginning of the spring semester.

The balmy weather in February allowed the AJLC team to begin the yearly Tappin’ in Tappan project to harvest sap from maple trees to make into syrup. With the help of Oberlin community members, First Church, and the AJLC team, more than 3 gallons of maple syrup were produced from over 100 gallons of sap that was diligently harvested by students.

This spring was busy one. In addition to organizing this year’s Poop Campaign and making a float for the Big Parade in late April, the AJLC co-hosted an open house in April. The garden and orchard require a lot of prep, and seeds have been started. We’re planning on another

The Environmental Studies Information Center Introduces New Programming

BY KIERAN MINOR '19

THIS YEAR, THE ESIC STAFF made significant strides toward transforming the space into a cozy place for social events, adding to its current reputation as a quiet study spot.

The staff hosted two major events each semester. The week of Halloween, we hosted “Spooky Slice Night,” where students ate pizza, drank hot cider,

and carved up jack-o’-lanterns from pumpkins grown at the nearby Hillcrest Orchards. Before winter break, we hosted “Cocoa Cookie Crumble Night,” a way for students to relieve finals stress by drinking hot cocoa, decorating cookies, and listening to some classic holiday tunes. The day after Valentine’s Day, we hosted “Speed D8 Your Senator Night,” a

phone bank night where students called Ohio senators to discuss recent environmental policy decisions, particularly the appointment of current EPA head Scott Pruitt.

Our final event of the year was Careers Night, where students could strategize postgraduate strategies with Taiyo Scanlon-Kimura ’15 of the Career Center. The ESIC staff was also involved with the AJLC Spring Open house, which featured tables from local environmental organizations, small businesses, and live music from students. Next year the ESIC staff hopes to expand programming and increase collaboration with other organizations on campus in order to increase the space’s visibility within the department and across campus.



Lauren Rhodes '17, Kieran Minor '19, and Margaret McCarthy '18 at an ESIC event.

bumper crop for donation to OCS this summer. Planning for those who will be here during commencement and over the summer are underway as well. Four AJLC students are graduating this spring: Dana Colihan, Owen Kleiman, Ryanna Fossum, and

Yinuo Zhang. They will all be greatly missed, but we looking forward to the new members of the AJLC team—Leah Finegold '20, Grant Sheely '19, Sean Kerns '20, and Brian James '19—who will join us next fall.

Environmental Studies and Africana Studies Students Team up for Field Trip to Detroit

BY MD RUMI SHAMMIN, ASSOCIATE PROFESSOR AND CHAIR, ENVIRONMENTAL STUDIES PROGRAM,
AND CHARLES PETERSON, ASSOCIATE PROFESSOR, AFRICANA STUDIES

Students in the sustainable cities course in environmental studies (ENVS) and in the African American politics course in Africana studies (AAS) participated in a joint field trip to Detroit last December 4 to learn about urban issues in its predominantly African American neighborhoods. The trip was a curricular collaboration between professors Rumi Shammin (ENVS) and professors Charles Peterson (AAS); students in the sustainable cities class were given readings from the African American politics class, and vice versa.

The group first visited Wayne State University for a presentation by Ben Dueweke and Carla Walker-Miller of Walker-Miller Energy Services (WMES) to learn about ongoing struggles in historically black neighborhoods and emerging projects that combine community engagement with renewable energy and EcoDistricts initiatives. The event was coordinated by the wonderful Donna Stallings of WMES.

At the Charles H. Wright Museum of African American History, students learned about the museum's sustainability programs and heard about the Detroit Climate Action Collaborative from Leila Mekias of Detroiters Working for Environmental Justice. Climate ambassador Alessandra Carreon talked about their work in Hope Village (one of

Detroit's two EcoDistricts).

Students also had a chance to quickly browse through the museum while their professors figured out how to jump start an Oberlin College Turtle Van. (If you are wondering how many PhDs it takes to jump start a bus, the answer is at least two!)

The group then made its way to the O'Shea Park neighborhood, accompanied by the amazing Crystal Robinson—a neighborhood resident instrumental in the ongoing collaboration between the O'Shea Park Solar Project and community members who live around the site of the proposed solar park. What began as an external project with no community engagement has evolved into a collaborative solution to revitalize a recreation center next to the solar park to bring lost and new amenities to the community.

Oberlin students had a chance to observe obvious signs of struggle in the community, which were embodied in many abandoned and burned-down homes, and they visited the existing, abandoned recreation center where the new facilities will be installed. They learned from Robinson how the community came together in conversations with the solar project to find hope and participate in a renewable energy future that gives back in



Above: The Oberlin group with WMES hosts. Top, clockwise: Crystal Robinson of O'Shea Park neighborhood speaking about revitalization plans for the abandoned recreation center next to the site of the solar park. Charles Peterson, Crystal Robinson, Carla Walker-Miller, and Rumi Shammin near space where the solar park is scheduled to be installed. Presentation at the Wright Museum of African American History.



addition to generating clean power for the larger region. The trip ended with group hugs and a solemn recognition of the opportunities and challenges facing many black neighborhoods in major rust belt cities.

In addition to practical exposures and cross-curricular interactions for students, the trip represented a collaborative venture between the Environmental Studies Program and the Department of Africana Studies at Oberlin—two disciplines that share common conversations on social equity, environmental justice, and systemic issues in the intersection of environment and society that continue to disproportionately affect communities of color. The professors are committed to making this field trip a feature of their respective classes every fall.



EnviroAlums Update

BY ANDREW DECORIOLIS '07

Over the last 10 years EnviroAlums has worked to empower and build the capacity of Oberlin's talented students to become tomorrow's sustainability leaders. Events of the past year have illustrated just how much work there is to do to make the world a more just and sustainable place. I can't think of a better way of amplifying my voice and my impact than by supporting Oberlin's student changemakers.

EnviroAlums would like to invite all alumni to join our efforts. EnviroAlums provides funding to student activists who are working in the Oberlin community, mentorship and connections to alumni who work in sustainability field, and perhaps most importantly, internship opportunities for students who are seeking real-world experience.

This spring we announced our third annual summer fellowship, aimed at financially supporting Oberlin students who are pursuing internship opportunities in sustainability related careers. The last two years the EnviroAlums Fellowship has gone to students working on

incredible projects that have had a direct impact in their communities. For example, we supported Scott Hulver, who helped launch the Oberlin SEED Ventures, which is now helping entrepreneurs in Oberlin and Lorain County launch sustainable food businesses.

The fellowship is a great example of how supporting Oberlin students can lead to big changes. And to expand our impact, we're calling on all alumni to join us. Membership in EnviroAlums is free, and we encourage anyone interested in sustainability to join. Simply visit www.enviroalums.org and fill out the form.

Over the next year we aim to make EnviroAlums a larger platform for alumni to connect with sustainability work in the Oberlin community and with other alumni through networking and speaker events.

You can also join the conversation on our Facebook page and LinkedIn group, where you can share relevant news, job information, and announcements. Join us today and help empower the next generation of leaders.

A Glimpse into the Environmental Studies Program



A



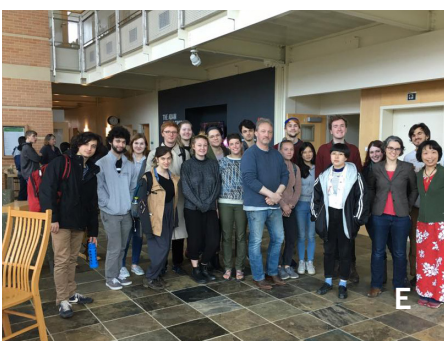
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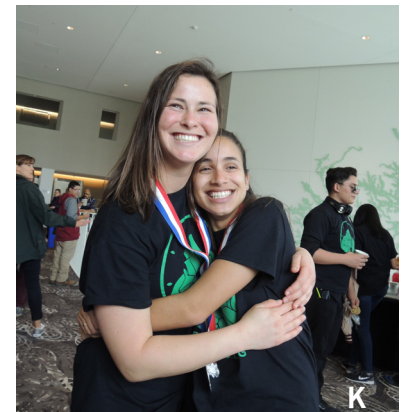
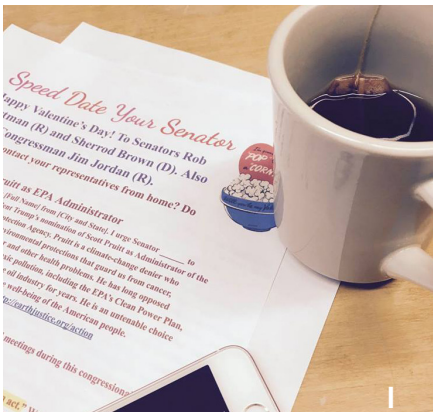


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A. Living Machine staff and ENVS students celebrate the winner of the 2017 Poop Campaign by pulling them on a toilet-themed float as part of the Oberlin Big Parade. **B.** Oberlin City School children participate in the Ecolympics Torch Relay. **C.** Majors gathered at the ES annual fall picnic. **D.** Relaxing during "Cocoa Cookie Crumble Night" at the ESIC. **E.** Aaron Fox, Professor of Ethnomusicology, Columbia University, visited Oberlin to meet ENVS students in March. **F.** The AMAM panel for the Allen Memorial Art Museum's "Animals in the Western and Non-Western Imaginations": I-r Andria Derstine (AMAM Director), Tom Newlin (Russian), Chie Sakakibara (ENVS), exhibit chair, Mary Garvin (Biology), Matt Senior (French), Karl Offen (ENVS), and Liliana Milkova (AMAM). **G.** Madonna Thunder Hawk (Cheyenne River Sioux activist) and Beth Castle (Denison University) visited AJLC to give a lecture on environmental justice and Standing Rock activism in March. The other members who are captured in this photo are Bob Roche, Cleveland American Indian Movement, and the Oberlin Students with Standing Rock. **H.** Maria Williams, professor of Alaska Native studies at the University of Alaska-Anchorage, after a lunch discussion with students. **I.** Sample text for messages left for senators during "Speed D8 Your Senator" night at the ESIC. **J.** Students carving pumpkins during "Spooky Slice Night" at the ESIC. **K.** Jen Krakower '17 and Natalia Garcia-Sanabria '17 at the Ecolympics Torch Relay. **L.** Students called Ohio senators to discuss recent environmental policy decisions at "Speed D8 Your Senator" night at the ESIC.



M. Edward Hummingbird, Cherokee art historian from the Southwest Indian Polytechnic Institute in Albuquerque, visited AJLC in March in conjunction with Chie Sakakibara's Allen Memorial Art Museum exhibition on human-animal relations in non-Western art. In addition to his public lecture, Edward visited ENVS classes and met students for discussion.

Grants, Awards, and Scholarships

SCHAENING MEMORIAL FUND AWARDS

The Ann Marie Schaening '87 Memorial Fund, established by the family and friends of Ann Marie Schaening, provides support for students pursuing winter-term projects related to the environment. Four students were granted awards in 2017:

Pang Fei Chiang '19 traveled to Malaysia to research the impact of the Lynas Corporation's rare earth refinery on the local community of Gebeng.

Danyang Dong '18 spent six weeks volunteering with the World Wildlife Fund's China Program in Washington, D.C, translating a major policy recommendation, initiating research, and assisting the SAIS Johns Hopkins Practicum Team.

Kate Little '19 traveled to New Zealand with a group of students and faculty to see first-hand the innovative conservation and behavior programs that are being implemented there.

Yael Reichler '19 interned at the Homeless Garden Project in Santa Cruz, Calif., assisting with events, administrative work, and winter tasks on the 3.5-acre organic farm.

DORIS BARON FUND

The Doris Baron Environmental Studies Student Research Fund was established to support independent research projects proposed by students and designed to increase knowledge of and appreciation for environmental studies. Projects typically involve close collaboration with existing organizations from local to international scales. A community-based focus—especially work that connects local agricultural initiatives with projects in developing countries—are favored. This year the fund will support three research projects:

Danyang Dong '18 will work alongside the international NGO TRAFFIC to conduct Beijing market research on consumption motivations and patterns that form the key building blocks for future campaigns against the illegal ivory trade and other forms of wildlife trafficking. Danyang will also implement a pilot public education program aiming to change people's apathy about wildlife trafficking and the excessive demand for wildlife products.

Naomi Fireman '19 and Yael Reichler '19 will do research on rice farming on rural family farms in the Kansai area in order to understand intensive agriculture and local

food systems in Japan. They plan to explore the growing concerns over aging rice farmers and a lack of younger farmers replacing them and gain knowledge about the role of organic produce in Japanese rural food networks.

Kopo Oromeng '18 will conduct research at the University of Arizona's Institute of the Environment and work with its Paleoclimate and Climate Change research team to study climate change induced droughts. Kopo hopes to relate this experience to climate change challenges and mitigation strategies dealing with climate change induced droughts in her home country of Botswana.

ARTHUR BLANK FELLOWSHIPS

Established by the Arthur M. Blank Foundation, this grant enables Oberlin students to undertake research and educational opportunities in collaboration with Environmental Studies Program faculty.

Professor John Petersen supervised two students assisting with research on developing, managing, and assessing the Environmental Dashboard during summer 2016:

Gailyn Gabriel '18 and Julian Geltman '17

Associate Professor Janet Fiskio supervised student **Moses Richardson '17** during his summer 2016 community-based internship at Vel's Purple Oasis garden and community kitchen in University Circle, Cleveland.

Assistant Professor Chie Sakakibara supervised two students, **Kiley Peterson '17** and **Paulus van Horne '17**, assisting with research on climate change and cultural resilience among the Iñupiat of Arctic Alaska.

AJLC Facilities Manager and Community Outreach Coordinator Ben Hobbs supervised two students focused on summer management and improvement of the Lewis Center: **Oriene Shiel '18 and Magdalen Musante '18**

JEROME DAVIS RESEARCH AWARD

This fund is designed to defray costs of research projects in the social sciences and well-defined topics focusing on or having implications for the community.

Kiley Petersen '17, Olivia Roak '17, and Paulus van Horne '17 each received the award for collaborating with Professor Chie Sakakibara on Alaska fieldwork and research publications.

OBERLIN COLLEGE OFFICE OF FOUNDATION STUDENT RESEARCH FELLOWSHIPS

Olivia Roak '17 will work with Chie Sakakibara on the community-partnered project in Barrow, Alaska, and produce reports and papers reflecting her experience and research findings in collaboration with Chie, Kiley Petersen, Paulus van Horne, and the Barrow community.

Samuel Tunick '19 worked with Chie Sakakibara on the art exhibition “Exploring Reciprocity: The Power of Animals in NonWestern Art” held at the Allen Memorial Art Museum at Oberlin through June 2017. This exhibition was developed in conjunction with the courses that Chie taught this spring: Nature, Culture, and Interpretation (ENVS 201) and Indigenous Environmentalism (ENVS 327).

JOYCE GORN MEMORIAL PRIZE:

Melissa Cabat '17

Melissa served on the Campus Climate Team’s working group on disability and access and helped craft a survey and listening group protocol. These experiences influenced her desire to pursue honors thesis on the link between disability rights and environmentalism. Melissa defended her honors thesis titled “Interrogating the “And”: A Study of Environmentalism and Disability,” in which she explored how people who are considered as “other” relate to their environment and surroundings. Her thesis also traces how the histories of the disability justice and climate justice are intertwined.

Dana Colihan '17

Dana’s interest and engagement in environmentalism have grown in relation to supporting indigenous and marginalized communities, specifically the Lakota and Palestinians. Last winter term, she lived with family friends in the West Bank and worked at the Applied Research Institute-Jerusalem, a Palestinian NGO that works toward the self-determination of Palestinian resources. In the fall of 2016, Dana travelled to Standing Rock for a week to support her Lakota friends and other water protectors in fighting the Dakota Access Pipeline. She helped start Oberlin Students for Standing Rock (OSSR) and worked closely with Assistant Professor Chie Sakakibara to bring two female indigenous activists to campus.

Emily Heck '17

Emily has volunteered in the Oberlin Public Schools and at the Oberlin Boys and Girls Club since her first year at Oberlin, assisting in areas ranging from dance instruction to environmental education. She trained a group of students to teach mini-lessons on the energy and water use reduction competition among schools and the interpreta-

tion of data displayed on Environmental Dashboard. For several years she trained and led teams of Oberlin students to help lead the Ecolympics resource reduction competitions in the schools. Her senior honors project built on this work in Oberlin Public Schools.

Elise Horensky '17

Elise volunteered at a school and orphanage in Beijing, China—the School of Love and Light—during winter-term 2016, teaching English classes that highlighted the strong links between environmental, human, and non-human well-being and sustainability. She prepared and implemented her own lesson plans and closely worked with a diverse body of students from underrepresented communities. In April 2016, she assisted Assistant Professor Chie Sakakibara in organizing student events in conjunction with ENVS 225 (Indigenous Peoples and Climate Change) with panelists for the Global Issues Symposium. Elise and Chie have coauthored a book chapter, “Indigenous Peoples and Climate Change: Humanistic Explorations of Cultural Resilience,” which is currently under consideration to be included in *Climate Change and the Task of Thinking* (Bloomington, IN: Indiana University Press).

SENIOR HONORS

Melissa Cabat '17

“Interrogating the “And”: A Study of Environmentalism and Disability”

Julian Geltman '17

“Neoliberalism, New Urbanism and Sustainable Urban Design”

Emily Heck '17

“Environmental and Community Efficacy: Research on Youth Arts Engagement in Oberlin”

Ayami Kan '17

“Examining the Energy Ladder in Central Rural Bhutan: Two case studies in Ura and Chokhor”

Yue Rick Yu '17

“Energy Budget of the Living Machine: A Cost Analysis”

OTHER STUDENT ACHIEVEMENTS AND AWARDS

Lindsey Brubaker '19, Critical Language Scholarship, Japan

Marie Lilly '17, Fulbright ETA, Colombia

Brendan Nuse '17, Shansi Fellowship, Shanxi, Taigu, China

Hyacinth Parker '17, Shansi Fellowship, Yogyakarta, Indonesia

Paulus van Horne '17, Watson Fellowship

In Appreciation of Bev Burgess

BY: JOHN PETERSEN '88



Retiring administrative assistant Bev Burgess with Paul Sears Professor of Environmental Studies John Petersen '88 and program chair Md Rumi Shammin.

After 25 years of service to the Environmental Studies Program, Bev Burgess chose to accept an early retirement offer from the college last year. As our superstar administrative assistant, Bev's warm smile and deep knowledge of our program were often the first things students, parents, visitors, and alumni encountered when they visited us. Bev played a critical supportive role in the ES program over the years as it grew and transitioned from one full-time faculty member and a few dozen students to one of the largest majors at Oberlin today with more than six core faculty members. It's fair to say there are many aspects of running the ship that is Oberlin's ES program that program chairs (David Orr, Roger Laushman, Harlan Wilson, David Benzing, me, and Rumi) never understood because we did not need to—Bev was the vast repository of knowledge of the byzantine procedures and doctrines by which the machinery of this fine institution runs. Her steady and skilled hand in managing the office were central to our growth and success. And this growth involved a bit of struggle and stress. Organizing hundreds of files associated with faculty searches and the herding of cats necessary to organize course schedules each semester are tiny examples of Bev's contribution to relieving this stress.

Bev was always at the center of things as the program moved from the basement of Rice Hall in the 1990s to the state-of-the-art Adam Joseph Lewis Center for Environmental Studies in the 2000s. From her perch in the nicest office in the AJLC (perhaps in the college!), Bev provided sometimes confused students with critical advice as the program substantially revised the major. Everything

Bev did in her years working for the program was done with kindness, competence, and good humor.

On December 2, the ES program and many of Bev's friends from around campus shared a dinner to celebrate her career. In preparation, we invited ES grads to share reflections. Here are some highlights:

- Bev, I have great memories of you as the “mama bear” holding the environmental studies department, seeing to everyone's needs and keeping everything flowing well. (*Malaika Bishop '97*)
- There are lots of things I don't remember about Oberlin but one thing I do remember is how cheerful and helpful you were every time I walked into the ENVS offices. Thanks for being a ray of sunshine in my college experience. (*Katrina Hoffman '97*)
- Your tireless commitment to churning out first class eco-warriors is much appreciated! (*Erin Kirkpatrick '98*)
- Kindness matters, and Bev's way of interacting was always filled with kindness and compassion. (*Caroline Losneck '98*).
- Bev was the glue that seemed to hold it all together: calm, down-to-earth, and ready to handle whatever off-the-wall requests came in from the well-intentioned but often a little ungrounded students. (*Seth Capron '02*)
- Bev calmed us down when we were freaking out about issues as small as course registration and as large as climate change. Thank you for the opportunity to celebrate her and her dedicated service of bending the arc of the universe towards justice. (*Abbey Tennis '03*)
- She put up with a lot, from supporting us on our poop campaigns (quarter poops, etc.) to probably seeing Harkness Co-op members dancing naked around campus tours through her office window. (*Rachel Cohn '05*)
- It is hard to believe that it has been 10 years since I graduated from Oberlin. I remember seeing your smile and calm personality with so much compassion everyday for years during 2003-07. Wishing you happiness, peace, and good health for your next chapter. ENVS will miss you but you will always be in my heart. (*Samina Ali '06*)
- Thanks for all of your hard work and dedication Bev! You've really helped to shape an outstanding ENVS program and community at Oberlin. (*Jenny Soong '07*)
- Bev, you have the best attitude. You have this combination of an intimate understanding of how things work (even if they only work in convoluted way) plus a supreme degree of competence, so you might be navigating a really complicated web of bureaucratic processes, yet you made it seem like it was no big deal. (*Kristin Braziunas*)

- Congrats to Bev on retiring! Bev was always warm and welcoming, and visiting her office was always something I looked forward to. She brought a lightness to my often hectic days as an over scheduled undergrad. I wish her all the best in her next adventures to come! (*Erika Oba '08*)

- Bev, Thanks so much for being a kind presence during some of the stressful periods at Oberlin. (*Albert Davila Jr. '11*)

- Bev, your smile is so bright it could be used as a form of renewable energy! Thanks for always making the AJLC a warm and welcoming place. (*Lisette Lorenz '12*)

- The ENVS program provided me with a strong sense of community, and it was very meaningful to me that it seemed as invested in me as I was in it. Bev, your presence in the office was a big part of that. (*Casey Lee '12*)

- Bev was a constant reminder that everyone would be okay, despite the stress and pressure of school. (*Britta Jansen '17*)

- Bev has always been a source of kindness and light in my Oberlin career! Her support, charisma, and cheer got me through many bad days and I'll forever be grateful for her generosity of spirit. (*Melissa Cabat '17*)



Bev's gift: a signature rocking chair, the same type found in the atrium of the AJLC.

Bev's Reflections

BY: BEV BURGESS

I BEGAN WORKING FOR Oberlin College in September 1987, first at the Conservatory of Music and then as the secretary for the director of external affairs and for a dean for four years. When the external affairs office closed, I moved to the development office in Bosworth Hall for a year. In 1992 I moved back into the academic environment as a part-time administrative assistant for environmental studies, women's studies, and steno services in the basement of Rice Hall. I transitioned back into full-time work solely for the Environmental Studies Program, as the number of majors increased and the Lewis Center was on the drawing board. The number of ENVS majors expanded from 22 in 1992 to 140-plus during my last year in 2016. From the start, I enjoyed working with David Orr and with the ESPC, made up of faculty members from other departments, including Harlan Wilson, David Benzing, Roger Laushman, and others.

As the administrative assistant for the ES program, I enjoyed working with students, faculty, and especially program chairs David Orr, John Petersen, Rumi Shammin, and acting chairs David Benzing and Roger Laushman. Many changes were made over the years, but the students' enthusiasm for all things environmental was always energizing! I enjoyed learning about the research and travels that took them all over the world. I also enjoyed working with other AAs and staff members across campus. I thank you all for your help, guidance, respect, encouragement, and friendly atmosphere that made for a great work environment!

I don't know how I kept my composure at my retirement party because now I'm very emotional on reflection! Thanks again to John for coordinating this wonderful event—beautiful flowers, great food, comfy rocker, and best of all, sweet words of love and support! I will miss the people and the Lewis Center! I'll stop in occasionally, and I do plan to attend some events—guest speakers, Commencement Open House, etc. I look forward to my retirement and a new phase in my life. I can spend more time gardening, bird watching, traveling, playing with our grandsons, and being more involved in volunteer and church activities.

"There is a time for everything, and a season for every activity under the heavens...a time to plant...a time to laugh...He has made everything beautiful in its time."

Ecclesiastes 3

Faculty and Staff News and Notes



AUGUSTUS ARTHUR, PROJECT MANAGER ENVIRONMENTAL DASHBOARD AND LECTURER

Greetings! The past year has been very exciting for my work with the Environmental Dashboard. A lot of progress has been made in an effort to advance dashboard technology toward easy distribution and adoption in other large organizations and communities. In the past year, and with the help of our superb student team of developers, we have been able to create new versions of Citywide Dashboard, the time series with empathetic character gauges and environmental orbs. We also plan to recreate the community voices component of the dashboard this summer.

In the fall of 2016, I co-taught a Sustainable Technology Behavior and Community practicum with Darrel Tremaine, in which students engaged in various projects of interest to the dashboard. One team worked in collaboration with a community partner to design a customizable version of Citywide Dashboard for the city of Toledo. This gave us the opportunity to design for the first time a version of Citywide Dashboard that had the functionality for switchable icons, thus making for endless customization possibilities.

The environmental orbs is another frontier with exciting news. We've not been able to support expansion of our orbs into other communities and organizations because the orb technology involves proprietary hardware that has somewhat prevented adoption. We are in the late stages of preparing to release a beta version of our new orb that takes advantage of new Wi-Fi enabled bulb technology (LIFX) catalyzed by the Internet of things (IoT) buzz. With this new orb technology, we are confident that most of the stumbling blocks will no longer be an issue and adoption will grow.

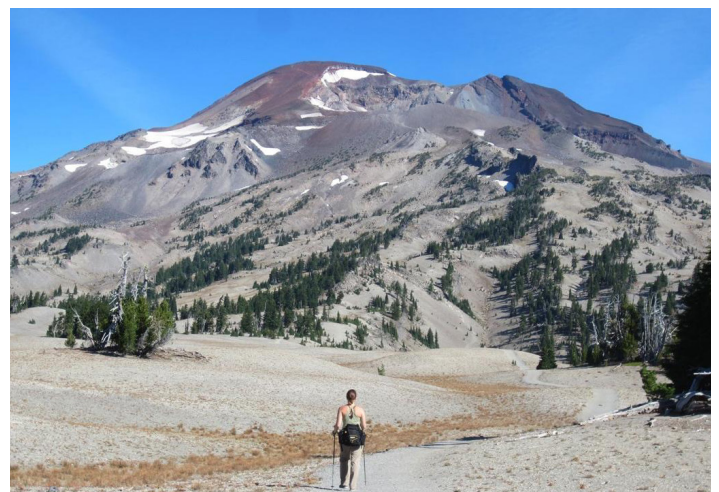
Lastly, with a grant from the Ohio EPA (see related article on dashboard on pg. 4), the Environmental Dashboard team at Oberlin is hosting a series of workshops to work with teachers in Toledo, Akron, Cleveland, and Oberlin public schools to create a curriculum for the classroom that harnesses dashboard technology.

It is my hope that all the hard work pays off with increased adoption of the dashboard technology and more autonomous engagement with the technology in the classroom as an outcome of our curriculum development workshops! I look forward to another successful and eventful year.

JANET FISKIO

This year I've been on post-tenure research leave (woohoo!). I am still celebrating being a part of the Oberlin community and am so profoundly grateful to my students and colleagues for inspiration, support, and dialogue. I'm very pleased to see several projects make it to publication, including an article coauthored with Md Rumi Shammin and Vel Scott, "Cultivating Community: Black Agrarianism in Cleveland, Ohio" in *Gastronomica: The Journal of Critical Food Studies*. This article is the result of years of mentoring and collaboration between Oberlin College and Vel's Purple Oasis, a teaching and learning garden in Cleveland. I am indebted to Vel Scott for her generosity and mentoring of me and of Oberlin students and interns. Vel, Rumi, and I will present our research at the ASLE conference in Detroit this June. I've also published two book chapters: "Dancing at the End of the World: The Poetics of the Body in Indigenous Protest" in *Ecocriticism and Indigenous Studies* and "Building Paradise in the Classroom" in *Teaching Climate Change in Literary and Cultural Studies*. Versions of these chapters are included in my book manuscript: *Counterfrictions: Climate Justice, Environmental Racism, and Dissent*, which is (finally!) fully drafted. I'm revising and hope to submit it to presses this summer.

Looking ahead, I am thrilled to continue collaborating with the community of Africatown, Alabama, on community-based learning and research projects. I'll be teaching a new course, Environmental Justice and Local



Knowledge, that will include a week in Africatown over fall break. My research assistant, Ify Ezimora, has been a fabulous recruiter for the class, and I am eager to collaborate with the incredible line up of students who have enrolled. In addition, in spring 2018, I'll be leading the Oberlin-in-London program with mentor and friend T.S. McMillin.

BEN HOBBS

I've managed to get a year under my belt managing the AJLC, which means two things. First, it means I've survived and so has the building. Second, it means that I've had a lot of time to research, fiddle, play, experiment, break, mull over, and stew about what makes this building work and how to make it work better. No one could have explained or described a tenth of what I was going to experience when I walked through these doors for the first time in March of 2016. Yes, I knew the basics. I knew about the solar arrays, the heat pumps, the Living Machine, and the garden. What



I didn't know is what to do when the closed anaerobic tank gets plugged only days before the retirement party of the department's beloved administrative

assistant, Bev Burgess's, resulting in fetid water backing up through the bathroom floor drains. I would be remiss if I didn't include a serious thank you to our FacOps plumbing division for their hard work and overtime helping fix that one. I also didn't know how happy we would make people at Oberlin Community Services when we delivered bag after bag of fresh chard, lettuce, and kale greens. Additionally, I was unaware of just how many people came to see our beautiful building. I gave over 40 tours of our building in the last year, ranging from a group of retired engineers to precocious fourth graders and everything in between. Oberlin has been a fantastic place to work, and I still feel like I've only scratched the surface. Here's to another successful year, now I'm off to the garden to weed...again.

KARL OFFEN

I spent my second year at Oberlin tweaking my courses, developing a new one called Society and Environment in Latin America and the Caribbean, and trying to be a better advisor for more students. I was also grateful to have my previous years of scholarship, teaching, and service recognized in the form of tenure and promotion to full

professor. These two milestones—usually achieved at separate times—are what most academics strive for, and I am happy to celebrate them at Oberlin.

For research, I am collaborating with a colleague at the



University of Bristol in the UK to write a book about the 18th-century Atlantic world from the point of view of three generations of a single family. A few years ago, and after some serious sleuthing, we tracked down an unknown trove of more than 300 documents produced by this family of British colonists and merchants who resided in what is today northeastern Honduras and Nicaragua. This past year, I've been working with history major Kevin Lin '17 to begin the arduous task of transcribing the material. This summer I'll travel to Bristol to work with my collaborator and the documents directly, and also conduct research about their contents in the National Archive (of the UK), London. I've been visiting this archive, along with the British Library and several other depositories around the UK, for almost two decades, but it never gets old. One thrust of my research is how ideas about and uses of the environment take shape in relation to economic, political, and cultural forces developing globally to affect socioenvironmental change locally. For eastern Central America, where I have been working since 1990, this means how early modern forms of globalization intersect with race, power, and ecology in rainforest, savanna, and marine environments.

DAVID ORR

I spearheaded the first conference to be held at the new Oberlin Gateway Center, titled After Fossil Fuels: The Next Economy. Guest speakers and presenters included Bill McKibben of 350.org, Tom Steyer of NextGen Climate, Michael Brune of the Sierra Club, and Arnold Schwarzenegger, the 38th governor of California. I'm currently working on the next major conference to come to Oberlin, titled The State of American Democracy, to take place November 15-17, 2007. The goals are to 1. Clarify the historic, legal, and policy origins of our present situation and 2. Collaborate in the making of a post-2020 agenda for reconstruction to rebuild the resilience, fairness, capacity, and durability of democratic institutions that have been decaying for decades and are now under direct assault. To that end we are organizing three or four national meetings, starting with the one in Oberlin, to set the larger context, followed by others in Denver, Los Angeles, and possibly



David Orr at the After Fossil Fuels conference with Oberlin President Martin Krislov, 350.org's Bill McKibben, and Hunter Lovinse.

Atlanta. In the process, we will assemble an advisory group to commission a blueprint for reconstruction, drawing on the expertise of other people and groups as necessary. After that, it is a lot of hard work to educate, mobilize, clarify, persuade, enact, and get on with solving the big issues of our time, particularly accelerating climate change and all that that implies. We do not intend to organize a permanent organization, but rather a fire brigade that helps in our present emergency with a long-term focus on structural and issues beyond the crisis du jour. I also have a new book out, titled *Dangerous Years: Climate Change, the Long Emergency, and the Way Forward* (Yale, 2016).

SWAPNA PATHAK

Working and teaching in the field of environmental politics has been rather challenging this past academic year given the



political climate. However, during this past year I have also seen resiliency and motivation in our students to face any trials that may come their way. I can say the same thing about the international community at large. Last November I attended COP 22 in Marrakesh following the Paris Agreement on

Climate Change in 2015. The international community, including various national leaders, seemed nervous given the result of the U.S. election. However, it was heartening to see leaders of countries like China, India, Germany, France,

Japan, and so on resolved to continue their work to address climate change with or without the United States, and even impose sanctions if the need be. It was a gathering that gave me hope that I was able to communicate to my students back here in Oberlin.

On the research front, I presented two research projects exploring issues of equity in the Paris Agreement at O.P. Jindal University and Tata Institute of Social Science Research in India. I also presented a paper on NGO coordination in climate change negotiations at the International Studies Association Meeting in Baltimore, 2017. Last year I also contributed a book chapter to *Implementation of the 2015 Paris Agreement on Climate Change* (Routledge, forthcoming in Nov. 2017), and a book review to *Review of Policy Research* (March 2017).

It was also my pleasure to direct honors thesis projects by Emma Eisendrath and Ayami Kan. The process taught me so much about U.S. policies around sea level rise and energy ladder analysis in Bhutan. I feel truly proud of Emma and Ayami. I will be on sabbatical next year after six years of continuous teaching here at Oberlin. I'm looking forward to catching up on research and some exciting backpacking.

JOHN PETERSEN '88

I came to Oberlin because I love teaching and knew students here were among the best. After 16 years I still feel that way.

And yet I watch my sabbatical year come to a close with melancholy. I had such ambitious plans and long to-do lists! And now I find that they have grown instead of shrinking...



Maybe I will feel better if I list a few things I HAVE managed to get done this last year. On the academic front, I've continued to collaborate closely with Cindy Frantz, Rumi Shammin, and many students on research focused at the intersection of resource flows, data visualization, and efforts to transform human behavior through feedback. I took the lead on a successful grant proposal to the Ohio EPA's Environmental Education Fund—\$50,000 for this year and next to work with teachers in Cleveland, Toledo, and Akron public schools to integrate real-time data on

resource flow through school buildings into the curricula of Northeast Ohio (see related article on pg. 4). I managed to shepherd three papers/book chapters through the peer review process—including two with former students as lead authors (congratulations to Shane Clark '14 and Danny Rosenberg '12!). I shifted a few more into various stages of the publication pipeline.

One of my big goals for my year away from teaching was to better organize all aspects of my life; in addition to pushing my research agenda forward, I made at least a first stab at organizing my office and computer and my classes. On a personal front, I've wrapped up a number of big projects on my home, including installing a heat pump, going fully solar, and getting my home workshop much better organized. More importantly I've spent quality time with my family— sailing up coast of Maine and down the Caribbean, biking, making stained glass with Lily (now 13). Luke (10) and I have been getting a real kick out of playing music together—open mics at the Woodshed and as guest performers with friends at the Vermilion Valley Winery.

CHIE SAKAKIBARA

My second year at Oberlin made me realize that almost all my wildest dreams can come true here. As a cultural geographer with a background in art history, I'm serving as the principal curator along with Sam Tunick '18, a third-year ENVS major, for a special exhibition at the Allen Memorial Art Museum titled "Exploring Reciprocity: The Power of Animals in Non-Western Art." In conjunction with this exhibition, I had a pleasure to organize a number of events involving faculty and students.

In November 2016, I traveled to Utqiagvik (formerly known as Barrow), Alaska, with three student collaborators to start a community-partnered project on climate change and indigenous cultural resilience (see the essay by the crew in this newsletter). I am thankful to the community for warmly welcoming us, and to several grants provided by ENVS and Oberlin College that made our fieldwork possible and meaningful.

This spring, I had the privilege of hosting a number of scholars and activists in Indigenous Studies on campus:



Maria Williams (Tlingit; University of Alaska), Edward Hummingbird (Cherokee; Southwestern Indian Polytechnic Institute), Aaron Fox (Columbia University), Elizabeth Castle (Shawnee; Denison University), and Madonna Thunder Hawk (Cheyenne River

Sioux; Standing Rock activist). Last spring, my students my in Indigenous Peoples and Climate Change course and I collectively nominated Rosemary Ahtuanguaruk, an Iñupiaq environmentalist from Nuiqsut, Alaska, for an Honorary Doctor of Humanities from Oberlin College. I am thrilled that Rosemary will be presented with the degree in honor of her commitment to environmental justice and indigenous rights at commencement this year. I have also enjoyed working closely with Oberlin Students for Standing Rock as well as contributing to the future agenda of the Luce Initiative on Asian Studies and the Environment. I look forward to more adventures and excitement in the coming academic year.

MD RUMI SHAMMIN

My 2016-17 academic year has been quite overwhelmed with administrative responsibilities—both as chair of environmental studies and through service in other college

committees, including the Educational Plans and Policies Committee (EPPC). One of my priorities as chair has been to dedicate efforts to ensure that environmental studies continues to provide an inclusive learning environment that instills interactional diversity and creates spaces where many different



perspectives, priorities, and values can combine, collide, and interact in a respectful and productive manner. To that end, I pursued a project to systematically collect data and implement programs to advance diversity in the Environmental Studies Program in consultation and collaboration with other relevant units on campus. I initiated another project to collect, organize, and make accessible information on internships and jobs for environmental studies majors. We are currently collaborating with the Career Center and participating in a pilot project with them to create discipline-specific career resources for our majors. During the past year, environmental studies has continued to cosponsor a diverse range of campus events and has maintained a sustained social media presence. Finally, mentoring tenure-track faculty has been one of the most important and humbling tasks for me as chair.

Faculty/Staff News CONTINUED

In 2015-16, I led a two-year, multi-campus project supported by the Great Lakes Colleges Association (GLCA) as part of its Expanding Collaboration Initiative funded by the Andrew W. Mellon Foundation to expand the Environmental Dashboard technology developed at Oberlin to four other campuses: Albion College, Antioch College, DePauw University, and Hope College. The project was completed in December 2016 and had engaged 38 faculty and staff members from the five participating institutions in curriculum development, research, and community engagement projects over two years. In January 2017, I traveled to Bangladesh to do the groundwork for the next phase of my research on climate change in developing countries. In the coming years, I will be investigating opportunities for north-south knowledge exchange on emergency preparedness as part of climate change adaptation. I am also working with my colleague Swapna Pathak and other collaborators in Washington, D.C., and Vancouver, Canada, on a project to study financing and programming opportunities in Bangladesh and other developing countries under new climate funds committed as part of the Paris Agreement. However, this project has been trumped and currently undergoing the process of re-envisioning.

ROSALIND SOLTOW '08, ADMINISTRATIVE ASSISTANT

I am happy to be the new administrative assistant for the Environmental Studies Program. I moved to the AJLC from Peters Hall, where I had served as the administrative assistant for the Oberlin Center for Languages and Cultures, Cooper International Learning Center, and Center for Learning, Education, and Research in the Sciences (Phew! That's a long one). Before that, I worked as an AA in the conservatory's



audio office. My history with the college starts much earlier though. I graduated from Oberlin in 2008 with a BM in viola performance and then earned my master's degree from the Cleveland Institute of Music in 2010. I continue to perform regularly with the Firelands, Mansfield, and Canton symphonies. I have also worked as the general manager for the Northern Ohio Youth Orchestra, based in Oberlin, and now serve as a member of its board of trustees. I am settling into the ES program nicely, and I look forward to working

with students and faculty to make sure the program runs as smoothly and successfully as possible.



DARREL TREMAINE

Throughout 2016 I worked to expand the Environmental Dashboard metering infrastructure at Oberlin College, with specific focus on installing thermal metering to capture data on steam and chilled water use. Sixteen buildings were brought online in the last 12 months, including major energy users such as the Central Heating Plant, Mudd Library, and the Science Center. This work is a step toward understanding the impact of thermal losses within the central heating and cooling loops and will ultimately allow us to increase the efficiency of our district energy system. I continue to work on expanding the metering infrastructure as a means to gain perspective on resource use throughout the entire OC building stock, with an eye on the institution's goal of achieving a carbon neutral campus by 2025.

In the fall of 2016 I co-taught ENVS 355, Sustainable Technology, Behavior, and Community, with Augustus Arthur. Several student groups investigated building resource loads and the behavior of the occupants to understand the hidden losses within our building automation systems. The goal of the course was to generate efficiency and sustainability proposals for submission to the student-run Green Edge Fund. Several proposals are currently being prepared, including one that introduces water-leak mitigation strategy that will result in tens of thousands of dollars in savings over the next three years. I will lead a new course in spring 2018 that further seeks to maximize synergistic efforts between the student body, the Office of Environmental Sustainability, Environmental Studies, Facilities Operations, and Facilities Planning and Construction. In a word, the future of Oberlin College is "green."

Reflections of Graduating Seniors

MELISSA CABAT '17

Being an environmental studies major is like having an open invitation to explore what makes you passionate about the world around you. My pathway in environmental justice led me to deeper reflection on the role of the academic side of activism and how academia can be a space to further discussions of intersectionality. This compelled me to write an honors thesis on the intersections between environmentalism and disability rights. Researching the histories and trajectories of these two social justice movements reminded me of the importance of education, both in academia and activism. Learning about movements that you may not identify with can help you to understand how to be more inclusive of other communities in the work that you do in your everyday life. We are taught that the world is an inherently damaged place, and I still believe this to be true. Moreover, we are currently at a crossroads where silence and inaction are becoming more and more dangerous. But pursuing your passions and digging deep into the dirty work that is understanding the complexities of environmentalism can be a way to patch the holes bored into our planet by greed and hatred. Understanding that everyone approaches the environment and environmentalism as a whole from different backgrounds and perspectives is vital to the development of an Environmental Studies major. Having faith in myself in addition to a willingness to grow, change, adapt, and try new things is what guided my journey through Oberlin, and I believe that a cautiously open mind and a guarded, but not excessively protected, heart are vital to the Oberlin environmental studies experience.

EMILY HECK '17

When I first came to Oberlin I knew I wanted to find a way to connect my passion for working with young people with my interest in the environment. Throughout my time here, I have become most invested in understanding how young people understand environmental issues and what things contribute to making youth feel like empowered agents of change. Looking at environmental issues on local scales in terms of local impacts is something I have grown to understand the importance of and this is what I aimed to focus on in my ENVS honors research project. For this project, I wanted to learn more about local environmental and community identity and efficacy through working with a group of 10 students at an after school program where I tutor. I studied the manifestations and impacts of environmental art and youth activism by

interviewing community members and working with this group of students for two months doing activities and art projects that were focused on the Oberlin community and environment. This process was an incredibly meaningful way to wrap up my academic career at Oberlin. I was able to work with and learn from a core group of students I have had the privilege of getting to know since I began tutoring my freshman year. I was also able to effectively synthesize my learning as an environmental studies major with an education concentration in a way that felt important. I feel incredibly lucky to have been a part of the ENVS department and the Oberlin community for the past four years.

DANA COLIHAN '17

As prospective student I walked through the AJLC and knew that I wanted to be an environmental studies major, and I knew that I wanted to work at the Living Machine. My mother says that on that tour I lit up like a christmas tree. Over the past four years, I have relished being a ENVS major and working as a Living Machine operator. I have been able to pursue a pathway in environmental justice and focus on the ways in which Palestinians and Indigenous communities in North America continue to experience and resist environmental colonialism. Through taking climate change with Janet Fiskio my sophomore year, I got the opportunity to join her research in Africatown, Alabama, a historic black community that has been target of polluting industries since the 1940s. We worked with a community organization, Mobile Environmental Justice Action Coalition, to collect soil samples and conduct community health surveys. My junior year, I was able to travel to the West Bank over winter term to work at the Applied Research Institute-Jerusalem, a nonprofit Palestinian organization working towards the self determination of Palestinian resources. And finally, this past fall, when I had the opportunity to go to Standing Rock to support indigenous activists fight against the Dakota Access Pipeline, Chie Sakakibara, my Indigenous Peoples and Climate Change professor, encouraged me to go. I had been concerned about missing a week of classes, but upon explaining my pathway to a someone at Standing Rock, he said, "Well then, you're not really cutting class at all." The opportunities I have experienced over the past four years with the support of my professors have defined my time at Oberlin and as an environmental studies major.

CONGRATS NEW GRADS!

Graduating ES Majors and Minors*

Nick Bassman*	Elise Horensky	Brooke Ortel
Maddie Batzli*	Sam Horne	Hyacinth Parker
Benjamin Biffis*	Britta Janssen	Emma
Melissa Cabat	Ayami Kan	Patterson*
Abby Cali	Owen Kleiman	Kiley Petersen
Mae Kate Campbell*	Jen Krakower	Emma Rast
Nora Catlin	Victor Lau	Simon Regenold
Dana Colihan	Rachel Leader*	Lauren Rhodes
Justin Cruz*	Sophia Lilien	Moses Richardson
Rebecca Debus	Marie Lilly*	Olivia Roak
Isaac Deitz-Green*	Sasha Lopez	Yanarilys Rodriguez
Chelsea Ettlinger	Dan Lynch	Olivia Scott
Kathleen Falk	Charlie Markowitz	Jeremy Simon*
Ryanna Fossum	Casey McGuire*	Samantha Spaccasi
Natalia Garcia-Sanabria	Kiran Melnyk	Carley Stein
Sloane Garelick	Olivia Menzer	Paulus Van Horne
Julian Geltman	Kit Mercer-Taylor	Clara Weinstein*
Erik Gonzales-Kramer	Sami Mericle	Keenen Willis
Emily Heck	Beth Minahan	Chunxin Yu*
Hannah Heinke-Green	Lillian Moskin*	Yue Rick Yu
Karalyn Grimes	Julia Murphy*	Yinuo Helen Zhang
Alyssa Hemler	Ryan Murphy	
	Ernest Newborn	
	Brendan Nuse	
	Emilia Omerberg	

Networking Our Future: A Conference for Students Interested in Sustainability

As a member of the National Council for Science and the Environment (NCSE), the environmental studies student representatives (Natalia, Hyacinth, Sky and Ify) have been coordinating with other NCSE member institutions in Ohio (University of Dayton, University of Findlay, Ohio State University, and University of Toledo) to organize a conference targeted to students. On September 23, 2017, all Ohio students are invited to Student Sustainability Leaders: Networking Our Future; a student-run, student-centric conference celebrating undergraduate and graduate contributions and supporting future leaders in sustainability careers. In partnership with the National Council for Science and the Environment (NCSE) and its Ohio member colleges, the event will be held at the University of Dayton's River Campus. Registration for the event will be free, and all students will receive a free one-year membership to NCSE. All disciplines of students are invited to attend and present research and scholarship. Nonprofits, private companies, and government agencies are invited to attend to network with students, hold an exhibition booth, and to sit as panelists.



The Environmental Studies Program will arrange transportation for student groups from Oberlin to travel to the conference. Agenda details can be accessed at go.udayton.edu/sustainabilityleaders.

ENVIRONMENTAL STUDIES PROGRAM

Adam Joseph Lewis Center for Environmental Studies

122 Elm Street
Oberlin, OH 44074
440.775.8747
www.oberlin.edu/envs
www.oberlin.edu/ajlc

FACULTY & STAFF:

Md Rumi Shammin
*Chair and Associate Professor
of Environmental Studies*

Augustus Arthur
*Sustainable Technology
Research Fellow*

Rosalind Soltow
Departmental Secretary

Janet Fiskio

*Associate Professor of
Environmental Studies*

Benjamin Hobbs

*AJLC Facilities Manager
and Community Outreach
Coordinator and Instructor*

Karl Offen

*Professor of Environmental
Studies*

David Orr

*Special Assistant to the
President*

Swapna Pathak

*Assistant Professor of
Environmental Studies*

John Petersen

*Paul Sears Professor of
Environmental Studies and
Biology*

Chie Sakakibara

*Assistant Professor of
Environmental Studies*

Darrel Tremaine

*Assistant Project Manager for
Environmental Dashboard*

ENVIRONMENTAL STUDIES PROGRAM COMMITTEE:

Md Rumi Shammin, ENVS
(Chair)

Cheryl Cottine, Religion
Matthew Elrod, Chemistry

Sarah El-Kazaz, Politics

Janet Fiskio, ENVS

Cindy Frantz, Psychology

Ben Hobbs, ENVS

Dennis Hubbard, Geology

Roger Laushman, Biology

T. S. McMillin, English

Thomas Newlin, Russian

Karl Offen, ENVS

Christie Parris, Sociology

Swapna Pathak, ENVS

John Petersen, ENVS

Chie Sakakibara, ENVS

**Ann Sherif, East Asian
Studies**

Peter Swendsen, TIMARA