Northeastern University Social Science Environmental Health Research Institute

SEPTEMBER 2019

SSEHRI 7th Annual Report

Director's Message

We've had another great year with new members, new grants, extensive publications, important conferences, continually expanding outreach, and growing policy influence. This Annual Report will give you a detailed presentation of the many projects SSEHRI members are engaged in, as well as highlights of our members' accomplishments throughout the year.

We are proud to announce that two of our SSEHRI faculty received tenure this year: Laura Senier at Northeastern University and Alissa Cordner at Whitman College. SSEHRI postdoc Lauren Richter has accepted a position as an Assistant Professor of Environmental Studies at the Rhode Island School of Design. Vanessa De La Rosa, a past T32 postdoc, has accepted a position as a Biomedical Sciences teaching faculty at Burrell College of Osteopathic Medicine in New Mexico. Another one of our T32 postdocs, Andrea Hindman, will be transitioning from her postdoc position with SSEHRI and Silent Spring Institute (SSI) to work as a AAAS Science Fellow with the Department of Defense. T32 postdoc Jennie Ohayon started as a Research Scientist at SSI.

Some of the major highlights include the 2nd National Conference on Per- and Polyfluoroalkyl Substances (PFAS), co-hosted by SSEHRI in June, 2019 here at Northeastern. The focus of this conference was to foster alliances across sectors (government, academics, NGOs, and community groups) to better support communities impacted by PFAS contamination. Like the 1st National PFAS Conference held in June 2017, This was a unique meeting, bringing together different stakeholders to address an expanding public health and environmental crisis.

Our grants success this year has been very impressive. Phil Brown, Loretta Fernandez, and Laurel Schaider (SSI) received a Northeastern Tier 2 grant for \$27,400 in support of their development for an NSF grant, "PFAS Central: A National Collaborative for Research, Community Assistance and Engagement, and Research Translation on Per- and Polyfluoralkyl Substances." Phil Brown and Laurel Schaider received the DERBI R21 NIEHS grant for "Scaling up access and usability of smartphone tools for reporting chemical biomonitoring results." Phil Brown and Alissa Cordner (Whitman College) received an REU supplement for \$32,000 related to their NSF grant on "The New Chemical Class Activism: Mobilization Around Perand Polyfluorinated Compounds." Lourdes Vera won the very prestigious Switzer Foundation Fellowship. Andrea Hindman was selected for the Advancing Green Chemistry (AGC) Science communication fellowship for the 2019-2020 class of fellows, and was selected as one of ten finalists selected to present a 5-min TED-style

talk in San Francisco, CA for the California Breast Cancer Research Programs (CBCRP) Global Challenge showcase and competition.

This past year we welcomed Sociology doctoral students Grace Poudrier and Jesse DiValli, and in September entering doctoral student Avery Rosenbloom, and co-ops from the ROUTES undergraduate training program, Liz Mariluz and Olivia Chagnon. We are very proud of our many SSEHRI members working with EDGI, the Environmental Data and Governance Initiative. The EDGI team, Sara Wylie, Phil Brown, Jesse DiValli, Grace Poudrier, Lourdes Vera, Lauren Richter, Jennie Ohayon, Vanessa De La Rosa, Andrea Hindman, Alissa Cordner, and Stephanie Knutson, all support this project which monitors government websites for changes and deletions, interviews current and past EPA and other federal staff, and develops models for future democratic governance. EDGI has informed over 220 new articles in top media outlets from The New York Times to The Guardian. In 2018-2019 we release two major reports on declines in enforcement at the EPA, that resulted in EDGI testifying before congress, and a second systematically analyzing censorship of information about climate change on federal website. This report was covered in The Independent, The Guardian and circulated broadly online through VICE news. Northeastern sociology graduate students and SSEHRI members have a forthcoming peer-reviewed article in Engaging Science, Technology and Society on web-monitoring as part of a special issue on STS responses to anti-science policies and rhetoric. We played a major role in writing successful proposals for the David and Lucile Packard Foundation (\$500,000) and the Doris Duke Charitable Foundation (\$200,000), which enabled us to hire many people to boost our already intense work. We also published in Mobilization, Annals of the American Association of Geographers and Information Communication and Society. SSEHRI student Lourdes Vera presented EDGI's work in Environmental Data Justice (EDJ) this summer at ASA and hosted an online meeting on EDJ in February. EDGI has a forthcoming event on September 21st about youth leadership in social justice movements. Please visit EDGI's website at envirodatagov.org.

We were also featured in several news pieces related to our projects, including: the updated collaborative PFAS site map with EWG; the PFAS conference in June; and Sara Wylie's Chemicals in the Creek environmental installation in November 2018. In administrative news, Sharon Harlan was chosen as the permanent Chair for the Health Sciences Department here at Northeastern. We are pleased to have brought in another affiliate member last year, Shalanda Baker, who is a Professor of Law, Public Policy and Urban Affairs at Northeastern. It will be a busy year for us starting new funded projects and writing major grant applications for NSF and NIEHS.

Phil Brown SSEHRI Director

SSEHRI Members



PHIL BROWN WITH NIEHS DIRECTOR, LINDA BIRNBAUM



LIZ MARILUZ, ROUTES UNDERGRADUATE

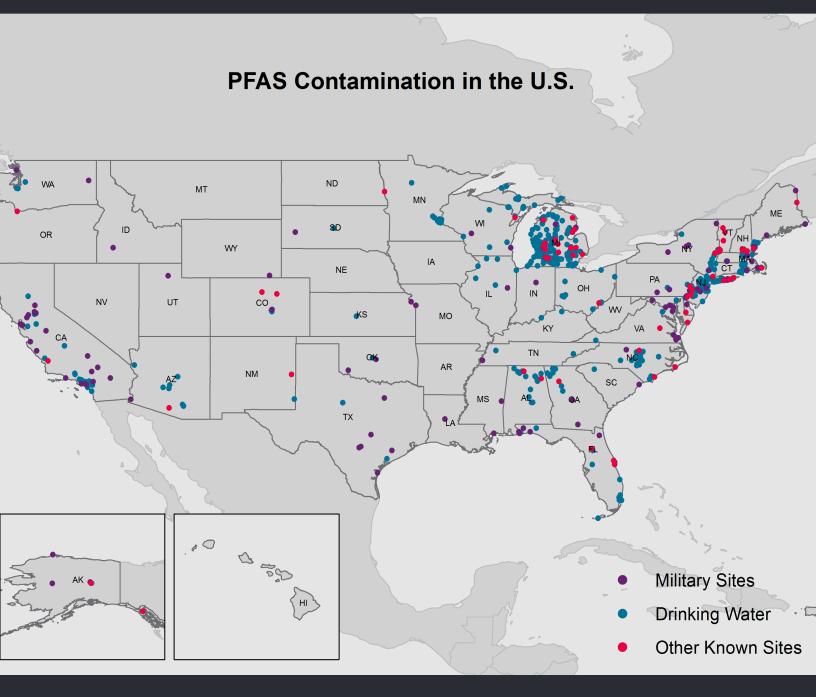


TAYLOR BRASWELL (LEFT) AND LOURDES VERA (RIGHT)

Cole Alder (Sociology and Environmental Studies BA Student) Shalanda Baker (Prof. of Law, Public Policy and Urban Affairs) Elizabeth Boxer (Environmental Studies BA Student) Taylor Braswell (Sociology PhD Student) Phil Brown (Prof. of Sociology and Health Sciences) Jesse Card (Sociology PhD Student) Olivia Chagnon (ROUTES undergraduate) Stephanie Clark (Sociology PhD Student) Lauren Contorno (Sociology PhD Student) Alissa Cordner (Assoc. Prof. of Sociology - Whitman College) Elicia Cousins (Sociology PhD Student) Tibrine Da Fonseca (Sociology PhD Student) Vanessa De La Rosa (Research Scientist, Silent Spring Institute) Rachel Domond (Sociology BA Student) Loretta Fernandez (Asst. Prof. of Civil and Environmental Engineering) Kelsi Furman (Marine & Environmental Science PhD Student) Sharon Harlan (Prof. of Health Sciences and Sociology) Andrea Hindman (Postdoctoral Research Assistant) Clare Malone (Sociology and Cultural Anthropology BA Student) Liz Mariluz (ROUTES undergraduate) Susan Mello (Asst. Prof. of Communication Studies) Fatuma Mohammad (International Affairs BA Student) Yvette Niwa (Environmental Studies and International Affairs BA Student) Kiera O'Donnell (Marine and Environmental Science PhD Student) Dietmar Offenhuber (Asst. Prof. of Art + Design) Jennifer Ohayon (Postdoctoral Research Associate) Grace Poudrier (Sociology PhD Student) Lauren Richter (Research Fellow, Silent Spring Institute & NU) Avery Rosenbloom (Sociology PhD Student) Ron Sandler (Professor of Philosophy and Religious Studies) Mariana Sarango (Population Health PhD Student) Steven Scyphers (Asst. Prof. of Marine and Environmental Sciences) Laura Senier (Assoc. Prof. of Sociology and Health Sciences) Sara Shostak (Assoc. Prof. of Sociology - Brandeis University) Melanie Smith (Grants Administrator) Jennie Stephens (Dean's Professor of Sustainability Science and Policy) Boris Templeton (Sociology PhD Student) Christine Vatovec (Asst. Prof. of Environment and Natural Resources and Medicine - University of Vermont) Lourdes Vera (Sociology PhD Student) Elisabeth Wilder (Sociology PhD Student) Sara Wylie (Asst. Prof. of Sociology and Health Sciences) Emily Zimmerman (Asst. Prof. of Communication Sciences & Disorders)

Front Cover Photos and Credit: Chemicals in the Creek Event - Rio Asch Phoenix (Top) and Will Campbell (Bottom) & Group Photo from 2019 PFAS Conference - Toxics Action Center staff (Middle).

Back Cover Photo and Credit: Community Workshop at 2019 PFAS Conference - Toxics Action Center staff.



This map can be founda at EWG's website: www.EWG.org

Photo (Right): Lauren Richter speaking to Rhode Island House of Representatives on PFAS

PFAS Project Lab

Co-led by Phil Brown, Northeastern University, and Alissa Cordner, Whitman College

Our work on per- and polyfluoroalkyl substances (PFAS) continually increases. In addition to Brown and Cordner, members of this lab group include Northeastern University graduate students: Elicia Cousins, Grace Poudrier, and Marina Atlas; Northeastern undergraduates Cole Adler and Olivia Chagnon; Whitman College undergraduates Jessica Rodriguez and Kylin Brown; Lauren Richter (Assistant Professor at Rhode Island School of Design); Silent Spring research scientists Jennie Ohayon, and Vanessa De La Rosa (recently finished, now faculty member at Burrell College of Osteopathic Medicine).

We finished our NSF grant on "Perfluorinated Chemicals: The Social Discovery of a Class of Emerging Contaminants," and its supplement for Research Experience for Undergraduates and are now in the first year of our new NSF grant on "The New Chemical Class Activism: Mobilization Around Per- and Polyfluoralkyl Substances," which also got an REU supplement. We recently held our second NIEHS-funded National PFAS Conference in June 2019, with over 250 attendees. It was a great success; a feature story is elsewhere in this newsletter. Our five-year NIEHS grant, "Health Assessment, Public Education, and Capacity-building in Communities Impacted by PFAS-contaminated Drinking Water," is now finishing its first year. This grant examines PFAS effects on children's responses to DTAP vaccines, provides water testing, and establishes a web-based resource for affected people all over the US to input their blood or water exposures and understand them against various benchmarks. We continue to update our joint interactive map with the Environmental Working Group, featuring U.S. EPA data on PFAS exposure in water alongside our own comprehensive data set of water contamination sites tracking old and new sites of discovery. Our "Contamination Site Database," the only database of its kind, continues to capture information on the sources and levels of PFAS contamination, dates of discovery, and state and local government responses, among other variables. The number of sites on the databased has increased to over 200, and the map has been used in state legislative and federal Senate testimony. Our community partners Testing for Peace and Toxics Action Center are conducting water sampling in Portsmouth NH with funding from the Seacoast Women's Giving Circle, involving Loretta Fernandez, a SSEHRI affiliate faculty.



We continue to share our research with multiple audiences. We have published academic articles, on state drinking water advisories, retailer and manufacturer response to PFAS consumer pressure, the social

and scientific discovery of PFASs, participant satisfaction with the C8 Health Study, and public sociology action on PFAS. More articles are under review and in progress, examining PFAS activism and corporate influence on PFAS research. We presented at the American Sociological Association and the Interstate Technology and Regulatory Council. Cordner and Brown gave a number of press interviews, postdoctoral fellow Lauren Richter testified twice in the Rhode Island legislature, Brown testified at the Massachusetts Department of Environmental Protection on proposed maximum contaminant level rulemaking, and Cordner serves on the Advisory Committee for Washington State's PFAS Chemical Action Plan. Cordner is also collaborating with Dr. Brian Mayer (U. of Arizona) on a project investigating firefighter risk perception related to cancer and exposure to toxic chemicals, including PFAS.

Transdisciplinary Training at the Intersection of Environmental Health and Social Science

NIEHS T32 Grant, PI, Phil Brown, Northeastern University, and Julia Brody, Silent Spring Institute

The T32 Training Grant funded 4 pre-doc trainees and 2 postdoc trainees 2018-2019, and will continue to fund 2 pre-doc trainees for the 2019-2020 academic year. In addition to working with our various lab groups and participating in training sessions, these trainees also have the opportunity to work on their own independent projects. Current pre-doc trainees include Jesse Card, working with Laura Senier's and Sharon Harlan's Water Equity Lab, and Grace Poudrier, working with Phil Brown's PFAS Project lab.

The trainees who completed their appointments in August this year, include Lauren Contorno, who is about to defend her dissertation "Power, Agency, and Equity in Decarbonization: a Multilevel Analysis of the Movement for a Just Transition; Lourdes Vera, recipient of the prestigious Switzer Environmental Fellowship, who works with Prof. Sara Wylie's lab group on civic science approaches to testing for hydrogen sulfide and other corrosives in areas affected by oil and gas extraction; postdoc Andrea Hindman, who worked with Silent Spring Institute, and is now starting an AAAS Fellowship at the Department of Defense this fall; and Jennie Ohayon, who is now a Research

Scientist at Silent Spring Institute and works on thePFAS Project Lab, on effectiveness of California's toxics law, Proposition 65, on effective and ethical approaches to report back personal exposure data to study participants, and implemented environmental health curriculum in high schools this past year.

Past trainees include postdoc Vanessa De La Rosa, who completed her appointment during the June of 2018. Vanessa is now an assistant professor at Burrell College of Osteopathic Medicine in New Mexico; Stephanie Clark, who completed her appointment in August of 2018, is now supported on a Ford Fellowship while she researches professionals' environmental health knowledge for her dissertation; and Elicia Cousins, who also completed her appointment in August of 2018, continues her dissertation work in Japan with outdoor evacuation retreats for mothers and children from Fukushima.

We submitted our 5-year T32 renewal application to the National Institute of Environmental Health Sciences (NIEHS) in May, and expect scores in October of 2019. Photos of T32 Trainees, L to R: (Top) Grace Poudrier Vanessa De La Rosa Jesse DiValli (Middle) Andrea Hindman Lourdes Vera Elicia Cousins (Botton) Lauren Contorno Stephanie Clark Jennifer Ohayon



Social Equity and Environmental Justice in Urban Water Systems

Water Equity Team (WET Lab)

Co-Led by Laura Senier and Sharon Harlan, Northeastern University

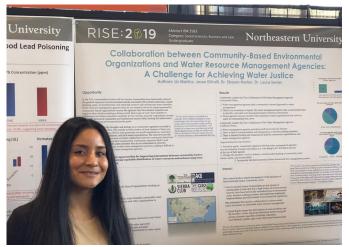
Sharon Harlan and Laura Senier teamed up this year to co-direct the Water Equity Team (WET Lab), an interdisciplinary group of students and faculty who study the consequences of social and environmental injustices related to water unaffordability; access to green and blue space and emotional well-being among urban teens; and floods and other vulnerabilities specific to coastal communities. Members of our lab are graduate students Mariana Sarango (Population Health), Stephanie Clark, Lauren Contorno, Jesse DiVall, Nickolas Faynshteyn, and Elisabeth Wilder (Sociology), Kelsey Furman, Kiera McDonnell, and Dr. Steven Scyphers (Marine and Environmental Science), Andrea Hindman (Silent Spring Institute Postdoctoral Fellow), and undergraduate ROUTES co-op undergraduate, Liz Mariluz.

The lab group met bi-weekly to hear rotating presentations about work-in-progress. We read and critiqued each other's writing, including draft manuscripts, proposals, and upcoming presentations and posters. Some of the works grew out of the previous year's lab research on interviews with community leaders about water challenges and visions of water sustainability in cities across the country.

A new project, using the interview data to focus on community efforts to organize around local water inequalities, was begun by Liz Mariluz. Laura Senier continued building her new project on the impacts of access to parks and water recreation on teen's emotional well-being. Other research presentations focused on a case study of perceived damages to coastal social and ecological systems after Hurricane Irma in Florida, and psychological distress and social disruption in fishing communities after among the collapse of New England fisheries. Sustainability Research Network, Urban Water Innovation Network (UWIN): Transitioning Toward Sustainable Urban Water Systems

> NSF Grant, PI, Sharon Harlan, Northeastern University

Harlan is project director of the Social Equity and Environmental Justice Project of UWIN, a national coalition of academic institutions and key partners across the United States focused on research, engagement, and educational programs to address challenges that threaten urban water systems. SSEHRI students have been involved with research and engagement that helps environmental justice communities articulate local water problems and a vision for water solutions that is consistent with inclusive, equitable, and sustainable urban development Mariana Sarango is writing her PhD dissertation on health impacts of unaffordable water bills for socially vulnerable groups. Elisabeth Wilder is writing her PhD dissertation on community visions of just sustainability in urban water systems. Harlan and Sarango recently co-authored an article on the social and cognitive determinants of flood risk perceptions using survey data from nine major metropolitan areas.



Liz Mariluz, ROUTES student, presenting at Northeastern's RISE

Public Health and the Right to

Affordable Water

Northeastern University TIER 1 Funded, Co-PIs Sharon Harlan, Martha Davis, Laura Senier

This a collaborative project among the Department of Health Sciences, the School of Law, and the Department of Sociology & Anthropology. Mariana Sarango, Population Health PhD candidate, is key personnel and this study is part of her dissertation. Sarango interviewed more than 20 residents of Boston and Chelsea, MA about the burden of high water bills and spending trade-offs on food and medicines that adversely affect their health. Additional research about municipal decision-making on setting water rates and assisting low-income customers in Chelsea was conducted by Wellesley College student and UWIN summer intern, Maggie O'Connor.

Davis, Professor and Associate Dean in the School of Law, published a report about affordability research in 12 Massachusetts communities. The report, "A Drop in the Bucket,"

Hazards SEES Enhancing

Emergency Preparedness for Critical Infrastructure Failure During Extreme Heat Events

NSF Grant, Co-I Sharon Harlan, Northeastern University



Sharon Harlan (Left), Maggie O'Connor, and Mariana Sarango (Right)

has attracted national and local media attention. The team has submitted a proposal about the emerging water unaffordability crisis for low-income and minority groups in US municipalities to the National Science Foundation in order to broaden this research.

This project is assessing the human, environmental, and technological impacts of independent and concurrent heat wave and electrical grid failure (blackout) events in Atlanta, GA, Detroit, MI, and Phoenix, AZ. Researchers at Arizona State University and the University of Michigan are analyzing household surveys and indoor temperature data loggers to determine how people use air conditioning and the social mechanisms that lead to vulnerability when heat emergencies occur.

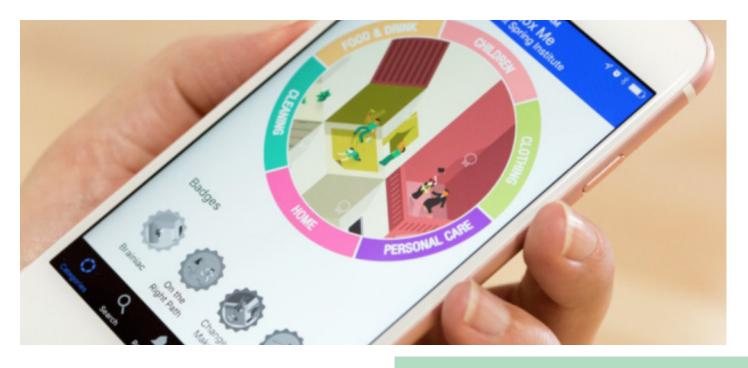


Olivia Chagnon, ROUTES student working on PFAS

Research Opportunities for Undergrads: Training in Environmental Health Science (ROUTES)

NIEHS Grant, Faculty Mentors, Phil Brown and Sharon Harlan, Northeastern University

The ROUTES program is designed to increase the number of undergraduate underrepresented minority (URM) students participating in environmental health (EH) research, training them in interdisciplinary settings and continuing onto graduate studies and lifelong EH research careers. ROUTES engages and prepares URM students for EH research careers through hands-on research experience, research community engagement, training, mentoring, and support. Faculty Mentors include Phil Brown, who has supervised 4 ROUTES students in SSEHRI, and Sharon Harlan, who supervised 2 ROUTES students in the UWIN project.



Combating Everyday Chemical Exposures through Hands-on Environmental Health Curriculum, a Mobile App, and Peer-to-Peer Mentoring

Toxics Use Reduction Institute, PI, Jennifer Liss Ohayon, Silent Spring Institute

In partnership with the Massachusetts Breast Cancer Coalition, Jennifer Liss Ohayon led a project to reduce high school students' exposures to common endo-crine-disrupting and asthma-associated chemicals. The project team went into classrooms at high schools across MA to help students conduct and analyze projects to assess common chemical exposures in their homes and use Silent Spring's environmental health app Detox Me (image above) to adopt strategies to reduce these exposures. Over 140 students participated in the two-class program at 6 high schools, and another approximately 150 students were reached through lecture hall presentations at two additional schools. In collaboration with UC Berkeley's Center for Environmental Research and Children's Health, the project also created a peer-to-peer mentoring program that connects high school students to youth who have participated in significant human biomonitoring research (research that measures chemical levels in the body) and successfully reduced their harmful exposures.

Data Sharing and Privacy Protection in Digital-Age Environmental Health Studies

NIH Grant, Co-PI, Phil Brown, Northeastern University

Evaluates privacy risks and develops solutions for environmental health studies through optimizing procedures to redact or mask data to improve privacy while retaining scientific utility for data sharing. The funding period has ended for this grant, but articles are still in progress.



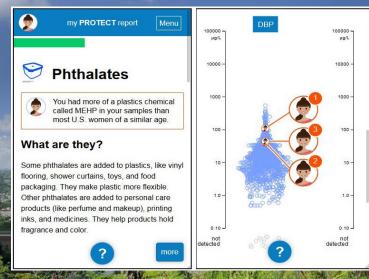
Phil Brown, SSEHRI Director, Northeastern University

Detox Me app photo care of Silent Spring Institute.

Puerto Rico Testsite for Exploring Contamination Threats (PROTECT) SRP

NIEHS Grant, Core Leader, Phil Brown, Northeastern University

The PROTECT center investigates the high preterm birth rate in communities surrounding toxic waste and Superfund sites in Puerto Rico. Phil Brown directs the Research Translation Core and co-directs the Community Engagement Core of this multi-project, multi-institution collaboration.



Center for Research on Early Childhood Exposure and Development in Puerto Rico

NIEHS and EPA Grant, Core Leader, Phil Brown, Northeastern University This multi project program builds on the PROTECT cohort, following 600 children born to PROTECT mothers, examining environmental chemicals and neurological outcomes, as well as asthma and other respiratory conditions resulting from air pollution. Phil Brown is Co-Director of the Community Outreach and Translation Core.

Scaling Up Access and Usability of Smartphone Tools for Reporting Chemical Biomonitoring Results

NIEHS Grant, Mulpti-PI, Julia Brody, Silent Spring Institute, Phil Brown, Northeastern University

Our newest grant builds new tools to expand researcher and participant access to the Digital Exposure Report-Back Interface personal exposure report method (DERBI), by developing an easy-to-use software interface so any researcher can use DERBI to visualize personal data and author reports without programming skills. This includes evaluating a smartphone form of DERBI as a tool for growing environmental health literacy among study participants.



Julia Brody, Silent Spring Institute, at the 2019 PFAS Conference. Photo Credit: Toxics Action Center staff.



OPEN WATER DATA: Chemicals in the Creek

Data Visualization project led by Sara Wylie, Northeastern University

In partnership with GreenRoots and Laura Perovich at MIT, and with the support of SSEHRI faculty and student volunteers we presented the Chemicals in the Creek Project a community performance about Clean Water Act violations by the regional oil storage facilities. The event was featured in an short film from MIT's media lab and the NIEHS PEPH August newsletter, It lead to a series of productive meetings with the facilities to identify the causes of these permit violations. This project is supported by the Center for Research on Environmental and Social Stressors in Housing Across the Life Course (CRESSH) and the Research Institute for Experiential Learning Science (RIELS).





The Wylie Research Lab continues using and developing community-friendly, low cost materials and methods to monitor hydrogen sulfide (H2S), sulfur dioxide (SO2), and volatile organic compounds (VOC) emissions near oil and gas facilities. This past year, the interdisciplinary team included Lourdes Vera (PhD student, Sociology), Garance Malivel (Master's Student, Environmental Studies York University), Dr. Drew Michanowicz (exposure scientist and post-doc at HSPH), and Sarah Lerman-Sinkoff (Graduate student Clark University), Northeastern undergraduate Kaline Langley (Biology/Journalism) in collaboration with Priscilla Villa from the organization Earthworks. This year we completed work on our sewage treatment plant validation study and submitted a paper on the method for review in Atmospheric Environment as part of a special issue on citizen science.

We continued our air monitoring work to Saskatchewan Canada in collaboration with the Price of Oil News consortium. This award-winning network of print and TV news in Canada is lead by Patti Sonntag the former managing editor of The New York Times. Our work was featured in two national news stories in Canada. With the support of Northeastern's Institute on

Development of Low Cost Approaches to Monitor Oil and Gas Operations

JPB Foundation & Harvard School of Public Health Grant - PI, Sara Wylie, Northeastern University

Research and Experiential Learning we returned to share the results with the community members who participated in the monitoring in August 2019. Garance Malivel successfully defended her Master's thesis at York University on our research and we will be working this year turning that into publications.

In collaboration with Sarah Lerman-Sinkoff and Mother's Out Front we are exploring whether the photopaper method can also be used to detect natural gas leaks from city pipes in Worcester, MA.

Photos from Chemicals in the Creek installation event in November, 2018 at the Chelsea River, MA. Photo Credit: Rio Asch Phoenix, NEU undergrad

Media Coverage: www.northeastern.edu/environmentalhealth/cressh









"PFAS Science, Policy, and Activism."

Phil Brown, Alissa Cordner, and Laurel Schaider. 2019. Annual Conference of Interstate Technology and Regulatory Council. Boston MA.

"Landmark Lessons of Superfund Research Program Centers" Brown, Phil. November 28, 2018 Annual

Meeting of the Superfund Research Program. Sacramento, CA

"Reproducing Invisibility: Contested Narratives about Radiation Health Effects after Fukushima.

Cousins, Elicia. 2019. Eastern Sociological Society Annual Meeting.

"Keeping Abreast of Prevention in Chemical Safety Testing.

Hindman, A.R., Helm J. 2019. Global Challenge to Prevent Breast Cancer, California Breast Cancer Research Program.

"Adverse Outcome Pathway of Estrogen **Receptor Activation by Endocrine Disrupting** Chemicals Leading to Enhanced Breast Cancer Susceptibility." Hindman A.R., Link A.P. and Rudel R.A. 2019. Society of Toxicology Annual 58th Annual

Meeting, Baltimore, MD.

"Impacts of Hurricane Irma on People and the Built Environment in the Florida Keys: A Survey of Coastal Residents.⁵

O'Donnell, K.L., S. Harlan, T. Tomiczek, S.B. Scyphers. 2019. CNREP 2019: 6th National Forum on Coastal Socioeconomics, New Orleans, Louisiana.

"Producing Environmental Ignorance: The Case of PFAS.

Richter, Lauren. 2019. Robert & Patricia Switzer Foundation, Board of Directors Retreat, Boston.

"Strategic Science Production."

Richter, Lauren, Alissa Cordner and Phil Brown. 2019. ASA Annual Meeting, New York.

"PFAS in Food Contact Paper."

Richter, Lauren, Maureo Fernández y Mora and Anna Robuck. 2019. Local Environmental Action Conference. Worcester, MA.

"Community Responses to Highly Fluorinated Compounds (PFAS)."

Richter, Lauren and Shaina Kasper. 2019. New England Grassroots Environment Fund. RootSkills Conference, Brattleboro, VT.

"Unaffordable Water in the U.S.: A Public Health & Health Equity Issue.'

Sarango, M. 2019. Law and Society Annual Meeting, Washington, D.C.

"Social-Ecological Sustainability along Coastlines: Promise, Progress, and Panaceas."

Scyphers, S. 2019. Oak Ridge National Laboratory, Oak Ridge, TN.



SELECT SSEHRI

PRESENTATIONS 2018-2019

"A Social-Ecological Systems Perspective on Shoreline Sustainability.

Scyphers, S. 2018. University of North Carolina – Chapel Hill, Institute of Marine Sciences, Morehead City, NC.

"When Data Justice and Environmental Justice Meet: Responding to Extractive Logic through

Environmental Data Justice" Vera, Lourdes. 2019. Presented at ASA Annual Meeting, New York, NY.

"One Water, One Future? Visions of Sustainability among Water Professionals and Practitioners."

Wilder, Elisabeth. 2019. Presented at SSSP Annual Conference in New York, NY.

"Unfracking the Future: Toward A Civic Technoscience.⁴

Wylie, Sara. 2019. Plenary Lecture. University of Montana 14th Annual Earth Sciences Student Colloguium.

"Designing Environmental Justice through Undoing Extractive Research Economies."

Wylie, Sara. 2019. Cultures of Energy 8, Center for Energy and Environmental Research in the Human Sciences, Rice University.

Photo: Lourdes Vera presenting at the 2019 ASA Annual Meeting

SELECT SSEHRI PUBLICATIONS 2018-2019

• Ashrap, Pahriya, Deborah Watkins, Antonia Calafat, Xiaoyun Ye, Zaira Rosario, Phil Brown, Carmen Vélez-Vega, Akram Alshawabkeh, Jose Cordero. 2018. "Elevated Concentrations of Urinary Triclocarban, Phenol and Paraben among Pregnant Women in Northern Puerto Rico: Predictors and Trends." *Environment International*, 121(1): 990-1002.

• Contorno, Lauren. 2018. "Turtles & Teamsters Revival? Analyzing Labor Unions' Environmental Discourse from the 2014 People's Climate March." *Interface* 10 (1-2):117-148.

• Cordner, Alissa, Phil Brown, and Lauren Richter. 2019. "Environmental Chemicals and Public Sociology: Engaged Scholarship on Highly Fluorinated Compounds." Forthcoming in *Environmental Sociology*.

• Cordner, Alissa, Vanessa De La Rosa, Laurel Schaider, Ruthann Rudel, Lauren Richter, and Phil Brown. 2019. "PFAS Drinking Water Guideline Levels: The Role of Scientific Uncertainty, Risk Assessment Decisions, and Social Factors." *Journal of Exposure Science & Environmental Epidemiology*, 29: 157-171.

• Cousins, Elicia Mayuri, Lauren Richter, Alissa Cordner, Phil Brown, and Sokona Diallo. 2019. "Risky Business? Manufacturer and Retailer Action to Remove Per- and Poly-fluorinated Chemicals from Consumer Products." *New Solutions: A Journal of Environmental and Occupational Health Policy*, 29(2): 242-265.

• Dillon, Lindsey, Rebecca Lave, Becky Mansfield, Sara Wylie, Nicholas Shapiro, Anita Say Chan, and Michelle Murphy. 2019. "Situating Data in a Trumpian Era: The Environmental Data and Governance Initiative." *Annals of the American Association of Geographers*, 109(2), 545-555.

• Fredrickson, L., Sullivan, M., Sellers, C., Ohayon, J.L., Kohl, E., Lamdan, S., Cordner, A., Hu, A., Kaczowka, K., Navas, N., Wicks, L., and EDGI. 2018. "A Sheep in the Closet: The Erosion of Enforcement at the EPA."

• Harlan, S.L., P. Chakalian, J. Declet-Barreto, D.M. Hondula, G.D. Jenerette. 2019. "Pathways to Climate Justice in a Desert Metropolis." *In People and Climate Change: Vulnerability, Adaptation, and Social Justice*, L.M. Reyes and J. Rigg (eds.) Oxford University Press.

• Kenny, Catherine, Max Liboiron, Sara A. Wylie. 2019. "Seeing power with a flashlight: DIY thermal sensing technology in the classroom." *Social Studies of Science*, 49(1), 3–28.

• Malone, Clare, Gülnaz Çiğ, Phil Brown, and Alan Ducatman. 2019. "Participant Satisfaction in the C8 Study of PFOA." *New Solutions*, 29(2): 186–204.

• Ohayon, J.L., and Fredrickson, L. 2019. "Newly empowered Democrats need to save the EPA- again." The Hill.

• Richter, Lauren. 2019. "Challenging Dominant Breast Cancer Research Agendas: An Assessment of Stakeholder Perspectives on the Interagency Breast Cancer and Environment Research Coordinating Committee." *Environmental Health*, 18(41).

• Richter, Lauren, Alissa Cordner, and Phil Brown. 2018. "Non-Stick Science: Sixty Years of Research and (In) Action on Perfluorinated Compounds." *Social Studies of Science*. 48(5): 691-714."

• Smith C., S.B. Scyphers. (2019) "Past hurricane damage and flood zone outweigh shoreline hardening for predicting residential-scale impacts of Hurricane Matthew." *Environmental Science and Policy*, 101: 46-53.

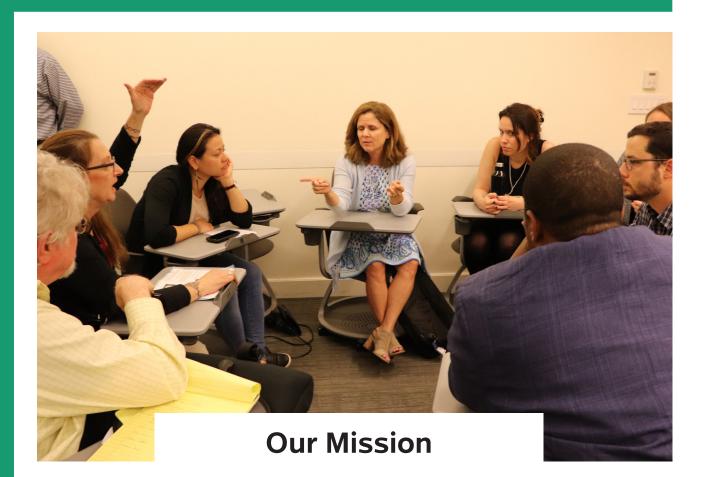
• Strain, E. M. A., K. Alexander, S. Kienker, R. Morris, R. Jarvis, R. Coleman, B. Bollard. S. B. Scyphers. 2019. "Urban blue: A global analysis of the factors shaping people's perceptions of the marine environment and ecological engineering in harbours." Science of The Total Environment.

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