



EDUCATION

UC Berkeley, Berkeley CA — July 2017-Present

- PhD Candidate in Department of Environmental Science, Policy, and Management — *August 2019-Present*
 - Dissertation topic: sustainable and just transitions to disposable-free dining
 - Dr. Kate O'Neill's Lab
 - Passed qualifying exams October 5th, 2020, topics included: waste, global governance, food systems, chemistry (plastics and politics), public health, school meal programs, sustainable transitions, applied innovation and entrepreneurialism, and systems thinking
- Master of Development Practice (MDP) — *July 2017-May 2019*
 - GPA: 3.917
- Graduate Certificate in Food Systems — *May 2019*

Bates College, Lewiston ME — September 2009-May 2013

- Bachelor of Arts in Psychology, concentration in Cognition and Emotion
 - GPA: 3.58
- Senior thesis, empirical study: *The Effects of Mindfulness Meditation on Attention and Heart Rate*

RELEVANT EXPERIENCE

The Nature Conservancy, San Francisco CA

January 2021-June 2021

Research Policy Intern - California Exported Plastic Waste

- *STAKEHOLDER LANDSCAPE ANALYSIS*: comprehensive analysis of the myriad stakeholders involved in the post-consumer plastic waste management process (e.g., MRFs, waste pickers, legislators, brokers, reclaimers, researchers)
- *RESEARCH SYNTHESIS*: research and analysis of legal and potentially illegal scrap plastic export dynamics in California, and of California waste management landscape, including capacity for, and barriers and solutions to addressing, difficult-to-recycle scrap plastic
- *STRAWMAN PROPOSAL*: Outline how to address plastic waste accumulating since implementation of the National Sword Policy and Basel Convention amendments, as well as how to achieve economically sound exports of plastic waste

Environmental Science, Policy, and Management, UC Berkeley CA

August 2019-Present

Lead Researcher

- *SUDS ORDINANCE*: a mixed-method randomized control trial to assess the economic and behavioral impacts of the City of Berkeley's Single Use Disposable Foodware and Litter Reduction ordinance, which was enacted in January 2019 and immediately began a phased roll-out at that time
- *FOODWARE WASTE + COVID-19*: to better understand who, why, and how the decisions were made to roll back reusable foodware legislation due to COVID-19 concerns and the public health impact those decisions had
- *SCHOOL MEAL PROGRAM FOOD PACKAGING WASTE*: a quantitative, pre-post analysis to assess the economic and behavioral impacts of San Francisco Unified School District's transition in their school meals program away from pre-made and packaged meals to meals prepared on-site

Other Department Roles

- *UNITED AUTO WORKERS (UAW) 2865 STEWARD*: liaison between people in the department who are part of the union and the campus
- *SOCIETY & ENVIRONMENT ADMISSIONS COMMITTEE*: reviewed PhD applicants for the Society & Environment division of the Department of Environmental Science, Policy, and Management (99 applicants, 4 offers)

- *ACADEMIC ADVISOR*: mentor course selection, oversee academic progress for 4 undergrads
- *FOOD SYSTEMS MINOR COMMITTEE MEMBER*: 12-member team, comprised of faculty, staff, student instructors, and undergraduates

Zero Waste Research Lab, UC Berkeley CA

January 2020-Present

Founder, Lead Facilitator

- *OVERVIEW*: founded to create a space for all student-led zero waste research to coalesce on UC Berkeley's campus
- *FOUNDATION*: chose three undergraduate facilitators to collectively organize, build the mission, vision, values, and structure (with goals) for the new organization
- *COLLABORATION*: conduit between community partners (local and national), campus partners, and student researchers to ensure the research project is effectively structured

Graduate Student Instructor (at 50% appointment, 20 hours a week), UC Berkeley CA

August 2021-December 2021

[Graduate Course] MBA 190.2: Food Innovation Studio (Will Rosenzweig)

January 2021-May 2021

[Undergraduate Course] ESPM 197: Community Engagement in Agri-Food System (Dr. Kathy De Master)

August 2020-December 2020

[Graduate Course] MBA 190.2: Food Innovation Studio (Will Rosenzweig)

January 2020-May 2020

[Undergraduate Course] ESPM 175: Senior Thesis (Dr. Patina Mendez)

August 2019-December 2019

[Undergraduate Course] ESPM 100: Environmental Problem-Solving (Dr. Kate O'Neill)

Ecology Center, UC Berkeley Office of the President, and Telegraph Business Improvement District, Berkeley CA

June 2019-December 2019

Single-Use Disposable Foodware Pilot Intern

- *OVERVIEW*: the implementation of a third-party reusable cup service provider in ten food/drink vendors in the Telegraph Business Improvement District and UC Berkeley's campus
- *PROJECT MANAGEMENT*: the various stakeholders to ensure successful implementation of the pilot program, which includes the three sponsors, the City of Berkeley, the food/drink vendors, UC Berkeley's Environmental Health and Safety department, the dishwashing facility, and outside funders
- *DATA*: compile baseline data and collect ongoing data to assess the impact of a reusable cup service provider on foodware waste generation
- *POLICY*: ensure proper compliance to current and upcoming food and safety policy
- *OUTREACH AND ENGAGEMENT*: to garner signups of the reusable cup service amongst customers, which are predominately UC Berkeley students, residents, and local business customers

Master's Thesis, Berkeley CA

January 2019-May 2019

"Transitioning to Disposable-Free Dining at UC Berkeley"

- *INTENTION*: Test adjustments to a café's operations and customer behavior to increase the use of reusable foodware at on-campus cafes
- *PILOTS*: Conducted two pilots at on-campus cafes
 - Brown's Café (university operated): 3 weeks; incorporated reusable foodware into a café that previously only used disposable foodware

- Café Think (third-party operated): 1 week; expanded the area in which customers could order their meals as dine-in (e.g. adjacent courtyard and buildings) and thus receive it on reusable foodware
- **RESULTS:**
 - The café management teams were willing to conduct the pilot, did not experience any hurdles during it, and planned to continue with the changes after the designated test dates
 - Customers were excited about the changes, but emphasized the need for such changes to be convenient
 - Each café can save \$1,500-2,200 a week on disposable foodware (this does not include any costs incurred by adopting reusable dishware; initial cost, labor, utilities)

Chou Hall Zero Waste, Berkeley CA

January 2018-December 2019

Student Lead

- **MANAGE:** the process of making Chou Hall at UC Berkeley the first certified TRUE Zero Waste (US Green Building Council) academic building in the US; the facility was awarded Platinum (December 2019) with successful completion of 69 of the 81 possible credits
- **STAKEHOLDER ENGAGEMENT AND CONSULTING:** via obtaining stakeholder buy-in (e.g. operations, facilities, café management, events team, audio-visual team, tenured faculty, and student body), recommending policy, and implementing practices
- **RESEARCH:** via qualitative (interviews) and quantitative (surveys and audits) methods to inform adaptive management procedures
- **FINANCIALS:** this includes fundraising (securing grants, donations from partners, and department funding) as well as budgeting (certification costs, various projects, and staffing)
- **SHARE LEARNINGS:** by creating a best practices guide of our process and working with project leads on other pre-existing or new facilities to make them zero waste
- **OUTREACH AND COMMUNICATION:** due to the uniqueness of the building (no landfill is generated in, or disposed of, in the building), building numerous diverse touchpoints to properly inform the users of a public building
- **PEOPLE MANAGEMENT:** with a team of nine people, ranging from full-time employees to graduate and undergraduate students to volunteers, ensuring agreed upon milestones are met so that the building successfully received certification and zero waste practices are institutionalized even after the project team disbands

August 2017-December 2017

Supply Chain Specialist

University of California Global Health Institute's Planetary Health Center of Expertise (PHCOE), Berkeley CA

PHCOE UC Student Ambassador – *September 2018-May 2019*

- **DEVELOP, ORGANIZE AND PROMOTE:** planetary health activities on UC Berkeley's campus and across the UC system to expand knowledge of planetary health issues, mobilize student, faculty and staff involvement in COE initiatives and catalyze critical change

Berkeley-Haas Center for Responsible Business, Berkeley CA

Patagonia Case Competition Student Lead – *October 2017-May 2018*

- **OUTREACHED, ORGANIZED, AND PLANNED:** the third annual nation-wide graduate student case competition jointly hosted between the CRB and Patagonia, including gaining a large and diverse competition pool, ensuring effective communication and project management among the hosts, and executing a two-day finalist event

Autodesk, San Francisco CA

Paid Media Campaign Strategist — *July 2015-May 2017*

Razorfish, Seattle WA

Search Manager — *April 2015-July 2015*

Search Coordinator — *September 2013-March 2015*

Associate Media Planner, Intern — *June 2013-September 2013*

PAPERS

- [in progress] California Plastic Scrap Stakeholder Analysis, Research Synthesis, and Strawman Policy Proposal
- [in progress] A Recycling Reckoning: How Operation National Sword Catalyzed a Transition in the US Recycling System
- Heiges, J. & O'Neill, K. (2020). COVID-19 has resurrected single-use plastics – are they back to stay? *The Conversation*. Accessible at <https://theconversation.com/covid-19-has-resurrected-single-use-plastics-are-they-back-to-stay-140328>.
- Posmik, D. C., Heiges, J., & Shyong, J. (2020). Economic and Environmental Impacts of Poly(3-hydroxypropionate). *Novomer*. Accessible at https://www.novomer.com/sites/default/files/2020-11/EconomicEnvironmentalImpactsP3HP_Novomer.pdf.
- Heiges, J., Doud-Martin, D., & Bennett, K. (2020). Chou Hall Zero Waste Initiative Report: Lessons Learned. *Haas School of Business*. Accessible at https://drive.google.com/file/d/1sZ_4CBmAzRna8e9Km9ynL_zNRqm-mbVu/view?usp=sharing.

FUNDING

- Graduate Remote Innovation Fellows Program – *December 2020* - \$2,000
- Overbrook Foundation – *March 2020-May 2022* - \$30,000
- Solid waste assessment and reduction specialist USDA San Francisco Unified School District research grant – *November 2019-May 2023* - \$10,000 of \$1,000,000 grant
- UC Berkeley's Environmental Science, Policy, and Management 201C Starter Grant – *December 2019* - \$1,000
- Ecology Center Research Grant – *November 2019* - \$5,000
- SWANA Robert P. Stearns/SCS Engineers Scholarship – *August 2019* - \$1,000
- University of California Global Health Institute Planetary Health Student Ambassador – *August 2018* - \$500
- UC Berkeley's Master of Development Practice Scholarship – *August 2017* - \$1,000

PRESENTATIONS

- [scheduled] The Plastic Free Comeback: Reduce, Refuse, Reuse, and Refill, The Ecology Center, *July 16th, 2021*
- Waste Possibilities, Circular Design Summit, *May 27th, 2021*
- Waste Possibilities, St. Mary's College Sustainability Speaker Series, *March 16th, 2020*
- Moving Beyond Plastics, Shedd Aquarium, *February 4th, 2020*
- Innovative Businesses Enabling the Shift to the Circular Economy, Australian Circular Economy Conference, *December 11th, 2020*
- Waste, Imperfect Lunch-n-Learn, November 18th, 2020
- Waste, Deloitte Lunch-n-Learn, *September 25th, 2020*
- Roundtable: Reopening Offices Sustainably and Safely, Dispatch Goods, *July 28th, 2020*
- Waste, Lyft Lunch-n-Learn, *July 27th, 2020*
- COVID-19 + Reusables, The Ecology Center, *May 28th, 2020*
- The Story of Plastic Discussion Panel and Q&A, Imperfect Produce, *May 12th, 2020*
- Sustainable Packaging Coalition's Panel Presentation: Packaging Sustainability and Public Health? *April 28th, 2020*
- Berkeley Changemakers, Edible Education, *February 26th, 2020*
 - Viewable at: <https://www.youtube.com/watch?v=YTyzfoeqzqhw> (start at 1:16:45)
- Zero Waste Infrastructure + Policy, Kate O'Neill's Lab, *November 12th, 2019*
- Chou Hall Zero Waste Initiative, Haas Professional Faculty Breakfast, *October 18th, 2019*

- Zero Waste Infrastructure, Yelp Lunch-n-Learn, *June 21st, 2019*
- Chou Hall Zero Waste Initiative: Lessons Learned, California Higher Education Sustainability Conference, *June 8th, 2019*
- Disposable-Free Dining, GradSlam Competition, *April 3rd, 2019*
- Chou Hall Zero Waste Initiative, ~500 graduate students' orientation, *August 2018*
- Chou Hall Zero Waste Initiative, Haas Professional Faculty Breakfast, *September 28th, 2018*

PROJECTS & COLLABORATIONS

- Geyserville Community Kitchen – *August 2020-May 2021*
- Waste Management Graduate Research Group (graduate students), co-founder and team member – *December 2019-Present*
- Zero Waste Coalition (undergraduate and graduate students), team member – *August 2019-Present*
- Berkeley Food Institute Graduate Student Council, board member – *January 2019-December 2020*
- Zero Waste Working Group (campus-wide, including some students, predominately staff and faculty), graduate student representative – *January 2018-Present*

MEDIA, ACCOLADES, & FELLOWSHIPS

- [referenced] Donovan-Smith, O. (2021). *Earth Day 2021: After COVID-19 derailed efforts to reduce plastic waste, will they move forward again?* The Spokesman-Review. <https://www.spokesman.com/stories/2021/apr/22/earth-day-2021-after-covid-19-derailed-efforts-to/>
- [referenced] Hemond, O. (2021). UC Berkeley's Zero Waste By 2020: Goals, Realities, And Reframings For The Future. *The Perennial*. <https://www.ocf.berkeley.edu/~perennial/2021/01/25/uc-berkeleys-zero-waste-by-2020-goals-realities-and-reframings-for-the-future/>
- Hearst Foundation's Environmental Health Scholar, [The Conversation](#) – *October 2020*
- InFEWS (Innovations at the Nexus of Food, Energy, and Water Systems) Fellow – *April 2020*
- Environmental Science, Policy, and Management Starter Grant – *December 2019*
- Solid Waste Association of North America Scholarship – *July 2019*
- California Higher Education Sustainability Conference Best Practice Award – *July 2019*
- [CACs Sustainability Award](#) by UC Berkeley's Chancellor's Advisory Committee on Sustainability – *April 2018*
- Cowan, Jill. "It's Earth Day. Here's How to Make Less Trash." *New York Times*. 22 Apr. 2019, <https://www.nytimes.com/2019/04/22/us/california-earth-day-berkeley-chou-hall.html>
- Vacar, Tom. "Zero Waste." KTVU (news segment). 22 Apr. 2019, accessible at https://drive.google.com/file/d/1RC7O-I5r4dIRFOftPQLQ21mAhl7PQB_O/view?ts=5cc0d0a5
- Danigelis, Alyssa. "UC Berkeley Building Earns TRUE Zero Waste Platinum Certification." *Environmental Leader*. 18 Jan. 2019, <https://www.environmentalleader.com/2019/01/berkeley-true-zero-waste-certification/>
- Girard, Kim. "UC Berkeley students deliver a lesson in zero waste with TRUE." *GBCI*. 17 Jan. 2019, <https://www.gbci.org/uc-berkeley-students-deliver-lesson-zero-waste-true>
- Kennedy, Mike. "UC Berkeley facility claims title of nation's 'greenest academic building.'" *American School & University*. 15 Jan. 2019, <https://www.asumag.com/green-design-buildings/uc-berkeley-facility-claims-title-nations-greenest-academic-building>

VOLUNTEER + ADVISOR

- Dispatch Goods, Advisor – *January 2019-Present*
- Second Brew, Advisor – *May 2021-Present*
- Vineyard Club Board Member – *November 2019-Present*
- Geyserville Community Foundation Board Member – *June 2016-Present*
- Marin Teen Mental Health Board (co-founder and president) – *August 2007-June 2009*