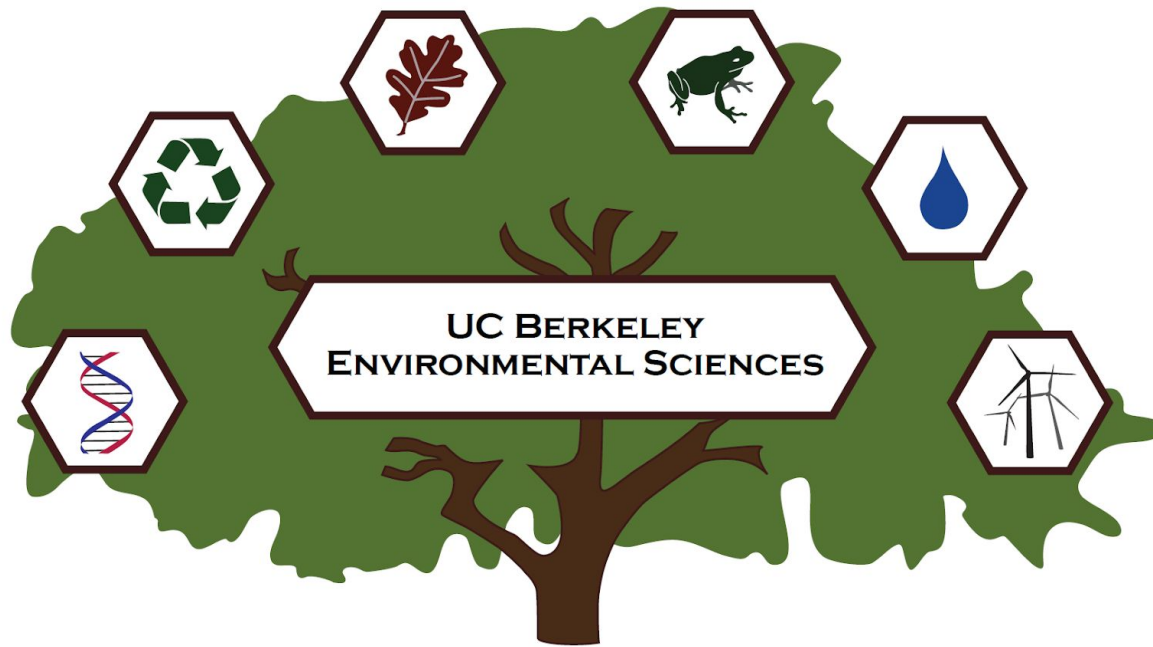


Environmental Sciences Senior Thesis Symposium

University of California, Berkeley



Sunday, April 19th, 2020
9:30AM - 3:00PM



Dear Seniors, Mentors, Families, Friends and Alumni,

On Sunday, April 19th, we expected to be celebrating the Environmental Sciences Senior Thesis Symposium together, but this year we canceled the in-person presentations.

Instead we are sharing the amazing work of our Environmental Sciences Seniors in moderated sessions online so that you can join in, listen to the presentations and hear about the great research experiences of our students.

Please join us via Zoom ([download](#)) using the links below that will be posted about 5 minutes before the session. Each presentation is allocated 15 minutes (presentation + questions) and presenters will answer questions submitted via chat to the moderator.

Looking forward to having you join us,

Tina Mendez, Sam Evans,
Leslie McGinnis, Jessica Heiges & Roxy Cruz

For More Info Contact Team 175 Instructors:

Patina Mendez (patina.mendez@berkeley.edu) &
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Project Website: <http://nature.berkeley.edu/classes/es196/>

Berkeley Rausser
College of Natural Resources

Morning Sessions [Note that you must use the unique link for each session column] If you're having trouble connecting, open zoom and enter the meeting ID into the box and you should be able to connect.

	Session 1	Session 2	Session 3
9:30 AM	<hr/> <p>Opening Comments & Welcome</p> <hr/> <p>Patina Mendez & Samuel Evans</p>	<p>Opening comments are in Session 1</p>	<p>Opening comments are in Session 1</p>
10:00 AM	<hr/> <p>Environmental Health & Justice I</p> <hr/> <p>Claire Krumm California's Human Right to Water: A Comparative Analysis of Domestic Well Water Quality Modeling</p> <p>Johanna Laraway How Statistical Modeling Can Help to Identify Areas of Lead Exposure Risk</p> <p>Erin Cain Pesticide Contamination in California's Rivers: Communicating the Impacts of Pesticides on Biological Indicators in the Central Valley</p> <p>[Short break and start back up at 11:00 AM]</p>	<hr/> <p>Business Sustainability</p> <hr/> <p>Jenny Chiu A Tale of To-Go: A Comparative Life Cycle Assessment of Single Use Foodware</p> <p>Ansel Deng Is Awareness Converted Into Practice? Local Berkeley Restaurants' Perception on Plastic Pollution</p> <p>Vanessa Garcia Economic Feasibility of California Greywater Systems</p> <p>Rebecca Lim Sustainability Reports and Social Media CSR Communications: Comparative Content Analysis via Topic Modelling</p>	<hr/> <p>Wildfire & Forest Management</p> <hr/> <p>Sunny Elliott Are the Bugs Alright? Wildfire Impacts on Beetle Assemblages in a Mediterranean Oak Woodland</p> <p>Melissa R. Jaffe A Remotely Sensed Prescribed Fire Shrub Consumption Model in Southern Sierra Nevada</p> <p>Ursula Harwood In Light of the Flames: Assessing Strategies for Severe Fire Risk Reduction in Young Plantation Forests in the Sierra Nevada</p> <p>Eileen Alcantar Williams Incarcerated and Hero: A Breakdown of Barriers for Formerly Incarcerated Firefighters</p>
11:00 AM	<hr/> <p>Ecology and Evolution</p> <hr/> <p>Key Gonzalez Cryptobiotic Communities and Allelochemicals Decrypted: <i>Eucalyptus globulus</i> Effects on Biocrusts in Berkeley's Tilden Park</p> <p>Chase Turnbull Pruning Plant Genes With Molecular Scissors: Using CRISPR-Cas9 to study the PPK gene in <i>Arabidopsis thaliana</i></p> <p>Angelica A. Santos Can Spiders Fly? A Comparative Analysis of the Dispersal Behavior of <i>Tetragnatha</i> Spiders</p>	<hr/> <p>Remie Sai Phasing Out: Plastic Ban's Potential Effects on Local Businesses in Taiwan</p> <hr/> <p>Sustainable Agriculture & Policy</p> <hr/> <p>Bella Goñi Let Them Eat Grass: How the Policy Structure of the Cattle Industry Can Be Changed to Incentivize Regenerative Grazing Over Factory Farming</p> <p>Yifei Liu Farming The Sun and the Crops at Once: A Cost Benefit-Analysis of Implementing an Agrivoltaic System in China</p> <p>Tiffany M. Lwin Garden to Table: Consumer Access of Urban Produce Among Food Insecure Communities in Berkeley</p>	<hr/> <p>Freshwater Science & Ecology</p> <hr/> <p>Alex Cisneros Carey The Game Is Afloat: Mobile Consumers Track Invertebrate Subsidies From Floating Algal Mats in a Northern California River</p> <p>Gabby Doerschlag To Emerge or Not to Emerge? Aquatic Macroinvertebrate's Response to Climate Change and Altered Flows in Sierra Nevada Streams</p> <p>Sam Larkin Bioenergetics of Juvenile Salmonid Foraging: A Mediterranean Stream Case Study</p> <p>Shannon K. Louie Hydrological Microrefugia: The Survivors of Climate Change in the Sagehen Drainage Basin</p>

Afternoon Sessions [Note that you must use the unique link for each session column] If you're having trouble connecting, open zoom and enter the meeting ID into the box and you should be able to connect.

	Session 4	Session 5	Session 6
1:00 PM	<p>Environmental Health & Justice II</p> <p>Lena Kondrashova Decolonization Through Environmental Restoration and Stewardship in Native American Communities</p> <p>Joshua Lin In Search of Food Justice: Variation in California Asian American Food Security</p> <p>Amy Zhang A Cross-Sectional Study on the Association Between Traffic Related Air Pollutants and Biomarkers of Metabolic Dysfunction</p> <p>Young Park An Environmental Health Assessment of California Prisons: Relationship Between Prisons and Community Health Outcomes</p>	<p>Environmental Education & Awareness</p> <p>Layla Chamberlin Establishing Goals for Environmental Literacy Education: A Case Study in Alameda Unified School District Middle Schools</p> <p>Dara Sengchanthavong (Up)Rooted Once Again: Environmental Racism and Educational Attainment for Southeast Asians in North Orange County</p> <p>Nhu Nguyen Influences of the Exposure to Environmental Issues on Environmental Justice Engagement and Educational Trajectories of Vietnamese-American College Students</p> <p>Kylie Murdock The Relationship between Socioeconomic Factors and Climate Denial in the United States</p>	<p>Wildlife Ecology & Conservation</p> <p>Charlotte Favre Roadkill in Idaho: What Species Are Being Overlooked?</p> <p>Yumna Zia Black Bear Hibernation in the California Sierra Nevada</p> <p>Natasha Thompson A Geospatial Analysis and Prediction of Human-Panther Interactions in Florida</p> <p>Cambrie Congdon You Can Sweat, but Seals Can't: Environmental Variables and Northern Elephant Seal Thermoregulation</p>
2:00 PM	<p>Environmental & Energy Policy</p> <p>Christopher Berven The Thirsty State: Efficacy of California Groundwater Policies</p> <p>Michael Yi The Economic Impact of Air Pollution Related Diseases on the Population of West Oakland</p> <p>Stanley Ou Economic and Environmental Cost Assessment of Lighting at UC Berkeley</p> <p>Sang Hyun Ma Are Ozone Warnings and Alerts Serving Their Purpose? Ozone Alert Effects on Mortality Rates Attributed to Ambient Ozone Exposure in Korea</p>	<p>Plant & Soil Ecology</p> <p>Uthara Vengrai Compost Application Effects on Soil Greenhouse Gas Emissions Along the Climatic Gradient of California Grasslands</p> <p>Lucy Bennett Can Crop Drought Resilience Be Improved With Soil Management Methods via Arbuscular Mycorrhizal Fungal Associations?</p> <p>Dana Price Eating Garbage: A Comparative Fava Bean Growth Assay Using Berkeley's Municipal Solid Waste Compost</p> <p>Emily Hóu Sustainable Organic Urban Agriculture: Planting Flowers to Reduce Pests</p>	<p>Landscape & Management</p> <p>Celia Rodriguez A Thorn in Our Side: Artichoke Thistle Management and Grassland Regeneration in Wildcat Canyon</p> <p>Carol Tsai Characterizing River Networks Into Functional Process Zones Using Geographic Information Systems</p> <p>Augie Clements Spatial Characteristics of Cannabis Agriculture and Viticulture in Mendocino County: Potential Impacts on Freshwater Resources</p> <p>Tasnim Ahmed Friends With Benefits: Mycorrhizal Resource Exchange Between <i>Serendipita bescii</i> and <i>Panicum hallii</i></p>
Thank You!	<p>Our Sincere Thanks to the faculty, postdoctoral researchers, graduate students, staff and community members who generously mentored students - your contributions clearly inspired and enriched the senior thesis experience. We thank Ginnie Sadil, Marques Redd, Lynn Huntsinger and the CNR Advising team. Special thanks to ES Director Dennis Baldocchi, ESPM Chair Paolo D'Odorico, John Battles, the Department of Environmental Science, Policy & Management and the Rausser College of Natural Resources.</p>		