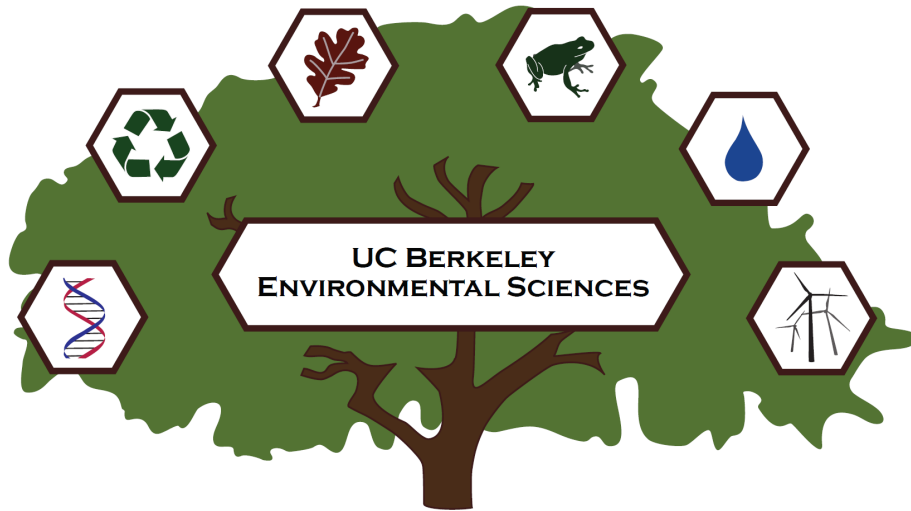


Environmental Sciences Senior Thesis Symposium

University of California, Berkeley



Sunday, April 24th, 2022
9:00AM - 5:00PM

Dear Seniors, Mentors, Families, Friends and Alumni,

Spring is here and it's time to celebrate the great accomplishments of our seniors! This year we're delighted that the Environmental Sciences Senior Thesis Symposium brings a chance for us all to be together in person.

This year we are again sharing the amazing work of our Environmental Sciences Seniors in moderated sessions in person! But we're also sharing them online so that those far away can listen to the presentations. We are happy that you can be part of our community supporting undergraduate research.

If you're joining us in person:

We look forward to seeing you in the session rooms! Please make it to your seat a few minutes before the session begins and we hope that you can stay for a whole session to support the students. Please ask questions of our presenters right after their talk or after the session.

If you're joining us online:

Please join us via Zoom ([download](#)) using the links below that will be posted about 5 minutes before the session. You must have a zoom account to view the talks. Each presentation is allocated 15 minutes (presentation + questions) and presenters will answer questions from the audience. We may have limited ability to monitor the chat in zoom.

Looking forward to seeing you!

Tina Mendez, Jessie Moravek, Sangcheol Moon, & Chelsea Andreozzi

For More Info Contact:

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



Morning Sessions

[If you are joining us on zoom, you must use the unique link for each session column]. Links will be posted about 10 minutes before the session starts. You may need to refresh your browser to see the links.

	159 Mulford	101 Morgan	132 Mulford
9:00 AM	Opening Comments & Welcome Welcome: Patina Mendez Special Guest: John Battles!	<- Opening comments are in 159 Mulford	<- Opening comments are in 159 Mulford
9:15 AM	1 -Evolution	2 - Energy	3 - Environmental Justice & Health
	<p>Xingying Ren Migration Stopover Selection for Hair-Crested Drongos</p> <p>Samantha Jacobsen Not at a Snail's Pace: Predicting the Expansion of <i>Pomacea canaliculata</i> in California's Future Climate</p> <p>Elisa Yang Dancing to Express, Not to Impress: Evolutionary Drivers of Female Song and Dance in Finches (Estrildidae)</p> <p>Pepe Sales Investigating Invasive-Invasive Interactions Through Statistical Modeling</p> <p>Jenna Krugler Temporal Patterns of Morphological Change in Bay Area Songbirds</p> <p>David Coyle Analyzing the Impact of Invasive Species on Tripartite Trophic Networks of Sap-suckers in Point Reyes</p> <p>Claire Bernd Pharyngeal Jaws: An Explanation to the Rapid Diversification of Seven African Cichlids</p>	<p>Lillian Zhang Diablo Canyon Countdown: California's Regulatory Response to Energy Shortages</p> <p>Max Williams The Potential for Agrivoltaics in Alameda County</p> <p>Elias Nash Homemade Electricity: Its Resilience is Shocking!</p> <p>Shane Puthuparambil Digging Deeper: Impacts of Oil and Gas Development in Yasuni National Park</p> <p>Yao Yao Covid-19 impact on PM 2.5 and Renewable Energy Consumption in China</p> <p>Jiaqi Meng A Bioremediation Method to Improve the Rate of Oil Degradation</p>	<p>Anjika G. Pai Beyond Legal Standing: Rights of Nature as a Tool for Indigenous Sovereignty</p> <p>Ally Zermeno The Ethical Considerations in the Collection, Analysis, and Reporting of Spatial Data</p> <p>Emily Hernandez Proximity of Parks and Schools to Highways in Alameda County</p> <p>Navid Goodarzi Understanding Air Pollution and COVID-19 Outcomes in Oakland, California</p> <p>Rachel Ng Jie Min Heat and Health of Central Valley Agricultural Populations</p> <p>Sophia Ramirez Understanding Water Quality and Availability in Mexico City</p>

Coffee Break!

Join us at Morgan Patio @ 11:00 AM. Bring your travel mug if you can.

159 Mulford

101 Morgan

132 Mulford

11:15 AM

4 - Freshwater & Marine Ecology

Junting Liang Potential for Asian Clams to Control Lake Eutrophication

Julia Dandar Overlap Between Projected Sea Level Rise and Whooping Crane Habitat

Shannon McKillop-Herr Seasonality of Macroinvertebrate Diversity and Distribution in California Freshwater Streams

Anders de Wit Hydroclimate Impacts on Benthic Macroinvertebrates in Pinnacles National Park

Man Tran Evaluating the Trophic Effects of Sea Star Wasting Disease in California

Erin Burke Bring Back The Kelp: Kelp Forests in Marine Protected Areas

Ziheng Yun Tracing the Pollution Sources of Lake Tahoe

5 - Environmental Justice & Land Use

Brianna Betts The Grass is Greener on the Other Side: Income Level and Access to Quality Green Space

Isabella Ciraulo Student Greenspace Access Inequality in Los Angeles Unified School District

Zoe Chan Exploring Oakland: Understanding Green Space Access and Activity Patterns

Ally Zhu Hostile Environmental Design and Environmental Justice in Oakland

Rezahn Abraha Historic Legacy of Redlining on Superfund Site Outcomes

Amandine Cornet Land Restoration and Environmental Justice in the Santa Susana Field Lab

6 - Ecology & Conservation

Julian Batz Humans, Dogs and the Biodiversity of Las Trampas

Pheleep F. Sidhom Listening for Birds in Claremont Canyon: Effects of Human Activity on Song and Diversity

Kayla A. Lin Urban Forestry: Biodiversity of San Francisco's Street Trees

Tsz Hin Ngan Wet and Dry: Macroinvertebrate Morphologies and Diversity Along Stream Intermittency Continuum

Taylor Rein Battle for the Pollinators: Insect Visitations to California Native Flowers and Exotic Counterparts at the UC Berkeley Botanical Garden

Brianne Roxbrough Ground-Dwelling Arthropod Community Responses to Extreme Drought

Ashley Cowell Surf's Up: Green Wave Surfing Resilience in Wyoming Mule Deer Spring Migrations

Lunch for ES Students is at the Morgan Patio @ 1:00 PM. ES Seniors group photo on the Mulford steps at 1:35 PM.

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. Links will be posted about 10 minutes before the session starts. You may need to refresh your browser to see the links.

	159 Mulford	101 Morgan	132 Mulford
1:45 PM	7 - Environmental Education	8 - Plant & Microbial Ecology	9 - Waste & Recycling
	<p>Amanda Nicole Gonzaga Environmental Education and Economic Disparity in Los Angeles County</p> <p>Tamlyn Schafer Basic Needs at UC Berkeley: COVID-19 and Resource Accessibility</p> <p>Ana Bertha Medel Environmental Science Education and its Impact on Climate Change Perceptions in Kern County, California</p> <p>Kyle Hicks Lessons in Waste: Assessing High School Student Knowledge of Waste Processing</p> <p>Hannah Ramsey Understanding Environmental Motivation in College Students</p> <p>Yifan Ding Ecolabel Knowledge and Consumer Purchasing Behavior: Evaluating the EPA Safer Choice Program</p>	<p>David S. Zhong Transform or Perish: Changes in Leaf Venation in Response to Punctures</p> <p>Amos Samuels Climate Resilience and Fungi Mutualism in Wheat</p> <p>Amber Lennon Impacts of Mechanical Forest Management on Soil Carbon and Nitrogen</p> <p>Madison Wheeler Bushwhacking through Claremont Canyon: A Vegetation Composition Analysis</p> <p>Julianne Oshiro Identifying Iron-starvation Responses for Photosynthetic Maintenance in <i>Dunaliella</i></p> <p>Ashley Kang Investigating the Role of Prior Glyphosate Exposure on Rhizobia Herbicide Tolerance</p>	<p>Angela Liu Exploring Potential Methods for Reducing Paper Napkin Waste In a High School Cafeteria</p> <p>Molly Wong COVID-19: A Mask Mayhem</p> <p>Grace Martin Achieving Zero Waste: Sorting Behavior, Knowledge, and Barriers at a U.C. Berkeley Residence Hall</p> <p>Melanie Rodriguez Fuentes Zero-Waste by Whom? UC Berkeley's Zero-Waste Initiative and Its Impact on Campus Facility Employees</p> <p>Zarine Kakalia Students & Thrift Stores: Understanding Sustainable Fashion Motivations in College Communities</p> <p>Tara Kelly Understanding the Pipe Dreams of Bay Area Recycled Water</p>

Coffee Break! Join us at Morgan Patio @ 3:15 PM. Bring your travel mug if you can.

159 Mulford

101 Morgan**132 Mulford**

3:30 PM

10 - Food & Environmental Justice

11 - Extreme Events

12- Environmental Policy

Emma Sallstrom Living Near the Cows: Understanding Environmental Burden in California's Central Valley

Jieyuan Kan A Story of Ice and Fire: Remote Sensing Analysis of the Impacts of Wildfire on Snow Cover in the Sierra Nevada

Grey Xu The Relationship between ESG (Environment, Society, and Governance) and Financial Performances: A Case Study of Private Firms in Fujian

T. Evan Domingo Ruppert Cut the Bull from Off Your Plate: Here is How Much Water US Beef Actually Uses

Jameson N.P. Christiansen Fire Frequency in California Chaparral Shrubs

Isobel Cooper Tracking Progress of Municipal Climate Action Plans in California

Gwantae Lee Life Cycle Assessment of a Food Service Operation in Oakland, California

Michael Xiao Modeling the Efficacy of Prescribed Burning in Reducing Wildfires in California

Ernesto Bracamonte Climate Change and the Authoritarian Alternative: Quantifying the effects of Beijing's 2008 Space Rationing Policy on Air Quality

Sara Kalantar The Invisible Burden of Food Insecurity in Asian Americans: A Disaggregated Analysis

Oscar Ticas Detecting Wetland Fire Occurrence in the Sacramento-San Joaquin Delta Through Charcoal in Peat Soils

Jacob Chow Extended Producer Responsibility & End-of-Life Management: A Policy Analysis Between the US and EU

Catherine Jennifer Analyzing Access to Food Sources and Greenspace in Seattle Neighborhoods

Miku Nakamura Using GRACE Data to Analyze Trends in Terrestrial Water Storage Anomalies during Global Flood Events

David Ramus Peyote is in Danger

Veda Lelchook Food Deserts in the East Bay: Community Asset Assessment and Policy Solutions

Tammy J Lee Sediment Discharge Rates in Sacramento River Reservoirs

Lily Elisha Social Media Sharks: Understanding Unregulated Shark Fishing in California Using Instagram Posts

Thank
You!

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 Jenny Miner, Josh Dullaghan, Kate O'Neill and the RCNR Advising team. Special thanks to John Battles, ESPM Chair Paolo D'Odorico, the Department of Environmental Science, Policy & Management and the Rausser College of Natural Resources.
