

# Sandy Sum

PH.D. CANDIDATE · ECONOMICS & ENVIRONMENTAL SCIENCE

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## Education

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### UC Santa Barbara (UCSB)

PH.D. ECONOMICS & ENVIRONMENTAL SCIENCE

2019 - present

- Committee: Tamma Carleton (Chair), Chris Costello, Olivier Deschênes, Kyle Meng

### UC Santa Barbara

M.A., ECONOMICS

2015-2016

### National University of Singapore

B.A., ECONOMICS

2009 - 2013

### Utrecht University

VISITING STUDENT, ECONOMICS DEPARTMENT

2012

## Research Positions

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2024 **Graduate Student Researcher**, Green Water Economics, UCSB emLab (PI: Tamma Carleton & Ram Fishman)

2023-2024 **Graduate Associate**, UCSB Broom Center for Demography

2020-2021 **Graduate Student Researcher**, California EPA Carbon Neutrality Study, UCSB emLab

2016-2019 **Research Analyst**, Quantifying Sustainable Development, UC Berkeley Global Policy Lab (PI: Solomon Hsiang)

2015-2016 **Ecological Data Intern**, National Center for Ecological Analysis and Synthesis

## Working Papers

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**Sum, S.** “Assessing the Impact of Droughts on Drinking Water Disparities in California” (under review)

Proctor, J., Carleton, T., and **Sum, S.** “Parameter recovery with remotely sensed variables” (in prep) [link](#)  
(equal authorship; order randomized)

**Sum, S.** “Distributional consequences of agricultural groundwater markets in California”

## Publications

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Deshmukh, R., Weber, P., Deschenes, O., Hernandez-Cortes, D., Kordell, T., Mallow, C., Magin, T., Meng, M., **Sum, S.**, Thivierge, V., Uppal, A., Lea, D., & Meng, K. “Well setbacks limit California’s oil supply with larger health benefits and employment losses than excise and carbon taxes” *Nature Energy*. Policy Brief, June 2023.

Deshmukh, R., Weber, P., Deschenes, O., Hernandez-Cortes, D., Kordell, T., Mallow, C., Magin, T., Meng, M., **Sum, S.**, Thivierge, V., Uppal, A. & Meng, K. “Equitable low-carbon transition pathways for California’s oil extraction” *Nature Energy*, May 2023.

## Policy Reports

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“Enhancing equity while eliminating emissions in California’s supply of transportation fuels”  
Commissioned report for California EPA with emLab, 2021

## Awards, Fellowships, & Grants

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- 2024 **Graduate Summer Research Fellowship**, Property & Environmental Research Center (PERC)
- 2023 **Bren Summer Research Fellowship**, UCSB Bren School
- 2022 **California Coastal Regional Equity Research Award**, UCSB Blum Center  
**H. William Kuni Research Award**, (with Anna Boser) UCSB Bren School  
**Berkeley Summer School in Environmental and Energy Economics Diversity Fellow**, UC Berkeley & Sloan Foundation  
**Bren Summer Research Fellowship**, UCSB Bren School  
**Travel Grant (x3)**, UCSB Bren School & Graduate Student Association
- 2021 **Graduate Summer Fellowship Grant**, California Policy Lab  
**Bren PhD student grant for equity research**, UCSB Bren School

## Presentations

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- May 2024. Summer Conference, AERE (*Accepted*)
- April 2024. Interdisciplinary PhD Workshop on Sustainable Development at Columbia University (*Accepted*)
- October 2023. Engaging The World panel on Health Equity at Chapman University
- 2021 & 2023. The Bren School PhD Research Symposium
- April 2023. The Occasional Workshop in Environmental and Resource Economics at UCSB
- October 2022. The Workshop in Environmental Economics and Data Science at the University of Oregon
- September 2022. Social Cost of Water Pollution Workshop at Cornell Atkinson Center for Sustainability & US EPA
- August 2022. Berkeley/Sloan Summer School in Environmental and Energy Economics
- April 2022. Interdisciplinary PhD Workshop on Sustainable Development at Columbia University
- May 2022. Annual Environmental Justice Symposium at the Bren School

## Teaching Experience

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- Teaching Assistant, University of California, Santa Barbara
- Spring 2022 & 2023 **Economics of Environmental Management (ESM 204)**, Profs. Christopher Costello and Tamma Carleton
- Fall 2022 & 2023 **Statistics for Environmental Data Science (EDS 222)**, Prof. Tamma Carleton
- Winter 2021 **Environmental Economics (ECON 115)**, Prof. Kyle Meng
- Student Q&A respondent
- November 2023 **BREAD-IGC Virtual PhD Course on Environmental Economics**, Prof. Tamma Carleton

## Professional Activities

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- 2023 **Bren School Masters in Environmental Data Science Lecturer Search Committee**, Student Representative
- 2022-present **Economics and Environmental Science Student Group**, Student Representative
- 2021 **The Bren School PhD Research Symposium**, Committee Member