

YANJUN (PENNY) LIAO

Resources for the Future
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APPOINTMENT

Fellow, Resources for the Future	Aug 2021 – Present
Postdoctoral Fellow, Wharton Risk Center, University of Pennsylvania	Aug 2019 – July 2021

EDUCATION

Ph.D. in Economics, University of California, San Diego Advisors: Mark Jacobsen (Chair), Julie Cullen, Joshua Graff Zivin	June 2019
B.A. in Economics, University of Hong Kong	June 2013

RESEARCH AREAS

Climate adaptation, natural disaster policy, climate financial risk

PUBLICATIONS

Liao, Y., Sølvesten, S., & Whitlock, Z. (2025). Community Responses to Flooding in Risk Mitigation Actions: Evidence from the Community Rating System. *Journal of Risk and Insurance*.

Druckenmiller, H., **Liao, Y.**, Pesek, S., Walls, M. & Zhang, S. (2024). Removing Development Incentives in Risky Areas Promotes Climate Adaptation. *Nature Climate Change*, 14(9), 936-942.

Hennighausen, H., **Liao, Y.**, Nolte, C. & Pollack A. (2023). Flood Insurance Reforms, Housing Market Dynamics, and Adaptation to Climate Risks. *Journal of Housing Economics*, 101953.

Nolte, C., Boyle, K.J., Chaudhry, A.M., Clapp, C.M., Guignet, D., Hennighausen, H., Kushner, I., **Liao, Y.**, Mamun, S., Pollack, A. & Richardson, J. (2023). Data Practices for Studying the Impacts of Environmental Amenities and Hazards with Nationwide Property Data. *Land Economics*, 102122-0090R.

Gourevitch, J., Kousky, C., **Liao, Y.**, Nolte, C., Pollack, A., Porter, J., & Weill, J. (2023). Unpriced Climate Risk and the Potential Consequences of Overvaluation in U.S. Housing Markets. *Nature Climate Change*, 13, 250-257.

Graff Zivin, J., **Liao, Y.**, & Panassie, Y. (2023). How Hurricanes Sweep up Housing Markets: Evidence from Florida. *Journal of Environmental Economics and Management*, 118, 102770.

Miao, Q., Abrigo, M., Hou, Y., & **Liao, Y.** (2022). Extreme Weather Events and Local Fiscal Responses: Evidence from U.S. Counties. *Economics of Disasters and Climate Change*.

Liao, Y., & Kousky, C. (2022). The Fiscal Impacts of Wildfires on California Municipalities. *Journal of the Association of Environmental and Resource Economists*, 9(3), 455-493.

Liao, Y., & Junco, P. R. (2022). Extreme Weather and the Politics of Climate Change: A Study of Campaign Finance and Elections. *Journal of Environmental Economics and Management*, 111, 102550.

Liao, Y. (2020). Weather and the Decision to Go Solar: Evidence on Costly Cancellations. *Journal of the Association of Environmental and Resource Economists*, 7(1), 1-33.

WORKING PAPERS

“Managed Retreat and Flood Recovery: The Local Economic Impacts of Buyout and Acquisition Program” (with Wei Guo and Qing Miao). R&R.

“What’s at Stake? Understanding the Role of Home Equity in Flood Insurance Demand” (with Philip Mulder). R&R.

“From Catastrophe to Caution: The Effect of Wildfires on Community Hazard Mitigation Investments”(with Simon Sølvesten and Zachary Whitlock).

“A Tale of Two Investments: Charging Stations and Purchase Subsidies for EV Adoption” (with Bei Luo and Beia Spiller)

OTHER WRITING

[Climate Change, Hurricane Helene, and the Unreliability of History as a Guide to Extreme Weather](#). RFF Blog Post. October 7, 2024.

[Storm Watch Series: Weather Volatility in the United States](#) (with Margaret Walls). RFF Blog Post Series. 2024.

[Facing Wildfire Insurance Challenges: Five Lessons from the National Flood Insurance Program](#) (with Margaret Walls and Matt Wibbenmeyer). RFF Report. July 18, 2024.

[Home Insurance in Crisis](#). Milken Institute Review. January 23, 2024.

[Boosting Recovery and Resilience in New York State after Hurricane Sandy](#) (with Matt Fleck). RFF Blog Post. December 15, 2023.

[Flooding in the United States 102: Policy and Solutions](#) (with Margaret Walls). RFF Explainer. December 13, 2023.

[Home Insurance in Crisis](#). Milken Institute Review. January 23, 2024.

[Boosting Recovery and Resilience in New York State after Hurricane Sandy](#) (with Matt Fleck). RFF Blog Post. December 15, 2023.

[Flooding in the United States 102: Policy and Solutions](#) (with Margaret Walls). RFF Explainer. December 13, 2023.

[As Sea Levels Rise, So Does Wastewater](#) (with Margaret Walls and Emma DeAngeli). RFF Blog Post. October 4, 2023.

[Jobs at Risk: Sea Level Rise, Coastal Flooding, and Local Economics](#) (with Sophie Pesek, Margaret Walls, and Celso Ferreira). RFF Working Paper. May 4, 2023.

[Climate-Smart Economies: Coordinating Economic Development with Resilience Planning](#) (with Sophie Pesek and Margaret Walls). RFF Blog Post. May 4, 2023.

[Climate Scenario Analysis 101](#). RFF Explainer. April 10, 2023.

[Flood Bubble: How Housing Markets Underestimate Climate Change](#) (with Matt Fleck). RFF Blog Post. February 16, 2023.

[Insurance Availability and Affordability under Increasing Wildfire Risk in California](#) (with Margaret Walls, Matthew Wibbenmeyer, and Sophie Pesek). RFF Issue Brief. November 30, 2022.

[Climate Finance 101](#) (with Anne McDarris). RFF Explainer. August 8, 2022.

[Climate Financial Risks 101](#) (with Anne McDarris). RFF Explainer. June 2, 2022.

GRANTS AND OTHER FUNDING

Local Economic Impacts of the Conservation Reserve Program. *U.S. Department of Agriculture*, with Matthew Wibbenmeyer (PI) and Margaret Walls. \$467,054. 2023-2025.

Transitions from Catastrophes. *WTW Research Network*, PI. \$125,000. 2023-2026.

Adapting to Variable Weather: the Roles and Impacts of Crop Insurance and Conservation Decisions In Rural Communities. *U.S. Department of Agriculture National Institute for Food and Agriculture, Agriculture and Food Research Initiative (AFRI)*, PI with Hannah Druckenmiller (co-PI) and Margaret Walls (co-PI). \$650,000. 2023-2026.

Wildfires, Air Quality, and Avoidance Behavior. *Google Cloud Climate Innovation Challenge*, with Matthew Wibbenmeyer and Devika Chirimer. \$6000. 2022-2023.

Septic to Sewer? Justice-focused Strategies for Addressing Coastal Septic Failures under Sea-level Rise and Increased Flooding. *US EPA Science to Achieve Results (STAR) Research Program*, co-PI with Allison Reilly (PI), Celso Ferreira (co-PI), Rachel Goldstein (co-PI), Birthe Kjellerup (co-PI), Margaret Walls (co-PI). \$477,000 (RFF allocation). 2022-2024.

Can Removing Development Subsidies Promote Adaptation? The Coastal Barrier Resources System as a Natural Experiment. *Lincoln Institute of Land Policy*, co-PI with Margaret Walls (PI) and Hannah Druckenmiller (co-PI), \$100,000. 2022-2023.

FELLOWSHIPS AND HONORS

Benjamin C. Horne Memorial Prize, UC San Diego	2018
Walter P. Heller Memorial Prize for Best Third Year Paper, UC San Diego	2016
CPhil Fellowship, UC San Diego	2016
Graduate Summer Research Fellowship, UC San Diego	2014–2015
Hong Kong University Alumni Prizes	2012
C.V. Starr Scholarship, University of Hong Kong	2012

SEMINARS AND CONFERENCES

(*: scheduled)

- 2025 FSU Risk Management Research Symposium, Federal Reserve Board, AERE Annual Conference* (Santa Ana Pueblo, NM), 2025 AAEA & WAEA Joint Annual Meeting* (Denver, CO)
- 2024 GMU Schar School of Policy and Government, SBCA 2024 Annual Conference (Washington DC), Federal Reserve Bank of New York, St. John's University, Fannie Mae, AERE Annual Conference (Washington DC), Congressional Wildfire Bootcamp (Stanford University), U.S. Department of Housing and Urban Development, WTW Natural Catastrophe Webinar, MIT Climate and Real Estate Symposium, UCSD, FHFA Economic Summit

- 2023 Center for Disaster Resilience Spring 2023 Research Workshop (University of Maryland), Housing Sustainability and Affordability Conference (Madison), NAREA Summer Conference 2023 (Annapolis), UAA 2023 Summer Workshop (Anchorage), NASEM Workshop, NBER Summer Institute, Climate Risk and Insurance Conference (American University), University of Miami, Climate Risk Management Conference (Georgia State University), FHFA Economic Summit
- 2022 C-EENRG Cambridge University, AERE Annual Meeting (Miami), APPAM Fall Research Conference (Washington DC), The Lincoln Institute of Land Policy, Office of Financial Research at the U.S. Department of Treasury
- 2021 Resources for the Future, EEA Annual Meeting, U.S. Federal Housing Finance Agency, 2021 PLACES Webinar, University of Alaska Anchorage, UCLA Climate Adaptation Research Symposium
- 2020 ASSA Annual Meeting (San Diego), Wharton Risk Center Research Seminar, UEA Virtual Meeting, First Street Foundation Flood Lab Workshop
- 2019 Duke Kunshan University, Cheung Kong Graduate School of Business, UC Davis ARE, Rensselaer Polytechnic Institute, Wharton Risk Center, Camp Resources XXVI (Asheville), Wharton EEF seminar, SEA Annual Meeting (Fort Lauderdale)
- 2018 Occasional Workshop in Environmental & Resource Economics, 12th All-California Labor Economics Conference (poster)
- 2017 ASSA Annual Meeting (Chicago)

REFEREEING

American Economic Journal: Economic Policy, Applied Economics, American Journal of Agricultural Economics, Climatic Change, Climate and Development, Climate Policy, Sustainability, Data for Policy 2021 (conference), Ecological Economics, Economic Modelling, Energy Journal, Environmental and Resource Economics, Environmental Science and Technology, Humanities and Social Sciences Communications, Journal of the Association of Environmental and Resource Economists, Journal of Environmental Economics and Management, Journal of Housing Economics, Journal of Political Economics Microeconomics, Journal of Risk and Financial Management, Land Economics, Nature Cities, Nature Climate Change, Nature Communications, Natural Hazards Review, PLOS Climate, PNAS, Real Estate Economics, Resources, Conservation & Recycling

OTHER PROFESSIONAL ACTIVITIES

- 2024 Reviewer for Stanford Sustainability Accelerator
Geneva Association Advisory Committee for Insurability of Physical Climate Risk Project
NOAA Effects of Sea Level Rise Review Panel

TEACHING

- Graduate Economics of the Environment (Co-instructor, 2016-17, UCSD SIO), Environmental and Regulatory Economics (Co-instructor, 2017, UCSD GPS)
- Undergraduate Econometrics (I, II), Data Analytics for Social Sciences, Public Economics, Principles of Microeconomics (Teaching Assistant, 2013-2019, UCSD Economics)

OTHER POSITIONS HELD

- 2013 Independent consultant, Civic Exchange, Hong Kong