

Melissa (Millie) Chapman

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🔄 milliechapman

Education

- 2018 – 2023 📖 **Ph.D., UC Berkeley** Environmental Science, Policy, and Management.
Dissertation: *From individual decisions to international agreements: Addressing biodiversity loss in an age of algorithms*
- 2010 – 2014 📖 **B.Sc. Yale University** Ecology and evolutionary biology.
Thesis: *Assessing patterns of malaria risk: Environmental and social determinants of endemicity across Burkina Faso and Kenya.*

Affiliations and Appointments

- 2025 – present 📖 **ETH Zürich** — Tenure Track Assistant Professor of Environmental Policy, D-USYS *Faculty member of:* Einstein School of Public Policy; Center for Comparative and International Studies; ETH AI Center; Zurich–Basel Plant Sciences Center
- 📖 **Source Cooperative** Science and Technology Advisory Board
- 📖 **IPBES** Expert for the Spatial Planning and Connectivity Assessment
- 2024 – 2025 📖 **Google Research** Visiting Faculty Researcher
- 2023 – 2025 📖 **National Center for Ecological Analysis and Synthesis (NCEAS)**
Director's Postdoctoral Fellow
- 📖 **Climate Change AI (CCAI)** Core team
- 2022 – 2023 📖 **International Institute of Applied Systems Analysis (IIASA)** Visiting Research Scholar | Visiting PhD Student
- 2021 – 2023 📖 **Data Intensive Social Science Lab** Teaching Fellow
- 2020 – 2023 📖 **Resources Legacy Fund** Lead scientific writer for California's Pathways to 30x30 Initiative
- 2015 – 2018 📖 **Woodwell Climate Research Center** Research Assistant II

Publications

[[Google Scholar](#)] | [[ORCID](#)]

Peer-reviewed articles

- Ellis-Soto, D., & **Chapman, M.** (2026). Historic residential segregation impacts biodiversity data availability disparately across the tree of life. *PNAS (In Press)*.
- Chapman, M.**, Jung, M., Boettiger, C., Ringwald, L., Leclère, D., Gusti, M., Augustynczyk, A., & Visconti, P. (2025). Meeting European biodiversity targets under future land-use demands. *Nature Ecology and Evolution*. 🔗 <https://doi.org/10.1038/s41559-025-02671-1>
- Faxon, H., & **Chapman, M.** (2025). Beyond spatial bias: Understanding the colonial legacies and contemporary social forces shaping biodiversity data. *Environmental Research Letters*. 🔗 <https://doi.org/10.1088/1748-9326/add6b6>

- Harrell, L., Kaeser-Chen, C., Ayan, B. K., Anderson, K., Conserva, M., Kleeman, E., Neumann, M., Overlan, M., **Chapman, M.**, & Purves, D. (2025). Heterogenous graph neural networks for species distribution modeling. *International Conference on Learning Representations (ICLR)*. <https://doi.org/10.48550/arXiv.2503.11900>
- Johnson, J. A., Chaplin-Kramer, R., **Chapman, M.**, Polasky, S., & Williams, B. (2025). Earth-economy modeling: Advances in linking economic and ecosystem models. *Annual Review of Resource Economics*. <https://doi.org/10.1146/annurev-resource-013024-033043>
- Oestreich, W., Czapanskiy, M., Katija, K., Record, N., & **Chapman, M.** (2025). Collective science to inform global ocean protections. *Ecology Letters*. <https://doi.org/10.22541/au.174282888.81070415/v1>
- Scoville, C., Amironesei, R., Xu, L., **Chapman, M.**, Record, N., & Boettiger, C. (2025). From maps to models: Participation and contestability in the dynamic management of natural resources. *Geo: Geography and Environment*. <https://doi.org/10.1002/geo2.70028>
- Chapman, M.**, Goldstein, B., Schell, C., Brashares, J. S., Carter, N. H., Ellis-Soto, D., Faxon, H. O., Goldstein, J. E., Halpern, B. S., Longdon, J., Norman, K. E., O'Rourke, D., Scoville, C., Xu, L., & Boettiger, C. (2024). Biodiversity monitoring for a just planetary future. *Science*. <https://doi.org/10.1126/science.adh8874>
- Ellis-Soto, D., **Chapman, M.**, & Koltz, A. (2024). Addressing data disparities is critical for biodiversity assessments. *Trends in Ecology and Evolution*. <https://doi.org/10.1016/j.tree.2024.10.005>
- Jung, M., Alagador, D. A., **Chapman, M.**, Hermoso, V., Kujala, H., O'Connor, L., Schinegger, R., Verburg, P., & Visconti, P. (2024). An assessment of the state of conservation planning in Europe. *Philosophical Transactions of the Royal Society B*. <https://doi.org/10.1098/rstb.2023.0015>
- Oestreich, W., Mckenna, M., Go, M., **Chapman, M.**, & Oliver, R. (2024). Listening to animal behavior to understand changing ecosystems. *Trends in Ecology and Evolution*. <https://doi.org/10.1016/j.tree.2024.06.007>
- Oliver, R., **Chapman, M.**, Ellis-Soto, D., Brum-Bastos, V., Cagnacci, F., Long, J., Loretto, M.-C., Patchett, R., & Rutz, C. (2024). Access to human mobility data is essential for building a sustainable future. *Cell Reports Sustainability*. <https://doi.org/10.1016/j.crsus.2024.10007>
- Oliver, R., **Chapman, M.**, Emery, N., Gillespie, L., Gownaris, N., Leiker, S., Nisi, A., Ayers, D., Breckheimer, I., Blondin, H., Hoffman, A., Pagniello, C., Raisle, M., & Zimmerman, N. (2024). Opening a conversation on responsible environmental data science in the age of generative AI. *Environmental Data Science*. <https://doi.org/10.1017/eds.2024.12>
- Sprenkle-Hyppolite, S., Griscom, B., Griffey, V., Munshi, E., & **Chapman, M.** (2024). Expert-informed leakage-free global carbon dioxide removal potential of trees in agriculture. *Carbon Balance and Management*. <https://doi.org/10.1186/s13021-024-00268-y>
- Chapman, M.**, Boettiger, C., & Brashares, J. S. (2023). Leveraging private lands to meet 2030 biodiversity targets in the United States. *Conservation Science and Practice*. <https://doi.org/10.1111/csp2.12897>
- Chapman, M.**, Xu, L., Lapeyrolerie, M., & Boettiger, C. (2023). Bridging adaptive management and reinforcement learning for more robust decisions. *Philosophical Transactions of the Royal Society B*. <https://doi.org/10.1098/rstb.2022.0195>
- Hasting, Z., **Chapman, M.**, Ocloo, X., Stenger, K., & Hunt, L. (2023). Trends in agroforestry research over four decades *co-first author. *Elementa: Science of the Anthropocene*. <https://doi.org/10.1525/elementa.2022.0015>

- Kurz, D., Middleton, A. D., **Chapman, M.**, Van Houtan, K. S., Wilkinson, C., Withey, L., & Brashares, J. (2023). Including rural america in academic conservation science. *Frontiers in Conservation Science*. <https://doi.org/10.3389/fcosc.2023.1227227/full>
- Moravek, J., Andrews, L. R., Serota, M. W., Dorcy, J. A., **Chapman, M.**, Wilkinson, C. E., Parker-Shames, P., Van Scoyoc, A., Verta, G., & Brashares, J. S. (2023). Centering 30x30 conservation initiatives on freshwater ecosystems. *Frontiers in Ecology and the Environment*. <https://doi.org/10.1002/fee.2573>
- Scoville, C., Faxon, H., **Chapman, M.**, & et al. (2023). Environment, society and machine learning. *Handbook on the Sociology of Machine Learning*. <https://doi.org/10.1093/oxfordhb/9780197653609.013.8>
- Ellis-Soto, D., **Chapman, M.**, & Locke, D. (2023). Uneven biodiversity sampling across redlined urban areas in the united states. *Nature Human Behavior*. <https://doi.org/10.1038/s41562-023-01688-5>
- Montealegre-Mora, F., Laperolerie, M., **Chapman, M.**, Keller, A., & Boettiger, C. (2023). Pretty darn good control: When are approximate solutions better than approximate models? *Bulletin of Mathematical Biology*. <https://doi.org/10.1007/s11538-023-01198-5>
- Calhoun, K. L., **Chapman, M.**, Tubbesing, C., McInturff, A., Gaynor, K. M., Van Scoyoc, A., Wilkinson, C. E., Parker-Shames, P., Kurz, D., & Brashares, J. (2022). Spatial overlap of wildfire and biodiversity in california highlights gap in non-conifer fire research and management. *Diversity and Distributions*, 28(3), 529–541. <https://doi.org/10.1111/ddi.13394>
- Chapman, M.**, Wiltshire, S., Baur, P., Bowles, T., Carlisle, L., Castillo, F., Esquivel, K., Gennet, S., Iles, A., Karp, D. et al. (2022). Social-ecological feedbacks drive tipping points in farming system diversification. *One Earth*, 5(3), 283–292. <https://doi.org/10.1016/j.oneear.2022.02.007>
- Dowd, S., **Chapman, M.**, Koehn, L. E., & Hoagland, P. (2022). The economic tradeoffs and ecological impacts associated with a potential mesopelagic fishery in the california current. *Ecological Applications*, e2578. <https://doi.org/10.1002/eap.2578>
- Lapeyrolerie, M., **Chapman, M.**, Norman, K. E., & Boettiger, C. (2022). Deep reinforcement learning for conservation decisions. *Methods in Ecology and Evolution*. <https://doi.org/10.48550/arXiv.2106.08272>
- Estey, C., **Chapman, M.**, Schell, C., Lowy, N., & Gerson, J. (2022). Demystifying the graduate school application process. *Bulletin of the Ecological Society of America*. <https://doi.org/10.1002/bes2.2029>
- Chapman, M.**, Oestreich, W. K., Frawley, T. H., Boettiger, C., Diver, S., Santos, B. S., Scoville, C., Armstrong, K., Blondin, H., Chand, K. et al. (2021). Promoting equity in the use of algorithms for high-seas conservation. *One Earth*, 4(6), 790–794. <https://doi.org/10.1016/j.oneear.2021.05.011>
- Chapman, M.**, Scoville, C., Lapeyrolerie, M., & Boettiger, C. (2021). Power and accountability in reinforcement learning applications to environmental policy. *The Thirty-Sixth Annual Conference on Neural Information Processing Systems (NeurIPS 2021)*. <https://doi.org/10.48550/arXiv.2205.10911>
- Kitzes, J., Blake, R., Bombaci, S., **Chapman, M.**, Duran, S. M., Huang, T., Joseph, M. B., Lapp, S., Marconi, S., Oestreich, W. K. et al. (2021). Expanding neon biodiversity surveys with new instrumentation and machine learning approaches. *Ecosphere*, 12(11), e03795. <https://doi.org/10.1002/ecs2.3795>

- Nagy, R. C., Balch, J. K., Bissell, E. K., Cattau, M. E., Glenn, N. F., Halpern, B. S., Ilangakoon, N., Johnson, B., Joseph, M. B., **Chapman, M.** et al. (2021). Harnessing the neon data revolution to advance open environmental science with a diverse and data-capable community. *Ecosphere*, 12(12), e03833. <https://doi.org/10.1002/ecs2.3833>
- Ordway, E. M., Elmore, A. J., Kolstoe, S., Quinn, J. E., Swanwick, R., Cattau, M., Taillie, D., Guinn, S. M., Chadwick, K. D., **Chapman, M.** et al. (2021). Leveraging the neon airborne observation platform for socio-environmental systems research. *Ecosphere*, 12(6), e03640. <https://doi.org/10.1002/ecs2.3640>
- Roe, S., Streck, C., Beach, R., Busch, J., **Chapman, M.**, Daioglou, V., Deppermann, A., Doelman, J., Emmet-Booth, J., Engelmann, J. et al. (2021). Land-based measures to mitigate climate change: Potential and feasibility by country. *Global Change Biology*, 27(23), 6025–6058. <https://doi.org/10.1111/gcb.15873>
- Scoville, C., **Chapman, M.**, Amironesei, R., & Boettiger, C. (2021). Algorithmic conservation in a changing climate. *Current Opinion in Environmental Sustainability*, 51, 30–35. <https://doi.org/10.1016/j.cosust.2021.01.009>
- Chapman, M.**, Walker, W. S., Cook-Patton, S. C., Ellis, P. W., Farina, M., Griscom, B. W., & Baccini, A. (2020). Large climate mitigation potential from adding trees to agricultural lands. *Global Change Biology*, 26(8), 4357–4365. <https://doi.org/10.1111/gcb.15121>
- Griscom, B. W., Busch, J., Cook-Patton, S. C., Ellis, P. W., Funk, J., Leavitt, S. M., Lomax, G., Turner, W. R., **Chapman, M.** et al. (2020). National mitigation potential from natural climate solutions in the tropics. *Philosophical Transactions of the Royal Society B*, 375(1794), 20190126. <https://doi.org/10.1098/rstb.2019.0126>
- Oestreich, W. K., **Chapman, M.**, & Crowder, L. B. (2020). A comparative analysis of dynamic management in marine and terrestrial systems. *Frontiers in Ecology and the Environment*, 18(9), 496–504. <https://doi.org/10.1002/fee.2243>
- Samndong, R. A., Bush, G., Vatn, A., & **Chapman, M.** (2018). Institutional analysis of causes of deforestation in redd+ pilot sites in the equateur province: Implication for redd+ in the democratic republic of congo. *Land Use Policy*, 76, 664–674. <https://doi.org/10.1016/j.landusepol.2018.02.048>
- Cunningham, C., Chen, W. C., Shorten, A., McClurkin, M., Choezom, T., Schmidt, C. P., Chu, V., Bozik, A., Best, C., **Chapman, M.** et al. (2014). Impaired consciousness in partial seizures is bimodally distributed. *Neurology*, 82(19), 1736–1744. <https://doi.org/10.1212/FWNL.0000000000000404>
- Galvin, B. D., Li, Z., Villemaine, E., Poole, C. B., **Chapman, M.**, Pollastri, M. P., Wyatt, P. G., & Carlow, C. K. (2014). A target repurposing approach identifies n-myristoyltransferase as a new candidate drug target in filarial nematodes. *PLoS neglected tropical diseases*, 8(9), e3145. <https://doi.org/10.1371/journal.pntd.0003145>

White papers

- Xu, L., Rolf, E., Beery, S., Bennett, J. R., Berger-Wolf, T., Birch, T., Bondi-Kelly, E., Brashares, J., **Chapman, M.**, Corso, A. et al. (2023). *Reflections from the workshop on AI-assisted decision making for conservation*. <https://doi.org/10.48550/arXiv.2307.08774>

Fellowships and Grants

- 2026-2030 ■ **EU Horizon Grant** "Biodiversity methods for advanced monitoring at large scales (BEAGLE)" (~\$11 million EUR) WP Lead: "Developing impactful insights for the science-policy interface" (\$437,000 EUR)
- 2026-2027 ■ **IVADO "Thematic Semester" Grant (based at McGill University)** "Biodiversity forecasting and planning with AI" Organizing Committee Member (~\$220,000 CHF)
- 2024-2027 ■ **NASA - Biological Diversity and Ecological Conservation** Co-PI (\$620,000)
- 2023 ■ **NCEAS Director's Postdoc Fellowship**, National Center for Ecological Analysis and Synthesis (approx. \$140,000)
- **Peccei Award**, International Institute of Applied Systems Analysis (IIASA) (approx. \$7,000)
- **Moore Foundation**, (research funding written into larger grant) (approx. \$7,000)
- **Departmental Research Fellowship**, University of California Berkeley (\$17,000)
- 2022 ■ **International Institute of Applied Systems Analysis (IIASA) Summer Fellowship**, Funded through the National Academy of Science (\$7,000)
- **Data Science Teaching Fellowship**, Funded through the UC Berkeley Social Science Data-Lab (\$5,000)
- **Artificial Intelligence, Ethics, and Society (AIES-22) Conference Student Award**, Funded through the National Science Foundation (\$1500)
- **Environmental Data Science Summit travel grant** (\$800), NCEAS (delayed to 2023 due to COVID)
- 2021 ■ **SESYNC Graduate Student Pursuit: Co- PI** (project link) (approx. \$35,000)
- 2020 ■ **Berkeley Center For Technology, Society, and Policy Fellowship** (project link) (\$4,000)
- 2018 ■ **NSF National Research Traineeship** Environment and Society: Data sciences for the 21st Century (\$32,000)
- **NSF Graduate Research Fellowship Program** Honorable Mention.
- 2014 ■ **Foreign Language Area Studies (FLAS) Fellowship: Kiswahili** (\$35,000 over two awards)

Selected Talks

- 2026 ■ **Chapman, M.** Can AI help us make more informed restoration and conservation decisions? *Centro Euro-Mediterraneo sui Cambiamenti Climatici (CMCC) Annual Conference, Invited Keynote*
- 2025 ■ **Chapman, M.** From data to decisions: Devising equitable strategies for meeting multilateral conservation and restoration targets. *Institute for Environmental Decisions (IED) seminar, Invited Talk*
- **Chapman, M.** Meeting biodiversity targets under future land use demands *University of Bern, Invited Seminar*
- **Chapman, M.** The colonial infrastructures of contemporary biodiversity data. *Living Data Conference, Bogota*

Selected Talks (continued)

- **Chapman, M.** Towards strategic and decision-informed biodiversity monitoring *Living Data Conference, Bogota*
- **Chapman, M.** Just urban biodiversity futures *Urban Biosphere Futures*
- **Chapman, M.** From data to decisions: Devising equitable strategies for meeting global biodiversity targets *AIxEnvironment Meeting, Invited Speaker*
- **Chapman, M.** Building a Resilient Future in a Changing Climate *Organization for Security and Co-operation in Europe (OSCE), Invited Panelist*
- **Chapman, M.** Designing financial mechanisms to support targeted conservation and restoration *Impact Evaluation and Mechanism Design Workshop, Iceland*
- **Chapman, M.** Meeting biodiversity targets under future land use demands. *Cumo*
- **Chapman, M.** Harnessing AI: safeguarding high-integrity data for climate action *London School of Economics and Public Policy, Invited Panelist*
- **Chapman, M.** From data to decisions: Towards a just planetary future in the age of artificial intelligence. *Cambridge Center for Human Inspired AI (CHIA) Conference, Invited Keynote*
- **Chapman, M.** Designing coordinated land use strategies. *AI for Climate Cooperative Action Coordination Workshop (Lausanne, CH), Invited Talk*
- **Chapman, M.** Meeting biodiversity targets under changing land use demands *Measuring Development World Bank, Invited Talk*
- 2024 ■ **Chapman, M.** Can AI help us make more informed conservation decisions? *Aspen Global Change Institute (AGCI), AI and Biodiversity Workshop, Invited Talk*
- **Chapman, M.** Addressing the social and political dimensions of biodiversity data. *North American Congress for Conservation Biology (NACCB), Vancouver 2024*
- **Chapman, M & Faxon, H..** The colonial infrastructures of contemporary biodiversity data. *Data Justice Workshop, Barcelona 2024*
- **Chapman, M & Faxon, H..** The colonial infrastructures of contemporary biodiversity data. *World Biodiversity Forum, Davos 2024*
- **Chapman, M.** Do biodiversity data biases risk entrenching social inequity into policy strategies? *Resources for the Future (Invited talk)*
- **Chapman, M.** From individual decisions to international agreements: addressing biodiversity loss in the age of algorithms. *Oregon State University (Invited Seminar)*
- **Chapman, M.** From individual decisions to international agreements: addressing biodiversity loss in the age of algorithms. *National Center for Ecological Analysis and Synthesis (Invited Roundtable Seminar)*
- **Chapman, M.** From data to decisions: toward a just and sustainable planetary future in the age of AI. *University of Oregon (Invited Seminar)*
- **Chapman, M.** From individual decisions to international agreements: addressing biodiversity loss in the age of algorithms. *Stony Brook University (Invited Seminar)*
- **Chapman, M.** AI is transforming the way we confront climate change and biodiversity loss. *GreenBiz Sustainability Conference (Invited keynote panel)*
- 2023 ■ **Chapman, M.** AI for equitable climate action. *GLOCAL Innovation Grant Kick-off (invited keynote speaker)*
- **Chapman, M.** Human histories shape the biodiversity data that decide our future. *GEO BON Conference, Montreal 2023)*

Selected Talks (continued)

- **Chapman, M.** From individual decisions to international agreements: Addressing biodiversity loss in an age of algorithms. *University of California Santa Barbara (invited departmental seminar)*
- **Chapman, M.** Addressing biodiversity loss in an age of algorithms. *International Institute for Applied Systems Analysis (invited seminar).*
- **Chapman, M.** From individual decisions to international agreements: Addressing biodiversity loss in an age of algorithms. *University of California Berkeley (Wildlife seminar)*
- 2022 ■ **Chapman, M, Jung, M., and Visconti, P.** Multiscale prioritization of conservation and restoration measures to meet 2030 biodiversity targets in the EU. *IIASA Summer Symposium [Slides]*
- **Chapman, M, Boettiger, C, and Brashares, J.** Potential contributions of private lands to U.S. 2030 biodiversity targets. *ESA 2022 [Slides]*
- **Chapman, M.** Climate mitigation and biodiversity contributions of land conservation and management (as part of a panel on "Ecologists Perspectives on COP26") *ESA 2022. [Slides]*
- **Chapman, M.** Governing AI Applications To Monitoring and Managing Our Global Environmental Commons. *AAAI/ACM conference on Artificial Intelligence, Ethics, and Society (AIES 2022). [Slides]*
- 2021 ■ **Chapman, M., Schell, C., Brashares, J.** "30x30: The New Conservation". Break-throughs Magazine Virtual Series. **[Recording]**
- **Chapman, M..** Pathways to 30x30: Accelerating Conservation of California's Nature. California Biodiversity Network Bioinformatics and Conservation Planning round table.
- **Chapman, M., Boettiger, C.** From data to decisions: Algorithms, power, and effective ocean management. UN FAO global forum on AI for a digital blue Planet. **[Recording]**
- 2020 ■ **Chapman, M..** Large climate mitigation from adding trees to agricultural lands. The Nature Conservancy Seminar Series (Invited Talk).
- **Chapman, M..** Large climate mitigation from adding trees to agricultural lands. Woodwell Climate Research Center Friday Seminar Series (Invited Talk).
- **Chapman, M., et al.** Tipping points in diversified farming systems. Ecological Society of America 2020 Meeting. Contributed Talk. **[Recording]**
- 2018 ■ **Chapman, M., and Walker, W.** (2018). A Global Analysis of Woody Aboveground Carbon Storage in Crop and Pasture lands. AGU Fall Meeting. (Presentation)

Working Groups and Assessments

- 2025-2027 ■ IPBES Spatial Planning and Connectivity Assessment (Review editor)
- 2024-2025 ■ USGS North American Biodiversity and Climate Assessment (Chapter Lead Author)
- NSF/NCEAS Biodiversity Data & Conservation Science working group
- 2024 ■ Data Justice Workshop (Invited paper/presentation)
- Resources for the Future: Climate Change and Natural Capital Workshop
- 2022-2024 ■ Ethics and Practices of Algorithmic Conservation Reading Group ([link](#)) *Co-founder/organizer*

Working Groups and Assessments (continued)

2023	Environmental Data Science Innovation Summit (ESIIL)
2023, 2024	Environmental Data Science Summit (NCEAS)
2022	AI-Assisted Decision-Making for Conservation (Harvard Center for Research on Computing and Society)
2019-2021	Ecological Forecasting Initiative <i>Student Working Group Co-chair and Co-founder</i>
2021	UC Berkeley Data and Environment Working Group <i>Co-founder</i>
	Bioinformatics and Community Science Round Table steering committee, California Biodiversity Network
	Culturally Relevant Education in Environmental Data Science (CREEDS) Workshop
2020	SESYNC Cyberinfrastructure Summer Institute
	NIMBioS Adaptive Management Tutorial
	People, Land, and Ecosystems: Leveraging NEON for Socio-Environmental Synthesis
2019	National Ecological Observation Network (NEON) Science Summit
	Advancing Integrated Process-Based Modeling of Socio-Environmental Systems (SESYNC)
	Graduate Student Workshop on Socio-Environmental Synthesis (SESYNC)
	Ecological Forecasting Initiative Summer Course
2017	Mathematical Ecology Working Group: Woods Hole, MA

Teaching and Mentoring

PhD Students	Jory Griffith (incoming 2026)
	Eduardo Gaggi (incoming 2026)
	Elodie Adam (2025-present)
	Giacomo Degaldo (2025-present)
	Nial Perry (2025-present)
Master's Students	Lydia Dai (2026-present)
ETH Courses	Big Data for Public Policy (Sp 2025)
	Quantitative Policy Analysis and Modeling (F 2025)
	Topics in Plant Science (F 2025)
ETH Lectures	Forest Management (Forest management policy) (2025)
Co-organizer	Science, Policy & Global Crises: Navigating Risk and Uncertainty (Summer School Faculty Mentor, 2026)
	Climate Change AI In-Person Summer School (2023)
	Climate Change AI Virtual Summer School (2023, 2024)
Data Science Fellow & Instructor	UC Berkeley Social Science Data Lab; (1) Data wrangling (2) Deep learning in Python (3) Introduction to R, and (4) Data visualization (2022-2023)
Graduate Student Instructor	UC Berkeley; ESPM 157: Data Science for Global Change Ecology (2020)

Teaching and Mentoring (continued)

Graduate Student Mentor	UC Berkeley; Fung Fellowship Conservation and Technology Course (2022)
Guest Lectures	- UC Santa Barbara; Data Science (2023) - Stanford University; Introduction to conservation planning and practice (2023) - University of California Santa Barbara; Introduction to Remote Sensing (2023) - Stanford University; Introduction to conservation planning and practice (2022) - Trinity College; U.S. Environmental Policy, Partisanship, and the Global Climate Crisis (2022) - UC Berkeley; Conservation and Technology (2022) - Middlebury Institute of International Studies; International Marine Science and Policy (2022) - Middlebury Institute of International Studies; Ecological Analysis (2022)
Research Mentor	- Undergraduate Research Apprentice Program (URAP) (2020-2022) - Undergraduate Honors Thesis Program (2019-2022)
Technical Mentor	IPAM; Public Policy Course (2017)
Undergraduate Instructor	- Yale University; Physics I (2014) - Yale University; Organic Chemistry II (2013)

Policy Documents and Briefs

2026	California's 30x30 Initiative: A Subnational Model for Biodiversity Action, Regions4 Case Study Database (In press)
2024	Land protection and restoration tools to effectively meet 2030 conservation targets in the United States, USDA Internal Brief [PDF available upon request]
2022	Pathways to 30x30 California: Accelerating Conservation of California's Nature, Scientific/Technical Writer [PDF] Conserving California: Advancing Science in Support of 30x30, Scientific Writer and Facilitator [PDF] California's Pathways to 30x30: Conserving Freshwater Ecosystems, Legislative Summary; Lead Scientific Writer [PDF] California's Pathways to 30x30: Expanding Access to Nature, Legislative Summary; Contributing Scientific Writer [PDF available upon request] California's Pathways to 30x30: Working Lands and Other Effective Conservation Measures (OECMs), Legislative Summary; Contributing Scientific Writer [PDF available upon request] California's Pathways to 30x30: Partnering with California Native American Tribes, Legislative Summary; Contributing Scientific Writer [PDF available upon request]
2021	Advancing 30x30 and Protecting Biodiversity, Lead Scientific Writer [PDF]

Policy Documents and Briefs (continued)

- 2018  **Prioritizing Areas for Reforestation of Private Lands in the Brazilian Amazon.** Policy Brief. [PDF]
- 2016  **Analysis of National Circumstances in the Context of REDD+ and Identification of REDD+ Abatement Levers in Papua New Guinea** Report produced by the Wildlife Conservation Society. [PDF]

Professional Service and Outreach

- 2026  Mistra BIOPATH Grants Evaluation Committee
- 2026-2026  D-USYS Diversity Committee Faculty Member
- 2025  AI for Public Goods Fast Grants (AI4PG) Committee Member
- 2024  Climate Change AI Innovation Grants Chair
-  Session organizer at World Biodiversity Forum
-  Session organizer at North American Convention for Conservation Biology
- 2023-2024  Climate Change AI Core Team
- 2022  Graduate Programs Committee student representative (ESPM, UC Berkeley)
- 2021-2022  Graduate Admission Committee student representative (ESPM, UC Berkeley)
- 2018-2021  UC Berkeley Graduate Student Association (GSA)
- 2019-2021  Letters to a Pre-scientist: *Volunteer*
- 2018-2021  Bay Area Scientists in Schools (BASIS): *Instructor*