

Mariah L. Coley

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Education

2018 - 2024 (expected)	PhD Candidate, Geography, University of California, Davis Major Advisor: Kate Scow <i>Dissertation: Associations between human gut microbiome, soil microbial communities, and child health in rural Kenyan farm-households</i>
2016 - 2018	MSc, International Agricultural Development, University of California, Davis Major Advisor: Kate Scow <i>Thesis: Participatory approach for model-based decision-support system development with Ugandan smallholder farmers</i>
2007-2011	BA, Studio Art and Classical Studies (dual degree), Dartmouth College

Publications

Tomich, T., Lidder, P., Dijkman, J., **Coley, M.**, Webb, P., and Gill, M. (2019). Agri-food systems in international research for development: Ten theses regarding impact pathways, partnerships, program design, and priority-setting for rural prosperity. *Agricultural Systems* 172: 101-109. doi:10.1016/j.agsy.2018.12.004

Tomich, T., Lidder, P., **Coley, M.**, Gollin, D., Meinzen-Dick, R., Webb, P., and Carberry, P. (2019). Food and agricultural innovation pathways for prosperity. *Agricultural Systems* 172: 1-15. doi:10.1016/j.agsy.2018.01.002

Thomas, K., Liptzin, D., Tomich, T., **Coley, M.**, Dahlgren, R., Houlton, B., Scow, K., White, A. (2016). "Chapter 1: Introducing the California Nitrogen Assessment." In *The California Nitrogen Assessment: Challenges and Solutions for People, Agriculture, and the Environment*, edited by T. Tomich, S. Brodt, R. Dahlgren, and K. Scow. University of California Press, Oakland, CA, USA.

Champetier, A., Sumner, D., Tomich, T., Brodt, S., **Coley, M.**, Kreith, M., Rosen-Molina, J.T., Thomas, K. (2016). "Chapter 2: Underlying drivers of nitrogen flows in California." In *The California Nitrogen Assessment: Challenges and Solutions for People, Agriculture, and the Environment*, edited by T. Tomich, S. Brodt, R. Dahlgren, and K. Scow. University of California Press, Oakland, CA, USA.

Sarker, P.K., Kapuscinski, A.R., Lanois, A., Livesey, E., Bernhard, K., **Coley, M.** (2016). Towards Sustainable Aquafeeds: Complete Substitution of Fish Oil with Marine Microalga *Schizochytrium* sp. Improves Growth and Fatty Acid Deposition in Juvenile Nile Tilapia (*Oreochromis niloticus*). *PLoS ONE* 11(6): e0156684. doi: 10.1371/journal.pone.0156684

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Fellowships and Awards

2023 - 2024	\$6,000: Geography Graduate Group Fellowship, UC Davis
2021 - 2022	\$62,000: GloCal Health Fellow, National Institutes of Health Fogarty International Center and University of California Global Health Institute
2020	\$1,000: Global Fellowship for Agricultural Development, US AID and UC Davis
2018 - 2019	\$10,000: Geography Graduate Group Fellowship, UC Davis
2017	\$8,000: Research and Innovation in Food and Agriculture Fellowship, US AID and UC Davis
2017 - 2020	\$9,000: Henry A. Jastro Research Award, UC Davis
2011	\$300: Classes of 1960 and 2010 Purchase Award, Department of Studio Art, Dartmouth College
2010	Dartmouth College Fund Scholarship, Dartmouth College
2007 - 2011	Academic Scholarship, Dartmouth College

Invited Presentations and Seminars

2023	"Perspectives from an alumnus on project implementation and budgeting," Fogarty Fellows and Scholars LAUNCH Orientation, National Institutes of Health, Bethesda, MD
2023	"Interdisciplinary research design: Informal institutions and land tenure in Uganda / Soil microbiome-gut microbiome associations in Kenya," Advanced Research Design in Geography, GEO200E, UC Davis (remote)
2022	"Does healthy soil support healthy children? Exploring associations between soil microbial communities and the child gut microbiome," Working Group on Microbiome Research in Kenya, Universities of Nairobi, Washington, and Manitoba Retreat, Naivasha, Kenya
2022	"Alumnus experiences", UC Global Health Institute GloCal Health Fellowship webinar (remote)
2021	"Connecting human and soil health: linking human gut microbiomes and soil microbiomes," Sustainable Development for HIV Health (SD4H) Seminar, UC San Francisco and Maseno University (remote)
2021	"Critical Perspectives on Feeding the World," UC Davis Political Ecology Lab (seminar discussant; remote)

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Research Expertise

Independent development and leadership of full research life-cycle:

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| <ul style="list-style-type: none">• Research question scoping and development• Proposal writing and funding acquisition• IRB & ethical review preparation and management (US and international settings)• Research team hiring, training, and supervision | <ul style="list-style-type: none">• Field-based research logistics, operations, and regulatory compliance in international setting• Budgeting and financial administration• Field-to-laboratory biological sample collection, storage, and processing | <ul style="list-style-type: none">• Household questionnaire design; qualitative data collection and analysis• Soil and human gut microbiome data analysis and visualization• Manuscript preparation; presentation and communication |
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Mentoring

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| 2021 - 2023 | Gloria Ger: Biological sample collection and processing in field and laboratory (Research assistant in Kisumu, Kenya) |
| 2021 - 2022 | Irene Oucho: Qualitative and survey data collection, biological sample collection (Research assistant in Homa Bay, Kenya) |
| 2021 - 2022 | Sylvia Akoko Ndege: Qualitative and survey data collection (Research assistant in Kisumu, Kenya) |
| 2019 - 2021 | Lydia Maranga: Development of soil health curriculum for a Ugandan NGO (MSc student, International Agricultural Development, UC Davis) |
| 2019 - 2020 | Monica Quezada: Analysis of geospatial data for small-scale irrigation feasibility assessment for El Salvador (MSc student, International Agricultural Development, UC Davis) |

Teaching Experience

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| 2021 | Lead teaching assistant (TA): Quantitative spatial methods for community research, CRD 150, Department of Human Ecology, UC Davis |
| 2021 | Lead instructor: Data ecosystem mapping with R; training for IFAD 50x2030 global South fellows |
| 2020 | Lead TA: Environmental policy analysis, ESP 1, Department of Environmental Science and Policy, UC Davis |
| 2018 - 2021 | Lead TA: Social-Ecological Systems, ESM 195, Department of Environmental Science and Policy, UC Davis |

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2018 | Lead TA: International Development Project Planning and Implementation, IAD 203, Department of Plant Sciences, UC Davis

Professional Experience

2021 - present | Associate, Data Policy and Practice, Centre for Agriculture and Biosciences International

2016 - 2021 | Editorial Assistant and Desk Reviewer, *Annual Review of Environment and Resources*

2020 | Graduate Student Researcher, Department of Land, Air, and Water Resources, UC Davis

2018 - 2019 | Research Communications Graduate Specialist, Department of Plant Sciences, UC Davis

2016 - 2018 | Project Assistant, CGIAR Independent Science and Partnership Council / UN FAO (Consultancy)

2016 - 2017 | Project Manager, Agricultural Sustainability Institute, UC Davis

2014 - 2016 | Sustainable Agriculture and Food Systems Analyst, Agricultural Sustainability Institute, UC Davis

2013 - 2014 | Research Assistant, Sustainable Aquaculture and Fisheries, Environmental Studies Department, Dartmouth College

Professional Service

Institutional service

GLOBAL (Geography Graduate Student Group) Executive Committee, UC Davis (2018-2020)

Journal reviewer

Progress in Development Studies

Professional memberships

American Association of Geographers

Environmental Information Systems Africa / AfricaGIS Associate Member

Planetary Health Alliance

Gamma Theta Upsilon Geography Honors Society