

MEGAN MUCIOKI

Assistant Research Professor

Social Science Research Institute
The Pennsylvania State University
Email: mem7005@psu.edu
megan-mucioki.org

EDUCATION

- Doctor of Philosophy** Department of Plant Science (social ecological systems). **2015**
McGill University Montreal, Canada. In the Centre for Indigenous Peoples' Nutrition and Environment (CINE)
Dissertation: Constructing seed sustaining farms with informal seed systems and crop diversity in semi-arid Kenya
Supervisor: Dr. Timothy Johns
- Master of Science** School of Environmental Studies (ethnobotany). University of Victoria, **2011**
Victoria, Canada
Thesis: The nutritious springtime candy of people and animals in British Columbia: Lodgepole pine cambium (*Pinus contorta* Douglas ex Louden var. *latifolia* Engelm. ex S. Watson)
Supervisor: Dr. Nancy Turner
- Bachelor of Science** Biology (botany) Ohio Northern University Ada, Ohio. **2009**
Honors with high distinction
- International exchange** (Indigenous studies) James Cook University Cairns, **2008**
Queensland, Australia

RESEARCH RELATED WORK EXPERIENCE

- Assistant Research Professor** Social Science Research Institute, **2020-ongoing**
Research affiliate Institutes of Energy and the Environment
The Pennsylvania State University
- Research consultant** Dept. of Environmental Science, Policy and Management, **2020-2021**
University California at Berkeley
- Post-doctoral Researcher** Tribal food security and agroecosystem resilience. **2015-2020**
Dept. of Environmental Science, Policy and Management, University California at Berkeley

PUBLICATIONS

Peer-reviewed journal articles

- 2024 **Mucioki, M.** Climate and land-use change impacts on cultural use berries: considerations for mitigative stewardship. *Plants, People, Planet*. DOI: 10.1002/ppp3.10500
- 2024 Chi, G., Zhou, S., **Mucioki, M.**, Miller, J., Korkut, E., Howe, L., Yin, J., Holen, D., Randell, H., Akyildiz, A. and Halvorsen, K.E. Climate impacts on migration in the Arctic North America: existing evidence and research recommendations. *Regional Environmental Change*, 24(2), p.47. <https://doi.org/10.1007/s10113-024-02212-9>
- 2024 Eitzel, M.V., Sarna-Wojcicki, D., Hogan, S., Sowerwine, J., **Mucioki, M.**, McCovey, K., Bourque, S., Hillman, L., Morehead-Hillman, L., Lake, F. and Preston, V. Using mixed-method analytical historical ecology to map land use and land cover change for ecocultural restoration in the Klamath River Basin (Northern California). *Ecological Informatics*, p.102552. <https://doi.org/10.1016/j.ecoinf.2024.102552>
- 2023 Sowerwine, J., **Mucioki, M.**, Sarna, D., McCovey, K., Morehead-Hillman, L., Hillman, L., Lake, F., Preston, V., and Bourque, S. Karuk Resilience Initiative: We are caring for it: xúus nu'éethi. *Health Promotion Practice*. 24 (6), 1096-1100. <https://doi.org/10.1177/15248399231190368>
- 2023 Nguyen, C., Wilbur, R., Henderson, A., Sowerwine, J., **Mucioki, M.**, Sarna, D., Ferguson, G., Maudrie, T., Moore-Wilson, H., Wark, K., Jernigan, V.B.B. Framing an Indigenous Food Sovereignty Research Agenda. *Health Promotion Practice*. 24 (6), 1117-1123. <https://doi.org/10.1177/15248399231190362>
- 2023 Maudrie, T., Nguyen, C., Wilbur, R., **Mucioki, M.**, Ferguson, G., Clyma, K., Jernigan, V.B.B. Food Security and Food Sovereignty—The Difference between Surviving and Thriving. *Health Promotion Practice*. 24 (6), 1075-1079. <https://doi.org/10.1177/15248399231190362>.
- 2023 **Mucioki, M.**, McCovey, K., Hillman, L. Sowerwine, J., Sarna-Wojcicki, D. (accepted) Caring for culturally significant plants in the midst of record setting droughts. *Artemisia, California Native Plant Society*.
- 2023 **Mucioki, M.** (accepted) Cultural significant plant stewardship as climate adaptation. *Artemisia, California Native Plant Society*.
- 2023 Powell, B., Bhatt, I.D., and **Mucioki, M.**, Rana, S., Rawat, S., and Kerr, R.B. The need to include wild foods in climate change adaptation strategies. *Current Opinion in Environmental Sustainability*, 63, 101302.
- 2022 **Mucioki, M.**, Sowerwine, J., Sarna-Wojcicki, D., McCovey, K., and Bourque, S.D. Understanding the conservation challenges and needs of culturally significant plant species through Indigenous Knowledge and species distribution models. *Journal of Nature Conservation*, 70. <https://doi.org/10.1016/j.jnc.2022.126285>
- 2022 **Mucioki, M.**, Hoover, E., Sowerwine, J, Intertribal Agriculture Council, Johnson-Reyes, K., Cornelius, D., Redhouse, L. Native American agriculture and food systems: challenges and opportunities presented by the COVID-19 pandemic. *Journal of Agriculture, Food Systems, and Community Development*, 11(3), 121–137. <https://doi.org/10.5304/jafscd.2022.113.013>

- 2021 **Mucioki, M.**, Sowerwine, J., Sarna-Wojcicki, D., Lake, F.K., and Bourque, S. Conceptualizing Indigenous Cultural Ecosystem Services (ICES) and benefits under changing climate conditions in the Klamath River Basin and their implications for land management and governance. *Journal of Ethnobiology*, 41(3): 313-330. [10.2993/0278-0771-41.3.313](https://doi.org/10.2993/0278-0771-41.3.313)
- 2019 Sowerwine, J., Sarna, D., **Mucioki, M.**, Hillman, L., Lake, F., Friedman, F. Enhancing Indigenous food sovereignty: a 5-year collaborative tribal-university research and extension project in California and Oregon. *Journal of Agriculture, Food Systems and Community Development*, 9(B), 167-190. <https://doi.org/10.5304/jafscd.2019.09B.013>
- 2019 (**co-lead author with Sowerwine**) Sowerwine, J., **Mucioki, M.**, Sarna, D., and Hillman, L. Reframing food security by and for Native American communities: A case study among Tribes in the Klamath River Basin of Oregon and California. *Food Security*, 11(3): 579-607. <https://doi.org/10.1007/s12571-019-00925-y>
- 2018 **Mucioki, M.**, Pelletier, B., Johns, T., Muhammad, L.W., and Hickey, G.M. Chronic household seed insecurity in semi-arid Kenya: a case study considering seed and food policy. *Food Security*, 10(3): 571-587. <https://doi.org/10.1007/s12571-018-0807-2>
- 2018 **Mucioki, M.**, Sowerwine, J., and Sarna, D. Thinking inside and outside the box: local and national considerations of the Food Distribution Program on Indian Reservations (FDPIR). *The Journal of Rural Studies*, 57: 88-98. <https://doi.org/10.1016/j.jrurstud.2017.11.002>
- 2016 **Mucioki, M.**, Hickey, G.M., Muhammad, L., and Johns, T. Supporting farmer participation in formal seed systems: Lessons from Tharaka, Kenya. *Development in Practice*. 26:2, 137-148. <https://doi.org/10.1080/09614524.2016.1131812>
- 2015 **Mucioki, M.**, Johns, T., Muriithi, C., and Hickey, G. The influence of gender roles and human migrations on the distribution of crop biodiversity in Tharaka, Kenya. *The Journal of Ethnobiology*. 36(1):172-191. <https://doi.org/10.2993/0278-0771-36.1.172>
- 2014 **Mucioki, M.**, Mucioki, S.K., and Johns, T. Intraspecific diversity and seed management of pearl millet (*Pennisetum glaucum* (L.) R. Br) in Tharaka, Kenya: a persistent and valued traditional food crop. *Economic Botany*. 68(4), 397-409. <http://www.jstor.org/stable/43304458>
- 2013 **Dilbone, M.**, Turner, N.J., and von Aderkas, P. Lodgepole Pine Cambium (*Pinus contorta* Dougl. Ex Loud var. *latifolia* Engelm. Ex S. Wats.): A Springtime First Peoples' Food in British Columbia. *Ecology of Food and Nutrition*. 52(2), 130-147. [10.1080/03670244.2012.706013](https://doi.org/10.1080/03670244.2012.706013)

Publications under review

- 2023 **Mucioki, M.**, Holen, D., Kelly, S., Galbreath, T., Nelson, D., Powell, B., Paterno, S. Mixon, R., and Chi, G. Gardens and gardeners in rural Alaska: Considering cultivation as a component of wild food systems. *Agriculture and Human Values*.
- 2023 The Karuk Berkeley Collaborative, Sarna, D., **Mucioki, M.**, McCovey, K., Bourque, S., Sowerwine, J. Indigenous science key to adapting to climate change and enhancing Karuk Indigenous Cultural Agroecosystem Resilience. *Sustainability*

Publications under development

Powell, B. **Mucioki, M.**, Howe, L., Holen, D., Balstensperger, A., Zheng, Q., Chi, G. A novel framework for drivers of dietary change in Alaska and the Arctic. Planned submission to *Global Food Security* May 2024

Mucioki, M., Baumflek, M., Greenlaw, S., Aderman, H. Powell, B., Sowerwine, J., Sarna, D., McCovey, K. Considering biocultural tending or stewardship as means of resilience to environmental and governance stressors. Planned submission to *Human Ecology* March 2024.

Mucioki, M., Buzzard, R., Powell, B., Paniyak, C., Tuluk, R., Wilde, J., Leztring, M., Holen, D., Chi, G., and Maio, C. 'Merbok was a good thing and a bad thing': place based, community based systems grow more resilient post natural disaster. Planned submission to *Ecology and Society* April 2024.

Book chapters

2016 **Mucioki, M.**, Johns, T., and Mucioki, S. Gendered food-and-seed-producing traditions for pearl millet (*Pennisetum glaucum* (L.) R. Br) and sorghum (*Sorghum bicolor* (L.) Moench) in Tharaka-Nithi County, Kenya. (pp 73-89). In Brownhill, L., Njuguna, E., Bothi, K.L., B. Pelletier, Muhammad, L., and Hickey, G.M. (Eds.) *Food Security, Gender and Resilience: Improving Smallholder and Subsistence Farming*. Earthscan/Routledge: Oxford, United Kingdom.

Reports, policy briefs, and other non-peer reviewed

2023 Karuk Tribe – UC Berkeley Collaborative. Karuk Agroecosystem Resilience and Cultural Foods and Fibers Revitalization Initiative: xúus nu'éethti – we are caring for it. Karuk Aboriginal Territory. Karuk Tribe – UC Berkeley Collaborative. Berkeley, CA: University of California at Berkeley, and Orleans, CA: Karuk Department of Natural Resources. https://nature.berkeley.edu/karuk-collaborative/wp-content/uploads/2023/03/Karuk-Resilience-Report_Smallest-file-size.pdf

2021 **Mucioki, M.**, Sarna-Wojcicki, D., Sowerwine, J., McCovey, K., and Bourque, S.D. Keeping a Detailed Record of the Changing Climate Could Save This Tribe's Foodways. *Civil Eats*. <https://civileats.com/2021/10/08/keeping-a-detailed-record-of-the-changing-climate-could-save-this-tribes-foodways/>

2021 Chi, G., Holen, D., Randall, H., **Mucioki, M.**, and Napolitano, R. Rural Alaska has a bridge problem as permafrost thaws and crossing river ice gets riskier with climate change. *The Conversation*. <https://theconversation.com/rural-alaska-has-a-bridge-problem-as-permafrost-thaws-and-crossing-river-ice-gets-riskier-with-climate-change-169345>

2021 **Mucioki, M.**, Hoover, E., Sowerwine, J., and Intertribal Agriculture Council. *IAC Report on the Impact of COVID-19 on Tribal Producers and Communities and Opportunities to Strengthen their Resilience*. Berkeley, CA: University of California at Berkeley.

2019 Sowerwine, J., **Mucioki, M.**, Hillman, L., Sarna-Wojcicki, D. *Policy Brief: Restoring Access to Native Foods Can Reduce Tribal Food Insecurity*. Berkeley, CA: University of California at Berkeley. <https://nature.berkeley.edu/karuk-collaborative/wp->

content/uploads/2019/06/Native-Food-Insecurity-Policy-Brief_June-2019.pdf

- 2019 Sowerwine, J., **Mucioki, M.**, Friedman, E., Hillman, L., and Sarna-Wojcicki, D. *Food Security Assessment of Native American Communities in the Klamath Basin with the Karuk Tribe, Klamath Tribes, Yurok Tribe, and Hoopa Tribe*. Karuk-UC Berkeley Collaborative. Berkeley, CA: University of California at Berkeley. <https://nature.berkeley.edu/karuk-collaborative/wp-content/uploads/2019/05/Food-Security-Assessment-Web-5.20.pdf>
- 2018 **Mucioki, M.**, Sowerwine, J., Sarna, D, and The Karuk Tribe. *Policy Brief: Integrating traditional and local foods into the tribal commodities program*. Berkeley, CA: University of California at Berkeley. <https://nature.berkeley.edu/karuk-collaborative/wp-content/uploads/2019/06/FDPIR-policy-brief-March-13-2018.pdf>
- 2018 **Mucioki, M.**, Sowerwine, J., Preston, M.D. *Policy Brief: Making WIC more accessible to Native American families in remote regions of the middle and lower Klamath River Basin in California*. Berkeley, CA: University of California at Berkeley.
- 2013 **Dilbone, M.** Pearl Millet Diversity in Tharaka-Nithi County, Kenya. *InRef News, KARI-McGill Innovations for Resilient Farm Systems*. Issue 3.
- 2013 **Dilbone, M.** Humble pine provides springtime treats. *Williams Lake Tribune, Casual Country Edition*. 93-95.

Outreach/extension publications

- 2024 **Mucioki, M.**, Fried, R., and Beans, J. Community Brief: Urban traditional foods security in Anchorage, Alaska: findings from planning discussions. Penn State University, University of Alaska, Southcentral Foundation. https://www.megan-mucioki.org/_files/ugd/2ac6fc_2e4fda2fc3f24264b4e8744329c6d02c.pdf
- 2024 Napolitano, R., Colligan, S., Saleem, M. R., Holen, D., **Mucioki, M.**, Randell, H., and Chi, G. Wood River Bridge, AK (Version 1). *Zenodo*. <https://doi.org/10.5281/zenodo.10479202>
- 2020 **Mucoki, M.** *Investigating biological resilience in mushrooms, mosses, and ferns*. Karuk Tribe K-12 Curriculum. Grades 3-5
- 2019 **Mucioki, M.** *Spring workshop at the UC-Jepson Herbaria to expand our collection skills and the Karuk Herbarium*. Karuk-UC Berkeley Collaborative Newsletter.
- 2016 The Yurok Tribe, **Mucioki, M.**, and Sowerwine, J. *Klamath Basin Food System Assessment: Yurok Tribe Data Summary*. Klamath, California and Berkeley, California: Yurok Tribe and University of California at Berkeley. https://nature.berkeley.edu/karuk-collaborative/wp-content/uploads/2019/07/Yurok-Tribe-data-summary-report_March-2019.pdf
- 2016 The Karuk Tribe, **Mucioki, M.**, and Sowerwine, J. *Klamath Basin Food System Assessment: Karuk Tribe Data Summary*. Orleans, California and Berkeley, California: Karuk Tribe and University of California at Berkeley. https://nature.berkeley.edu/karuk-collaborative/wp-content/uploads/2019/07/Karuk-Tribe-data-summary-report_March-2019.pdf

- 2016 The Klamath Tribes, **Mucioki, M.**, and Sowerwine, J. *Klamath Basin Food System Assessment: Klamath Tribes Data Summary*. Chiloquin, Oregon and Berkeley, California: Yurok Tribe and University of California at Berkeley. <https://nature.berkeley.edu/karuk-collaborative/wp-content/uploads/2019/07/Klamath-Tribes-data-summary-report-March-2019.pdf>
- 2016 **Mucioki, M.** Learning about your herbaria: a special collection of plants. Karuk Tribe K-12 Curriculum. Grade 8, Lesson 5.
- 2015 **Mucioki, M.** Learning about your herbaria: a special collection of plants. Karuk Tribe K-12 Curriculum. Grade 5, Lesson 5.

SELECT PRESENTATIONS

- 2023 *Indigenous food security and traditional foods in urban spaces: planning efforts to identify community-based research and outreach priorities in Alaska*. Alaska Food Policy Council Festival and Conference. Anchorage, Alaska. (November 11).
- 2023 *Indigenous food security and traditional foods in urban spaces: planning efforts to identify community-based research and outreach priorities in Alaska*. Southcentral Foundation Traditional Foods Gathering. Anchorage, Alaska. (August 28).
- 2023 *Centering relationships with food, people, and places in research for action and restorative practice*. Seminar at SUNY ESF Center for Native People and Environment. (April 4).
- 2023 *Considering co-management/stewardship approaches to Indigenous lands and relations*. Guest lecture in Population Ecology. SUNY ESF Center for Native People and Environment. (April 5).
- 2023 *Climate change and Indigenous food systems in the Pacific Northwest*. Guest lecture in GEOG 438W Human Dimensions of Global Warming. Penn State University (April 7).
- 2023 *Exploring the conservation challenges and needs of culturally significant plant species through climate change and multiple ways of knowing*. UC Berkeley Herbaria. Botany Lunch Talk (March 10).
- 2023 *Indigenous food security, sovereignty and systems*. Guest lecture in CED 410 The Global Seminar Population and Environment. Penn State University (February 16).
- 2023 *Stewarding climate resilience and adaptation through relationships with environments and people*. Seminar at American University, Environmental Science Department (January 30).
- 2022 *Resituating Alaska at the apex of the food chain: climate impacts for better or worse*. Science on Tap with the Penn State Science Policy Society (October 5).
- 2022 *Reframing food security with, for, and by Native American and Alaska Native communities*. Whitehouse Conference on Hunger, Nutrition, and Health. Penn State Watch Party Rapid Talk (September 28).

- 2022 *Findings from the Karuk Agroecosystem Resilience and Cultural Foods and Fibers Revitalization Initiative: Xúus Nu'éethi – We Are Caring For It.* National Tribal & Indigenous Climate Conference (Aug. 29-Sept. 1). Virtual.
- 2022 *Findings from the Karuk Agroecosystem Resilience and Cultural Foods and Fibers Revitalization Initiative: Xúus Nu'éethi – We Are Caring For It.* The Western Klamath Restoration Partnership Speaker Series (June 29-30). Virtual.
- 2022 *Examining climate impacts on food systems in rural coastal communities in Alaska.* The Alaska Food Festival and Conference (March 17-19). Virtual.
- 2021 *Conceptualizing Indigenous Cultural Ecosystem Services (ICES) and benefits under changing climate conditions in the Klamath River Basin and its implications for land management and governance.* The Society of Ethnobiology. Indigenous People and Local Communities and Climate Change. (May 12-15). Virtual.
- 2019 *Reframing food security by and for Native American communities: A case study among Tribes in the Klamath River Basin of Oregon and California.* Association of the Study of Food and Society/ Agriculture, Food, and Human Values Society Annual Meeting. (June 26-29). Anchorage, Alaska.
- 2019 *Karuk Agroecosystem Resilience and Cultural Foods and Fibers Revitalization Initiative: Xúus Nu'éethi – We Are Caring For It.* Association of the Study of Food and Society/ Agriculture, Food, and Human Values Society Annual Meeting. (June 26-29). Anchorage, Alaska.
- 2019 *Karuk Agroecosystem Resilience and Cultural Foods and Fibers Revitalization Initiative: Xúus Nu'éethi – We Are Caring For It.* The Society for Economic Botany Annual Meeting. (June 2-6). Cincinnati, Ohio.
- 2017 Klamath River Basin Food Security Assessment: Data from Karuk households. (Nov. 15). Orleans, CA.
- 2016 *Native Food Sovereignty in the Klamath Basin of Oregon and California.* Association of Geographers Annual Meeting. (March 29-April 3). San Francisco, CA.
- 2015 *Integrating western science with traditional ecological knowledge to revitalize Native food resources and wisdom.* California Indian Conference (October 15-17). Berkeley, CA
- 2014 *Building seed sustaining households.* African CIFSRF Symposium (June 23-27). Nairobi, Kenya
- 2014 *Intraspecific diversity and seed security.* KARI-McGill Knowledge Integration Conference (June 19). Nairobi, Kenya
- 2013 *Local seed, certified seed, and resource poor farming systems: the role of variety access and variety utilization in Tharaka County, Kenya.* Semi-annual food security KARI conference (February 19). Nairobi, Kenya.

- 2012 Lodgepole pine cambium: a spring treat of Chilcotin First Peoples. Introduction to Ethnoecology. (March 4). University of Victoria.
- 2011 Place based knowledge and foods of Central British Columbia. Introduction to Ethnoecology. (December 1). University of Victoria

GRANTS AND AWARDS

- 2023 The Equal Opportunity Planning Committee Grant **(Co-PI)** *Lion's Paw Pawpaw Ice Cream* \$10,000.
- 2023 NSF Research Experience for Undergraduates Supplement **(PI)** \$9,000.
- 2023 NSF Planning Grant **(PI)** entitled *Indigenous food security and traditional foods in urban spaces: a planning proposal to identify community-based research and outreach priorities in Alaska*. \$200,000
- 2022 NSF Planning Grant **(Co-PI)** entitled *Planning: Building Community Resilience in the Food-Energy-Water and Society Nexus*. \$200,000
- 2022 NSF RAPID **(Co-PI)** entitled *RAPID: Using Mobile Phone Data to Understand the Impacts of the COVID-19 Pandemic on Food Assistance Use in Alaska*. \$200,000
- 2021 NSF EAGER SAI **(Co-PI)** entitled *Collaborative Research: Bridging the Arctic: Community-Driven Innovation for Resilient Bridges in Rural Alaska Communities*. \$300,000
- 2021 SSRI seed-grant **(Co-PI)** entitled, *Mobility Patterns and Their Influence on Food Security in Alaskan Communities: Using Digital Trace Data for Social and Behavioral Research during the COVID-19 Pandemic* awarded through the COVID-19 Pandemic Emergency Research Funding in Social and Behavioral Sciences Request for Proposals. \$30,000.
- 2021 NSF Research Experience for Undergraduates Supplement **(PI)**. \$9,000.
- 2018-2022 *Karuk Agroecosystem Resilience and Cultural Foods and Fibers Revitalization Initiative: xúus nu'éethi – we are caring for it*. **(Post-doc)** AFRI-USDA grant. \$1.2 million
- 2011-2014 International Development Research Centre Canada Fellowship. \$60,000.
- 2012-2013 International Development Research Centre Canada Field Work Fellowship **(Grad Student)**. McGill University. \$25,000.
- 2011-2014 Graduate Excel Fellowship **(Grad Student)**. McGill University. \$15,000.
- 2009-2011 Pacific Century Award **(Grad Student)**. University of Victoria. \$18,000.
- 2007 Travel Grant **(Undergrad Student)**. AustraLearn. \$1000.
- 2007 Travel Grant **(Undergrad Student)**. Ohio Northern University. \$500.

TEACHING EXPERIENCE

- The Pennsylvania State University** **2024**
- GEO 493: Indigenous Connections through Pawpaw (co-teaching with Dr. Bronwen Powell and Dr. Robert Roberts)
- The Pennsylvania State University** **2023**
- CED 297: Exploring Sustainability in Local Food Systems (teaching with student Vancie Peacock)
- The Pennsylvania State University** **2022-2023**

- GEOG 530, Seminar in Human-Environment Geography, Critical perspectives on Diet and Food Systems (co-teaching with Dr. Bronwen Powell)

University of Victoria

2009-2011

- Ecological Processes, School of Environmental Studies, University of Victoria. (Primary instructor for labs.)
- Ethnoecology, School of Environmental Studies, University of Victoria (teaching assistant)

Ohio Northern University

2008-2009

- Plant Systematics, Biology Department. Ohio Northern University (teaching assistant).

Community focused instruction.

- 2020 Investigating biological resilience in mushrooms, mosses, and ferns. Orleans Elementary School (April 20). Orleans, CA
- 2019 Spring workshop at the UC-Jepson Herbaria to expand our collection skills and the Karuk Herbarium. Berkeley, CA
- 2016 An introduction to plant pressing. Karuk Youth Culture Camp. (August 25). Happy Camp, CA
- 2016 Ethnobotany and herbarium collections. Yurok Language Immersion Camp. (July 30). Tully Creek, CA
- 2016 An introduction to plant pressing. Orleans Elementary after school program. (May 5). Happy Camp, CA

STUDENT MENTORSHIP

Drawdown Scholars

May 2023-August 2023

- Summer Research Experience for Undergraduates at Penn State. Mentor of Erin Martin.

Polar Impact Mentorship Initiative for minoritized students

June 2022- ongoing

- Mentor to Millie Harding: Masters by Research in Physical Geography at the Department of Geography at Durham University, UK

Graduate Research Assistantships supervision at Penn State

Sept. 2021- ongoing

- **Ayse Akyildiz:** Graduate Research Co-supervisor, Department of Agricultural Economics, Sociology, and Education, 2022-ongoing
- **Jessica Miller:** Graduate Research Co-supervisor, Department of Agricultural Economics, Sociology, and Education, 2021-ongoing
- **Emma Chiaroni:** Graduate Research Co-supervisor, Department of Agricultural Economics, Sociology, and Education, 2021-2022

Research Experience for Undergraduates

Nov. 2020- ongoing

- NSF funded undergraduate research internships at Penn State University

University of California Berkeley

April 2015-October 2020

- Supervision of eight undergraduate students through the Sponsored Projects for Undergraduate Research program

SELECTED MEDIA OUTREACH AND ENGAGEMENT

- 2022 Executive Office of the President of the United States. Guidance for Federal Departments and Agencies on Indigenous Knowledge. <https://www.whitehouse.gov/wp-content/uploads/2022/12/OSTP-CEQ-IK-Guidance.pdf>
- 2022 Hoorn, R. Indigenous Knowledge guides the conservation of culturally important plants. *Mongabay*. <https://news.mongabay.com/2022/12/indigenous-knowledge-guides-the-conservation-of-culturally-important-plants/>
- 2021 USFS. Gathering Value from Tribal Forest-Tending Practices. US Forest Service Research and Development News. <https://www.fs.fed.us/research/docs/newsletter/November-2021-RD-Newsletter.pdf>
- 2021 LaJeunesse, S. Researchers address need for bridges in remote Alaska as climate warms. *Penn State News*. <https://www.psu.edu/news/research/story/researchers-address-need-bridges-remote-alaska-climate-warms/>
- 2019 Cowan, J. Fighting Hunger in the Klamath River Basin. *New York Times*. <https://www.nytimes.com/2019/08/14/us/klamath-native-american-food.html>
- 2019 Mucioki, M. Celebrating the work of the Society of Ethnobiology's Graduate Fellowship Winners. *Forage! Blog*. The Society of Ethnobiology.
- 2018 Mucioki, M. Revitalizing native food systems and supporting food security through collaborative research in the Klamath River Basin. *Forage! Blog*. The Society of Ethnobiology.

PROFESSIONAL ACTIVITIES AND SERVICE

Peer review of papers

Agriculture and Human Values, Development in Practice, Economic Botany, Food Security, Preventative Medicine Reports, Journal of Agriculture, Food Systems, and Community Development, Journal of Nature Conservation, Human Ecology, BMC Public Health, Health Promotion and Practice, Climatic Change, Arctic Anthropology

Editorial service and special issues

Leading and co-editing special issue of *Artemisia* (California Native Plant Society) on Indigenous peoples, climate, and native plant stewardship with emphasis on Indigenous scholarship and community-based work **Sept. 2022-present**

Associate Editor of food sovereignty equitable food access and availability, *Journal of Agriculture, Food Systems, and Community Development* **Dec. 2022- present**

Prior: Editor of *Forage!* by the Society of Ethnobiology, student editor *Economic Botany*

Proposal Review Panels

USDA NIFA Community Food Projects
USDA NIFA Gus Schumacher Nutrition Incentive Program

January 2023
July 2023

LANGUAGES

Swahili (elementary knowledge)

Spanish (elementary knowledge)

FIELD EXPERIENCE AND COLLABORATIONS

- Arctic and sub-arctic Alaska in collaboration with multiple Tribes and Tribal organizations
- Bristol Bay Native Association
- Indigenous Collaborative for Health, Agriculture, Nutrition, Growers, and Environmental Sovereignty
- Alaska Food Policy Council
- Karuk UC Berkeley Collaborative
- Klamath River Basin of Northern California and Southern Oregon in collaboration with Karuk, Yurok, and Klamath Tribes
- The Intertribal Agriculture Council (national representation of Tribes and Nations)
- Tharaka People and The Kenya Agricultural and Livestock Research Organization
- T̓s̓id̓el̓del̓ First Nations in central British Columbia, Canada