ALEX C. MCALVAY

New York Botanical Garden
Center for Plants, People and Culture
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Bronx, NY 10458-5126
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NYBG Profile
Personal Website

EDUCATION

2012-2017 **Ph.D., Botany**, University of Wisconsin-Madison.
Dissertation: Domestication, Invasion, and Ethnobotany of *Brassica rapa*
Supervisor: Dr. Eve Emshwiller.

2006-2010 **B.S., Biological Anthropology**, Western Washington University

PROFESSIONAL POSITIONS

2026-present **Research Scientist II/Associate Curator,** Center for Plants, People and Culture, New York Botanical Garden

2020-2026 **Research Scientist I/Assistant Curator,** Center for Plants, People and Culture, New York Botanical Garden

2021-present **Adjunct Associate Research Scientist**, Ecology, Evolution, and Environmental Biology, Columbia University, New York

2021-present **Doctoral Faculty and Adjunct Professor**, Graduate Center of the City University of New York, New York

2019-2020 **Postdoctoral Research Associate**, Dr. Alison Power Lab, Cornell University

PUBLICATIONS

Peer-reviewed journal articles

2026 **McAlvay, A. C.,** Ramos-Bierge, S., Arce, A. E., Vibrans, H., Linares, E., Bye, R., Rodriguez, A., Sanchez-Ramos, C., Silvestre, P. X., Nevares, A., & Emshwiller, E. Adopting and adapting: Use and management of introduced field mustard (*Brassica rapa*) in Mexico. *Journal of Ethnobiology*. ***In press***

2026 Diazgranados, M., Gianella, M., Bell, E., Kor, L., Gori, B., Khoury, C.K., Dempewolf, H., **McAlvay, A.C.,** Diulgheroff, S., and Ulian, T. World Checklist of Food Plants 2025. *Scientific Data.* ***In review.***

2026 Taylor, C.M., Mabry, M.E., Carver, D., Ford, T., **McAlvay, A.C.,** Rousseau-Gueutin, M., King, G.J., Pires, J.C. and Nelson, M.N. Enhancing crop biodiversity: distributions and conservation priorities for Brassica crop wild relatives. *Nature Plants*. ***In review***

2026 Abebe, M., Asfaw, Z., Woldu, Z., Warkineh, B., Dejen, A., Ruelle, M.L. and **McAlvay, A.C.** Variety mixtures of sorghum (*Sorghum bicolor*): Traditional use and management in diverse agroecological zones of North-Central Ethiopia. *Journal of Ethnobiology.* ***In review.***

2026 Smith, W.J., Gering, E., Mabry, M., Adamu, A.M., Beatty, S., Caicedo, A.L., Cornille, A., Dorph, A., Ellison, S., Grau, H.R., Hansen, M.M., Holmgren, M., Kohl, P., **McAlvay, A.C.,** McElligott, A., Olsen, K.M., Proboste, T., Reed, T., Sherratt, E., Stuart, O.P., & Carlen, E.J. Feralisation as a catalyst of biodiversity change in the Anthropocene. *Nature Ecology & Evolution.* ***In review.***

2026 Orrit González, J., Bredero, R., Fernandez-Llamazares, A., Jordan, F., McAlvay, A.C, Reyes-García, V., Teixidor-Toneu, I., & Mattalia, G. The persistence of cultural keystone species depends on endangered sociocultural groups. *Ecosystems and People.* ***In review.***

2026 S. Ahmed; Morgan, K.; Bertoldo, J.; Annan, R.; Amare, E.; Barboza, M.; Balvers, M.; Brinkley, S.; Chien, C.-M.; Cody, K.; German, J. B.; Gallo-Franco, J. J.; Lal, V.; Laporte, M.-A.; Fukagawa, N. K.; Hall, R. D.; Jaramillo-Botero, A.; Kennedy, G.; Low, M.; Lowe, A. J.; **McAlvay, A. C.;** Odenkirk, M. T.; Prenni, J. E.; Shafizadeh, T.; Siegel, J.; Tagkopoulos, I.; Tohme, J.; Rajasekharan, M.; Vázquez-Manjarrez, N.; Vogliano, C.; Watkins, S.; de la Parra, J. Leveraging Food Composition Data for Human and Planetary Health Solutions. *Trends in Food Science and Technology*. ***In review***.

2026 Khoury, C., Dempewolf, H., Argumedo, A., de Haan, S., Diazgranados, M., McAlvay, A., Toledo, A., van Zonneveld, M. and Wenzl, P. Food plant diversity in a rapidly changing world. *Plants, People, Planet.*

2026 I. Maurice-Hammond, **McAlvay A.C.**; Deur, D., Mathews, D.; Recalma-Clutesi, K.; and Sewid-Smith, Daisy. Estuarine root gardens and Indigenous soils: Enduring legacies of 'Namgis First Nation caretaking at the Gwa'ni/Nimpkish River estuary in British Columbia, Canada. *American Antiquities*. ***In review.***

2026 Khoury, C.K., Gora, S., Dempewolf, H., Diazgranados, M., **McAlvay, A.C**., Azevedo, V., Brockington, S., Cano, Á., Carver, D., Cowell, C. and Crane, P., 2026. Enhance food plant diversity conservation and use through greater coordination between genebanks and botanic gardens. *Plants, People, Planet.*

2026 Toulabi, S.B., Van Buiten, C., Carolan, M., Kantar, M.B., Gore, M.A., Khoury, C.K., Gallo-Franco, J.J., Brinkley, S., **McAlvay, A.C.,** de Haan, S. and Holm, D.G., Harnessing Foodomics for Next-Generation Crop Breeding: Advancing Sustainable Agrifood Systems and One Health. *Journal of Agriculture and Food Research*, p.103252.

2026 G. Mattalia; Sartori, Z; **McAlvay, A.C;** Spada, A.; and Reyes-García, V. 2025. Cattle: A cultural keystone species shaping the biocultural landscape of the Walser People of the Southern Swiss Alps. *Society & Natural Resources,* pp.1-22.

2026 Sheban, K., Duguid, M., McAlvay, A.C. and Bradford, M. Protecting wild populations and working landscapes: the case for transitioning to size-based criteria for federal regulation of American ginseng. *Environmental Research Letters*. 21(14), p.144002.

2026 T. Hailegiorgis.; Asfaw, Z; Woldu, Z.; Warkineh, B., Ruelle, M.; **McAlvay, A.C.** Legume-Legume Polycultures: Traditional Mixed Cropping of Faba Bean (*Vicia faba*) and Field Pea (*Pisum sativum*) in Highland Ethiopia. *Ethnobotany and Economic Botany*. pp.1-22.

2026 G. Mattalia, **McAlvay, A.C.**, Reyes-García, V., Asfaw, Z., Ban, N.C., Caviedes, J., De Meyer, E., Díaz, S., Franco, F.M., Ibarra, J.T. and Loayza, G., 2026. Stewardship practices enhance nature's contributions to people. *BioScience*, 76(6), pp.491-500. (Cover)

2026 Antonelli et al. 2026. State of the World's Plants and Fungi 2026. Royal Botanic Gardens, Kew. DOI: https://doi.org/10.34885/rdzs-ky83

2026 Morgan, K., Warne, T., Toulabi, S., Li, F., Birnbaum, A., Ehlers Cheang, S., Weng, C.-Y., Srichamnong, W., Kanwal, S., Aduku, L.N.E., Apprey, C., Balcha, K.H., Lutterodt, H.E., McGuinness, M., Wallace, B., Manoochehri, L., **McAlvay, A.C.**, Nunoo, M.A., Agyekum, P.B., Annan, R.A., van Buiten, C., Barboza, M., de la Parra, J., Ahmed, S., Brinkley, S. Agricultural and environmental drivers of variation in the composition of food crops: A scoping review, *Plants, People, Planet,* ppp3.70197

2026 Tillería, S.G., Presotto, A., Pandolfo, C., **McAlvay, A.C**., Emshwiller, E., Mabry, M.E., Bird, K.A. and Ureta, M.S., Unveiling the genetic diversity and ancestry of Brassica rapa weeds in Argentina: evidence for local adaptation and feralization. *AoB Plants*, *18*(2), p.plag018.

2026 Cormier, L., Ritchie, M., **McAlvay, A. C.,** Albert, R. M., Cornelis, J.-T., Berna, F., & Armstrong, C. G. Soil phytoliths as indicators of Sts'ailes (Coast Salish) stewardship legacies and history at Lhemqwó:tel in western Canada. *Quaternary International*, 759, 110152.2026

2025 Z. Kikvidze, Mosulishvili, M., Chkhutiashvili, G., Toriashvili, N., Maisaia, I., Zambrana, N.Y.P., Bussmann, R.W., **McAlvay, A.C.** and Power, A.G., 2025. From field to the edge of memory: the ethnobotany and conservation of indigenous wheats in Georgia, the Caucasus. Ethnobotany Research and Applications, 32, pp.1-11.

2025 I. Vandebroek., Voeks, R., de la Parra, J., Applequist, W., Vardeman, E.T., Ruelle, M.L., Maldonado Andrade, G., **McAlvay, A.C.,** Fatur, K., Orr, B. and Lukhoba, C., 2025. Ethnobotany and Economic Botany: Why We Are Changing Our Journal Name: Vandebroek et al. *Ethnobotany and Economic Botany*, pp.1-12.

2025 R. Hart; Odonne, G.; **McAlvay, A.C.;** Hoffman, B.; Souza, E. N. F.; Kelleher, C.; Schmull, M.; Fonseca, V.; Mapes, C.; Flores, D.; Beltran, L.; Prehn, A.; Romero, C.; Salick, J.; Nesbitt, M.; Walker, K.; Pace, M.; Balick, M.; Murguia, M.; Mattalia, G.; Leonard, K.; Groom, Q.; Townesmith, A.; Vandebroek, I. Repositories of Biocultural Diversity: Toward a Framework for Including Ethnobotany in Digital Herbaria. *Plants People Planet*. 8(4), pp.1095-1103.

2025 S. Thomas; Abrahams, R. S.; Kick, D. R.; Walden, N.; Conant, G.; McKain, M. R.; An, H.; Arias, T.; Edger, P. P.; Harkess, A.; Hendriks, K. P.; Koch, M. A.; Lens, F.; Lysak, M. A.; **McAlvay, A.C.;** Mummenhoff, K.; Al-Shehbaz, I. A.; Washburn, J. D.; Pires, J.

C. Mesopolyploidy as a taxonomic clade marker for mustard crops and relatives. *Annals of Botany. mcaf170*

2025 D. Melese; Asfaw, Z.; Woldu, Z.; Warkineh, B.; Amare, E.; **McAlvay, A. C**.; Ruelle, M. Mixed Teff (Eragrostis tef, Poaceae) Cultivation and Consumption among Smallholder Farmers in South Wollo Zone, Ethiopia. *Journal of Ethnobiology and Ethnomedicine*

2025 S. Ramos Bierge, Carillo de la Cruz, T; **McAlvay, A.C.** Data sovereignty and community engagement at the intersection of language and ecological knowledge: Lessons from ethnobiology and linguistics. *Sociolinguistic Studies*.

2025 Sheban, K.C., Kuebbing, S.E., Duguid, M.C., Ashton, M.S., McAlvay, A.C., Munsell, J.F., Orefice, J. and Bradford, M.A., 2025. Keeping forests on the agroforestry agenda. *Nature Climate Change*, *15*(6), pp.581-584.

2024 **A.C. McAlvay**; Bye, R.; Linares, E; Nevares, A.; Xochitl Silvestre, P.; Enriquez Maldonado, D.; Ramos Bierge, S; Emshwiller, E. Genetic and phenotypic consequences of farmer management of feral *Brassica rapa* in Mexico. *Etnobiología. 22*(3).

2024 Mattalia, G., **McAlvay, A.C.**, Teixidor-Toneu, I., Lukawiecki, J., Moola, F., Asfaw, Z., Cámara-Leret, R., Díaz, S., Franco, F.M., Halpern, B.S. and O'Hara, C. Cultural keystone species as a tool for biocultural stewardship. A global review. *People and Nature.*

2024 Á. Fernández-Llamazares; Teixidor-Toneu, I.; Armstrong, C.G.; Caviedes, J.; Ibarra, J.T.; Lepofsky, D.; **McAlvay**, **A.C.**; Molnár, Z.; Moraes, M.; Odonne, G.; Poe, M.R.; Bahraman, A.S.; Turner, N.J. The global relevance of locally grounded ethnobiology. *Journal of Ethnobiology and Ethnomedicine*. *20*(1), p.53.

2023 Mabry, M.E., Harkess, A.E., I.A. Al-Shehbaz, E.H. Roalson, G.J. King, M.A. Koch, M.A. Lysak, K. Mummenhoff, S. Bhattacharya, L.A. Nikolov, I.J. Leitch, D.J. Murphy, W.J. Baker, F. Lens, J.C. Hall, R.L. Barrett, K.P. Hendriks, M.S. Barker, M.T.W. McKibben, **A.C. McAlvay**, J.G. Conran, Y. Hao, G.C. Conant, M. Dassanayake, S. Barak, M.E. Shranz, A. Beric, R.S. Abrahams, M. Pisias, S.K. Thomas, Q. Yu, S.B. Carey, F. Mercati. Complementing model species with model orders. *The Plant Cell.* koad260 p. 1- 22

2023 I. Maurice-Hammond; **McAlvay, A.**; Mathews, D.; Bosman, A.; Morris, J. A ləƙʷəŋən estuarine root garden: The case of Tl'chés. *Economic Botany*. 77, 410-432

2023 C.G. Armstrong; Lepofsky, D.; **McAlvay, A.C.**; Leonard, K.; Richie, M.; Lyons, N.; Blake, M. Reply to Oswald: Scale in Studies of Pre-Colonial Forests. *Ecosystems and People*. 19:1.

2023 J.R. Wall; Lukawiecki, J; Young, R.; Powell, L.; **McAlvay, A.C.**; Moola, F. Operationalizing the Biocultural Perspective Part II. A Review of Biocultural Action Principles since The Declaration of Belém. *Environmental Science and Policy*. 150

2023 M.E. Mabry; Bagavathiannan, M.V.; Bullock, J.M.; Wang, H.; Caicedo, A.L.; Dabney, C.J.; Drummond, E.B.M; Frawley, E.; Gressel, J.; Husband, B.C.; Lawton-Rauh, A.; Maggioni, L.; Olsen, K.M.; Pandolfo, C.; Pires, J.C.; Pisias, M.T.; Razifard, H.; Soltis, D.E.; Soltis, P.S.; Tillería, S; Ureta, S.; Warschefsky, E.; **McAlvay, A.C.** Open

questions in crop ferality: where are we coming from and where are we going? *Plants People Planet*. 5(2).

2023 C.G. Armstrong; Lyons, N.; **McAlvay, A.C.;** Richie, M.; Lepofsky, D.; Blake, M. Historical Ecology of Forest Garden Management in Ts'msyen Lahkhyuup and Beyond. *Ecosystems and People*. 19(1), 2160823.

2022 **A.C. McAlvay**; DiPaola, A; D'Andrea, A.C.; Ruelle, M.; Mosulishvili, M.; Halstead, P.; Power, A.G. Cereal species mixtures: an ancient practice with potential for climate resilience. A review. *Agronomy for Sustainable Development*. 42(5), pp. 1-17.

2022 M.T. Pisias, Bakala, S., **McAlvay, A.C.,** Mabry, M.E., Birchler, J.A., Yang, B., Pires, J.C. Prospects of Feral Crop De Novo Re-Domestication. *Plant and Cell Physiology*. pcac072. https://doi.org/10.1093/pcp/pcac072

2022 C.G. Armstrong; Earnshaw, J.; and **McAlvay, A.C**. 2022. Coupled archaeological and ecological analyses reveal ancient cultivation and land-use in Nuchatlaht (Nuu-chah-nulth) Territories, in the Pacific Northwest of North America. *Journal of Archaeological Science*. 143, 105611. https://doi.org/10.1016/j.jas.2022.105611

2022 Abera, B..; T. Legesse; A. Nebiyu; A. Dejen; F. Hailu; Z. Asfaw; M. Ruelle; **A.C. McAlvay;** A.G. Power; A. Tesfaye. Diversity, use and production of farmers' varieties of common bean (*Phaseolus vulgaris* L., Fabaceae) in southwestern and northeastern Ethiopia. *Agroecology and Sustainable Food Systems*. 67, 339–356.

2021 **McAlvay, A.C.**; C.G. Armstrong; J. Baker.; L. Black Elk; S. Bosco; N. Hanazaki; L. Joseph; T. Martínez; M. Nesbitt; M. Palmer; APW.C. Priprá de Almeida; J. Anderson; Z. Asfaw; I. Borokini; E.J. Cano-Contreras; S. Hoyte; M. Hudson; A. Ladio; G. Odonne; S. Peter; J. Wall; S. Wolverton; I. Vandebroek. Decolonizing institutions, projects, and scholarship in ethnobiology. *Journal of Ethnobiology*. 41(2), pp. 170-191

2021 Poveda, J.; P. Velasco; A. de Haro; T.J. Johansen; **A.C. McAlvay**; C. Mollers; J. Mölmann; E. Ordiales; V.M. Rodríguez. Modification of agronomic and metabolomic parameters in *Brassica oleracea* var. *acephala* divergent selection populations for glucobrassicin content in different environments. *Metabolites*. 11(6), 384.

2021 Mabry, M.E.; S.D. Turner-Hissong, E.Y Gallagher, **A.C. McAlvay**, H. An, P.P. Edger, J.D. Moore, D.A.C. Pink, G.R. Teakle, C.J. Stevens, G. Barker, J. Labate, D.Q. Fuller, R.G. Allaby, T. Beissinger, J.E. Decker, M.A. Gore, J.C. Pires. The Evolutionary History of Wild, Domesticated, and Feral *Brassica oleracea* (Brassicaceae). *Molecular Biology and Evolution*. msab183

2021 **McAlvay, A.C**.; A.P. Ragsdale; X. Qi; K. Bird; P. Velasco; A. Hong; M. Mabry; J.C. Pires; E. Emshwiller. *Brassica rapa* domestication: untangling wild and feral forms and multiple origins of crop morphotypes. *Molecular Biology and Evolution.* msab108

2021 Armstrong, C.G.; J. Miller; **A.C. McAlvay;** M. Richie; D. Lepofsky. 2021. Functional traits and biodiversity reflect Indigenous Peoples' Land-Use Legacies in Pacific Northwest Archaeological sites. *Ecology and Society*. 26(2), Art. 6

2019 Reyes-García, V., D. García-del-Amo, P. Benyei, Á Fernández-Llamazares, K. Gravani, A.B. Junqueira, V. Labeyrie, X. Li., D.M. Matias, **A.C. McAlvay** and P.G. Mortyn, A collaborative approach to bring insights from local observations of climate change

impacts into global climate change research. *Current Opinion in Environmental Sustainability*, 39, pp.1-8.

2019 Armstrong, C.G. and **A.C. McAlvay**. Introduction to Special Section on Action Ethnobiology. *Journal of Ethnobiology*, 39(1), pp.3-13.

2019 Golan, J. and **A.C. McAlvay**. Intellectual Property and Ethnobiology: An Update on Posey's Call to Action. *Journal of Ethnobiology*, 39(1), pp.90-109.

2019 Abera, B., M. Berhane, A. Nebiyu., M.L. Ruelle, **A.C. McAlvay**, Z. Asfaw, A. Tesfaye, Z. Woldu. Diversity, use and production of farmers' varieties of common bean (*Phaseolus vulgaris* L., Fabaceae) in southwestern and northeastern Ethiopia. *Genetic Resources and Crop Evolution*, 67:339-356.

2019 An, H., X. Qi, M.L. Gaynor, Y. Hao, S.C. Gebken, M.E. Mabry, **A.C. McAlvay**, G.R. Teakle, G.C. Conant, M.S. Barker, and T. Fu. Transcriptome and organellar sequencing highlights the complex origin and diversification of allotetraploid *Brassica napus*. *Nature communications*, 10(1), p.2878.

2017 **McAlvay, A.C.**; K. Bird; J.C. Pires; E. Emshwiller. Barriers and prospects for crop wild relative conservation in *Brassica rapa*. *Acta Horticulturae.* 1202 pp. 165-177.

2017 Armstrong, C.G.; A.C. Shoemaker; I. McKechnie; A. Ekblom; P. Szabó; P.J. Lane; **A.C. McAlvay**; O.J. Boles; S. Walshaw; N. Petek; K.S. Gibbons; E.Q. Morales; E.N. Anderson; A. Ibragimow; G. Podruczny; J.C. Vamosi; T. Marks-Block; J.K. LeCompte; S. Awâsis; C. Nabess; P. Sinclair; C.L. Crumley. Anthropological contributions to historical ecology: 50 questions, infinite prospects. *PLoS ONE* 12:2.

Book chapters

2026 K. Leonard; Gelfand, A; Jemison, G.P.; Smith, J.; Corwin, J., Gumbs, S.; Francis, A., Peters, J.; Rosenstein, G.; **McAlvay, A.C.** Indigenous Fire in New York. Landkeeping (edited volume).

Unrefereed publications

2026 Armstrong, C.G.; J.T. Cornelis; D. Harris; D. Lefebvre; **A.C. McAlvay**; S. McPhail; A. Robinson and T. Wale. Naa Dax Deet Historical, Archaeological, and Environmental Research. Community Report.

2025 **McAlvay, A.C.** Book Review: Agave Spirits: The Past, Present, and Future of Mezcals. By Gary Paul Nabhan and David Suro Piñera. 2023. W.W. Norton & Company, New York, USA. 320 pp. *Ethnobiology Letters*. 16(1):10-11

2024 Petriello, M.A. & 36 Contributors [Including **A.C. McAlvay**]. Good practices in the co-production of knowledge: Working well together in the climate sciences. Center for Science and Society & Lamont-Doherty Earth Observatory, Columbia University. 102pp. *Columbia Academic Commons*

2021 **McAlvay, AC.** Book review: Plants, People, and Places: The roles of ethnobotany and ethnoecology in Indigenous Peoples' land rights in Canada and beyond. Edited by Nancy Turner. 2020. McGill-Queen's, Montreal. 480 pp. *Herbalgram*

2020 Lepofsky, D.; **A.C. McAlvay**; C.G. Armstrong; J. Miller; K. Lertzman. Re-evaluating "Conservation Implications of Native American Impacts." *EcoEvoArx.* ***Preprint***

2017 **McAlvay, AC.** Book review: Plants and Health - New Perspectives on the Health-Environment- Plant Nexus. Edited by Elizabeth Anne Olson and John Richard Stepp. 2016. Springer, Switzerland. 175 pp. *Ethnobiology Letters.*

2013 **McAlvay, A.C.** and Y. Chen. 2013. Handbook of Sidama Traditional Medicinal Plants. University of Wisconsin Department of Surgery.

Datasets

2025 Mattalia, G., McAlvay, A. C., Teixidor-Toneu, I., & Reyes-García, V. (2025). Cultural Keystone Species: A dataset of occurrences in English-language literature [Data set]. Zenodo. https://doi.org/10.5281/zenodo.17544898

Tools

2026 Taylor, C. M., Mabry, M. E., Carver, D., Ford, T., McAlvay, A. C., Rousseau-Gueutin, M., King, G. J., Pires, J. C., & Nelson, M. N.. *Brassica crop wild relative conservation gap analysis* tool (Version 1.0). https://candytaylor.github.io/Brassica-conservation-gap-analysis/

2026 Gallo-Franco, J., Brinkley, S., Cardenas, V., Laporte, M.-A., Arnaud, E., Pulleman, M., McAlvay, A., Murphy, K., Lundgren, J., Farley, S., Page, S., Kennedy, G., Rajasekharan, M., Chien, C.-M., Tohme, J., German, B., Ahmed, S., & de la Parra, J. (2026). Farming practices metadata module: A standardized framework for characterizing farming practices across food systems. White paper. CGSpace.

GRANTS AND AWARDS

2025 **$500,000**, Rockefeller Foundation | Integrating Regenerative Mixed Cropping Practices for Enhanced Nutritional Security and Climate Resilience in Kenyan School Feeding Programs | Lead PI

2025 **$66,000**, Shota Rustaveli Georgian National Science Foundation | Endemic wheats of Georgia: uses and traditional mixed cropping systems | Project Expert

2023 **$18,860**, Social Sciences and Humanities Research Council Partnership Engage Grant (Canada) | Indigenous Data Sovereignty and Ethnobotany | Co-PI.

2023 **$499,121**, Rockefeller Periodic Table of Food Initiative | Rockefeller Foundation | Investigating underutilized traditional crop mixtures for nutritional yield, climate resilience, and soil regeneration | Lead PI.

2022 **$75,000,** Earthlab Innovation Grant | University of Washington Earthlab | Cultural Ecosystems in a changing world: building a network across the Northwest to support food sovereignty, climate adaptation, and land rights | Participant and coauthor

2022 **$19,972,** Level I Funding | National Geographic | Collaborative Ethnobotanical and

Floristic Investigation of the Long Island Shinnecock | Lead PI

2021 **$418,415**, Dynamic Language Infrastructure/Documenting Endangered Languages | National Science Foundation (NSF)/National Endowment for the Humanities (NEH). The Language of Land and Life: Connecting Language and Ecology in Wixárika | Lead PI

2020 **Sequencing of 20 reference genomes, Equivalent value ~$1,000,000.** The Brassicales Genome Initiative, Joint Genome Initiative, Department of Energy (PI: Alex Harkess) | Participant

2019 **$10,000**, Engaged Cornell Fund Supplement for Undergraduate Training, Cornell University.

2019 **$162,000**, Academic Venture Fund, Cornell University Atkinson Center for a Sustainable Future | Cereal mixtures for Climate Resilience | Postdoctoral Fellow

2017 **1 semester of graduate student support**, EK and ON Allen Fellowship, UW-Madison Dept. of Botany.

2016 **$19,862**, Doctoral Dissertation Improvement Grant | NSF

2016 **$800**, Student Travel Award, Society for Economic Botany.

2016 **$2500**, CHE Graduate Student Research and Travel Grant, UW-Madison Center for Culture, History, and Environment.

2015 **$4000**, Davis Research Support, UW-Madison Dept. of Botany.

2015 **$2500**, Iltis Field Travel Support, UW-Madison Dept. of Botany.

2015 **$1500**, Davis Field Travel Support, UW-Madison Dept. of Botany.

2015 **$4000**, Newcomb Summer Fellowship | UW-Madison Dept. of Botany.

2013 **$4000**, Davis Research Support, UW-Madison Dept. of Botany.

2013 **$2000**, Nave Research Award, UW-Madison Latin American, Caribbean and Iberian Studies Program.

2012 **$5000**, Foreign Language and Area Studies Fellowship for Kazakh, Center for Russia, East Europe, and Central Asia.

2012 **$1000**, Biological Scholars Award, UW-Madison.

2011 **$1500**, Henry G. Schwarz Mongolian Studies Scholarship, WWU.

2010 **$250**, Undergraduate Ethnobiologist of the Year Award, Society of Ethnobiology.

2006 **$2000**, Presidential Scholarship, WWU.

PRESENTATIONS

Invited Seminars/Presentations

2026 McAlvay, A.C. | Roots of Resilience: Conserving Crop Diversity and Wild Relatives | Garden Club of America Leadership Meeting | New York

2026 **McAlvay, A.C; Balick, M; Plunkett, G; Daly, D.** Conservation Through Community Stewardship | New York Botanical Garden Webinar Series | Virtual

2026 **McAlvay, A.C.** Biodiversity by Design, Cultural Strategies for Resilient Food Systems | NYBG Science and Humanities Speaker Series | New York

2026 **McAlvay, A.C.** Remembering Resilience: Drawing on biodiversity and traditional agriculture practices to climate-proof crops | Rockefeller Foundation | New York

2026 **McAlvay, A.C.** The Global Conservation Consortium for Food Plants | New York Botanical Garden Webinar Series | Virtual

2026 **McAlvay, A.C.** Remembering Resilience: Drawing on biodiversity and traditional agriculture practices to climate-proof crops | National Museum of Kenya

2025 **McAlvay, A.C.** The Global Conservation Consortium for Food Plants | Diversifying Perennial Grains Working Group | Virtual

2025 **McAlvay, A.C.** Ancient Gardens, Living Forests: Ecological Legacies of Indigenous Plant Stewardship in the Pacific Northwest | New York Botanical Garden Science and Humanities Seminar Series | New York, USA

2025 **McAlvay, A.C.** Remembering Resilience: Drawing on biodiversity and traditional agroecological knowledge to climate-proof our food | Wollo University | Dessie, Ethiopia

2025 **McAlvay, A.C.** Remembering Resilience: Drawing on biodiversity and traditional agroecological knowledge to climate-proof our food | Florida Museum of Natural History | Gainesville, FL

2025 **McAlvay, A.C.** Remembering Resilience: Drawing on biodiversity and traditional agriculture practices to climate -proof crops | Fordham University, Department of Biological Sciences | New York, USA

2025 **McAlvay, A.C.** Remembering Resilience: Drawing on biodiversity and traditional agriculture practices to climate-proof crops | The Land Institute | Virtual

2025 **McAlvay, A.C.** Faith in a Seed | NYBG Humanities Institute and Dumbarton Oaks joint series | Virtual.

2024 **McAlvay, A.C.** Remembering Resilience: Drawing on Traditional Agricultural Practices to Climate-Proof Our Crops | Invited seminar presentation | *Columbia University, Ecology, Evolution, and Environmental Biology* | New York, USA

2024 **McAlvay, A.C**. Remembering resilience: supporting and revitalizing traditional mixed grain cropping in Ethiopia for climate tolerance | Seminar presentation | *New York Botanical Garden* | New York, USA

2024 **McAlvay, A.C.** Remembering Resilience: Drawing on Traditional Agricultural Practices to Climate-Proof Our Staple Crops | Invited seminar presentation | *University of Vermont Department of Crop and Soil Science* | Burlington, Vermont, USA

2024 **McAlvay, A.C.** Remembering Resilience: Drawing on Traditional Agricultural Practices to Climate-Proof Our Staple Crops | Invited seminar presentation | *Maine Grains Alliance*. Unity, Maine, USA.

2024 **McAlvay, A.C.** Remembering Resilience: Drawing on Traditional Agricultural Practices to Climate-Proof Our Staple Crops | Invited seminar presentation | *Columbia University Center for Archaeology*. New York, USA

2024 **McAlvay, A.C.** Remembering Resilience: Drawing on Traditional Agricultural Practices to Climate-Proof Our Staple Crops | Invited seminar presentation | *Colorado*

State University Department of Soil and Crop Sciences and *Department of Horticulture*. Fort Collins, Colorado.

2022 **McAlvay, A.C.** Investigating Underutilized Traditional Crop Mixtures for Climate Resilience, Nutritional Yield, and Soil Regeneration | Rockefeller Foundation Periodic Table of Food Initiative Sandbox Webinar Series | *Rockefeller Foundation* | New York, USA.

2022 **McAlvay, A.C.** Climate change and storytelling | *Printed Matter* | New York, USA.

2021 **McAlvay, A.C.** Ecological and evolutionary impacts of traditional and Indigenous plant management | E3B Research Seminar Series*, Columbia University*, New York, USA.

2021 **McAlvay, A.C.** Traditional farming and crop diversity for a more resilient future | Climate Week Seminar Series | *New York Botanical Garden*, New York, USA.

2021 **McAlvay, A.C.** Decolonizing Ethnobiology | Interactive Laboratory in Ethnobotany, at the *National Museum of the Federal University of Rio de Janeiro*, Rio de Janeiro, Brazil.

2021 **McAlvay, A.C**. Traditional Plant Management as Resource Sovereignty | Global Ethnobotany Research Webinar Series | *Centre for Conservation of Natural Resources*, Bangalore, India.

2020 **McAlvay, A.C.** Ethnoecology and traditional resource and environmental management | Department of Anthropology, *Axum University*, Axum, Ethiopia.

2019 **McAlvay, A.C.** Cultural keystone plant species | Department of Plant Biology and Biodiversity Management, *Addis Ababa University*, Addis Ababa, Ethiopia.

2014 **McAlvay, A.C.** Sidama Traditional Medicinal Plants: An ethnobotanical study from southwestern Ethiopia | Department of Surgery Seminar Series, *University of Wisconsin-Madison*, Madison, United States.

Conference presentations

2026 **McAlvay, AC**. Remembering resilience: drawing on traditional cereal species mixtures to build resilience in our crops in Ethiopia and beyond | *Mix4Agroecology* | Paris, France.

2026 **McAlvay, AC.** Remembering resilience: Revitalizing traditional grain mixtures to climate-proof our crops | *Climate Riskscapes* | Columbia University | New York.

2026 **McAlvay, A.C.,** The Global Conservation Consortium for Food Plants | USDA Plant Germplasm Operations Committee.

2026 **McAlvay, A.C.,** Ancient Gardens, Living Forests: Ecological Legacies of Indigenous Plant Stewardship in the Pacific Northwest | Washington Association of District Employees Conference | Virtual

2026 **McAlvay, A.C.** Mixed in the field, mixed on the plate: nutritional yield and dietary complementarity in traditional polycultures and variety mixtures in Ethiopia | Society for Ethnobotany | Montpellier, France

2026 **McAlvay, A.C.** The Global Conservation Consortium for Food Plants | *Global Conservation Consortium Summit. Edinburgh, Scotland.*

2025 **McAlvay, A.C.** Global Conservation Consortium for Food Plants | *11th Governing Body meeting for the International Treaty on Plant Genetic Resources for Food and Agriculture Side Event* | Lima, Peru

2025 **McAlvay, A.C.** Ethnobotany of Sorghum Variety Mixtures: Traditional Knowledge, Agroecological Resilience, and Food Security. *Society for Ethnobotany* | Prague, Czechia

2024 **McAlvay, A.C**. Ethnobotany in service of food, land, and data sovereignty: examples and barriers. *International Botanical Congress* | Madrid, Spain.

2024 **McAlvay, A.C**. The language of land and life: importing data sovereignty lessons and tools from linguistics into ethnobiology. *International Botanical Congress* | Madrid, Spain.

2024 **McAlvay, A.C**. Remembering resilience: supporting and revitalizing traditional mixed grain cropping in Ethiopia for climate tolerance. *Botanical Society of America/Society for Ethnobotany*. Grand Rapids, MI.

2024 **McAlvay, A.C**. Remembering resilience: supporting and revitalizing traditional mixed grain cropping in Ethiopia for climate tolerance. *International Society of Ethnobiology*, Marrakesh, Morocco.

2024 **McAlvay, A.C**. Grain mixtures for dietary diversity, climate resilience, and soil regeneration. *Periodic Table of Food Initiative Launch*, New York, USA.

2024 **McAlvay, A.C**. Remembering resilience: supporting and revitalizing traditional mixed grain cropping in Ethiopia and the Republic of Georgia for climate tolerance. *Society of Ethnobiology*, St. Louis, MO, USA.

2023 **McAlvay, A.C**.; Pace, M.; Walker, K. Collaborative Ethnobotanical and Floristic Investigation of the Long Island Shinnecock Nation. *Samples with Consequences*. New York, USA.

2023 **McAlvay, A.C.** Investigating underutilized traditional crop mixtures for nutritional yield, climate resilience, and soil regeneration. *American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America International Annual Meeting.* St. Louis, MO, USA.

2022 **McAlvay, A.C.** Pacific Northwest Cultural Ecosystems. Lightning Talk. *Northeast Regional Meetup of the Society for Economic Botany and International Society of Ethnobiology.* New York, NY*,* USA.

2022 **McAlvay, A.C.** Data Sovereignty and Labeling Tools in Ethnobotany. Preconference Workshop. *Society for Economic Botany* and *International Society of Ethnobiology.* Virtual

2022 **McAlvay, A.C.** and T. Adams Food programs at The New York Botanical Garden. Agriculture, food Systems and the future of food in botanic gardens. Food and Agriculture Community Townhall. *American Public Gardens Association.* Virtual

2021 **McAlvay, A.C.** Reconstructing the dedomestication and invasion history of field mustard (*Brassica rapa*). *Botanical Society of America.* 2021: Virtual.

2021 **McAlvay, A.C.** Use, management, and potential climate resilience of traditional wheat and barley seed mixtures in Ethiopian highland agriculture. *Society of Ethnobiology*. 2021: Virtual.

2021 **McAlvay, A.C.** Ethics and Advocacy - Organizing Equity and Decolonizing Ethnobiology. *Royal Anthropological Institute Anthropology and Conservation Conference*. Workshop panel. 2021: Virtual.

2020 **McAlvay, A.C.** Wixárika ethnobotany and land rights. *Arts to Research Universities Conference*. 2020: Madison, WI, USA.

2019 **McAlvay, A.C.** Toward a united literature on traditional resource and environmental management: implications for resource sovereignty and understanding human subsistence. *Society of Ethnobiology* 2019: Vancouver, BC, Canada.

2018 **McAlvay, A.C.;** A. Ragsdale, X. Qi, K. Bird, P. Velasco, J.C. Pires, and E. Emshwiller. Out of Turnips: Reconstructing the domestication history of *Brassica rapa* crops in Eurasia. *Joint meeting of the Society of Ethnobiology and Society for Economic Botany*. 2018: Madison, WI, USA.

2018 **McAlvay, A.C.**; A. Ragsdale, X. Qi, K. Bird, P. Velasco, J.C. Pires, and E. Emshwiller. Domestication and ferality of *Brassica rapa* clarified through genotyping-by-sequencing. *Botanical Society of America*. 2018: Rochester, MN, USA.

2017 **McAlvay, A.C.** Barriers, resources, questions: Moving forward as an advocate-academic | Paper presented at the 40th *Society of Ethnobiology* Meeting, Montreal, QC, Canada.

2017 **McAlvay, A.C.** Trained peer-review to improve writing and feedback quality | *Center for the Integration of Research, Teaching and Learning* | All-Network Teaching As Research Conference.

2017 **McAlvay, A.C.** "We have always grown it" - forming relationships with an invasive weed in Mexico | Paper presented at the *Culture, History, and Environment Graduate Student Symposium*, Madison WI, United States.

2017 **McAlvay, A.C.**; R. Bye, E. Emshwiller. Redomestication of feral turnips in Mexico: phenotypic and genotypic evidence. *Society of Economic Botany*. 2017: Bragança, Portugal.

2017 **McAlvay, A.C.**; K. Bird, C. Pires, E. Emshwiller. Weedy and wild *Brassica rapa* worldwide: origins, relationships, and a surprising pool of diversity. *Brassica 2017*: Pontevedra, Spain.

2016 **McAlvay, A.C**. Ethnobotany and resource sovereignty in Mexico | Paper presented at Academic Forum of *Wirikuta Weekend: Celebrating Indigenous Cultural Survival*, Austin TX, United States.

2016 **McAlvay, A.C.**; I. Neubauer; C.G. Armstrong; J. Miller; E. Emshwiller. Beyond the foraging- farming continuum: modeling the diversity of human subsistence in multiple dimensions | Paper presented at the 39th *Society of Ethnobiology* Meeting, Tucson AZ, United States.

2015 **McAlvay, A.C.**; E. Emshwiller. Adopting and Adapting: Local Use and Management of Invasive *nabitos* (*Brassica rapa* L.) in Mexico and Consequences for their Evolution | Paper presented at the 2nd *New International Community for Historical Ecology meeting*, Vancouver, British Columbia, United States.

2015 **McAlvay, A.C.;** R. Pierotti; E. Emshwiller**.** The many faces of anthropogenic evolution: reconciling isolated lines of research on human-induced selection under the

banner of ethnobiology | Paper presented at the 38th *Society of Ethnobiology* meeting, Santa Barbara CA, United States.

2015 **McAlvay, A.C**.; R. Bye; E. Emshwiller. Evolutionary consequences of traditional plant management of weedy field mustard in Mexico | Paper presented at the 38th *Society of Ethnobiology* Meeting, Santa Barbara CA, United States.

Poster presentations

2016 **McAlvay, A.C.**; Y. Chen; H. Busse; G. Tefera. Healthcare access and traditional medicine among the Sidama of Ethiopia | Poster presented at the *Wisconsin Medicinal Plant Symposium*, Madison WI, United State.

2014 **McAlvay, A.C.**; E. Emshwiller. Traditional non-crop management of the Wixáritari (Huichol) of western Mexico | Poster presented at the 37th *Society of Ethnobiology Meeting*, Cherokee NC, United States.

2014 **McAlvay, A.C.**; Y. Chen; H. Busse; G. Tefera. Healthcare access and traditional medicine among the Sidama of Ethiopia | Poster presented at the *University of Wisconsin-Madison Department of Surgery Research Summit*, Madison WI, United States.

Consulting and advisory roles

2024 **Shinnecock Nation**: Working with the Center for Braiding Indigenous Knowledges and Science on ethnobotanical projects with the Shinnecock Nation.

2024 **Meadows and More:** Advisor for wild edible plant harvesting business.

2023-2024 **Periodic Table of Food Initiative:** Advising on development of a regenerative agriculture module for the online platform to allow integration of farming data with food composition/nutritional data.

2023- **Regen10 Experts Network**: Serving as one of 15 Experts for Regen10, a multinational initiative emerging from COP26 seeking to scale up regenerative agriculture and feed the majority of the world's people sustainably by the end of the decade. The initiative will work with 500 million farmers and leverage $60 billion per year. The Experts Network will provide technical advice and guidance as Regen10 refines and launches a Regenerative Outcomes Framework.

Policy participation

2026 **Workshop participant**, Bellagio Convening: Periodic Table of Food Initiative at a Global Tipping Point: Aligning Science, Systems, and Investments for Precision Nutrition. Bellagio, Italy.

2025 **Contributor**, Delivered remarks on behalf of Botanic Gardens Conservation International in the main session of the 11th Meeting of the Governing Body of the International Treaty for Plant Genetic Resources for Food and Agriculture. Lima, Peru.

2025 **Case Study**, Case study for the Global Report on Collective Progress in the Implementation of the Kunming-Montreal Global Biodiversity Framework (CBD

Notification 2025-100). Case Study: Traditional Knowledge and Biodiversity Conservation in Ethiopia. Link.

2025 **Workshop participant**, Ozark Experts Convening to FAO's preparation of an action plan under the Convention on Biological Diversity. St. Louis, Missouri.

2023 **Policy report**: K. Morgan; McAlvay, A.C.; de la Parra, J. 2023. Legume-Based Agroecology for African Nutrition Security. FAO Agroecological Knowledge Hub. Link.

2023 **Input submitted**: Tata Cornell Institute for Agriculture and Nutrition policy brief on Promoting Millets in the Public Distribution System.

2022 **Input submitted**, UN Human Rights report on Indigenous Women, Traditional and Scientific Knowledge for presentation at the UN Human Rights Council.

2022 **Input submitted**, Indigenous Tribal Consultation and Public Input Opportunities on Indigenous Traditional Ecological Knowledge in Federal Policy, U.S. Government.

2022 **Input submitted**, NIFA Listens: Session for stakeholder input to science priorities

TEACHING AND MENTORSHIP EXPERIENCE

Instructor of record

2024 **Instructor, City University of New York:** Seminar in Special Topics: Plants People and Culture (Biology 79302)

2021/23/25 **Instructor, Columbia University:** Ethnobotany: The Study of People and Plants (Ecology, Evolution, and Environmental Biology G4086; Co-instuctor: Michael Balick). 3 semesters

2019 **Instructor**, **Cornell University:** Scientific Writing and Statistical Analysis Graduate Level Course. One-month training for Ethiopian graduate students and three-day training for Ethiopian professors.

2016-2017 **Instructor, UW-Madison:** Ethnobotany (American Indian Studies / Anthropology / Botany 474). Summer term for two years.

Professional development in teaching

2018 **Cultivating Effective, Culturally Responsive Mentoring |** 1 semester | Research mentor Training Seminar | WISCIENCE program.

2017 **Teaching in Science and Engineering: The College Classroom** | 1 semester | Center for the Integration of Research, Teaching and Learning (CIRTL).

2016 **Delta Internship** | 1 semester | Co-developed a writing-based curriculum for a Tropical Horticulture Class | CIRTL.

2016 **Delta Internship Seminar** | 1 semester | Participated in a seminar to discuss best practices for designing and implementing scholarship of teaching projects | CIRTL.

2016 **Advancing Learning Through Evidence-Based STEM Teaching** | 1 semester | CIRTL.

2013 **Teaching in Science and Engineering: The International College Classroom**

| 1 semester | CIRTL.

Teaching assistant and curriculum development

2022 **Curriculum Developer**, Vision Learning Biodiversity module, City University of New York. Helped develop free STEM resource for undergraduate students.

2014-2017 **Teaching Assistant,** UW-Madison: Plants and Humans, 3 semesters.

2014-2017 **Teaching Assistant,** UW-Madison: Ethnobotany (Botany 474), 3 semesters (in person) 1 semester (online).

2016-2017 **Teaching Assistant and Independent Project Mentor,** UW-Madison: Introductory Biology, 2 semesters.

2012-2016 **Teaching Assistant,** UW-Madison: General Botany, 5 semesters.

2013 **Curriculum developer,** Nutrition, Environment and Food Systems in Ethiopia program. Worked with Hawassa University to write culturally informed inquiry-based modules on traditional ecological knowledge and ecosystem services for Ethiopian community conservation leaders.

2012 **Teaching Assistant** (**Laboratory),** UW-Madison Introductory Biology, 1 semester.

2010 **Curriculum Developer and Teacher**, Huichol Center for Cultural Survival and Traditional Arts. Worked at a summer school with Wixárika teachers to develop and teach culture-based curriculum for 5-10-year-old Wixárika children in Jalisco, Mexico. Applied for grants and developed volunteer infrastructure for school.

Workshops and lecture series

2022 **Food and plant preservation** | Members gallery talk | New York Botanical Garden.

2022 **Crops and Climate** | Plant whisperers adult continuing education class | New York Botanical Garden.

2024 **Ethnobotany: the study of plants and cultures** | Mellon Foodways Fellows | New York Botanical Garden. 2 talks.

Guest lectures

2026 **Towards an Ethnobotanical Future** | Ethnobotany | University of Wisconsin-Madison | Virtual

2026 **Biodiversity by Design: Cultural Strategies for Resilient Food Systems** | Paleoethnobotany | Columbia University| New York, NY

2025 **Crop Diversity in Farms and Genebanks** | Plant Humanities | Pratt Institute | Virtual

2025 **Pacific Northwest Cultural Ecosystems** | Restoring Landscape: Picturing Plants | Evergreen State College | Olympia, WA

2025 **Traditional Ecological Knowledge** | Environmental Linguistics | Swarthmore University | Swarthmore, PA

2025	**Traditional plant stewardship** | Plants, Fungi and Cultures | Clark University | Worcester, MA
2023-2024	**Domesticación y Feralidad** | Consecuencias genéticas y fenotípicas en el manejo de la *Brassica rapa* feral en México, 2 classes |Agrobiodiversidad | Universidad Nacional del Sur, Bahía Blanca | Argentina.
2023	**Anthropology in Practice Lecture Series |** SUNY Oswego | Oswego, NY.
2022	**Ethnobotany** | Scientific Inquiry | St. John's University | Queens, NY.
2022	**Food security** | Biodiversity, Climate Change and the Political Process | The City College of New York, NY.
2022	**Domestication, dedomestication, and ethnobotany of *Brassica rapa*** | Domestication, Agriculture, and Ferality | Universidad Nacional del Sur | Bahía Blanca, Argentina.
2022	**Ethnobotany and climate change**| Making Climate Change | Yale University | New Haven, CT.
2021	**Traditional ecological management and sovereignty in Mexico, Canada, and Ethiopia** | Introduction to Ethnobotany | Drake University | Des Moines, IA.
2021	**Traditional plant management strategies** | Ethnoecology: Nature, Knowledge, and People. | University of Maryland, College Park, MD.
2021	**Traditional Plant Management: Ecology, Evolution, and Sustainability** | Graduate Student Science Communications | City University of New York | New York, NY.
2020-2024	**Domestication and Ongoing Selection on the Farm** | Food, Agriculture, and Society, 5 classes | Cornell University | Ithaca, NY.
2020	**Domestication and agrobiodiversity** | Current Topics in Plant Biology | City University of New York | New York, NY.
2020-2023	**Global cropping systems** | Introduction to Ethnoecology, 4 classes | Simon Fraser University | Vancouver, BC.
2019-2021	**Wild and managed edible plants** | Plants and People, 3 classes | Swarthmore University | Swarthmore, PA.
2020	**Medicinal Plants** | Place-Based Ecological Knowledge | Clark University | Worcester, MA.
2020	**Ethnobotany: the study of plants and cultures** | Senior environmental studies seminar | St. John's University | Queens, NY.
2018	**Traditional food systems** | Archaeology and Ethnobiology in Resource and Environmental Management | Wilp Wilxo'oskwhl Nisga'a Institute | Royal Roads University, Gitwinksihlkw, British Columbia.
2016-2017	**Traditional Agroecological Knowledge** | Foundations of Agroecology, 2 classes | UW-Madison.
2014-2016	**Ethnoecology and Traditional Ecological Knowledge |** Ethnobotany, 3 classes | UW-Madison.

Mentorship

Postdoctoral fellows: Stefanie Ramos Bierge (2021-2024), Giulia Mattalia (2023-2024), Makenzie Mabry (2023-)

Ph.D. students: Toni Johnson (City University of New York-NYBG), Karam Sheban (2026: Yale University-NYBG).

Master's students: Amani Rodriguez (2025: Columbia University-NYBG), Marco Zanghi (2026: Columbia University-NYBG)

Graduate committee member: Lucía Muñoz Sueiro (Columbia University), Adele Woodmansee (Cornell University), Luis Vega (Fordham University), Tierney Kulju (Fordham University), Tori Ford (University of Massachussetts-Amherst)

Undergraduate researchers (* = senior thesis): Daniel Connelly (2025), Helen Grace Skilbred (2025), Rachel Warner (2025), Nicholas Duby (2025), Alexander Fleischmann (2025), Via Pouget (2025), Parker Brand (2025), Sabina Ahmed (2025), Jamie Rivera (2024), Danielle Cruz (2024), Luis Vega (2024), Tara Allen (2024), Jada Tulloch (2023), Maimuna Islam (2022), Chanti Max (2022), Gabriel Rosenstein (2022), Tina Le* (2022), Calvin Heiman* (2021). Josh Haberstroh (2017), Noah Bevers (2017), Elena Schmelzer (2017), Thi Le (2017), Ilhulpatchakatl Neubauer (2016), Megan Christensen (2015), Yingshan Deng (2015), Matthew Brodhead (2015), Tyler Keime (2015), Katie Mullan (2015), Rodrigo Indig (2014), AJ Hill (2014), Patrick O'Flaherty (2014), Sean Mcsweeney (2014), Rae Schira (2014), and Syd Midgorden (2014).

Graduate student volunteers: Jordan Deskins (2025),

High school researchers: Chase Talpins (2025)

Visiting scholars: Jason Irving (2023), Fabrizia Milani (2024)

PRESS COVERAGE

Press highlights

2026 **Le Mag** | Living in harmony with biodiversity: What if it were possible? | June 30, 2026

2025 **Food and Agriculture Organization of the United Nations |** Safeguarding Edible Biodiversity | Nov. 24, 2025

2024 **Washington Post** | Why 'chaos wheat' may be the future of bread | Sept. 17, 2024

2024 **Science** | What's in your food? A new research effort intends to find out | April 26, 2024

2024 **Cool Food: Erasing Your Carbon Footprint One Bite at a Time |** Chapter 5. Nuts.

2023 **The Atlantic** | The Missing Piece of the Foraging Renaissance | June 6, 2023

2023 **Climate Wire** | Experts find modern climate resilience in ancient grains | Jan. 17

2022 **WIRED** | This Ancient Grain-Sowing Method Could Be Farming's Future | Oct. 29, 2022.

2022 **Inside Climate News** | The Botanic Matchmakers that Could Save Our Food Supply | Aug. 28, 2022.

2022 **Washington Post Magazine** | Ditch Your Grocery Store. Go Foraging Instead | Aug. 15, 2022.

2022 **CBC News** | New research shines light on how Nuchatlaht people cultivated plants in their territory | May 29, 2022.

2021 **National Geographic** | Answers to these botanical mysteries could help a climate-stressed world | Jun. 15, 2021.

2021 **Smithsonian Magazine** | Indigenous Peoples in British Columbia Tended 'Forest Gardens' | Apr. 29, 2021.

2021 **Popular Science** | 'Forest gardens' planted by Canada's Indigenous people before the 1800s still benefit ecosystems today | Apr. 27, 2021.

2021 **National Geographic** | 'Forest gardens' show how Native land stewardship can outdo nature | Apr. 23, 2021.

2021 **Science Magazine** | Pacific Northwest's 'forest gardens' were deliberately planted by Indigenous people | Apr. 22, 2021.

2021 **New York Times** | National Endowment for the Humanities Announces New Grants | Apr. 14, 2021.

2019 **ScienceDaily |** Mapping a vegetable family tree for better food https://www.sciencedaily.com/releases/2019/07/190708154106.htm.

Additional press coverage

2025 **National Information Platform on Nutrition** | Enhancing Food Security in Africa: The Role of Indigenous Knowledge and Innovation | October 22, 2025

2025 **Mongabay** | Bring the forest to the farm or the farm to the forest? Agroforestry faces a dichotomy | June 23, 2025

2025 **Fordham Now** | Ethiopian Technique Could Be Key to Sustainable Farming for a Hungry World | March 20, 2025.

2025 **Science Daily** | Agriculture in forests can provide climate and economic dividends | Science Daily | May 29, 2025

2025 **The Accidental Seed Heroes** by Adam Alexander | Chelsea Green Publishing | Featured | March 20, 2025.

2025 **The Rockefeller Foundation Grantee Impact Stories** | Can Ancient Farming Practices Tackle Modern Hunger? | April 22, 2025

2025 **Fordham Now** | Ethiopian Technique Could Be Key to Sustainable Farming for a Hungry World | March 20, 2025.

2024 **The Blue Plate** | Grain mixtures work featured in photo caption of Chapter 1.

2024 **The Good Men Project** | Indigenous Forest Gardens Help Bolster Land Rights Arguments | May 16, 2024

2024 **LiveScience** | Are kale, broccoli and Brussels sprouts really all the same plant? | March 24, 2024

2024 **Ecological Farmers Association of Ontario** | Mixed-up Grains: Variety Blends, Diverse Populations & Maslins | March 11, 2024.

2024 **Undark** | Indigenous Forest Gardens Help Bolster Land Rights Arguments | May 1, 2024

2024 **ClarkNow** | Can we feed the world by going with the grains? Ethiopian farmers may hold the answer, and researchers are listening to them. January 25, 2024

2023 **Atmos** | The Environmental Wisdom Encoded in Endangered Languages | November 22, 2023

2023 **Yale Environment Review** | Imagining the future of food with ancient answers | August 23, 2023

2023 **Ambrook Research** | Maslins, a Method of Planting Grains You've Probably Never Heard of | June 28, 2023

2023 **International Bakery Magazine** | An Enduring History | April 25, 2023

2023 **The Financial Express** | Mixing cereal species for stabilising crop yields | Jan. 24, 2023

2023 **Lifegate** | Maslin, uno studio valorizza la pratica di miscelare i semi di cereali per far fronte ai cambiamenti climatici. Feb. 15, 2023

2023 **European Scientist** | Agricultural innovation vital for climate-threatened food security and sustainability. Feb. 2, 2023

2023 **EnviroNewsBits** | Ancient farming strategy holds promise for climate resilience. Jan. 30, 2023

2023 **Agricultura & Mar** | Técnica agrícola com mais de 3.000 anos pode ajudar colheitas a sobreviverem às alterações climáticas. Jan. 22, 2023

2023 **Gizmodo |** Una técnica agrícola de hace más de 3000 años puede ayudar a las cosechas a sobrevivir al cambio climático. Jan. 16., 2023

2023 **Fanpage.it |** Un'antichissima tecnica agricola può salvare i raccolti dai cambiamenti climatici | Jan. 16, 2023

2023 **Science Alert |** Fluke Discovery of Ancient Farming Technique Could Stabilize Crop Yields, Jan. 16, 2023

2023 **New Atlas |** Study shows how mixed-grain crops can thrive where others falter | Jan. 16, 2023

2023 **Phys.org |** Ancient farming strategy holds promise for climate resilience | Jan. 12, 2023

2023 **Newslanes |** Fluke Discovery of Ancient Farming Technique Could Stabilize Crop | Jan. 16, 2023

2023 **Cornell Chronicle** | Ancient farming strategy holds promise for climate resilience, Jan. 12, 2023

2022 **Atlas Obscura |** Our Favorite Environment Stories of 2022 | Dec. 20, 2022.

2022 **CBC News** | How ancient forest gardens could impact Nuchatlaht First Nation's land claim | May 29, 2022.

2022 **New Scientist** | The surprising origin of sprouts, the vegetable we either love or hate | Dec. 14, 2022.

2022 **Undark** | Making the Case for the Revival of an Ancient Grain Tradition | Nov. 11, 2022

2022 **Mother Jones** | This Nearly Lost Ancient Grain Tradition Could Be the Future of Farming | Oct. 23, 2022.

2022 **Atlas Obscura** | This Nearly Lost Ancient Grain Tradition Could Be the Future of Farming | Oct. 13, 2022.

2022 **Civil Eats** | Meet the Researchers 'Decolonizing Botany' to Save Our Food Supply | Sept. 9, 2022.

2022 **Sierra Club BC** | Ancient Forest Gardens in Nuchatlaht ḥaḥuuliʔakʔi (Territory) Illuminate Hishuk'ish tsawalk (everything is one) nisma̓ (land) and čaaʔak (water) Stewardship |May 24, 2022.

2022 **Perpetual Notion Machine** | WORT 89.9 FM Madison, WI | Crop diversity and crop wild relatives | Jan. 13, 2022.

2022 **UW-Madison News** | In a busy and productive 2021 for UW–Madison research, these stories stood out | Dec. 14, 2021.

2021 **Labroots** | A Look Back at the Evolution of Greens | Jul. 13, 2021.

2021 **NSF Research News** | Don't like your greens? Blame it on *Brassica* domestication | Jun. 22, 2021.

2021 **Phys.org** | A feral past could help chart the future for Brassica vegetables | Jun. 25, 2021.

2021 **The Frontier Post** | Study shows that many deep rooted vegetables come from same species | Jun. 22, 2021.

2021 **Atlas Obscura** | The Deep Roots of the Vegetable That 'Took Over the World' | Jun. 14, 2021.

2021 **Hakai Magazine** | Ancient gardens persist in British Columbia's forests | Jun. 9, 2021.

2021 **Morning AgClips** | Don't like your greens? Blame it on Brassica domestication | Jun. 7, 2021.

2021 **Scienmag** | Don't Like Your Greens? Blame It On Brassica Domestication | Jun. 4, 2021.

2021 **Quirks and Quarks (CBC News)** | How Indigenous science could help us with our sustainability and diversity crisis | June 4, 2021.

2021 **Bioengineer** | Don't like your greens? Blame it on Brassica domestication | Jun. 4, 2021

2021 Industry Update | Don't you like your greens? Blame the domestication of oilseed rape | Jun. 4 2021.

2021 **EurekAlert!** | Don't like your greens? Blame it on Brassica domestication | Jun. 4, 2021.

2021 **New York Botanical Garden Press Release** | Research Team Led by NYBG Scientist Identifies the Likely Original Relative of Many Food Crops, a

Resource That Could Make Them More Environmentally Resilient | May 24, 2021

2021 **Miragenews** | First we tamed turnips. Then we turned them into bok choy and other veggies | May 20, 2021

2021 **Phys.org** | First we tamed turnips, then we turned them into bok choy and other veggies | May 20, 2021

2021 **SeedQuest** | First we tamed turnips - Then we turned them into bok choy and other veggies | May 19, 2021

2021 **UW-Madison News** | First we tamed turnips. Then we turned them into bok choy and other veggies | May 19, 2021

2021 **Arstechnica** | Indigenous forest gardens remain productive and diverse for over a century | May 18, 2021.

2021 **National Post** | Ancient Indigenous forest gardens still yield bounty 150 years later

2021 **Pro Science** | Лесные сады канадских индейцев | Apr. 30, 2021

2021 **The Tyee** | Unearthing the Work of Indigenous Master Horticulturalists | Apr. 28, 2021.

2021 **SFU News** | Ancient Indigenous forest gardens promote a healthy ecosystem | Apr. 22, 2021

2019 **EurekAlert!** | Tracing the roots: Mapping a vegetable family tree for better food https://www.eurekalert.org/pub_releases/2019-07/uom-ttr070819.php and

2017 **ScienceDaily** | Archaeologists on the vanguard of environmental research | Feb. 26, 2017

PROFESSIONAL SERVICE

Advisory roles

2022- **Contributor**, Periodic Table of Food Initiative, Developing Regenerative Agriculture Ontologies.

2023- **Expert,** Regen10 Experts Network.

Leadership roles in academic societies

2025-2026 **Chair**, Nominations and Awards Committee, Society for Ethnobotany

2025-2026 **Chair**, Endowment Committee, Society for Ethnobotany

2024-2025 **President,** Society for Ethnobotany

2024-2025 **Chair**, Executive Committee, Society for Ethnobotany

2024-2025 **Chair**, Education and Outreach Committee, Society for Ethnobotany

2023-2024 **Chair**, Program and Publicity Committee, Society for Ethnobotany

2023-2024 **Chair**, Membership Committee, Society for Ethnobotany

2021-2024 **Executive board member: Secretary**, Society of Ethnobiology.

2021-2023 **Alliance for Diversity and Inclusivity in Ethnobiology**, Society of Ethnobiology, Society for Economic Botany, and International Society of Ethnobiology.

2018 **Public relations officer**, Botanical Society of America.

2016-2019 **Board member and promotion and outreach coordinator: student engagement,** Society of Ethnobiology.

2011-2012 **Undergraduate outreach coordinator**, Society of Ethnobiology.

Editor and reviewer for academic journals

2025-present **Editorial Board,** *Blue Nile Journal of Agriculture*

2025-present **Associate Editor**, *Botanical Review*

2020-2026 **Editorial Board**, *Journal of Ethnobiology and Ethnomedicine*

2018-2023 **Associate Editor**, *Journal of Ethnobiology*

2018 **Guest Editor**, *Journal of Ethnobiology* | Special issue on Allyship, Activism, and Social justice in Ethnobiology.

2016-present **Ad-hoc reviewer for scientific journals**| *PNAS* (1)*, Journal of Ethnobiology* (9)*, Ethnobiology letters* (2)*, Journal of Ethnobiology and Ethnomedicine* (3)*, Frontiers in Sustainable Food Systems* (1)*, Economic Botany* (6)*, Climatic Change* (2). *Heredity* (1)*, Agriculture and Human Values* (1)*, Botanical Review* (3)*, Current Opinion in Plant Biology* (1)*, Ethnobotany Research and Applications* (1)*, Journal of Agriculture and Food Research* (1)*, Society and Natural Resources* (1)*, Trends in Ecology and Evolution* (2)*, Veterinary Medicine and Science* (1)*, Basic and Applied Ecology* (1)*, Sociolinguistics Studies* (1)*, People and Nature* (1)*, PLOS One* (1)*, Advances in Economic Botany* (1)*, Environmental Science and Policy* (1), *Nature Communications* (1)

Reviewer for grants

Foundation for Food and Agriculture Research (1), Israel Science Foundation (1), National Geographic Foundation (1)

Institutional service

2026 **Contributor**, NYBG America 250 signage in the Barnsley Beds | New York Botanical Garden.

2021- **Committee member**, Indigenous Engagement Committee| New York Botanical Garden.

2022-2025 **Committee member**, Inclusion, Diversity, Equity, and Accessibility Committee | New York Botanical Garden.

2022 **Strategic planning committees**, Transformational Ideation and Foundation Ideation (Exploration) committees | New York Botanical Garden.

2022 **Planning committee member**, Psychoactive Plants display | New York Botanical Garden

2021-2022 **Planning committee member**, Foodways: Around the Table exhibition | New York Botanical Garden.

2021 **Judge**, Abundant Future: Cultivating Diversity in Garden, Farm, and Field | American Society of Botanical Artists New York Botanical Garden Triennial | New York Botanical Garden

2017 **Teaching and undergraduate committee**, Department of Botany | UW–Madison.

2015-2016 **Awards committee member**, Department of Botany | UW–Madison.

Conference and symposium organization

2026 **Co-organizer**, Society for Ethnobotany Annual Conference, Montpellier, France

2025 **Co-organizer**, Society for Ethnobotany Annual Conference, Prague, Czechia

2025 **Co-organizer**, Global Conservation Consortium for Food Plants Launch, NYC Climate Week, New York

2025 **Co-organizer**, Global Conservation Consortium for Food Plants Launch, 11th Governing Body meeting for the International Treaty on Plant Genetic Resources for Food and Agriculture Side Event, Lima, Peru

2025 **Co-organizer**, Global Conservation Consortium for Food Plants Launch, Eurogard, Rome, Italy

2025 **Co-organizer**, Society for Ethnobotany Annual Conference, Grand Rapids, Michigan

2024 **Co-organizer**, Lenape Nations Convening at New York Botanical Garden

2024 **Organizer**, NYC Biocultural Conservation Symposium.

2022/24 **Co-organizer**, Pacific Northwest Cultural Landscapes Convening

2018 **Assistant organizer**, Joint meeting of the Society for Economic Botany and Society of Ethnobiology.

2016 **Assistant organizer**, Wirikuta Weekend Academic Forum.

2016 **Assistant organizer**, First Annual Wisconsin Medicinal Plant Symposium.

2015 **Assistant organizer**, New International Historical Ecology Community.

2011 **Volunteer**, Society for Applied Anthropology.

Conference session chair, panelist, discussant, or workshop organizer

2026 **Panelist,** Resilience-Building Techniques in Riskscapes | Climate Riskscapes | Columbia University, New York.

2026 **Co-organizer**, Where Everything Mixes: Designing a collaborative agenda for diverse, decentralized seed systems | Society for Ethnobotany | Montpellier, France

2025 **Co-organizer and moderator,** Alternative Avenues for Funding Your Ethnobotanical Research | Society for Ethnobotany | Virtual

2025 **Panelist**, Indigenous knowledge, Biodiversity and Health. Ethiopian Public Health Institute | Ethiopian Public Health Institute | Addis Ababa, Ethiopia

2025 **Panelist**, Regenerative and Resilient Farming Systems: Innovations for Smallholder Agriculture in East Africa | Wollo University | Dessie, Ethiopia

2025 **Discussant,** Coffee and Caffeine Cultures Symposium | Coffee Origins: Africa, the Red Sea & the Indian Ocean | New York Botanical Garden | New York, USA

2021 **Session chair**, Botanical Society of America | Darwins' reversals: What we now know about Feralization and Crop Wild Relatives | Virtual.

2021 **Session chair**, Society of Ethnobiology | Traditional Ecological Knowledge | Virtual.

2018 **Session chair**, Botanical Society of America | Crop wild relatives and domestication | Rochester, MN, USA.

2018 **Session chair**, Society of Ethnobiology | Ethnobotany | Madison, WI, USA.

2017 **Session organizer and chair**, Society of Ethnobiology | Solidarity, Allyship, & Justice in an "Applied" Ethnobiology | Montreal, QC, Canada.

2016 **Session Moderator**, Society of Ethnobiology | Hosted session on Landscape Management and Agriculture.

ENGAGEMENT AND OUTREACH

Non-profit

2018-2020 **Volunteer, native-lands.ca**, Contributor to mapping effort to raise awareness of traditional Indigenous territories.

2014-2022 **Board member, Herbal Anthropology Project**, Organizing projects, assisting with grant-writing, documenting traditional plant knowledge.

2010 **Supporter, Black Mesa Indigenous Support**, Acted as land rights and human rights observer on Diné territory while living with elders.

2010 **Teacher, grant writer, and volunteer coordinator, Huichol Center for Cultural Survival and Traditional Arts**, Taught culture-based curriculum to 5-10-year- old Wixárika (Huichol) children. Applied for grants and developed volunteer infrastructure.

2009-2010 **Student Representative**, Sehome Arboretum Board of Governors.

2004-2008 **Washington Native Plant Stewardship Program**, Washington Native Plant Society.

Community engagement

2023 **Farmer radio** | Traditional Grain Mixture Project featured on Ethiopian Radio Show on Dessie Fana 96.0 FM which reaches millions of farmers in the Amhara region.

2023	**Booth presenter** | Presented on local wild edible plants to the public as part of the New York Botanical Garden's Fall Forest Weekend event.
2022	**Workshop** | Co-hosted a networking workshop on cultural ecosystems in the Pacific Northwest of North America with researchers and representatives from Tseshaht and Sts'ailes Canadian First Nations, and Quinault, Muckleshoot, and Nooksack U.S. Tribal Nations, and various non-native researchers | Sts'ailes, Canada.
2022	**Workshop** | Co-hosted Ethnobotany and linguistics two-day workshop for the Department of Applied Linguistics at the Autonomous University of Nayarit | Tepic, Mexico.
2022	**Workshop** | Shinnecock Culture Camp Youth Event | The Shinnecock Ethnobotany Project hosted the Shinnecock Culture Camp, a summer youth group, for a day to share about the plants on the Nation's territory and their traditional uses | Shinnecock Nation, NY
2021	**Workshop leader** | Shinnecock Ethnobotany Program | Organized workshop to train members of the Shinnecock Nation in plant specimen collection, pressing, and curation.
2020	**Volunteer** | Lehman Alternative Community School Teach-In | We are this place: when people are necessary for environmental health | Lehman Alternative Community School, Ithaca, NY.
2017-2018	**Volunteer** | Indigenous Arts and Sciences program | Taught two workshops with Ho- Chunk middle schoolers during STEM visits | University of Wisconsin-Madison.
2015-2018	**Volunteer** | Pre-college Enrichment Opportunity Program for Learning Excellence | Taught four ethnobotany workshops for prospective first-generation STEM college students | University of Wisconsin-Madison.
2014-2016	**Workshop volunteer**, Rarámuri Traditional Edible Plant Workshop, 2 workshops
2013/2014	**Booth coordinator** | Darwin Day Outreach Event | Coordinated and manned a booth about evolution at the UW-Madison Darwin Day event.
2013	**Science fair mentor** | Madison Middle School Science Symposium | Mentored a 7th-grader with his project on Mangrove ecosystem services.
2016	**Educational garden designer** | Centro Hispano | Designed and established an educational medicinal plant garden and traditional Mexican demonstration farm at a non-profit Latino resource center in Madison, WI.
2014	**Educational garden designer** | Sidama medicinal plant garden | Established a garden of medicinal plants on the UW-Madison campus.
2008	**Co-presenter** | Lilawagila School | Helped lead Dzawada̱'enux̱w First Nation elementary students on an educational tour of traditional salt-marsh gardens.
2004	**Educational garden designer** | Mercer Island Library | Designed and established a Pacific Northwest ethnobotany garden.

Podcasts, blogs, interviews, Wikipedia, and social media engagement

2026 **Medieval Way YouTube Channel** | What Was Maslin? The Medieval Baker's Famine Proof Bread You've Never Heard Of | February 19, 2026

2025 **Plant People Podcast** | The Periodic Table of Food | March 10, 2025

2025 **Comic** | Local Contexts: Restorying Sovereignty with Plant Relatives. J Anderson, S Gumbs, M Hudson, AC McAlvay, K Leonard Zenodo

2024 **ClimaTwins Podcast** | Agrobiodiversity and Sustainability with Alex McAlvay | January 21, 2024

2023 **Foodie Pharmacology Podcast** | Agrobiodiversity and climate resilience in Ethiopia with Dr. Alex McAlvay | November 6, 2023

2023 **Plant Talk** | NYBG Scientists Working at the Nexus of Food Security, Plant Biodiversity, and the Climate Crisis. November 29, 2023

2022 **Wikipedia article** | Contributed to Wikipedia article on Wisconsin Fast Plants (*Brassica rapa*)

2022 **Plant Talk** | East End Story: Protecting Shinnecock Plant Knowledge and Biodiversity on Long Island" | July 27, 2022

2021 **National Museum of the Federal University of Rio de Janeiro Social Media** | Decolonizing Institutions, Projects, and Scholarship in Ethnobiology https://www.instagram.com/p/CTkSGa-nlBx/ | Sept. 9, 2021

2019 **Decolonial Anthropology Project YouTube channel** | David Berga | https://www.youtube.com/watch?v=rToPmohva_g

2019 **Fork and Life podcast** | Contributor to podcast about food and culture https://www.forkandlifepodcast.com/

Trainings

2025 **IUCN Redlist Training**

LANGUAGES

English (Native proficiency) | **Spanish** (Professional working proficiency) | **Mongolian, Japanese, Amharic, Mandarin, Italian** (Elementary proficiency).