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Marijke Hecht

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School of Environment & Natural Resources
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Professional preparation

- Doctor of Philosophy, Learning Sciences & Policy** 2020
University of Pittsburgh School of Education – Pittsburgh, PA
Dissertation: “*Relational processes between people and place: Understanding environmental interest and identity development through a learning ecosystem lens*”
Advisor: Dr. Kevin Crowley
- Master of Science, Botany** 2002
University of Vermont Field Naturalist Program – Burlington, VT
Master’s Thesis: “*Natural community assessment & recommendations for ecological core areas on the Glebe Mountain Matrix Block,*” submitted to The Nature Conservancy of Vermont
- Bachelor of Arts, Self-designed major** 1996
Hampshire College – Amherst, MA
Division II (Major): “*Nutrition, agriculture, & science education and their roles in the urban landscape*”

Professional appointments

- The Ohio State University – Columbus, OH** *current*
Assistant Professor, Environmental Education, School of Environment & Natural Resources
- Penn State University - Greater Allegheny – McKeesport, PA** 2020-2022
Assistant Professor, Recreation Park & Tourism Management
- Pittsburgh Parks Conservancy – Pittsburgh, PA** 2009-2016
Director of Education
- Western Pennsylvania Conservancy – Pittsburgh, PA** 2008-2009
TreeVitalize Pittsburgh Program Director
- Nine Mile Run Watershed Association – Pittsburgh, PA** 2002-2008
Executive Director
- The Nature Conservancy of New York – Troy, NY** 1998, 2000
Field Supervisor
- NYC Board of Education – New York City, NY** 1996-1999
Classroom Teacher (6th grade math & science; 9th grade Biology; 10th grade Chemistry)

Publications (* = graduate student)

Peer-reviewed journal publications

- Hecht, M., & Jadallah, C. C.,** (2023) Learning with water: Centering more-than-human interactions in science learning for more just social-ecological futures. *Digital Culture & Education*, 14(5), 243 – 261.

- Hecht, M.** (2023). Enclosure (or what we risk losing). *Cultural Studies of Science Education*, 18(1), 195-204.
- Hecht, M.** (forthcoming). Challenging the nature-culture binary through urban environmental education. In George Noblit (Ed.), *Oxford Research Encyclopedia of Education*. New York: Oxford University Press.
- Hecht, M.** & Nelson, T. (2022) Getting “really close”: Relational processes between youth, educators, and more-than-human beings as a unit of analysis. *Environmental Education Research*, 28(9), 1359-1372.
- Hecht, M.**, King, M., & Williams, S. (2022). Co-creating a learning refugia by walking alone and together. *Open rivers: Rethinking water, place, & community*, No. 21.
- Drage, E.*, **Hecht, M.**, Taff, B. D., & Newman, P. (2022). Exploring stakeholder perspectives in protected areas and gateway communities: The case of aviation tourism growth in the Alaska Range. *Tourism Recreation Research*, 1–14.
- Akiva, T., **Hecht, M.**, & Osai, E. (2021). Arts learning across a city: How ecosystem thinking helps shape understanding of Black-centered and Eurocentric arts programming. *Urban Education*, online first, 1-27.
- Hecht, M.**, & Nelson, T. (2021). Youth, place, and educator practices: Designing program elements to support relational processes and naturalist identity development. *Environmental Education Research*, 27(9), 1401-1420.
- Hecht, M.** (2021). Creating cultural refugia to transform the boundaries of science. *Cultural Studies of Science Education*, 16, 549-556.
- Hecht, M.** (2020). Relational processes between people and place: Understanding environmental interest and identity through a learning ecosystem lens. *Environmental Education Research*, 26(7), 1060-1061.
- Hecht, M.**, & Crowley, K. (2020). Unpacking the learning ecosystem framework: Lessons from the adaptive management of biological systems. *Journal of the Learning Sciences*, 2(29), 264-284.
- **Media coverage:** [Youth Today](#) 11/29/23
- Hecht, M.**, Knutson, K., Crowley, K., Lyons, M., McShea, P., & Giarratani, L. (2020). “How could the dinosaurs be so close to the future?”: How natural history museum educators tackle deep time. *Curator: The Museum Journal*, 63(1), 39-54.
- Hecht, M.**, Knutson, K., & Crowley, K. (2019). Becoming a naturalist: Interest development across the learning ecology. *Science Education*, 103(3), 691-713.
- **Media coverage:** [Talaterra Podcast](#) Episode 40
- Akiva, T., Crowley, K., Russell, J. L., & **Hecht, M.** (2018). Leadership in out-of-school learning: The educational doctorate program at the University of Pittsburgh. *International Journal for Research on Extended Education*, 5(2), 217-220.
- Bain, D. J., Copeland, E. M., Divers, M. T., **Hecht, M.**, et al. (2014). Characterizing a major urban stream restoration project: Nine Mile Run (Pittsburgh, Pennsylvania, USA). *Journal of the American Water Resources Association*, 50(6), 1608-1621.

Conference proceedings

- Hecht, M.** (2021). Supporting youth environmental interest and identity development through program infrastructures connecting people and place. In E. de Vries, Y. Hod, & J. Ahn (Eds.), *Proceedings of the 15th International Conference of the Learning Sciences - ICLS 2021* (pp. 893-894). Bochum, Germany: International Society of the Learning Sciences.

Hecht, M., Crowley, K., & Russell, J. (2020). Decentering humans in the learning sciences: The role of nonhuman nature and place in learning ecosystems. In M. Gresalfi & I. S. Horn (Eds.), *The Interdisciplinarity of the Learning Sciences, 14th International Conference of the Learning Sciences (ICLS) 2020*, Volume 1 (pp. 501-504). Nashville, Tennessee: International Society of the Learning Sciences.

Book chapters

Hecht, M. & King, M. (In preparation). Daring delight in a damaged world. In Sezen-Barrie, A. & Tolbert, S. (Eds.) *The Handbook of Climate Change Education: Research, Policy, and Practice*. Springer Nature/Palgrave Macmillan.

Akiva, T., **Hecht, M.**, & Blyth, D.A. (2022). Using a learning and development ecosystem framework to advance the youth fields. In T. Akiva & K. Robinson (Eds.), *It takes an ecosystem: Understanding the people, places and possibilities of learning and development across settings* (pp. 13-36). Information Age Publishing.

Brown, J., Byron, M., Corrao, S., **Hecht, M.**, & King, A. (2015). Urban parks as classrooms. In A. Russ (Ed.), *Urban Environmental Education* (pp. 39-42). Cornell University Civic Ecology Lab/North American Association for Environmental Education/EE Capacity.
<https://naaee.org/sites/default/files/uee-2015.pdf>

Practitioner-focused

Hecht, M. & Baird, A. (Forthcoming). Chapter 1: Introduction. in Ohio Certified Volunteer Naturalist Handbook

Hecht, M., & Colvin, S. (2018). Getting dirty: Little nature in informal learning spaces. *Voice of Youth Advocates*. 41(1), 34-36.

Hecht, M. (2012). Education through restoration: Creating meaningful service-learning projects in the parks. *Community Works Journal*. <https://magazine.communityworksinstitute.org/education-through-restoration-creating-meaningful-student-projects-in-the-parks/>

Reports

Akiva, T., **Hecht, M.**, & Osai, E. (2019, September). *Creative Learning in Pittsburgh* [Report prepared for The Heinz Endowments.] Pittsburgh, PA: University of Pittsburgh. <https://tiny.cc/CLPgh>

Akiva, T., DeMand, A., **Hecht, M.**, & McNamara, A. (2017). *Simple Interactions 2.0: Initial findings from a randomized control trial*. Pittsburgh, PA: University of Pittsburgh.

Akiva, T., DeMand, A., Colvin, S., Delale-O'Connor, L., **Hecht, M.**, & McNamara, A. (2017). *Evaluation of the 2016 Pittsburgh Learn and Earn summer youth employment program*. Pittsburgh, PA: University of Pittsburgh.

General audience

Akiva, T. & **Hecht, M.** (2022, February 2). Ecosystems for learning and development: In Pittsburgh and everywhere. *Remake Learning Blog*. <https://remakelearning.org/blog/2022/02/02/ecosystems-for-learning-and-development/>

Hecht, M., Hicks, J., & Kubis, A. (2021, March 12). Better nature, better relationship, better planet: A conversation with a Pittsburgh urban ecologist [Audio podcast episode]. In *Source Podcast*. <https://www.publicsource.org/better-nature-better-relationship-better-planet-a-conversation-with-a-pittsburgh-urban-ecologist/>

Hecht, M. (2020, April 15). The coronavirus exposed inequities across Pittsburgh Public Schools. To parents like me, it also revealed the district's inability to imagine learning outside of schools. *Public Source*. <https://www.publicsource.org/the-coronavirus-exposed-inequities-across-pittsburgh-public->

[schools-to-parents-like-me-it-also-revealed-the-districts-inability-to-imagine-learning-outside-of-schools/](#)

Hecht, M. (2015, August 25). Send children outside: Nature is the best training ground for STEM careers. *Pittsburgh Post-Gazette*, pp. D1.

Hecht, M. (2006, Fall). Nine Mile Rebirth. *H: The Magazine of The Heinz Endowments*, pp. 20-27.

Falck, Z., & **Hecht, M.** (2006, Spring). The sewerage and salvaging of Nine Mile Run. *Western Pennsylvania History*, pp. 40-50.

Hecht, M. (2002, Winter). Soil mapping: Getting down to earth with a soil scientist. *Northern Woodlands*, pp. 54-57.

Presentations (* = graduate student)

Invited

Hecht, M. (2024, March). “O girlie, I’m not saving that”: Using video-based interaction analysis to explore relational processes between educators and the environment. *Byrd Polar and Climate Research Center Seminar*.

Kwauk, C., Morrison, S., & **Hecht, M.** (2023, October). Education and climate change: Where do we go from here? Keynote and plenary at the *North American Association for Environmental Education Research Symposium*, Virtual.

Hecht, M. (2023, April). Radical imagining for the world we want. Keynote address at the *2023 Annual conference of the Environmental Education Council of Ohio*. Mt Sterling, OH.

Hecht, M., King, M., & Williams, S. (2021, July). Learning refugia. Workshop at the *Association for the Study of Literature and Environment Conference*. [Held online due to COVID-19; <https://www.youtube.com/watch?v=z2bytjePPeY>].

Nelson, T., & **Hecht, M.**, Weilbacher, M., & McCracken, B. (2021, March). Opportunities for action. Panel discussion at the *Pennsylvania Association for Environmental Education conference*. [Conference held online due to COVID-19.]

Hecht, M. (2017, September). Keynote address at the *Pittsburgh Association for the Education of the Young Child Unconference: Get Dirty!*, Pittsburgh, PA.

Hecht, M. (2015, April). Place-based learning in parks, schools, & neighborhoods. Panelist at *Greater & Greener: Innovative Parks, Vibrant Cities conference of the City Parks Alliance*, San Francisco, CA.

Hecht, M., Brown, J., & Zellie, H. (2014, March). Teaching environmental education in the city. Panelist at *Pennsylvania Association of Environmental Educators Conference*, Bolivar, PA.

Carter, M., **Hecht, M.**, Butcher, A., Guenter, T., & Taylor, S. (2013, April). The power of parks. Presentation at *Green Building Alliance Inspire Speaker Series*, Pittsburgh, PA. <https://www.youtube.com/watch?v=G61A6XMUb8A>

Hecht, M., Barker, J., Cochran, E., & Sechler, G. (2013, April). How are buildings of today becoming places of tomorrow? Panelist at *Carnegie Mellon University Engineering Sustainability Conference*, Pittsburgh, PA.

Hecht, M. (2008, September). Getting credit for trees. Panelist at *International Urban Parks Conference: Parks and the Health of Great Cities*, Pittsburgh, PA.

Hecht, M. (2007, March). Restoring urban nature. Panelist at *The Lincoln Institute of Land Policy Conference: A More Humane Metropolis*, Pittsburgh, PA.

Hecht, M. (2004, October). Downtown & dirty: Urban park renewal. Panelist at the *14th Annual Society for Environmental Journalists Conference*, Pittsburgh, PA.

Hecht, M. (2004, August). Cultivating uncommon allies: Community forestry in an urban watershed. Presentation at the *80th Annual International Society of Arboriculture Conference*, Pittsburgh, PA.

Additional peer-reviewed conference presentations

Reigh, E. & **Hecht, M.** (2024, January). Critically examining partnerships between science/environmental educators and Indigenous communities. Wondering presentation at the *Science Educators for Equity Diversity & Social Justice (SEEDS) Conference*, Tucson, AZ.

Ortbahn, C.*, **Hecht, M.** & Lekies, K. (2023, October). Connection to nature and positive youth development through urban agriculture. Prerecorded session presented at the *North American Association for Environmental Education Research Symposium*, Virtual.

Ortbahn, C.*, **Hecht, M.**, Lekies, K. & Bailey, M. (2023, November). Youth perspectives: Building confidence and sense of belonging in a youth urban agriculture program. Poster presented at *The Ohio State University Engaged Scholarship Symposium*, Columbus, OH.

Hecht, M. & Jadallah, C. (2022, October). Learning with water: Centering human-more-than-human interactions for just social-ecological futures. Roundtable presented at the *North American Association for Environmental Education Research Symposium*, Tucson, AZ.

Hecht, M. (2021, June). Supporting youth environmental interest and identity development through program infrastructures that connect people and place. Poster presented at the *International Conference of the Learning Sciences (ISLS)*, 2nd Place Winner in Poster Contest. [Conference held online due to COVID-19].

Perry, J., Akiva, T., & **Hecht, M.** (2021, April). Making scholarship a tool for change: Repurposing literature in EdD programs. Paper presented at the *American Educational Research Association Annual Meeting*. [Conference held online due to COVID-19].

Hecht, M., Crowley, K., & Russell, J. L. (2020, June). Decentering humans in the learning sciences: The role of nonhuman nature and place in learning ecosystems. *International Conference of the Learning Sciences*, Nashville, TN. [Conference held online due to COVID-19]

Hecht, M., Akiva, T., & Osai, E. (2020, April). Forging equity in a citywide creative learning ecosystem: Responding to funding shifts as natural disturbance. Roundtable session at the *American Educational Research Association Annual Meeting*, San Francisco, CA. <http://tinyurl.com/wlok2yz> [Proposal accepted, but conference cancelled due to COVID-19].

Hecht, M., Howison, M., Osai, E., & Akiva, T. (2019, October). Mobilizing for creative learning: A citywide approach. Showcase presentation at the *Connected Learning Summit*, UC Irvine, CA.

Hecht, M. (2019, October). More than just a bunch of parts: Expanding the learning ecosystem framework using insights from biological systems. Ignite Talk at the *Connected Learning Summit*, UC Irvine, CA. <https://www.youtube.com/watch?v=jFoH0QXC9I8>

Hecht, M., Knutson, K., & Crowley, K. (2018, October). Becoming a naturalist: Interest development across the learning ecology. Poster presented at the *North American Association for Environmental Education Research Symposium*, Spokane, WA.

Hecht, M. (2018, March). A research-practice partnership for informal learning: Creating pathways for 21st century naturalists. Presentation at the *University of Pittsburgh Conference for Graduate Students in Education Annual Conference*, Pittsburgh, PA.

Hecht, M., Tonsor, S., Crowley, K., & Knutson, K. (2017, October). Developing 21st century naturalists: A research-practice partnership. Presentation at the *North American Association for Environmental*

Education Research Symposium, San Juan, Puerto Rico. [Proposal accepted, but conference cancelled due to Hurricane Maria].

- Trovato, C., Akiva, T., & **Hecht, M.** (2017, June). Designing an out-of-school learning EdD program. Presentation at the *Carnegie Program on the Education Doctorate Convening*, Pittsburgh, PA.
- Crowley, K. Giarratani, L., **Hecht, M.**, Knutson, K. Lyon, M. & Tonsor, S. (2017, April). Bringing research and practice together in a museum: A partnership to develop informal learning experiences for the 21st Century Naturalist. Poster presented at the *American Educational Research Association*, San Antonio, TX.
- Culley, P., **Hecht, M.**, & Shaltes, N. (2015, September). Vetting to specifications: Using the design phase for the Living Building Challenge materials petal. Presentation at the *International Living Future Institute: Living Products Expo*, Pittsburgh, PA.
- Hecht, M.** (2014, October). City parks as classrooms: Engaging urban schools in environmental education. Presentation at the *North American Association for Environmental Education*, Ottawa, Ontario, Canada.
- Bonci, F., **Hecht, M.**, & Rademacher, S. (2014, April). The path to park sustainability: From restoration to innovation. Presentation at the *2014 PA-DE American Society of Landscape Architects Annual Meeting*, Nemaquin, PA.
- Aumer, R., **Hecht, M.**, & Shaltes, N. (2013, November). Frick Environmental Center: A case study. Presentation at the *International Living Future Institute: Net Zero Water Forum*, Philadelphia, PA.
- Rademacher, S., **Hecht, M.**, & Bonci, F. (2013, July). Clarifying history: Environmental center at Frick Park. Presentation at the *2013 PA Statewide Conference on Heritage*, Pittsburgh, PA.
- Hecht, M.** (2011, March). City parks as classrooms. Presentation at the *Pennsylvania Association of Environmental Educators Conference*, Ligonier, PA.
- Hecht, M.** (2010, March). Urban EcoStewards: Building volunteer programs in parks. Presentation at the *63rd Annual PA Recreation & Parks Society Conference*, Seven Springs, PA.
- Hecht, M.** (2008, November). Recruiting and maintaining volunteers. Presentation at the *16th Annual PA Urban and Community Forestry Conference*, Pittsburgh, PA.
- Hecht, M.** (2008, January). Nine Mile Run valley restoration. Presentation at the *Society for Ecological Restoration Mid-Atlantic Chapter Conference*, Philadelphia, PA.
- Hecht, M.** (2006, October). Urban & community forestry in Pittsburgh. Presentation at the *Society for American Foresters National Convention*, Pittsburgh, PA.
- Hecht, M.** (2005, October). Restoration = Access: Nine Mile Run case study. Presentation at the *Canaan Valley Institute Annual Conference*, Morgantown, WV.

Additional peer reviewed symposia, panels and workshops

- Hecht, M.** (organizer), Jadallah, C., Barsoum, R., Strange, A., Lachney, M.L., Davis, N. (chair) (accepted 2024, April). Waterways & pedagogical entanglements: Teaching, learning, and relating to water and its multiple meanings. Symposium at the *American Educational Research Association*, Philadelphia, PA.
- Aksoy, S., **Hecht, M.**, Weinstein, M., Ruggirello, R., Merritt, J., Suriel, R., Ibourk, A. (2024, January). Science teaching for justice in unjust times. Workshop presented at the *Science Educators for Equity Diversity & Social Justice (SEEDS) Conference*, Tucson, AZ.
- Ortbahn, C.*, Suriel, R., **Hecht, M.** (2024, January). What's in a meter squared? Connecting to local place using our senses and questioning our place as humans in the natural world. Workshop

presented at the *Science Educators for Equity Diversity & Social Justice (SEEDS) Conference*, Tucson, AZ.

Hecht, M. (organizer), Hunter, R. and Carlone, H. (2023, October). Social-ecological justice-oriented environmental education with human and more-than-human beings. Panel presented at the *North American Association for Environmental Education Research Symposium*, Virtual.

Ortbahn, C.* & **Hecht, M.** (2023, July). Connecting with nature using our senses: A 3-D sensory mapping activity for high school youth. Workshop presented at the *Science Educators for Equity Diversity & Social Justice (SEEDS) Summer Institute*, La Fortuna, Costa Rica.

Suriel, R. L., Hall, J. L., & **Hecht, M.** (2023, July). Developing our understanding for teaching environmental science and ecojustice. Workshop presented at the *Science Educators for Equity Diversity & Social Justice (SEEDS) Summer Institute*, La Fortuna, Costa Rica.

Lawson, D., Hunter, R. & **Hecht, M.** (2022, October). Looking forward: Issues and cross-cutting questions from environmental education researcher perspectives. Workshop presented at the *North American Association for Environmental Education Research Symposium*, Tucson, AZ.

Lawson, D., Hunter, R. & **Hecht, M.** (2022, October). Looking forward: Issues and cross-cutting questions from environmental education practitioner perspectives. Workshop presented at the *North American Association for Environmental Education Annual Conference*, Tucson, AZ.

Hecht, M., Sherry-Wagner, J., Jadallah, C., McDaid, N., Silvera Seamans, G., Bell, P., Cassone McGowan, V., & Price, N. (2021, October). Centering human and more-than-human interactions across wildly different educational contexts. Workshop presented at the *North American Association for Environmental Education Research Symposium*. [Conference held online due to COVID-19].

Hecht, M., King, M., & Williams, S. (2021, July). Living, learning, and loving our way to refugia. Experimental Workshop at *Connected Learning Summit 2021* [Conference held online due to COVID-19].

Hecht M., & Nelson, T. (2019, October). Navigating a research-practice partnership in an urban environmental education program. Panel presentation at the *North American Association for Environmental Education Research Symposium*, Lexington, KY.

Hartley, J., Armstrong, A., Bowers, N., **Hecht, M.**, Hunter, R., Jackson S., Lawson, D., & Sadan, N. (2019, October). Professional development workshop for graduate students and early career professionals in environmental education. Workshop presented at the *North American Association for Environmental Education Research Symposium*, Lexington, KY.

Hecht, M., Nelson, T., Cephas, N., Thomas, B., Layman, J., & Schmutte, A. (2019, October). Integrating education into conservation planning to foster stewardship. Symposium participant at the *2019 Natural Areas Conference*, Pittsburgh, PA.

Hecht, M., Crowley, K. Giarratani, L., Knutson, K. Lyon, M. & Tonsor, S. (2017, October). *What is a 21st Century Naturalist?* Workshop at the *International Committee for Museums and Collections of Natural History*, Pittsburgh, PA.

Grants

Research

The Ohio State University – Columbus, OH

- **Hecht, M.** (Principal Investigator) and Jeong, S. (Co-Principal Investigator). “Connecting the global with the local: Strengthening environmental education in urban communities,” Ohio Sea Grant. Total awarded = \$187,364. (2024-2027)

- **Hecht, M.** (Principal Investigator). “Learning *about, in, with, for, and from* the environment: A comparative case study of two professional development programs,” Ohio Sea Grant. Total awarded = \$9,564. (2023)
- **Hecht, M.**, Hitzhusen, G., Berardo, R., Gray, S., and Eilers, E. “Research infrastructure support for Environmental Social Sciences Lab,” School of Environment & Natural Resources (internal). Total awarded = \$7,500. (2023)

Penn State University Greater Allegheny – McKeesport, PA

- Martin, D. (Co-Principal Investigator), **Hecht, M.** (Co-Principal Investigator), Johnson, M. (Co-Principal Investigator), Hill, K. (Co-Principal Investigator), Grozinger, C. (Co-Principal Investigator). "Collaborative research: modeling in place: Agent based modeling games to facilitate learning of complex social and ecological networks of insects in informal learning environments," National Science Foundation – Advancing Informal Science Learning (AISL). Total requested: \$2,414,518.00. (Proposal submitted 2022, not funded).
- Lawson, D.F., McClain, L., & **Hecht, M.** Reclaiming nature through authentic conversations: Leveraging intergenerational learning and environmental education to advance racial equity. Spencer Conference Grant. The Spencer Foundation. Total requested: \$50,000. (Proposal submitted 2020, not funded).

University of Pittsburgh – Pittsburgh, PA

- Dissertation funding
 - Faculty Student Research Grant from School of Education, \$3,000 (2019)
 - Council for Graduate Students in Education research grant, \$400 (2019)
- Council of Graduate Students in Education Colloquium & Interdisciplinary Workshop
 - Guest workshop with Dr. Ananda Marin (Assistant Professor of Qualitative Research Methods in Education, UCLA) funded by Vice Provost for Graduate Studies, \$2,500 (2019)

University of Vermont – Burlington, VT

- Master’s project support, Conservation and Research Foundation – New London, CT, \$500 (2001)

Programs & projects

Pittsburgh Parks Conservancy – Pittsburgh, PA

- Frick Environmental Center capital project
 - Commonwealth of Pennsylvania Redevelopment Assistance Capital Program (RACP), \$1,700,000 (2016)
 - PA Department of Community and Economic Development, \$1,590,000 (2014-2016)
 - The Heinz Endowments, \$1,500,000 (2014-2016)
 - Eden Hall Foundation, \$1,500,000 (2011-2016)
 - Additional government and foundation grants totaling \$12,710,000 (2010-2016)
- Environmental education programming
 - PNC Foundation, Buzzword Early Literacy, \$125,000 (2015-2016)
 - The Pittsburgh Foundation, High School Young Naturalists, \$75,000 (2015-2016)
 - Grable Foundation, general programming, \$140,000 (2012-2016)
 - Additional public and private grants and individual gifts totaling over \$350,000 (2009-2016)

Western Pennsylvania Conservancy – Pittsburgh, PA

- TreeVitalize program to plant urban street trees
 - Pennsylvania Department of Conservation and Natural Resources, \$730,000 (2008-2009)
 - The Heinz Endowments, \$250,000 (2008-2009)
 - Colcom Foundation, \$250,000 (2008-2009)

- Richard King Mellon Foundation, \$150,000 (2008-2009)
- PA Infrastructure Investment Authority (PennVest), for tree planting in public rights-of-way for stormwater management, \$2,400,000 (2009-2011, project completed after leaving position)
- The Home Depot Foundation, volunteer engagement in plantings, \$50,000 (2009)

Nine Mile Run Watershed Association – Pittsburgh, PA

- Nine Mile Run Rain Barrel Initiative
 - PA Department of Environmental Protection ‘Growing Greener’, \$406,439 (2006-2007)
 - Richard King Mellon Foundation, \$400,000 (2006-2010, project completed after leaving position)
- Regent Square Gateway design project, Anonymous private family foundation, \$150,000 (2007)
- Nine Mile Run Stream Monitoring, U.S. Steel Foundation, \$18,500 (2007)
- Watershed environmental education programming, PA Department of Environmental Protection ‘Growing Greener’, \$35,000 (2003-2004)
- Annual operating support
 - The Heinz Endowments, \$450,000 (2006-2008)
 - The Pittsburgh Foundation via the Nine Mile Run Fund, \$200,000 (2003-2004)
 - The Heinz Endowments, start-up organizational support, \$50,000 (2003)

Teaching

The Ohio State University, School of Environment & Natural Resources
Assistant Professor, Environmental Education

current

- Courses taught
 - ENR 3612 – Introduction to Environmental Education & Communications (AU 22, AU 23)
 - ENR 4610 – Natural History of Ohio (SP 24)
 - ENR 5194 – Environmental Education in Action (SP 23)

Penn State University - Greater Allegheny
Assistant Professor, Recreation Park & Tourism Management

2020-2022

- On-campus courses (synchronous)
 - RPTM 120 - Leisure & Human Behavior (face-to-face)
 - RPTM 277 - Inclusive Leisure (face-to-face)
 - RPTM 220 - Sustainability, Society, & Well-being (face-to-face)
 - RPTM 236 - Leadership & Group Dynamics (face-to-face)
 - RPTM 334 - Non-profit Recreation Agency Operations (hybrid)
- World Campus courses (asynchronous & online)
 - RPTM 120 - Leisure & Human Behavior
 - RPTM 220 - Sustainability, Society, & Well-being

University of Pittsburgh
Teaching Assistant

2019

- Supported instruction and grading for EdD course: Out-of-School Organizational Theory

University of Vermont
Teaching Assistant

2001

- Led laboratory activities and completed grading for undergraduate Biology class

New York City Board of Education – New York, NY
Middle School & High School Classroom Teacher

1996-1999

- Taught biology, chemistry, math, and life science in NYC Department of Education (Teach for America Corps member, 1996-1998)
- Developed and co-taught course on chemistry & art culminating in student pieces included in “The Time of Our Lives” exhibition at The New Museum of Contemporary Art (1999)

Student research supervision & advising

The Ohio State University, School of Environment & Natural Resources

current

Masters Advising

- 2023-present. Kaleb Lee (MS).

Undergraduate Honors Advising

- 2023-present. Inez O’Malley (BS). *Garden-based learning: Exploring connections formed by youth between the garden and their homes, schools, and communities.*

Thesis & dissertation committees

- 2023-present. Kimberly Ordonez (PhD). *In/Equity in Ohio Environmental Organization Outcomes: Causes, Cases, and Changes.*
- 2024-present, Iresha Jayasinghe (PhD). *Environmentalism Through an International Lens: Examining Asian College Student Perspectives on Connection to Nature and Pro-Environmental Behaviors*
- 2024-present. Lily Mank (PhD).

Penn State University - Greater Allegheny

2020-2022

Thesis & dissertation committees

- 2020-2021. Erinn Drage (MS). *Understanding stakeholder perspectives of aviation tourism growth in the Alaska Range: An exploration of history, change, and sustainable tourism in National Parks and gateway communities*

Honors and fellowships

International Conference of the Learning Sciences – Bochum, Germany / Online

2021

- Research poster 2nd place award

Pennsylvania Association of Environmental Educators’

Outstanding Contribution to Environmental Education Award – Seven Springs, PA

2020

- For research contributions to environmental education

University of Pittsburgh Center for Urban Education – Pittsburgh, PA

2017-2020

- Graduate Student Fellow

William B. Stapp Student Scholarship – Lexington, KY

2019

- For participation in the 48th Annual NAAEE Research Symposium

Carnegie Science Center Leadership in STEM Education – Pittsburgh, PA

2015

- For partnering with schools to use city parks as classrooms

- PUMP and Pittsburgh Magazine ‘40 Under 40’** – Pittsburgh, PA 2010
 - For environmental leadership in Southwest Pennsylvania
- Pennsylvania Environmental Council ‘40 Under 40’** – Harrisburg, PA 2010
 - For environmental leadership in the Commonwealth of Pennsylvania
- The Nature Conservancy** – Montpelier, VT 2001
 - Hubert Vogelmann Fellow in support of Master’s Project
- University of Vermont** – Burlington, VT 2000
 - Field Naturalist Fellow in support of graduate studies
- Neighborhood Partners Initiative** – Bronx, NY 1998
 - Community Service Award for creation of Morris Avenue Community Garden
- Hampshire College** – Amherst, MA 1996
 - Threshold Award for outstanding undergraduate senior thesis

University service

The Ohio State University (current)

School of Environment & Natural Resources

- Olentangy River Wetland Research Park Leadership Committee (2022-present)

College of Food, Agriculture, and Environmental Science

- Academic Search Committee – 4H STEM Specialist (2022-2023)

Penn State University (2020-2022)

- Recreation Park and Tourism Management Graduate Faculty
- PSU Sustainability Institute Faculty Affiliate (2020-2022)
- Recreation Park and Tourism Management Commonwealth Campus Consortium (2020-2022)
- Penn State Greater Allegheny Green Team (2021-2022)
- Penn State Greater Allegheny Student Life Committee (2021-2022)
- Penn State Greater Allegheny Curricular Affairs Committee (2020-2021)
- RPTM Faculty Search Committee for Penn State Abington (2020-2021)

University of Pittsburgh (2018-2020)

- Chancellor’s Advisory Council on Sustainability – Graduate Student Representative
- Council of Graduate Students in Education – Colloquium Committee Co-chair

Service to the profession

- North American Association for Environmental Education** 2023-2025
Research Symposium Co-chair
- Ohio Environmental Protection Agency/Environmental Education Council of Ohio** 2023-present
Partnership Steering Committee Member
- Science Educators for Equity, Diversity, & Social Justice (SEEDS)** 2022-present
Leadership Council member & Elected Website & Social Media Committee Co-chair
- Playful Pittsburgh Collaborative** 2013-2016
Co-founder of advocacy group with 20+ organizational members
- Pennsylvania Association for Environmental Educators** 2010-2016
Advisory Board member

- Pittsburgh Public Schools Science & Technology Academy** *2009-2014*
 Environment and Energy Occupational Advisory Committee member
- Urban Ecology Collaborative** *2002-2010*
 Founding member, Education Working Group (chair) of 8-city model sharing
 funded by USDA-Forest Service

Professional memberships

- American Educational Research Association (AERA)
- Environmental Education Council of Ohio (EECO)
- International Society for the Learning Sciences (ISLS)
- North American Association for Environmental Education (NAAEE)
- Science Educators for Equity, Diversity, & Social Justice (SEEDS)
- Ohio State University
 - STEAM Factory
 - Sustainability Institute, Affiliated Faculty

Reviewer

- American Educational Research Association – Environmental Education SIG (1)
- Bank Street Occasional Paper Series (1)
- Carnegie Science Awards Selection Committee (2)
- Cultural Studies in Science Education (1)
- Environmental Education Research (2)
- International Conference on the Learning Sciences (1)
- Journal of Environmental Education (1)
- Journal of Environmental Studies and Sciences (2)
- National Science Foundation – Science & Technology Studies (1)
- North American Association for Environmental Education Research Symposium (6)
- Ohio Environmental Protection Agency Environmental Education Grants (1)
- Open Rivers (1)
- Visitors Studies Journal (2)

Non-profit management

- Pittsburgh Parks Conservancy – Pittsburgh, PA** *2009-2016*
Director of Education

- Led education team in development and implementation of environmental education programs using parks as classrooms
 - Spearheaded outreach to local schools and districts that prioritized inclusion of marginalized communities to expand and diversify environmental education program participation
 - Emphasized interdisciplinary, hands-on learning to meet standards for STEM (Science Technology Engineering Math) and ELA (English & Language Arts)
 - Partnered with public and charter schools to offer ACT 48 professional development credits to K-12 teachers
 - Annual program reach included
 - enrollment increase from 2 to 20 schools over 7 years
 - 950+ K-12 children from public, charter, and private schools
 - 400 summer camp participants

- 1,500 people through adult and family programs
 - Created culture for program staff and participants that fostered a sense of wonder, an appreciation for the natural world, and a commitment to lifelong learning
- Led development of new Frick Environmental Center
 - Managed design and construction teams for \$19M urban environmental center
 - Building and site achieved Living Building Challenge & LEED Platinum certification and 8 additional architectural and industry awards, including 2017 AIA Committee on Education in Architecture Award of Excellence
- Participated in capital & program fundraising from foundations, government, & individuals
- Managed annual program budget of \$600K and capital expense budget of \$19M
- Supervised team of 9 permanent and 7-10 seasonal staff

Western Pennsylvania Conservancy – Pittsburgh, PA

2008-2009

TreeVitalize Pittsburgh Program Director

- Developed regional urban tree planting program to improve community and ecological health modeled after successful Philadelphia TreeVitalize program
- Managed neighborhood tree plantings of over 3,300 trees including site assessment, tree procurement, tool management, and plantings with more than 1,500 volunteers
- Provided education & technical support to over 40 community groups in 30 neighborhoods
- Coordinated efforts of program partners including PA Dept Conservation & Natural Resources, Allegheny County, City of Pittsburgh, Tree Pittsburgh, & Western Pennsylvania Conservancy
- Participated in fundraising to raise \$3.8M from public and private funding sources

Nine Mile Run Watershed Association – Pittsburgh, PA

2002-2008

Executive Director, start-up phase

- Led organizational development from all-volunteer to full-time staff of 6
- Spearheaded outreach and stewardship programs including:
 - watershed education reaching over 6,000 citizens
 - implementation of citizen-based tree inventory of 3,000+ trees with 150 volunteers
 - installation of 600 rain barrels
 - successful fundraising to install 3,400 additional barrels
 - involvement of 250 citizens & 30 public officials in design of park entrance for stormwater capture
 - scientific monitoring of Nine Mile Run with academic partners
- Led fundraising of \$2M from public & private sources including start-up organizational funds
- Successfully advocated for additional federal funds to ensure completion of \$7.7M Nine Mile Run Aquatic Ecosystem Restoration

Consulting

- Client: **Fred Rogers Company**, *Environmental education advisor* (2016-2018; 2023-present)
 - Support development and review lesson plans and activities for educators based on *Through the Woods*; distributed through PBS' LearningMedia
 - Assisted with PBS proposal and script development for *Ollie's Big Backyard*, an animated and live action series for 3-5-year-olds (2017-2018)
 - Provided themes and episode review of ten 3-minute episodes of *Through the Woods*, an animated web-based series for 3-5-year-olds (2016)
- Client: **RTI International**, *Research support* (2021-2024)
 - Team member for 3-year Public Lands Service Coalition project for the National Park Foundation (NPF)

- Developed survey, photovoice, and interview protocols
- Conducted interviews with program participants
- Collaborated on data interpretation and analysis
- Support report and presentation preparation to NPF
- Client: **UrbanKind, Inc.**, *Educational assessment support* (2019)
 - Prepared survey for assessment of youth Social and Emotional Learning (SEL)
- Client: **BW3, LLC.**, *Trainer* (2019)
 - Implemented workplace leadership training focused on race, culture, and women