MATTHEW C. PACE, PHD

THE NEW YORK BOTANICAL GARDEN
2900 SOUTHERN BLVD., BRONX, NY, 10458
mpace@nybg.org
HTTPS://ORCID.ORG/0000-0002-2333-1924

EDUCATION

2011 – 2015	**PhD, University of Wisconsin – Madison: Botany** Dissertation: *Evolution, species boundaries, morphology, and biogeography of Spiranthes*. Advisor: Kenneth M. Cameron
2003 – 2007	**BS, Cornell University: Plant Science**

PROFESSIONAL & ACADEMIC POSITIONS

	The City University of New York
2022 – Present	Adjunct Professor
	The New York Botanical Garden
2024 – Present	Associate Curator of the Herbarium
2015 – 2024	Assistant Curator of the Herbarium
2007 – 2011	Curatorial Assistant
2005; 2006	Herbarium Intern
	University of Wisconsin – Madison
2013 – 2015	Teaching Assistant, Departments of Botany & Zoology
2013 – 2014	Flora Aeterna Fellow, Department of Botany
2011 – 2013	Research Assistant
	Cornell University
2003 – 2007	Curatorial Volunteer, Liberty Hyde Bailey Hortorium

RESEARCH INTERESTS

Orchidaceae (Orchidoideae, Cranichidinae, Goodyerinae, Spiranthinae, *Cyclopogon*, *Goodyera*, *Microchilus*, *Pelexia*, *Platanthera*, *Spiranthes*, *Zeuxine*), Fagaceae (*Castanopsis*, *Lithocarpus*), Ochnaceae, Aquifoliaceae, biogeography, hybridization, systematics, taxonomy, phylogenetics, conservation, monography, Herbarium management

SCIENTIFIC PUBLICATIONS

Pace, M.C., Jie Cai, JianJun Jin, and R.F.C. Naczi. 2026. Preserved Botanical Science Collections Support and Facilitate Restoration. *In:* Grover, E.C., D.C., Bartholomew, M. De Vitis, E.W. Sanderson, & M. Diazgranados, *Scaling ecosystem restoration through botanical garden networks*. BGCI, Richmond, UK BGCI Technical Reviews | Botanic Gardens Conservation International

Antonelli, A., C. Fry, R.J. Smith, et al. 2026. State of the World's Plants and Fungi 2026. Royal Botanic Gardens, Kew. DOI: https://doi.org/10.34885/rdzs-ky83. **(M.C. Pace, co-author; 414 authors total.)**

Pace, M.C. 2026. *Igapodendron* (Ochnaceae), a new genus with six new species from northern Amazonia. *Brittonia*, 78: 262–288. https://doi.org/10.1007/s12228-026-09880-3

Barrett, C.F., C.W. Corbett, S.V. Skibicki, V.S.F.T. Merckx, **M.C. Pace,** and P.M. Peterson. 2026. Mycoheterotrophy and plastid genome evolution in the early-diverging epidendroid orchid tribe Nervilieae: independent transitions in *Epipogium* and *Stereosandra*. *AoB PLANTS*, 18, https://doi.org/10.1093/aobpla/plag002

Barrett, C.F., J.V. Freudenstein, S.V. Skibicki, C.W. Corbett, B.T. Sinn, H.L. Thixton-Nolan, W.J. Baker, V.S.F.T. Merckx, O.A. Pérez-Escobar, **M.C. Pace,** P.M. Peterson, K. Suetsugu, and T. Yukawa. 2026. Nuclear Phylogenomic Insights into Relationships, Support, and Conflict Among the Early Diverging Lineages of the Megadiverse Epidendroid Orchids. *Systematic Biology*, https://doi.org/10.1093/sysbio/syaf069

Pace, M.C. 2025. New species of Mexican and Central American *Goodyera* (Orchidaceae). *Brittonia*, 77: 419–425. https://doi.org/10.1007/s12228-025-09846-x

Hart, R., V. Fonseca-Kruel, E. Dalcin, E. da Silva Luís Alexandre, **M.C. Pace,** M. Schmull, L. Beltran-Rodríguez, M. Murguía-Romero, D.G., Flores-Camargo, C. Mapes-Sánchez, M. Nesbitt, C. Romero, A. Townesmith, J. Salick, A. McAlvay, K.R. Otero-Walker, M.J. Balick, J. Golan, B. Hoffman, K. Leonard, G. Mattalia, G. Odonne, A. Prehn, and I. Vandebroek. 2025. Repositories of biocultural diversity: Toward best practices for empowering ethnobotany in digital herbaria. *Plants, People, Planet*, 1–9. https://doi.org/10.1002/ppp3.70052

Diazgranados M., E. Sessa, L. Kelly, C. Lyman, B. Ambrose, K.E. Armstrong, M.J. Balick, E. Beaury, A. Bedoya, A. Borsuk, L. Briscoe, S. D'Acunto, D. Daly, R. Evans, J. Jin, K. Karol, D.P. Little, A. McAlvay, L. Mertehikian, F.A. Michelangeli, K. Miller, R.C.F. Naczi, B. Oberle. **M.C. Pace,** G. Plunkett, E.W. Sanderson, N. Tarnowsky, B. Torke, K. Watson, C. Zumajo. 2025. *NYBG Science Strategy* (2025–2030). New York Botanical Garden. 89 pages. https://www.nybg.org/content/uploads/2025/06/SCI-Science-Strategy-2025.pdf

Barrett, C.F., **M.C. Pace,** C.W. Corbett, A. Kennedy, H. Thixton-Nolan, J. Freudenstein. 2024. Organellar phylogenomics at the epidendroid orchid base, with a focus on the mycoheterotrophic *Wullschlaegelia*. *Annals of Botany*, https://doi.org/10.1093/aob/mcae084

Barrett, C.F., **M.C. Pace,** and C.W. Corbett. 2024. Plastid genome evolution in leafless members of the orchid subfamily Orchidoideae, with a focus on *Degranvillea dermaptera*. *American Journal of Botany*, 111(7): e16370. https://doi.org/10.1002/ajb2.16370

Fay, M.F., J. Lanhorne, **M.C. Pace.** 2024. Plant Portrait: 1101. *Spiranthes spiralis* (L.) Chevall. *Curtis's Botanical Magazine*, 1–9. https://doi.org/10.1111/curt.12559

Pace, M.C., M. Wang, P. Li. 2024. *Spiranthes stylites* is another long overlooked Asian Spiranthes with an unusual sylvan habitat. *Systematic Botany*, 49:117–127. https://doi.org/10.1600/036364424X17110456120712

Pace, M.C. 2023. *Spiranthes*. *In:* Jepson Flora Project (eds.) Jepson eFlora, Revision 12, https://ucjeps.berkeley.edu/eflora/eflora_display.php?tid=10976

Zeng, X., M. Wang, M. Cai, P. Luo, **M.C. Pace,** and P. Li. 2023. Characteristics and evolution of leaf epidermis in the genus *Amana* Honda (Liliaceae). *Taxonomy*, 3: DOI: 10.3390/taxonomy3030025

Pace, M.C. 2023. Independent origins of *Spiranthes* ×*kapnosperia* (Orchidaceae) and their nomenclatural implications. *PhytoKeys*, 226: 89–100. https://doi.org/10.3897/phytokeys.226.100062

Pace, M.C. 2021. *Spiranthes bightensis* (Orchidaceae), a new and rare cryptic hybrid species endemic to the U. S. Mid-Atlantic Coast. *Phytotaxa*, 498 (3): 159–176.

Pace, M.C. 2020. The Orchidaceae of northeastern North American: Systematics, evolution, diversity, and conservation. *Memoirs of the Torrey Botanical Society*, 29: 156–189.

Pace, M.C. 2020. A recircumscription of *Goodyera* (Orchidaceae), including the description of *Paorchis* gen. nov., and resurrection of *Cionisaccus*, *Eucosia*, and *Salacistis*. *Brittonia*, 72: 257–267.

Pace, M.C. 2020. New species of *Microchilus* and *Pelexia* (Orchidaceae) from the Yungas and western Amazonia of Bolivia and Peru. *Brittonia*, 72: 141–153.

Pace, M.C. & K.M. Cameron. 2019. The evolutionary and systematic significance of hybridization between taxa of *Spiranthes* (Orchidaceae) in the California Sierra Nevada and Cascade Range. *Taxon*, 68: 199–217.

Pace, M.C., G. Giraldo, J. Frericks, C.A. Lehnebach, & K.M. Cameron. 2018 on-line first, in print 2019. Illuminating the systematics of the *Spiranthes sinensis* species complex (Orchidaceae): ecological speciation with little morphological differentiation. *Botanical Journal of the Linnean Society*, 189: 36–62.

Pace, M C. & J. V. Freudenstein. 2018. Orchidaceae, the orchid family. In R.F.C. Naczi and Collaborators, New Manual of Vascular Plants of Northeastern United States and Adjacent Canada, online edition 2016 onward. NYBG Press, New York. [Pace wrote whole treatment other than *Corallorhiza*]

Pace, M.C. & K.M. Cameron. 2017. The systematics of the *Spiranthes cernua* species complex (Orchidaceae): Untangling The Gordian Knot. *Systematic Botany*, 42: 640–669.

Pace, M.C., S.L. Orzell, E.L. Bridges, & K.M. Cameron. 2017. *Spiranthes igniorchis* (Orchidaceae), a new and rare cryptic endemic of the south-central Florida Osceola Plain subtropical grasslands. *Brittonia*, 69: 323–339.

Pace, M.C. & K.M. Cameron. 2016. Reinstatement, redescription, and emending of *Spiranthes triloba* (Orchidaceae): Solving a 117 year old cryptic puzzle. *Systematic Botany*, 41: 924–939.

Spalink, D., B.T. Drew, **M.C. Pace,** J.G. Zaborsky, J.R. Starr, K.M. Cameron, & K.J. Sytsma. 2016. Biogeography of the cosmopolitan sedges (Cyperaceae) and the area-richness correlation in plants. *Journal of Biogeography*, 43: 1893–1904.

Pace, M.C., N. Tarnowsky, E.D. Block, A. Weiss, C. Zimmerman, & B.M. Thiers. 2016. An updated description of the collections and history of The New York Botanical Garden Herbarium (NY): 1995–2015. *Brittonia*, 68: 317–323.

Atha, D.E., T. Forrest, R.F.C. Naczi, **M.C. Pace,** M. Rubin, J.A. Schuler, & M. Nee. 2016. The historical and extant spontaneous vascular flora of The New York Botanical Garden. *Brittonia*, 68: 245–277.

Spalink, D., B.T. Drew, **M.C. Pace,** J.G. Zaborsky, P. Li, K.M. Cameron, & K.J. Sytsma. 2015. Evolution of geographical place and niche space: patterns of diversification in the North American sedge (Cyperaceae) flora. *Molecular Phylogenetics and Evolution*, 95:183–195.

Pace, M.C. & A.E. Brant. 2015. *Spiranthes praecox* (Orchidaceae) & *Carex atlantica* subsp. *capillacea* (Cyperaceae): New to the flora of Missouri. *Castanea*, 80: 144–146.

Carter, D.L. & **M.C. Pace.** 2015. Noteworthy Collection, Wisconsin: *Spiranthes ovalis* var. *erostellata*. *The Michigan Botanist*, 52: 105–108.

Pace, M.C. 2011. First verifiable record of *Betula nigra* L. (River Birch) in Suffolk Co., NY and overview of the species purported distribution on Long Island. *The Journal of the Torrey Botanical Society*, 138: 336–339.

Popular Publications & Media Interviews

The Hand Lens. http://sweetgum.nybg.org/science/the-hand-lens/ Ongoing contributor to public engagement stories highlighting New York Botanical Garden Steere Herbarium specimens. "NYBG 2023 New Species Review!," "Botany & Birds: Taking Flight," "Vanishing Lakes," "Botanical Ragtime" [with Kenneth Walker], "The Ames–Britton Connection" [with Kenneth Walker], "Orchids in your Home!," "NYBG 2022 New Species Review!," "Royal Symbols," "Naming the Rainbow," "Ethel Zoe Bailey," "A Botanical Tour of Harlem," "NYBG 2021 New Species Review!," "Meet *Spiranthes bightensis*: A New Orchid in Our Own Backyard," "Species that Work-from-Home," "Dancing Lady Orchids Take Center Stage," "Orchids of New York: Fairy Slippers and Dragon Mouths," "No Leaves, No Problem!," "Typical: *Ceratozamia euryphyllidia*, the largest type?," "Exploring the Bahamas with Lewis Jones Knight Brace," "The LGBTQ+ Legacy of NYBG: Out of the Cabinet & Pride in the Field," "New York's Missing Species"

Pace, M.C. 2024. The Foundation of Global Orchid Conservation. Plant Talk Series. https://www.nybg.org/planttalk/the-foundation-of-global-orchid-conservation/

Interviewed for *Science Friday* by Ira Flatow. 2024. Discussed the 50th Anniversary of the Endangered Species Act and orchid conservation. Recording available: https://www.sciencefriday.com/segments/endangered-species-act-50-anniversary/

Pace, M.C., & J.G. Zaborsky. 2013. Lady Luck Shines on Hunt for Shining Ladies' Tresses. *The Flora*, *newsletter of the Botanical Club of Wisconsin*, Fall 2013: 1–2.

Pace, M.C. 2013. Seeing Red: Convergent Floral Evolution in Cranichideae. *Orchids, The Bulletin of the American Orchid Society*, 82(7).

Funding, Grants, & Awards

2022 National Science Foundation. Capacity: Biological Collections: Securing and Sharing Biocultural Diversity Collections at The New York Botanical Garden. Award #2140478, Ina Vandebroek & Michael Balick co-PIs; 2022 – 2025 [$424,728]

2021 National Science Foundation. Digitization TCN: Bringing Asia to Digital Life: Mobilizing Underrepresented Asian Herbarium Collections in the US to Propel Biodiversity Discovery. Award #2100755, Kate Armstrong co-PI; 2021 – 2025 [$629,237]

2018 National Science Foundation. Digitization TCN: Digitizing "endless forms": Facilitating Research on Imperiled Plants with Extreme Morphologies. Lead project PI, 2018 – 2023; collaborative proposal with 16 museums and universities; [$1,179,312 total award; $837,624 NYBG allocation]

American Society of Plant Taxonomists. Grady L. Webster and Barbara D. Webster Plant

Systematics Publication Award. For: Pace, M.C. & K.M. Cameron. 2017. The systematics of the *Spiranthes cernua* species complex (Orchidaceae): Untangling The Gordian Knot. *Systematic Botany*, 42: 640–669.

2014 Native Orchid Conference. Fred Case Grant [$1,000]

University of Wisconsin – Madison. Flora Aeterna Fellowship [semester-long Fellowship]

2013 University of Wisconsin – Madison. Flora Aeterna Fellowship and Research Grant [semester-long Fellowship and $7,500]

American Society of Plant Taxonomists. Graduate Student Research Grant [$800]

Society of Herbarium Curators. Graduate Student Research Grant [$500]

Native Plant Society of New Mexico. Research Grant [$1,000]

Botanical Club of Wisconsin. John Thomson Award [$1,000]

Philadelphia Botanical Club. Bayard Long Award [$1,000]

2012 University of Wisconsin – Madison. Davis Research Grant [$1,500]

2011 University of Wisconsin – Madison. Biological Sciences Scholar Award [$1,000]

Northeastern Natural History Conference. Honorable Mention, Best Overall Botany Presentation: New York Flora Association

2007 Cornell University. Arthur Thomas Memorial Fund Award for strong academic achievement, [$400]

2006 Cornell University. A.M.S. Pridham Scholarship for commitment to academic excellence, [$1,000]

PROFESSIONAL TALKS, PRESENTATIONS, & POSTERS

2026 Botany 2026. Oral Paper: **Pace, M.C.,** D.P. Little, and K.E. Armstrong. "Reviewing the Fagaceae of Myanmar: An overlooked center of unique biodiversity?"

2025 NYBG Science Seminar: "From indet. to gen. nov., or the Steere Herbarium as a driver of discovery."

Invited Key Note Speaker, Ohio Botanical Symposium: Ladies'-tresses Orchids (*Spiranthes*) of Ohio and Eastern U.S

2024 NYBG Science Seminar: **Pace, M.C.,** K.E. Armstrong, H. Wang, & H. Wheeler. NYBG Asia-Pacific Research & Collections: NY's Other Great Strength. Presented jointly with

2023 NYBG Science Seminar: "Subfamily Orchidoideae: the other orchids."

Latina/o/x Voices: Transforming the Academic Landscape, a CUNY-wide Interdisciplinary Symposium: **M.C. Pace,** K.R. Walker, E. Vardeman, & I. Vandebroek "NYBG as a resource for Latina/o/x Biocultural Study."

NYBG Science Seminar: **Pace, M.C.,** K.R. Walker, and M.J. Balick. "Exploring the NYBG Ethnobotany, Economic, and Biocultural Collections."

2020 NYBG Science Symposium, Invited Speaker: Here Today, Gone Forever: Plant Extinction Now and Conservation Strategies for Tomorrow: "Herbaria, Living Collections, and Extinction."

NYBG Humanities Institute, Queering Botanical Science: A Discussion in Celebration of LGBTQ+ Pride Month, Invited Speaker: "Pride in the Field: The LGBTQ Legacy of NYBG."

2017 Society for the Preservation of Natural History Collections: **Pace, M.C.,** M.L. McMillin, and M. Tulig "Adapting to APG IV: Curating the second largest herbarium in the world."

2016 Mt. Cuba Center, Invited Speaker: "Cutting The Gordian Knot: Spiranthes as a Model for 21st Century Orchid Research and Conservation"

Botany 2016. Oral Papers: "The biogeographic history of *Spiranthes* (Orchidaceae)". "Updating the Orchid Flora of Eastern North America: Revising Gleason & Cronquist". "What is the evolutionary significance of hybridization in North American Orchidaceae?: Evidence from *Spiranthes* and *Platanthera*"

2015 J.F. Crow Institute for the Study of Evolution Seminar Series: "The most perplexing orchid genus in our flora: Evolution, species boundaries, morphology, and biogeography of *Spiranthes*"

2014 Avon Park Air Force Range Invited Speaker: "Identification and conservation of a globally rare orchid: *Spiranthes triloba*"

Botany 2014. Oral Paper: **Pace, M.C.** & K.M. Cameron. "Phylogenetic systematics of *Spiranthes* (Orchidaceae): Assessing species-limits and potential hybridization". Poster: **Pace, M.C.** & K.M. Cameron. "Preliminary Evidence for Limited Hybridization Among Midwestern Spiranthes (Orchidaceae)."

North American Native Orchid Society Conference: "Untangling Gordian's Knot: Reevaluating species status and the biogeographic origins of *Spiranthes*"

University of Wisconsin – Madison Arboretum Science Day: "Evidence for limited hybridization among Midwestern Spiranthes (Orchidaceae)"

2013 Botany 2013. Poster: **Pace, M.C.** & K.M. Cameron. "The utility of fine-scale morphological features in species delimitation of Spiranthes (Orchidaceae)."

University of Wisconsin – Madison Arboretum Science Day Invited Speaker: "Researching the Diversity and Pollination Biology of *Spiranthes*, Ladies' Tresses Orchids"

2011 Northeastern Natural History Conference. Oral Paper: "Rediscovering the flora of the New York Botanical Garden Forest, using the Steere Herbarium"

PROFESSIONAL SERVICE, TEACHING, & MENTORSHIP

2024 Mentor for Dakota Feirer, New York University Masters in Museum Studies & biocultural collection curation volunteer

Instructor, NYBG Adult Education: Pressing Plants for Art and Science; with Melisande Schwartzfarb

Mentor and science co-leader for Mellon Foundation Foodways Interns (Year 3). With Laura Briscoe, co-taught intro botany and morphology, lead plant walks, and helped students formulate independent research projects at the intersection of the humanities and science, resulting in stories published on the NYBG platform: *The Hand Lens*. Eight students from local Bronx community colleges and universities.

2023 Instructor, NYBG Adult Education: Pressing Plants for Art and Science; with Melisande Schwartzfarb

Mentor and science co-leader for Mellon Foundation Foodways Interns (Year 2). With Laura Briscoe, co-taught intro botany and morphology, lead plant walks, and helped students formulate independent research projects at the intersection of the humanities and science, resulting in stories published on the NYBG platform: *The Hand Lens*. Eight students from local Bronx community colleges and universities.

Search committee member: NYBG Director of the LuEsther T. Mertz Library

2022 Mentor and science co-leader for Mellon Foundation Foodways Interns (Year 1). With Laura Briscoe, co-taught intro botany and morphology, lead plant walks, and helped students formulate independent research projects at the intersection of the humanities and science, resulting in stories published on the NYBG platform: *The Hand Lens*. Seven students from local Bronx community colleges and universities.

Mentor for Kenneth Walker. Ethnobotany and biocultural collections intern, SUNY Binghamton

Mentor for Alex DiCorpo. Summer research intern, The Taft School

2021 Search committee member: Selby Botanical Gardens Orchid Research Botanist

2020 – 2022 NYBG Inclusion, Diversity, Equity, and Access Committee member

2020 – 2021 Led NYBG Herbarium, Horticulture, & Library team to implement a unified digital content statement discussing the historical context of our collections

2020 City College of New York, BIOL 79302, Current Topics in Plant Biology Graduate Seminar: Herbarium Curation & Orchidaceae Research

Review Panel reviewer: National Science Foundation, Collections in Support of Biological Research (CSBR)

2019 Mentor for Lydia Morley, graduate student at Texas A&M University, in partnership with Daniel Spalink

Search committee member: NYBG Ethnobotany Curator

2016 Mt. Cuba Center: Invited taxonomic verification of living Orchidaceae conservation Collection

2015 – 2020 Instructor, NYBG Adult Education: Plant Whispers: From Sea to Shining Sea: The New York Botanical Garden's Recent Botanical Exploration in North America

Instructor, NYBG Adult Education: Plant Systematics

Instructor, NYBG Adult Education: Plant Whispers: The Orchid Next Door

2015 Teaching Assistant, University of Wisconsin – Madison: Botany 345: Plant Morphology and Evolution

2014 Teaching Assistant, University of Wisconsin – Madison: Biology 152: Introductory Biology Laboratory

2013 Teaching Assistant, University of Wisconsin – Madison: Botany 401: Vascular Flora of Wisconsin

2012 – 2013 University of Wisconsin – Madison student chapter of the Botanical Society of America: Graduate Student Liaison

2011 – 2015 Taught laboratory procedures (DNA extraction, PCR, data analysis) to undergraduate and first year graduate students

2011 – 2014 University of Wisconsin – Madison Biology Colloquium Series: graduate student board member

FIELDWORK & COLLECTIONS

United States of America (2003 – present); Peru (2026)

Collections deposited to date: 1,300; distributed to AMES, ANHC, APSC, B, BH, BKL, CAS, CM, CONN, FLAS, K, MEXU, MO, NCU, NCSC, NY, NYS, RENZ, RSA, TENN, WIS, US, USF

EDITORIAL & REVIEW SERVICE

2025 – Present Managing Editor, Brittonia

2018 – Present Associate Editor, Botanical Journal of the Linnean Society

2015 – 2025 Associate Editor, Brittonia

Reviewer for *American Journal of Botany*, *Applications in Plant Science*, *Botanical Journal of the Linnean Society*, *Botanical Review*, *Brandeis University Press*, *Economic Botany*, *Frontiers in Plant Science*, *Journal of Plant Research*, *Lankesteriana*, *Molecular Phylogenetics and Evolution*, *Native Orchid Conference Journal*, *PeerJ*, *PhytoKeys*, *PLOS ONE*, *Systematic Botany*, *Taxon*

COMMUNITY SCIENCE & COMMUNITY ENGAGEMENT

2024 Community Gardens + Herbarium community dialog session “Rooted in Conversation.”

Co-led a community dialog at The Bronx Library Center about the scientific resources of the Herbarium, exploring opportunities for community and project collaboration.

2023 Community Gardens + Herbarium Webinar: led a public-oriented overview of how to access the digital science collections and content of NYBG.

Bronx Green-Up Community Awards: herbarium specimen tabling event

Community Gardens + Herbarium workshop: co-led a workshop on how to make herbarium specimens and initiating community dialog at El Flamboyan Community Garden, Bronx, NY. In partnership with NYBG Humanities Institute and Bronx Green-Up. With Audrey Jenkins & Kenneth Walker.

2022 Native Orchid Conference public webinar: “Ongoing Monographic Studies in *Spiranthes*”

Harvard Business School Club of New York webinar: "The William & Lynda Steere Herbarium at The New York Botanical Garden –A Virtual Visit"; presented jointly with Kate Armstrong.

2021 WeDigBio webinar: Spotlight on Herbarium Research – Epiphytes!

DigiVol webinar: "From Kangaroo Island to New York, learn how DigiVol volunteer contributions are aiding research around the globe"

2019 – Present WeDigBio & DigiVol virtual volunteer transcription events. Projects have focused on epiphytes, bulbs, carnivorous plants, flora of Malaysia, the Himalayan mountains, the Philippines, Cactaceae, Orchidaceae, Piperaceae, Euphiorbiaceae, and Bromeliaceae. With Kim Watson, Charlie Zimmerman, & Kelcie Brown.

2017 Outreach event seminar: "Rotting Meat, Jewels, and Venus' Slippers: The Orchids of Southeast Asia," NYBG Orchid Evenings

2016 Valentine's Day outreach event seminar: "Love, Death, Chocolate, and Five-Inch Tongues: The Secret Lives of Orchids," NYBG Orchid Evenings

2015 – Present NYBG Steere Herbarium Open Houses

2015 Public outreach lecture: Participatory Learning and Teaching Organization (PLATO) Seminar Series: "The most perplexing orchid genus in our flora": Evolution, species boundaries, morphology, and biogeography of *Spiranthes*

2014 Native Orchid Conference Seminar: "Untangling Gordian's Knot: Reevaluating species status and the biogeographic origins of *Spiranthes*"

2013; 2014 University of Wisconsin – Madison Arboretum Science Day: lecturer

2013 Collaborate with Community -Scientists of the Native Orchid Conference in the collecting of North American *Spiranthes* (Orchidaceae)

2012 – 2015 Member of Madison Orchid Research Group: publishing reviews of scientific articles in Orchids Magazine

2012 University of Wisconsin – Madison Science Exploration Day: volunteer

2009 Saw Mill River Bioblitz: Botany division NYBG team member