RYAN FOLK

(330) 801-3078 | ryanfolk@ufl.edu
Florida Museum of Natural History
Dickinson Hall, University of Florida
Gainesville, FL 32611

POSITIONS HELD:

Postdoctoral associate	University of Florida	2017 –
Postdoctoral fellow	NSF (courtesy appt. at UF)	2015 – 2017
Graduate research assistant	The Ohio State University	2015
Graduate teaching associate	The Ohio State University	2012 – 2014
Graduate fellow	The Ohio State University	2010 – 2012, 2014 – 2015

EDUCATION:

Ph.D., Evolution, Ecology, and Organismal Biology, The Ohio State University, 2010-2015 (4 yr 10 mo). Dissertation: Biosystematics of the Genus *Heuchera* (Saxifragaceae).

B.S., Biology, *Summa cum Laude,* University of Akron, 2006-2010 (3 yr 11 mo). Minor, Chemistry.

RESEARCH INTERESTS:

Phylogenomics and biodiversity informatics, particularly: (1) integration of ecological niche modeling in a phylogenetic framework; (2) phenotypic and phylogenomic approaches to understanding the evolution and success of nitrogen-fixing symbioses; (3) detection of species boundaries and hybridization with genomic data.

RESEARCH GRANTS RECEIVED:

2017, Sr. Pers.: Systems Biology Research to Advance Sustainable Bioenergy Crop Development (DOE, $7,300,000). Phylogenomic discovery and engineering of nitrogen fixation into the bioenergy woody crop poplar. Press release: http://blogs.ifas.ufl.edu/news/2017/10/02/uf-researchers-awarded-7m-grant-improve-plants-get-nitrogen-reduce-pollution/. Project website: http://nitfix.org/.

2017, co-PI: Research Opportunity Fund (University of Florida, $67,226, PI D. Soltis). Using the tree of life to develop novel approaches for public engagement in science.

2017, PI, co-PI: Two XSEDE start-up allocations (50,000 Stampede system units ea., approx. $1,739 equivalent value).

2017, co-PI: Biodiversity Institute Seed Grant (University of Florida, co-funded with the University of Florida Informatics Institute, $40,000, PI D. Soltis). An integrative resource for trait-based evolutionary synthesis: Uncovering hidden enablers of nitrogen fixation in the rosids. *Writing lead.*

2016, co-PI: Genetics Institute Pilot Grant (University of Florida, $49,727, PI R. Guralnick) Next Generation Bioinformatics—Tools for rapid mining and assembly from genomic repositories.

2015, PI: Post-Doctoral Fellowship in Biology (NSF, $138,000). Niche biology in deep time: New methods for ancestral niche reconstruction applied to the Saxifragales.

2014, co-PI: Doctoral Dissertation Improvement Grant (NSF, $15,502; PI J. Freudenstein)

Investigating the impact of hybridization on diversification: A case study in the plant genus *Heuchera*. *Writing lead.*

2013, PI: American Society of Plant Taxonomists Research Grant ($800)

2013, PI: AGGRS Alumni Grant (The Ohio State University, $1,900)

2012, PI: R. L. Stuckey Endowment Fund (The Ohio State University, $1,500)

2011, PI: Beatley Fund (The Ohio State University, $1,200)

2008, 2009, PI: Dr. Paul Acquarone Award in Plant Sciences (University of Akron, $450 each)

GRANTS IN PROCESS:

2018, PI: DEB core (NSF, $677,283). Origin and impact of nitrogen-fixing symbioses in a major clade of flowering plants.

MISCELLANEOUS PERSONNEL ROLES:

2017, foreign collaborator: Major international joint research project (NSFC of P.R. China, 3.1066 million yuan RMB = ~$450,000; PI T. Yi) The global diversification of Rosales in space and time.

PUBLICATIONS:

19. Allen, J.M.*, **R.A. Folk***, P.S. Soltis, R.P. Guralnick, and D.E. Soltis. 2019. Space, traits, and history: Biodiversity synthesis in the green branches of the Tree of Life. *Nature Plants* 5: 11–13.
18. **Folk, R.A.**, C.J. Visger, D.E. Soltis, P.S. Soltis, and R.P. Guralnick. 2018. Geographic range dynamics drove ancient hybridization in a lineage of angiosperms. *American Naturalist* 192: 171–187.
17. **Folk, R.A.**, M. Sun, S.A. Smith, P.S. Soltis, R.P. Guralnick, and D.E. Soltis. 2018. Challenges of comprehensive taxon sampling in comparative biology: Wrestling with rosids. *American Journal of Botany* 105: 433–444. Invited review, special Tree of Life issue.
16. **Folk, R.A.**, P.S. Soltis, R.P. Guralnick, and D.E. Soltis, and R.P. Guralnick. 2018. New prospects in the detection and comparative analysis of hybridization. *American Journal of Botany* 105: 363–374. Invited review, special Tree of Life issue.
15. Allen, J.M., R. LaFrance, **R.A. Folk**, K. Johnson, and R.P. Guralnick. 2018. aTRAM 2.0: An improved, flexible locus assembler for NGS data. *Evolutionary Bioinformatics* 14: 1176934318774546.
14. **Folk, R.A.***, J.C. Ginori*†, D.E. Soltis, and A.J. Floden. 2018. Integrative identification of incipient lineages in *Heuchera longiflora* (Saxifragaceae). *Botanical Journal of the Linnean Society* 187: 327–345.
13. Zhang N.-N., Y.-P Ma., **R.A. Folk**, J.-J. Yu, Y.-Z. Pan, and X. Gong. 2018. Maintenance of species boundaries in three sympatric *Ligularia* (Senecioneae, Asteraceae) species. *Journal of Integrative Plant Biology* 60: 986–999.
12. Schuette, S., **R.A. Folk**, J.T. Cantley, and C.T. Martine. 2018. The hidden *Heuchera:* How science Twitter uncovered a globally imperiled species in Pennsylvania, USA. *PhytoKeys* 96: 87–97.
11. Stubbs, R.L., **R.A. Folk**, C. Xiang, D.E. Soltis, and N. Cellinese. 2018. Pseudo-parallel patterns of disjunctions in an Arctic-alpine plant lineage. *Molecular Phylogenetics and Evolution*. 123: 88–100.

10. **Folk, R.A.**, J.R. Mandel, and J.V. Freudenstein. 2017. Ancestral gene flow and parallel organellar genome capture result in extreme phylogenomic discord in a lineage of angiosperms. *Systematic Biology* 66: 320–337.
9. Zhang, R., X. Gong, and **R.A. Folk**. 2017. Evidence for continual hybridization rather than hybrid speciation between *Ligularia duciformis* and *L. paradoxa* (Asteraceae). *PeerJ* 5: e3884.
8. García, N., **R.A Folk**, A.W. Meerow, S. Chamala, M.A. Gitzendanner, R.S de Oliveira, D.E. Soltis, and P.S. Soltis. 2017. Deep reticulation and incomplete lineage sorting obscure the diploid phylogeny of rain-lilies and allies (Amaryllidaceae tribe Hippeastreae). *Molecular Phylogenetics and Evolution.* 111: 231–247.
7. Freudenstein, J.V., M.B. Broe*, **R.A. Folk***, and B.T. Sinn*. 2017. Biodiversity and the species concept – Lineages are not enough. *Systematic Biology* 66(4): 644–656.
6. **Folk R.A.** and P.J. Alexander. 2015. Two new species, *Heuchera soltisii* and *H. inconstans*, with further taxonomic notes for the western group of *Heuchera* section *Heuchera* (Saxifragaceae). *Systematic Botany* 40: 489–500.
5. **Folk, R.A.**, J.R. Mandel, and J.V. Freudenstein. 2015. A protocol for targeted enrichment of intron-containing sequence markers for recent radiations: A phylogenomic example with genomic resources from *Heuchera* (Saxifragaceae). *Applications in Plant Sciences* 3: 1500039.
4. **Folk, R.A.** and J.V. Freudenstein. 2015. "Sky islands" in the eastern U.S.A.? – Strong phylogenetic structure in the *Heuchera parviflora* group (Saxifragaceae). *Taxon* 64: 254–271.
3. **Folk, R.A.** and J.V. Freudenstein. 2014. Phylogenetic relationships and character evolution in the genus *Heuchera* L. (Saxifragaceae) on the basis of nuclear loci. *American Journal of Botany* 101: 1532–1550.
2. **Folk, R.A.** and J.V. Freudenstein. 2014. Revision of *Heuchera* section *Rhodoheuchera* subsections *Hemsleyanae* and *Rosendahliae* subsect. nova (Saxifragaceae). *Systematic Botany* 39: 850–874.
1. **Folk, R.A.** 2013. *Heuchera lakelae* (Saxifragaceae), a new species from the Sierra La Marta and Sierra Coahuilón, Coahuila and Nuevo León, Mexico. *Phytotaxa* 124: 37–42.

MANUSCRIPTS IN PROCESS:

20. **Folk, R.A.**, R.L. Stubbs, M.E. Mort, N. Cellinese, J.M. Allen, P.S. Soltis, D.E. Soltis, and R.P. Guralnick. In revision. Rates of niche and phenotype evolution lag behind diversification in a temperate radiation. *Proceedings of the National Academy of Sciences.*
21. Howard, C.C., **R.A. Folk**, J.M. Beaulieu, and N. Cellinese. In revision. The monocotyledonous underground: Global climatic and phylogenetic patterns of geophyte diversity. *American Journal of Botany.*
22. Liu, L., Y. Du, **R.A. Folk**, P. Li, D.E. Soltis, and C. Fu. In revision. Plastid genome evolution in Saxifragaceae and multiple plastid capture events involving *Heuchera* and *Tiarella*. *Molecular Phylogenetics and Evolution.*
23. Stubbs, R.L., **R.A. Folk**, C.-L. Xiang S. Chen, D.E. Soltis, N. Cellinese. In review. Phylogenomics reveals evolutionary processes and historical biogeography within an arctic-alpine lineage (*Micranthes*, Saxifragaceae). *New Phytologist.*
24. Yang, R., **R.A. Folk**, N. Zhang, X. Gong. In revision. Formation and population dynamics of hybrids in the Hengduan Mountains flora. *Ecology and Evolution.*

25. Sun, M., **R.A. Folk**, M.A. Gitzendanner, S.A. Smith, C. Germain-Aubrey, R.P. Guralnick, P.S. Soltis, Z. Chen, and D.E. Soltis. Submitted. Exploring the phylogeny and diversification of rosids with a five-locus supermatrix. *New Phytologist.*

BOOK CHAPTERS AND OTHER NON-PEER-REVIEWED CONTRIBUTIONS:

Folk, R.A. and R.L. Stubbs. [In press] Treatment of Saxifragaceae. In R.F.C. Naczi, *New Manual of Vascular Plants of the Northeastern United States and Adjacent Canada.* [Initially issued as digital fascicles; print edition to follow on series completion]

Folk, R.A. and A.S. Weakley. Treatment of *Heuchera.* In A.S. Weakley. *Flora of the Southern and Mid-Atlantic States.* [Online e-book with print editions at irregular intervals]

**equally contributing authors*
†undergraduate author

AWARDS:

2017, Travel award, Florida Museum of Natural History ($1,000)
2015, Travel award for the Phylogenomics Symposium and Software School, Ann Arbor, Michigan ($500).
2014, George R. Cooley Award for best contributed paper in plant systematics ("Sky islands' in the eastern US? – Strong phylogeographic structure in the *Heuchera parviflora* group (Saxifragaceae)"; American Society of Plant Taxonomists, $500)
2010, Susan L. Huntington Distinguished University Fellowship (3 yr; $64,800)
2010, Young Botanist Award (Botanical Society of America)
2006 – 2010, Dean's List (The University of Akron)

DEPARTMENTAL SEMINARS:

Folk, R.A. 2018. Large-scale approaches to understanding niche evolution and symbiosis in the flowering plants. *University of Florida.*
Folk, R.A. 2017. Large-scale approaches to understanding niche evolution and symbiosis in the flowering plants. *San Diego State University.*
Soltis, D.E.*, P.S. Soltis*, and **R.A. Folk***. 2017. The Tree of Life and the evolution of nitrogen-fixing symbioses. *New York Botanical Garden.*
Folk, R.A. 2017. Hybridization and diversification: Extreme phylogenomic discord in *Heuchera*. *Kunming Institute of Botany* (P.R. China).
Folk, R.A. 2017. Hybridization and diversification: Extreme phylogenomic discord in *Heuchera*. School of Integrative Plant Science, *Cornell University.*
Folk, R.A. 2017. Hybridization and diversification: Extreme phylogenomic discord in *Heuchera*. Department of Biology, *San Francisco State University.*
Folk, R.A. 2017. Hybridization and diversification: Extreme phylogenomic discord in *Heuchera*. Department of Biological Sciences, *University of Alabama.*
Folk, R.A. 2016. Hybridization and diversification: Extreme phylogenomic discord in *Heuchera*. Department of Biological Sciences, *Texas Tech University.*
Folk, R.A. 2016. New sequencing strategies for radiations ancient and recent—An explicit test of reticulate evolution in the *Heuchera* clade (Saxifragaceae). *Royal Botanic Garden Edinburgh* (United Kingdom).
Folk, R.A. 2015. Phylogenomics of *Heuchera*—Organellar capture and trait evolution. Florida Museum of Natural History, *University of Florida.*

Folk, R.A. 2014. Phylogenetic relationships in *Heuchera* (Saxifragaceae) based on ribosomal and low-copy nuclear loci. Department of Evolution, Ecology, and Organismal Biology, *The Ohio State University*.

**co-presented/tag-team*

INVITED SYMPOSIUM PRESENTATIONS:

Folk, R.A. 2019. Title TBD. 2019 Symposium: Chicago Plant Science Symposium.

Kates, H.*, **R.A. Folk***, B. Ruben, C. Dervinis, R. LaFrance, M. Kirst, R.P. Guralnick, D.E. Soltis, P.S. Soltis. 2018. Rapid workflows from specimens to sequences: Global-scale phylogenomics from collections. Colloquium: Botanical Society of America.

Folk, R.A., D.E. Soltis, P.S. Soltis, N. Cellinese, M.E. Mort, J.M. Allen, R.L. Stubbs, R.P. Guralnick. 2018. Large-scale integration of specimens, literature, and database infrastructure in Saxifragales. Colloquium: Botanical Society of America.

Folk, R.A.*, R.P. Guralnick, P.S. Soltis, D.E. Soltis, J.M. Allen*. 2017. Data assembly and post-processing in aTRAM for museum phylogenomics. Symposium: International Botanical Congress.

Folk, R.A., C.J. Visger, R.P. Guralnick, D.E. Soltis, P.S. Soltis. 2017. Assessing ancestral niche suitability and geographic range dynamics as drivers of hybridization in *Heuchera* (Saxifragaceae). International Botanical Congress symposium.

Soltis, D.E.*, R.P. Guralnick, S.R. Manchester, J.M. Allen, M. Kirst, J. Oliverio, and **R.A. Folk***. Uncovering hidden enablers of nitrogen fixation in a major clade of flowering plants. Symposium: Collaborations in Biodiversity Research, University of Florida.

**co-presented/tag-team*

CONTRIBUTED CONFERENCE PRESENTATIONS:

Folk, R.A., D.E. Soltis, P.S. Soltis, N. Cellinese, M.E. Mort, J.M. Allen, R.L. Stubbs, R.P. Guralnick. 2018. Correlation among functional trait shifts, habitat shifts, and diversification patterns in the flowering plant clade Saxifragales. Botanical Society of America meeting.

Howard, C., J. Landis, **R.A. Folk,** J. Beaulieu, N. Cellinese. 2018. Global phylogenetic patterns and diversification of monocotyledonous geophytes. Botanical Society of America meeting.

Schuette, S., **R.A. Folk**, J.T. Cantley, C. Martine. 2018. The hidden *Heuchera*: How science and Twitter uncovered a globally imperiled species in Pennsylvania, USA. Botanical Society of America meeting.

Stubbs, R.L.; **R.A. Folk**, C.-L. Xiang, D.E. Soltis, N. Cellinese. 2018. The evolution of cold-adapted plants: A phylogenomic analysis of *Micranthes* (Saxifragaceae). Botanical Society of America meeting.

Folk, R.A., D.E. Soltis, P.S. Soltis, N. Cellinese, M.E. Mort, J.M. Allen, R.L. Stubbs, R.P. Guralnick. 2018. Correlation among functional trait shifts, habitat shifts, and diversification patterns in the flowering plant clade Saxifragales. Society of Systematic Biologists meeting.

García N., A.W. Meerow, S. Arroyo-Leuenberger, J. Dutilh, R.S. Oliveira, W.S. Judd, **R.A. Folk**, D.E. Soltis, & P.S. Soltis. 2017. Propuesta de classificación genérica de Amaryllidaceae tribu Hippeastreae basada en su filogenia ("Proposal of a generic classification of Amaryllidaceae tribe Hippeastreae based on their phylogeny"). Argentine Botanical Society meeting.

Allen, J.M., R. LaFrance, **R.A. Folk**, K. Bell, K. Johnson, R.P. Guralnick. 2017. aTRAM 2.0: Targeted assembly of loci from both reduced and whole genome NGS data. Evolution meeting.

Soltis, D.E., P.S. Soltis, J. Beach, A. Stewart, A. Thompson, J. Cavner, C.J. Grady, S. Smith, J. Fortes, **R.A. Folk**, M. Gitzendanner. 2017. Biotaphy—Connecting resources to enable large scale biodiversity analyses. International Botanical Congress.

Stubbs, R.L., **R.A. Folk**, D.E. Soltis, N. Cellinese. 2017. Investigating the Sierra Nevada-Rocky Mountain disjunction in *Micranthes* (Saxifragaceae) with a target enrichment approach. Botanical Society of America meeting.

Naranjo, A., **R.A. Folk**, P.S. Soltis, D.E. Soltis. 2017. *Dicerandra*: Understanding ancestral niches of a narrow endemic. Botanical Society of America meeting.

Soltis, D.E., P.S., Soltis, J. Beach, A. Stewart, A. Thompson, J. Cavner, C.J. Grady, S. Smith, J. Fortes, **R.A. Folk**, M. Gitzendanner. 2017. Biotaphy: Mobilizing and integrating big data in studies of spatial and phylogenetic patterns of biodiversity. Botanical Society of America meeting.

Folk, R.A., R.L. Stubbs, N. Cellinese, M.E. Mort, P.S. Soltis, D.E. Soltis, R.P. Guralnick. 2017. Dynamics of niche evolution in the Saxifragales. Botanical Society of America.

Folk, R.A., R.P. Guralnick, P.S. Soltis, D.E. Soltis, J.M. Allen. 2017. Data assembly and post-processing in aTRAM for museum phylogenomics. Botanical Society of America meeting.

Folk, R.A., C.J. Visger, R.P. Guralnick, D.E. Soltis, P.S. Soltis. 2017. Historical range dynamics drove hybridization in a lineage of angiosperms. Society of Systematic Biologists standalone meeting.

Soltis, D.E., M. Sun, C. Germain-Aubrey; S. Smith; P.S. Soltis, Z. Chen, **R.A. Folk**, R.P. Guralnick. 2016. Wrestling with the rosids II: Too big to nail–Challenges in conducting comprehensive analyses in the angiosperms. Botanical Society of America meeting.

Stubbs, R., **R.A. Folk**, D.E. Soltis, N. Cellinese. 2016. Specialized adaptations and restricted niche preferences of cold-adapted saxifrages (*Micranthes*, Saxifragaceae). Botanical Society of America meeting.

Folk, R.A., C.J. Visger, R.P. Guralnick, D.E. Soltis, P.S. Soltis. 2016. Ancestral reconstruction of habitat shifts from ecological niche models of extant species: A pipeline with applications to ancestral hybridization in *Heuchera* (Saxifragaceae). Botanical Society of America meeting.

García, N., A.W. Meerow; S. Chamala, M. Gitzendanner, R.S. Oliveira, **R.A. Folk**, D.E. Soltis, P.S. Soltis, 2016. Revisiting incongruence in the diploid phylogeny of Amaryllidaceae tribe Hippeastreae (Asparagales): Hybridization or incomplete lineage sorting? Botanical Society of America meeting.

Folk, R.A., J.R. Mandel, J.V. Freudenstein. 2015. Phylogenomic approaches in the genus *Heuchera* (Saxifragaceae) elucidate deep reticulation and simultaneous mitochondrial and chloroplast capture. Botanical Society of America meeting.

Folk, R.A., J.R. Mandel, J.V. Freudenstein. 2015. Protocol for targeted enrichment of intron-containing sequence markers for recent radiations: A phylogenomic example from *Heuchera* (Saxifragaceae). Botanical Society of America meeting.

Folk, R.A., J.V. Freudenstein. 2014. "Sky islands" in the eastern US? – Strong phylogeographic structure in the *Heuchera parviflora* group (Saxifragaceae). Botanical Society of America meeting (Cooley Award winner).

Folk, R.A., J.V. Freudenstein. 2013. Phylogenetic relationships in *Heuchera* (Saxifragaceae) based on ribosomal and low-copy nuclear loci. Botanical Society of America meeting.

Folk, R.A., J.V. Freudenstein. 2012. Reticulate evolution and phylogenetic relationships in the genus *Heuchera* (Saxifragaceae). Botanical Society of America meeting.

**co-presented/tag-team*

POSTERS:

R.A. Folk, D.E. Soltis, P.S. Soltis, R.P. Guralnick. 2017. Dynamics of niche evolution in the Saxifragales. Research Using Biological Collections (RUBC) PRFB Symposium.

Tarullo, C., **R.A. Folk**, D.E. Soltis, P.S. Soltis, B. Drew. 2016. Using a supermatrix approach to explore historical biogeography, divergence times and phylogenetics of Saxifragales. Botanical Society of America meeting.

FORMAL TEACHING EXPERIENCE:

2018, UF, co-instructor of record, Taxonomy of Vascular Plants (undergraduate/graduate; BOT5725)

2016, UF, co-instructor of record, Principles of Systematics (graduate; BOT6726/ZOO6927)

2014, OSU, Graduate Teaching Assistant, Honors Evolution, Ecology, and Systematic (early undergraduate; BIO1114H)

2013, OSU, Graduate Teaching Assistant, EEOB (advanced undergraduate; EEOB3410: Ecology)

2012 – 2013, OSU, Graduate Teaching Assistant, CSLE (early undergraduate; BIO1114: Evolution, Ecology, and Systematics)

STUDENT RESEARCH MENTORSHIP:

OSU: 3 undergraduates

UF: 9 undergraduates, 1 high school student

Partial list: Clara Brandon (now on an internship), Jeffry Flenniken, Minji Ku, Joseph Wigley, Joshua Gil (now at U Conn in graduate school), Julian Ginori (NSF REU, recipient of Botanical Society of America Young Botanist Award, UF Biology Undergraduate Assistant Award, now in Colorado on an internship), Jay Talati (UF SSTP high school summer program, now at Emory University in undergraduate), Tatyana Srybnykh (now a lab tech), Ian Cooney (now at University of Utah in graduate school), Amelia Krusell, Kaitlyn Robis (now a high school biology teacher)

Formal mentorship programs: REU mentor to one student (UF; 12 wk, 15 hr/wk); research mentor to a high school student under UF's SSTP program (7 wk, 35 hr/wk).

SERVICE:

Committee memberships: American Society of Plant Taxonomists Awards and Honors Committee

Peer reviews (~15/yr) for: *New Phytologist, Molecular Ecology, Evolution, Genome Biology and Evolution, BMC Evolutionary Biology, BMC Plant Biology, Biology Letters, Taxon, American Journal of Botany, Frontiers in Genetics, Heredity, PLoS One, PeerJ, Applications in Plant Science, Botanical Journal of the Linnaean Society, Systematic Botany, Botany Letters, Botany, Phytotaxa, Journal of Systematics and Evolution, Evolutionary Bioinformatics*

Grant reviews for:

2016, 2017 – NSF ad hoc reviewer (for the following DEB programs: 1. OPUS; 2. Population and Community Ecology)
2017, 2018 – American Society of Plant Taxonomists (graduate student awards)

Miscellaneous:

2018 – presentation judge, Cooley Award (American Society of Plant Taxonomists)
2017, 2018 – session chair, Macroevolution (Botanical Society of America meeting)

PUBLIC OUTREACH, MEDIA COVERAGE:

2018, Media coverage: *Science Daily:* https://www.sciencedaily.com/releases/2019/01/190101094500.htm. *Morning Ag Clips:* https://www.morningagclips.com/using-big-data-for-planet-sized-plant-questions/. *Seed Daily:* http://www.seeddaily.com/reports/Scientists_Time_is_ripe_to_use_big_data_for_planet_sized_plant_questions_999.html. *Phys.org:* https://phys.org/news/2019-01-scientists-ripe-big-planet-sized.html.

2018, Media coverage: *BBC Radio:* https://www.bbc.co.uk/programmes/w3cswmpk. *Quartz:* https://qz.com/1258508/botany-twitter-just-helped-discover-a-rare-plant-clinging-to-a-cliff-in-pennsylvania/amp/. *IFL Science:* http://www.iflscience.com/plants-and-animals/how-twitter-helped-find-and-possibly-save-an-endangered-plant/. *Phys.org:* https://phys.org/news/2018-04-science-twitter-uncover-globally-imperiled.html. *PLoS Blogs:* https://blogs.plos.org/ecology/2018/06/12/science-twitter-and-the-secretly-super-rare-saxifragaceae/.

2018, Cameo appearance on "Plants are Cool, Too!" – rediscovery of *Heuchera alba* (https://youtu.be/SFApGT8cHcE).

2017 –, Scientific advisor (credited), multimedia outreach video "TreeTender" on the relevance of the Tree of Life; in collaboration with the UF Digital Worlds institute and coordinated with the 100-year anniversary celebration of FLMNH (press release and trailer https://www.floridamuseum.ufl.edu/science/tree-of-life-events/; impact ~1,500 visitors over two days)

2016, Organizing volunteer, several Tree of Life pop-up tent events (UF campus, FLMNH public museum, local brew-pub)

2016, Table volunteer for iDigBio at BSA

2014, Oral presentation, Ohio Botany Research Symposium – "Evolutionary relationships and hybridization among species of coral bells (*Heuchera*)"

2011 – 2015, Organizing volunteer, OSU Museum of Biological Diversity Open House (impact ~1000-3000 visitors on single-day event)

2009, Oral presentation, Ohio Natural History Conference – "The jaw morphology of the parasitic rotifer *Proales werneckii*"

SCIENTIFIC WORKSHOP OUTREACH:

2017, 2018, 2019, Co-organizer and lecturer for Botanical Society of America iDigBio/BiotaPhy workshop: "Using Digitized Herbarium Data in Research: Applications for Ecology, Phylogenetics, and Biogeography"

2018, Lecturer for iDigBio ADBC (Advancing Digitization of Biodiversity Collections) Summit: "BiotaPhy web platform"

2016, Co-organizer and lecturer for Botanical Society of America iDigBio workshop: "Using Digitized Herbarium Data in Research: A Crash Course"

INVITED WORKSHOPS:

2017, BCoN Workshop (Next-Generation Natural History Collections; Harvard University, Cambridge)
2017, FuturePhy SoTol ("State of the Tree of Life"; Field Museum, Chicago)

SOFTWARE REPOSITORIES:
https://github.com/ryanafolk

OUTSIDE COURSES:
2015, Phylogenomics Symposium and Software School (Ann Arbor, Michigan)
2011, Cladistics Workshop by the Willi Hennig Society (INECOL, Xalapa, Mexico)

PROFESSIONAL SOCIETIES:
Botanical Society of America; American Society of Plant Taxonomists; Society of Systematic Biologists; Sigma Xi.

Last updated: 1/10/19.