

Department of Biology, Hendrix College
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Education

- Ph.D.** Integrative Biology, University of California, Berkeley **2017**
Major Advisor: Bruce Baldwin
- B.S. *summa cum laude***, Biology & Chemistry, University of Wisconsin–Eau Claire **2012**

Professional Appointments

- Assistant Professor**, Hendrix College **2018 – present**
Biology and Environmental Studies
- Postdoctoral Fellow**, University of Toronto **2017 – 2018**
Major Advisor: Sasa Stefanovic

Publications

Refereed Articles:

- In press* Fitzpatrick CR, **Schneider AC**. Assembly of the parasitic plant microbiome. *Journal of Experimental Botany* [Preprint: <https://www.biorxiv.org/content/10.1101/775155v1>]
- 2019 **Schneider AC**. *Claytonia perfoliata* newly reported in Arkansas, U.S.A. *Journal of the Botanical Research Institute of Texas* 13:495–497.
- 2018 **Schneider AC**, Chun H, Stefanovic S, Baldwin BG. Punctuated plastome reduction and host-parasite horizontal gene transfer in the holoparasitic plant genus *Aphyllon*. *Proceedings of the Royal Society B* 285:20181535.
- 2018 **Schneider AC**, Braukmann T, Banerjee A, Stefanovic S. Convergent plastome evolution and gene loss in holoparasitic Lennoaceae (Boraginales). *Genome Biology and Evolution* 10: 2663–2670.
- 2017 **Schneider AC**, Moore A. Parallel Pleistocene amphitropical disjunctions of a parasitic plant and its host. *American Journal of Botany* 104: 1745–1755.
- 2017 Colwell AEL, Watson KC, **Schneider AC**. A new species of *Aphyllon* (Orobanchaceae) parasitic on *Galium* in the western USA. *Madroño* 64: 99-107.
- 2017 **Schneider AC**. Flowering time evolution is independent of serpentine tolerance in the California Flora. *Ecosphere*. 8:e01767/ecs2.767.
- 2016 **Schneider AC**. The resurrection of the genus *Aphyllon* for New World broomrapes (*Orobanche* s.l., Orobanchaceae). *Phytokeys* 75: 107-118.
- 2016 **Schneider AC**, Colwell AEL, Schneweiss GM, Baldwin BG. Cryptic host-specific diversity among western hemisphere broomrapes (*Orobanche* s.l., Orobanchaceae) *Annals of Botany* 118: 1101-1111.
- 2016 **Schneider AC**, Freyman WA, Guilliams CM, Springer YP, Baldwin BG. Pleistocene radiation of the serpentine-adapted genus *Hesperolinon* and other divergence times in Linaceae (Malpighiales). *American Journal of Botany* 102: 221–232.
- 2014 **Schneider AC**, Lee TD, Kreiser MA, Nelson GT. 2014. Comparative and interactive effects of reduced precipitation frequency and volume on growth and function of two grassland perennials. *International Journal of Plant Sciences*. 175: 702-712.

- 2014 Rapacciuolo G, Maher SP, **Schneider AC**, Ackerly DD, Hammond TT, Jabis MD, Walden GK, Walsh R, Iknayan KJ, Oldfather MF, Bessinger SR. Beyond a warming fingerprint: Individualistic biogeographic responses to heterogeneous climate change in California. *Global Change Biology* 20: 2841-2855.

Book Chapters:

- 2017 Kulhanek KA, Ponisio LC, **Schneider AC**, Walsh RE. Strategic conversation: Mission and relevance of national parks. In Beissinger SR, Ackerly DD, Dormus H, Machelis GE, *Science, Conversation, and National Parks*. University of Chicago Press.

Floristic Treatments:

- 2017 **Schneider AC**, Freyman WA, McDill JR. *Linum*. In *Jepson eFlora*, rev. 5 <http://ucjeps.berkeley.edu/eflora/> (Jepson Flora Project, eds.)
- 2017 **Schneider AC** and Colwell AEL. *Aphyllon*. In *Jepson eFlora*, rev. 5 <http://ucjeps.berkeley.edu/eflora/> (Jepson Flora Project, eds.)
- 2017 **Schneider AC** and Colwell AEL. *Phelipanche*. In *Jepson eFlora*, rev. 5 <http://ucjeps.berkeley.edu/eflora/> (Jepson Flora Project, eds.)

Curatorial Experience

- 2018-present Director, Hendrix College Herbarium
- Approx. 7000 specimen collection. Member of SERNEC.
 - Active loan, digitization, and mounting programs.
 - Used citizen science portal Notes From Nature to facilitate digitization.
 - Managed one student worker in digitization, mounting, loan processing, etc.
- 2013-2014 Graduate Student Researcher, University of California, Berkeley
- Duties split between two projects: (1) Managing the digitization of the Reef Point Herbarium (housed at UC/JEPS), a collection of historic horticultural collections. (2) Vouchering living collections at the UC Botanical Garden at Berkeley for accession at UC/JEPS.

Grants and Fellowships

Research Grants: (TOTAL = \$57,452)

- 2019 Faculty Project Grant, "Developing a Galapagos Internship Program". Hendrix College. (\$3,595)
- 2019 Odyssey Project Grant, Hendrix College, "Professional Field/Museum Experience at the Charles Darwin Research Station at Galapagos, Ecuador" (\$5,865)
- 2016 National Science Foundation, Doctoral Dissertation Improvement Grant (\$20,344)
- 2016 California Native Plant Society, East Bay Chapter. "Molecular systematics and evolution of *Arceuthobium* (Viscaceae)" (\$955)
- 2016 Larry Heckard Memorial Fund, Jepson Herbarium. "Phylogeny and Systematics of *Perityleae* (Asteraceae)" (\$2,000)
- 2016 Summer Research Grant, Department of Integrative Biology, UC Berkeley (\$1,750)
- 2016 California Native Plant Society, Doc Burr Grant (\$945)
- 2014 Leeper Fund, UC Berkeley College of Letters and Science (\$1,700)
- 2013 California Native Plant Society, Santa Clara Valley Chapter (\$1,500)
- 2013-2016 Integrative Biology Department, GRAC (\$1200; \$300 x 4)
- 2013 Larry Heckard Memorial Fund, Jepson Herbarium. "Systematics and Host Relationships of *Orobanche* sect. *Gymnocaulis* (Orobanchaceae)" (\$3,500)
- 2013 Larry Heckard Memorial Fund, Jepson Herbarium "Molecular Systematics and Taxonomy of *Hesperolinon* (Linaceae)" (\$3,300)

Fellowships/Awards:

- 2019 Public Policy Award, Botanical Society of America

2012–2016 Berkeley Graduate Fellowship
 2010–2011 Blugold Fellowship (Univ. Wisconsin–Eau Claire)

Presentations and Conferences

Invited Symposia talks:

- 2017 **Schneider AC**, Colwell AEL. Cryptic host-specific diversity in the recently resurrected parasitic genus *Aphyllon*. Northern California Botanists Symposium
 2016 **Schneider AC**. The use of herbaria to detect cryptic speciation: A case study in *Orobanche* (Orobanchaceae). Botanical Society of America Annual Meeting.
 2016 **Schneider AC**, Williams CM, Freyman WA, Springer YP, Baldwin BG. Rapid radiation of *Hesperolinon*, a serpentine specialist. Northern California Botanists Symposium.

Contributed Conference Presentations (last 4 years):

Mentored undergraduate students denoted by *

- 2020 Benton B*, **Schneider AC**. Morphometrics of *Aphyllon fasciculatum* and an undescribed segregate species. Northern California Botanists Symposium (poster)
 2020 **Schneider AC**. Using phylogenomics to resolving the controversy of dwarf mistletoe diversity in California. Northern California Botanists Symposium (lightening talk)
 2019 Sanders K*, Idec J*, **Schneider AC**. Phylogenomics of dwarf mistletoe (*Arceuthobium*, Viscaceae) Arkansas Academy of Science (poster)
 2019 Wiles T*, Draud S*, Shepard C*, Hubbard S*, Hardin J, **Schneider AC**. Urban–rural clines in white clover cyanogenesis (poster). (a) Posters at the Capitol, Little Rock AR; (b) Arkansas Academy of Science.
 2018 **Schneider AC**. Using horizontal gene transfer events to improve divergence time estimation: A case study in the Orobanchaceae. Botany 2018: Thriving with Diversity, Rochester MN
 2018 **Schneider AC**, Besik A, Ensminger I, Stefanovic S. Variation in photosynthetic function and gene expression in parasitic dodder. Botany 2018: Thriving with Diversity, Rochester, MN
 2017 **Schneider AC**. Host-to-parasite horizontal gene transfer and its utility in time-calibrating the Orobanchaceae phylogeny. 26th California Botanical Society Graduate Student Symposium
 2017 Xu S*, Freyman WA, **Schneider AC**, Baldwin BG. Biogeography and chromosome number evolution of Linaceae. Northern California Botanists Symposium (poster)

Service and Outreach

Professional Service:

- Reviewing Editor, *Applications in Plant Science* (2016–2018)
 Board Member, California Botanical Society (2014–2017)
 Co-chair, 25th and 26th California Botanical Society Graduate Student Symposia (2015, 2017)

Merit Review Panel:

- National Science Foundation, *Graduate Research Fellowship Program* (2020)
 National Science Centre (Poland) (2019)

Journal Reviewer: *Annales Botanica Fennici*, *Applications in Plant Science*, *Bulletin of the Torrey Botanical Society*, *Canadian Journal of Botany*, *Ecological Research*, *Molecular Phylogenetics and Evolution*, *New Phytologist*, *Nordic Journal of Botany*, *Pacific Science*, *Systematic Botany*

Awards and Honors

- Botanical Society of America Public Policy Award (2019)
- Outstanding Graduate Student Instructor, UC Berkeley (2017)
- NSF Graduate Research Fellowship Program Honorable Mention (2013, 2014)