Sylvia P. Kinosian

Utah State Biology Department ◇ 5305 Old Main Hill, Logan, UT 84322
518.708.5827 ◇ sylvia.kinosian@gmail.com

EDUCATION

Ph.D., Ecology, candidate, Advisor: Paul Wolf — August 2016 - present
Utah State University (USU), Logan, UT

Bachelor of Science, Forestry, *summa cum laude* — August 2011 - May 2015
University of Vermont (UVM), Burlington, VT.

RESEARCH INTERESTS & CAREER GOALS

I am interested broadly patterns of evolution and diversification across land plants. My undergraduate research focused on the island biogeography of Hawaiian *Polystichum* ferns, trying to elucidate the number of colonization events from the Asian mainland. This study piqued my interest in researching ferns, the evolutionary midpoint between the better-known bryophytes and seed plants. It also inspired me to focus on under-studied groups, like ferns, and stress their importance to scientists and lay-people alike. My dissertation research is an exploration of the systematics of the fern genus *Ceratopteris*, one species of which (*C. richardii*) has been used as a model organism for several decades. I hope to contribute to the knowledge of this genus by delineating species boundaries, which will aid future studies and selection of potential model organisms. I am also interested in using herbarium resources for research, education, and public outreach. In the future, I would like to continue in academia with research and teaching, to help increase our knowledge of ferns and also excite the next generation of scientists.

PROFESSIONAL EXPERIENCE

Teaching Assistant. USU Biology Department, *Instructor*: Lauren Lucas. — January - May 2018
Course: Biology II Laboratory
Implemented weekly labs and held office hours for three lab sections.

Co-Instructor/TA. USU Biology Department, *Instructor*: Paul Wolf. — August - December 2017
Course: Plant Systematics and Diversity
Designed and taught weekly labs; wrote and proctored exams; gave lectures throughout the semester.

Field Technician. USU Quinney College of Natural Resources. — May - August 2016
Supervisor: Karen Mock
Assisted with a study on aspen regeneration, measuring the growth of aspen seedlings in plots on Cedar Mountain.

Laboratory Technician. UVM Plant Biology Department. — July - December 2015
Supervisor: Michael Sundue
Performed genomic DNA extractions for various projects as well as identification of herbarium specimens.

Intern. Vermont Urban and Community Forestry. Burlington, VT. — January - May 2014
Raised community awareness of invasive insects and planned a UVM Arbor Day celebration.

Intern. The Land Stewardship Program. Burlington, VT. — June - August 2013
Conducted property surveys to inform management decisions using field and GIS-based techniques.

Peer Tutor. UVM Learning Cooperative. — Fall 2012 - Spring 2014
Tutored students in a variety of subjects including Botany, Astronomy, and Anthropology.

PROFESSIONAL AFFILIATIONS AND STUDENT ORGANIZATIONS

Member. American Society of Plant Taxonomists. — April 2018 - present
Member. American Fern Society. — January 2018 - present
President. USU Cycling Team. — August 2017 - present
Organizing Committee. USU Biology Programming Club. — January 2017 - present
Vice President. UVM Forestry Club. — January - May 2015

HONORS & AWARDS

Asian Symposium of Ferns and Lycophytes 2018 Student Travel Grant ($480)	October 2018
American Society of Plant Taxonomists Travel Grant - Botany 2018 ($335)	July 2018
Joseph E. Greaves Endowed Scholarship, USU Biology Department ($4550)	April 2017
Organization for Tropical Studies, Barbara Joe Hoshizaki Memorial Scholarship ($500)	January 2017
National Science Foundation Graduate Research Fellowship Program ($102,000)	April 2016
Award for Excellence in Plant Biology, UVM Plant Biology Department ($250)	May 2015
W. R. Adams Award for Outstanding Academic Achievement in Forestry, UVM Rubenstein School of Environment and Natural Resources (RSENR)	May 2015
Holcomb Natural Resource Prize, UVM RSENR	May 2015
Dale Bergdahl Scholarship Award, UVM RSENR ($1000)	May 2014
Dean's Book Award for Outstanding Juniors, UVM RSENR	May 2013
Dean's List, UVM RSENR	Fall 2011 - Spring 2015

PRESENTATIONS & PUBLICATIONS

Jacob Suissa and **Sylvia P. Kinosian**. 2018. Botany 2018: Exploring Minnesota's Driftless Area, with Drifting Pteridologists. Fiddlehead Forum. 45(4): 73-77.

Sylvia P. Kinosian. Population structure analysis of the pan-tropical fern genus *Ceratopteris* (Pteridaceae). Oral presentation, Asian Symposium of Ferns and Lycophytes. Taipei, Taiwan. October 18 2018.

John Thomson, Paul G. Wolf, **Sylvia P. Kinosian**, Zach Gompert, Joshua Der, Carol Rowe, Martin P. Schilling, Trish McLenachen, Peter Lockhart, and Lara Shepherd. 2018. Relationships among worldwide groups in the fern genus *Pteridium* (bracken) based on nuclear genome markers. American Journal of Botany. *In prep.*

Sylvia P. Kinosian. Zach Gompert, Paul G. Wolf, Joshua Der, Carol Rowe, Martin P. Schilling, Trish McLenachen, Peter Lockhart, Lara Shepherd, and John Thomson. Population admixture in the cosmopolitan fern genus *Pteridium* (Dennstaeditaceae). Oral presentation, Botany. Rochester, MN. July 24 2018.

S. P. Kinosian, W. D. Pearse, and M. E. Barkworth. Spindle: SPecimen INformation Data capture and Label crEation. Contributed poster, Botany. Rochester, MN. July 23 2018.

Mary Barkworth, Paul G. Wolf, **Sylvia P. Kinosian**, Curtis Dyreson, Will Pearse, Ben Brandt, and Neil Cobb. 2017. The Value of Agricultural Voucher Specimens. Proceedings of TDWG 1: e19932.

Sylvia P. Kinosian. Zach Gompert, Paul G. Wolf, Joshua Der, Carol Rowe, Martin P. Schilling, Trish McLenachen, Peter Lockhart, Lara Shepherd, and Jobn Thomson. Population admixture in the cosmopolitan fern genus *Pteridium* (Dennstaeditaceae). Contributed poster, Evolution Conference. Portland, OR. June 24 2017.

William D. Pearse, Maxwell J. Farrell, Konrad Hafen, Mallory Hagadorn, Spencer B. Hudson. **Sylvia P. Kinosian**, Ryan McCleary, Alexandre Rego, and Katie Welgarz. 2017 (*in prep*). NATDB: An R package that downloads species trait data, but is Not A Trait Database. Available on GitHub: goo.gl/i9LkLQ

Sylvia P. Kinosian. Admixture Analysis of *Pteridium* (Dennstaeditaceae) in a global context. Presentation, Tropical Ferns and Lycophytes Course. Organization for Tropical Studies. San Vito, Costa Rica. January 12 2017.

S. P. Kinosian, N. Patel, and D. S. Barrington. Insights into the Hawaiian *Polystichum* (Dryopteridaceae) species. Contributed poster, Next Generation Pteridology. Smithsonian Institution, Washington D.C. June 1 2015.

S. P. Kinosian., N. Patel, and D. S. Barrington. Insights into the Hawaiian *Polystichum* (Dryopteridaceae) species. Contributed poster, University of Vermont Student Research Conference. Burlington, VT. April 23 2015.

FIELD COURSES & TRAININGS

AIARE I. American Institute for Avalanche Research and Education. Logan, UT. January 2018
Learned how to make informed decisions and stay safe in avalanche terrain.

Wilderness First Aid. Desert Mountain Medicine. Logan, UT May 2017
Trained in wilderness safety and emergency medical protocols.

Tropical Ferns and Lycophytes. Organization for Tropical Studies. Costa Rica. January 2017
Course emphasizing field identification and systematics of tropical pteridophytes.

Tropical Plant Systematics. UVM Plant Biology Department. Costa Rica. January 2015
Explored tropical land plant diversity at four field sites in Costa Rica.

Study Abroad. Round River Conservation Studies. Patagonia, Chile. September - December 2014
Semester course on conservation biology and wildness survival resulting in student-lead research projects.

Study Abroad. Round River Conservation Studies. British Columbia, Canada. June - August 2014
Summer course on conservation biology and traditional ecological knowledge in the Tlingit First Nation.

SKILLS

Languages: English (primary), Spanish (conversational)
Programming Languages: R (proficient), BASH (proficient), LaTeX(proficient), Angular 6 (HTML & Typescript) (familiar), Perl (familiar), Python (familiar), C / C++ (familiar)
Administrator of the Wolf-Mock Lab High Performance Computer Workstation (Ubuntu OS)
Miscellaneous: able to drive 4x4 manual vehicles in the field; familiar with using a DSLR digital camera with manual settings; proficient with dichotomous identification keys; chainsaw certified through Game of Logging course; AIARE I and WFA certified, experienced bicycle (road & mountain) mechanic.