

Helen M. Kurkjian

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Research Appointments	2018 (current)	Postdoctoral Researcher, Boston College , Biology Mentor: Dr. Babak Momeni
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Education	2018	PhD, University of California, Berkeley , Integrative Biology Dissertation Title: <i>Metapopulations in miniature: connectivity, subpopulation extinction, and recovery in microbial microcosms</i> Advisor: Dr. Ellen Simms Certificate of Teaching and Learning in Higher Education, UC Berkeley
	2012	Master of Science, Humboldt State University , Biology Thesis Title: <i>A population viability analysis of the <i>Lassics lupine</i></i> Advisor: Dr. Erik S. Jules
	2007	Bachelor of Arts, New York University , Individualized Major, <i>cum laude</i>

Classroom Teaching Experience	2018 – 2012	Graduate Student Instructor, UC Berkeley <ul style="list-style-type: none">• General Biology (Bio 1B) Lab<ul style="list-style-type: none">○ Spring 2018○ Spring 2017○ Fall 2015○ Spring 2014○ Spring 2013○ Fall 2012• Ecology (IB 153) Discussion Sections<ul style="list-style-type: none">○ Fall 2017○ Fall 2013• Teaching Colloquium (IB 303)<ul style="list-style-type: none">○ Fall 2016• Methods in Population and Community Ecology (!B 170LF)<ul style="list-style-type: none">○ Spring 2015• Ecological Genetics (IB 162)<ul style="list-style-type: none">○ Fall 2014
	2011 - 2009	Teaching Associate, Humboldt State University <ul style="list-style-type: none">• Introduction to Ecology Lab<ul style="list-style-type: none">○ Spring 2011○ Fall 2010• Plant Taxonomy Lab<ul style="list-style-type: none">○ Spring 2010○ Fall 2009

Other Teaching Experience	<p>Curriculum Development Graduate Student Instructor, General Biology (Bio 1B) Lab, Organismal Diversity (Plant Biology) Module, UC Berkeley, Spring 2016</p> <p>Discipline-Cluster Leader, Biological Sciences, UC Berkeley Teaching Conference for First-Time GSIs</p> <ul style="list-style-type: none"> • Fall 2016 • Spring 2016 • Fall 2015 <p>Co-facilitator, Fostering Critical Reading Workshop, UC Berkeley GSI Center, March 10, 2016</p> <p>Focus Session Leader, Facilitating Laboratory Sections, UC Berkeley Teaching Conference for First-Time GSIs, Fall 2014</p> <p>Volunteer, Introduction to California Plant Families Workshop, Jepson Herbarium, August 8-10, 2014</p>	
Awards	<p>Outstanding Graduate Student Instructor Award, UC Berkeley, 2014</p> <p>Gregory Mark Jennings Award for Botany, Humboldt State University, 2012</p>	
Research Interests	<p>Role of connectivity in metapopulation dynamics, Allee effects, early warning signals of population collapse, population and community ecology, intra- and inter-specific facilitation and competition, ecology of rare and endangered plants, dynamics of extinction</p>	
Research Experience	<p>2018-</p> <p>2013-2018</p> <p>2012-2014</p> <p>2009-2012</p> <p>2011-2012</p> <p>2011-2012</p> <p>2009</p> <p>2008</p> <p>2007-2008</p> <p>2007</p> <p>2007</p> <p>2006</p>	<p>Fungal-Bacterial Interactions, Boston College</p> <p>Network Heterogeneity in Bacterial Metapopulations, UC Berkeley</p> <p>Seed Predation in California Endemic Lupines, UC Berkeley</p> <p>Master's Thesis Research, Humboldt State University</p> <p>Research Associate, Humboldt State University</p> <p>Database Developer, California Native Plant Society</p> <p>Research Associate, Great Basin Institute</p> <p>Vegetation Technician, Oregon State University</p> <p>Field Technician, Colorado Division of Wildlife</p> <p>Field Technician, Utah State University</p> <p>Wildlife Technician, Kansas State University</p> <p>Field Assistant Intern, Student Conservation Association</p>

Publications	<p>Kurkjian, H.M. <i>in review</i> at Methods in Ecology and Evolution. The metapopulation microcosm plate: A modified 96-well plate for use in microbial metapopulation experiments.</p> <p>Kurkjian, H.M., Carothers, S.K. and Jules, E.S. 2017. Seed predation has the potential to drive a rare plant to extinction. <i>Journal of Applied Ecology</i>, 54: 862–871. doi:10.1111/1365-2664.12808</p> <p>Jules, E.S., J.I. Jackson, R.J. Butz, H.M. Kurkjian. 2017. Population structure and site characteristics of the rare Shasta snow-wreath (<i>Neviusia cliffonii</i>). <i>Madroño</i> 64(4):116-123. doi: 10.3120/0024-9637-64.4.116</p>
Contributed Talks	<p>Kurkjian, H.M. Metapopulation corridor position and subpopulation connectivity affect recovery following subpopulation extinction. Ecological Society of America 2018, New Orleans, LA.</p> <p>Kurkjian, H. M. Metapopulation connectivity and persistence in <i>Pseudomonas syringae</i>. Ecological Society of America 2017, Portland, OR.</p> <p>Kurkjian, H. M., S. K. Carothers, E. S. Jules. Seed predation reduces the fecundity of a rare plant and leads to population decline. Ecological Society of America 2012, Portland, OR.</p> <p>Kurkjian, H., S. Carothers, E. Jules. A population viability analysis of the Lassics lupine. California Native Plant Society 2012, San Diego, CA.</p>
Contributed Posters	<p>Kurkjian, H. M., Network heterogeneity in <i>Pseudomonas syringae</i>: an empirical test of a new method for bacterial metapopulation experiments. American Society of Naturalists 2016. Abstract P6.</p> <p>Kurkjian, H. M., Network heterogeneity and metapopulation persistence in <i>Pseudomonas syringae</i>. ESA 2015. Annual Meeting Abstracts. Bulletin of the Ecological Society of America 96 (4).</p>
Published Data Packages	<p>Kurkjian, H. M., S. K. Carothers, E. S. Jules. 2016. Data from: Seed predation has the potential to drive a rare plant to extinction. Dryad Digital Repository. doi:10.5061/dryad.mq3mq</p>
Publications, Non-refereed	<p>Kurkjian, H.M. 2012. Lassics Lupine Seed Production Study, 2010-2011. Report to the United States Fish and Wildlife Service, Arcata Field Office. 10 pgs.</p> <p>Kurkjian, H.M. 2010. Seed Predation Study on Mount Lassic. Report to the United States Fish and Wildlife Service, Arcata Field Office. 6 pgs.</p>
Relevant Coursework	<p>Population & Community Ecology, Plant-Animal Interactions, Intermediate Statistics, Forest Pathology, Ascomycetes & Basidiomycetes, Field Lab in Ecology, Ecology & Environmental Thought, Evolution, Microbiology & Microbial Genomics, Rethinking the Bio Sciences, Intro to GIS, AIC Model Selection, Modern Statistical Modeling, Hierarchical Statistical Modeling, Plant Physiological Ecology</p>

Other Education	<p>Santa Fe Institute, Massively Open Online Courses Introduction to Complexity, Completed: June 29, 2013 Mathematics for Complex Systems, in progress</p> <p>Joint 2013 MBI-NIMBioS-CAMBAM Summer Graduate Wksp: Connecting Biological Data with Mathematical Models at the National Institute for Mathematical and Biological Synthesis</p> <p>UC Berkeley GSI Teaching and Research Center Workshops Attended Peer Exchange of Statements of Teaching Philosophy, Spring 2016 Grading and Assessment, Fall 2015 Strategies for Teaching and Learning, Spring 2015 Syllabus and Course Design, Fall 2014 How Students Learn, Fall 2013 Developing a Statement of Teaching Philosophy, Spring 2013</p>
Grants & Funding	<p>2016 Doctoral Dissertation Improvement Grant: Network heterogeneity and metapopulation persistence in <i>Pseudomonas syringae</i> National Science Foundation, \$20,396</p> <p>2015 Reshetko Family Scholarship of the College of Letters and Sciences, \$3011</p> <p>2014 Sigma Xi National, Network Heterogeneity in Bacterial Metapopulations, \$672</p> <p>2014 Roy Leeper Scholarship for the Biological Sciences, \$1700</p> <p>2013 Sigma Xi, UC Berkeley, Seed Predation on California Endemic Lupines, \$466</p> <p>2013 Lawrence R. Heckard Endowment Fund of the Jepson Herbarium Seed Predation on <i>Lupinus</i> species of northern California, \$4466</p> <p>2012 USFWS, Arcata Field Office, Lassics Lupine Seed Production Study, \$2287</p> <p>2011/10 Humboldt State University, Dept of Biological Sciences, Master's Student Grant</p> <p>2010 USFWS, Arcata Field Office, Seed Predation Study on Mount Lassic, \$1000</p> <p>2009 Six Rivers NF, USFS, Estimate of <i>Lupinus constancei</i> Seed Production, \$2000</p>
Professional & Community Service	<p>Be A Scientist Mentor to sixth-grade students' independent projects, Fall 2017, Spring 2016</p> <p>Co-chair Queer Grads and Organizer of LGBT Science Reception, UC Berkeley, 2015-2016</p> <p>Dept of Integrative Biology Delegate to the UC Berkeley Graduate Assembly, 2014 – 2016</p> <p>Laboratory Safety Officer, Simms Lab, UC Berkeley, Fall 2013 – Spring 2018</p> <p>Review Services, New Phytologist, Nature Communications</p> <p>Treasurer, Biology Graduate Students Association, HSU, 2010-2011</p> <p>Volunteer Docent, Friends of the Dunes, Arcata, CA</p>
Professional Societies	<p>California Native Plant Society, Ecological Society of America, Northern California Botanists</p>