## Amy Lauren Angert

The University of British Columbia 6270 University Boulevard Vancouver, British Columbia, V6T 1Z4 604-827-3892 • http://angert.botany.ubc.ca • angert@mail.ubc.ca

Professional appointments Associate Professor Botany and Zoology, University of British Columbia, Vancouver, BC	2015 – present
Assistant Professor Botany and Zoology, University of British Columbia, Vancouver, BC	2012 – 2015
<b>Assistant Professor</b> Biology, Colorado State University, Fort Collins, CO	2008 – 2012
<b>Postdoctoral Research Associate</b> Ecology and Evolutionary Biology, University of Arizona, Tucson, AZ	2005 – 2007
Education	
<b>Ph.D.</b> , Plant Biology and Ecology, Evolution, and Behavioral Biology Michigan State University, East Lansing, MI	2005
<b>Ph.D. candidate</b> , Botany University of Washington, Seattle, WA	1998 – 2001
<b>B.A.</b> , Biology, <i>summa cum laude</i> Washington University, St. Louis, MO	1994 – 1998

### Areas of emphasis

Evolutionary and population ecology, especially of plants Biogeography, focusing on range limits, rarity, and climate-driven range shifts Plant functional ecology and its relationship to population and community dynamics

### **Publications**

47. <u>Bontrager MG</u> and **Angert AL**. 2018. Gene flow improves fitness at a range edge under climate change. *Evolution Letters*, in press.

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- 46. **Angert AL**, <u>M Bayly, SN Sheth</u>, and <u>JR Paul</u>. 2018. Testing range-limit hypotheses using range-wide habitat suitability and occupancy for the scarlet monkeyflower (*Erythranthe cardinalis*). *The American Naturalist* 191: E76-E89.
- <u>Li Q</u>, DL Grossenbacher, and **AL Angert**. 2018. The effect of range overlap on ecological niche divergence depends on spatial scale in monkeyflowers. *Evolution* 72: 2100-2113.
- 44. <u>Gamble DE</u>, <u>MG Bontrager</u>, and **AL Angert**. 2018. Floral trait variation and links to climate in the mixed-mating annual *Clarkia pulchella*. *Botany* 96: 425-435.
- 43. <u>Germain RM</u> JL Williams, D Schluter, and **AL Angert**. 2018. Moving character displacement beyond characters using contemporary coexistence theory. *Trends in Ecology and Evolution* 33: 74-84.
- 42. Lewthwaite JMM, **AL Angert**, SW Kembel, SJ Goring, TJ Davies, AO Mooers, FAH Sperling, SM Vamosi, JC Vamosi, and JT Kerr. 2018. Canadian butterfly climate debt is significant and correlated with range size. *Ecography*.
- 41. <u>Sheth SN</u> and **AL Angert**. 2018. Demographic compensation does not rescue populations at a trailing range edge. *Proceedings of the National Academy of Sciences* 115:2413-2418.
- 40. <u>Muir CD</u> and **AL Angert**. 2018. Grow with the flow: A latitudinal cline in physiology is associated with more variable precipitation in *Erythranthe cardinalis*. *Journal of Evolutionary Biology*, in press.
- <u>Csergo AM</u>, R Salguero-Gomez, O Broennimann, S Coutts, A Guisan, AL Angert, E Welk, I Stott, B Enquist, B McGill, J-C Svenning, C Violle, and Y Buckley. 2017. Less favourable climates constrain demographic strategies in plants. *Ecology Letters* 20: 969-980.
- 38. Sargent R, JL Williams, and **AL Angert**. 2017. When are species invasions useful for addressing fundamental questions in plant biology? *American Journal of Botany* 104: 797-799.
- 37. Gilbert KJ, NP Sharp, AL Angert, GL Conte, JA Draghi, F Guillaume, AL Hargreaves, R Matthey-Doret, and MC Whitlock. 2017. Local adaptation interacts with expansion load during range expansion: maladaptation reduces expansion load. American Naturalist 189: 368-380.
- 36. <u>Pironon S</u>, G Papuga, J Villellas, AL Angert, MB Garcia, and J Thompson. 2016. Geographic variation in genetic and demographic performance: New insights from an old biogeographical paradigm. *Biological Reviews* Early View (doi: 10.1111/brv.12313). [0, 1
- 35. <u>Peterson M</u>, KM Kay, and **AL Angert**. 2016. The scale of local adaptation in *Mimulus guttatus*: comparing life history races, ecotypes, and populations. *New Phytologist* 211: 345-356.
  - > Commentary by von Wettberg et al., New Phytologist 211: 8-10.

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- 34. Lee-Yaw J, H Kharouba, <u>MG Bontrager</u>, C Mahoney, A Noreen, AM Csergo, R Schuster, <u>Q Li</u>, and **AL Angert**. 2016. A synthesis of transplant experiments and ecological niche models suggests that range limits are often niche limits. *Ecology Letters* 19: 710-722.
- 33. <u>Bontrager MG</u> and **AL Angert**. 2016. Effects of range-wide variation in climate and isolation on floral traits and reproductive output of *Clarkia pulchella*. *American Journal of Botany* 103: 10-21.
- <u>Sheth SN</u> and AL Angert. 2016. Artificial selection reveals high genetic variation in phenology at the trailing edge of a species range. *American Naturalist* 187: 182-193.

> Winner of 2017 American Naturalist Student Paper Award

- 31. Louthan A, **AL Angert**, and DF Doak. 2015. Where and when do species interactions set range limits? *Trends in Ecology and Evolution* 30: 780-792.
- 30. <u>Borgman EM</u>, AW Schoettle, and AL Angert. 2015. Assessing the potential for maladaptation during active management of limber pine populations: A common garden study detects genetic differentiation in response to soil moisture in the Southern Rocky Mountains. *Canadian Journal of Forest Research* 45: 496-505.
- 29. <u>Borgman EM</u>, AW Schoettle, and **AL Angert**. 2014. Using among-year variation to assess maternal effects in *Pinus aristata* and *Pinus flexilis*. *Botany* 92: 805-814.
- Angert AL, <u>S Kimball</u>, <u>M Peterson</u>, TE Huxman, and DL Venable. 2014.
   Phenotypic constraints and community structure: Testing the concordance of tradeoffs within and among species. *Evolution* 68: 3149-3165.
- 27. Maron JL, K Baer, and **AL Angert**. 2014. Disentangling the drivers of contextdependent plant-animal interactions. *Journal of Ecology* 102:1485-1496.
- 26. <u>Sheth SN</u> and **AL Angert**. 2014. The evolution of environmental tolerance and range size: A comparison of geographically restricted and widespread *Mimulus*. *Evolution* 68: 2917-2931.
- 25. <u>Sheth SN</u>, I Jiménez, and **AL Angert**. 2014. Identifying the paths leading to variation in geographical range size in western North American monkeyflowers. *Journal of Biogeography* 41: 2344-2356.
- 24. <u>Kimball S</u>, <u>JR Gremer</u>, GA Barron-Gafford, **AL Angert**, TE Huxman, and DL Venable. 2014. High water-use efficiency and growth contribute to success of non-native *Erodium cicutarium* in a Sonoran Desert winter annual community. *Conservation Physiology* 2: cou006-cou006.
- <u>Gremer JR</u>, <u>S Kimball</u>, KR Keck, TE Huxman, AL Angert, and DL Venable. 2013. Water-use efficiency and relative growth rate mediate competitive interactions in Sonoran Desert winter annual plants. *American Journal of Botany* 100: 2009-2015.

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- 22. <u>Kimball S</u>, <u>JR Gremer</u>, TE Huxman, DL Venable, and **AL Angert**. 2013. Phenotypic selection favors missing trait combinations in coexisting annual plants. *American Naturalist* 182: 191-207.
- Huxman TE, <u>S Kimball</u>, AL Angert, <u>JR Gremer</u>, GA Barron-Gafford, and DL Venable. 2013. Understanding past, contemporary, and future dynamics of plants, populations and communities using Sonoran Desert Winter Annuals. *American Journal of Botany* 100: 1369-1380.
- 20. Barron-Gafford GA\*, **AL Angert**\*, DL Venable, KL Gerst, AP Tyler, and TE Huxman. 2013. Photosynthetic temperature responses of co-occurring desert winter annuals with contrasting resource-use efficiencies and different temporal patterns of resource utilization may allow for species coexistence. *Journal of Arid Environments* 91: 95-103. \*authors contributed equally
- 19. <u>Gremer JR</u>, <u>S Kimball</u>, TE Huxman, **AL Angert**, and DL Venable. 2012. Variation in photosynthetic response to temperature in a guild of winter annuals. *Ecology* 93: 2693-2704.
- 18. <u>Kimball S, JR Gremer</u>, **AL Angert**, TE Huxman, and DL Venable. 2011. Fitness and physiology in a variable environment. *Oecologia* 169: 319-329.
- <u>Kimball S</u>, AL Angert, TE Huxman, and DL Venable. 2011. Differences in the timing of germination and reproduction relate to growth physiology and population dynamics of Sonoran Desert winter annuals. *American Journal of Botany* 98: 1773-1781.
- 16. Angert AL, <u>SN Sheth</u>, and JR Paul. 2011. Incorporating population variation in thermal performance into predictions of geographic range shifts. *Integrative and Comparative Biology* 51: 733-750.
- 15. <u>Paul JR</u>, <u>SN Sheth</u>, and AL Angert. 2011. Quantifying the impact of gene flow on phenotype-environment mismatch: A demonstration with the scarlet monkeyflower (*Mimulus cardinalis*). *American Naturalist* 178: S62-S79.
  - Reproduced in Eco-evolutionary Dynamics (A. Hendry, ed.)
- Angert AL, LG Crozier, LJ Rissler, SE Gilman, JJ Tewksbury, and AJ Chunco.
   2011. Do species' traits predict recent range shifts? *Ecology Letters* 14: 677–689.
  - Highly cited paper (top 1% in Environment/Ecology)
  - > 1 of 5 most downloaded papers in *Ecology Letters* in 2011
  - Media (http://www.sciencedaily.com/releases/2011/05/110512091816.htm)
- 13. Gerst KL, **AL Angert**, and DL Venable. 2011. The effect of geographic range position on demographic variability in annual plants. *Journal of Ecology* 99: 591-599.

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 Kimball S, AL Angert, TE Huxman, and DL Venable. 2010. Contemporary climate change favors cold-adapted species in the Sonoran Desert. *Global Change Biology* 16: 1555-1565.

Media (http://www.sciencedaily.com/releases/2009/12/091216144145.htm)

- 11. Angert AL, JL Horst, TE Huxman, and DL Venable. 2010. Phenotypic plasticity and precipitation response in Sonoran Desert winter annuals. *American Journal of Botany* 97: 405-411.
- Angert AL. 2009. Colloquium Papers: The niche, limits to species' distributions, and spatiotemporal variation in demography across the elevation ranges of two monkeyflowers. *Proceedings of the National Academy of Sciences* 106: 19693-19698.
- 9. Sexton JP, PJ McIntyre, **AL Angert**, and KJ Rice. 2009. Evolution and ecology of species range limits. *Annual Review of Ecology, Evolution and Systematics* 40: 415-436.
  - Highly cited paper (top 1% in Environment/Ecology)
  - > 5<sup>th</sup> most downloaded paper in AREES since 1996, 4<sup>th</sup> in last 12 months
- 8. Angert AL, TE Huxman, P Chesson, and DL Venable. 2009. Functional trade-offs determine species coexistence via the storage effect. *Proceedings of the National Academy of Sciences* 106:11641-11645.
- 7. Angert AL, HD Bradshaw, and DW Schemske. 2008. Using experimental evolution to investigate geographic range limits in monkeyflowers. *Evolution* 62: 2660-2675.
   Faculty of 1000 selection
- Huxman TE, GA Barron-Gafford, KL Gerst, AL Angert, AP Tyler, and DL Venable.
   2008. Photosynthetic resource-use efficiency and demographic variability in desert annuals. *Ecology* 89:1554-1563.
- 5. **Angert AL**, TE Huxman, GA Barron-Gafford, KL Gerst, and DL Venable. 2007. Linking growth strategies to long-term population dynamics in a guild of desert annuals. *Journal of Ecology* 95: 321-331.
- 4. Angert AL. 2006. Demography of central and marginal populations of monkeyflowers (*Mimulus cardinalis* and *M. lewisii*). *Ecology* 87: 2014-2025.
- 3. Angert AL. 2006. Growth and leaf physiology of monkeyflowers with different altitude ranges. *Oecologia* 148: 183-194.
- 2. Angert AL and DW Schemske. 2005. The evolution of species' distributions: Reciprocal transplants across the elevation ranges of *Mimulus cardinalis* and *M. lewisii. Evolution* 59: 1671-1684.
  - > Reproduced in ecology textbook, *Economy of Nature* (R. Ricklefs, ed).
- 1. **Angert AL**, D Hutchison, D Glossip, and J Losos. 2002. Microhabitat use and thermal biology of the collared lizard (*Crotaphytus collaris collaris*) and the fence

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lizard (Sceloporus undulatus hyacinthinus) in Missouri glades. Journal of Herpetology 36: 23-29.

Grants	
NSF DEB Ecology, \$620,00020Plant community assembly and disassembly with climate change (coPl)20	016 – 2020
Canadian Foundation for Innovation Operating Funds, \$37,292 2015 – 2018	
Centre for Experimental Biogeography (PI)	
Canadian Foundation for Innovation, \$311,000 - 2016	2014
Centre for Experimental Biogeography (PI)	
Canadian Foundation for Innovation, <b>\$2,120,000</b> - 2018	2013
Construction of Envirotron (coPI)	
NSERC Discovery Grant, \$182,00020Evolutionary ecology of geographic ranges in western North American Mimu	012 – 2019 Jus (PI)
NSF DEB Evolutionary Ecology, \$14,984 - 2014	2012
Dissertation Research: Role of evolutionary potential in limiting distributions	(PI)
USDA Special Technology Development Program, \$54,921 - 2014	2012
Optimizing deployment of planting stock for multigenerational management pine blister rust and mountain pine beetle in limber pine stands (coPI)	of white
NSF DEB Population and Community Ecology, \$97,499 - 2012	2011
Workshop: Climate change and species interactions: ways forward (coPI)	
Shortgrass Steppe LTER VI, \$36,150 - 2013	2011
Ecological genetics of blue grama (Bouteloua gracilis) (PI)	
NSF REU Supplement, \$7,500 2011	
Ecological and evolutionary dynamics of geographic range limits (PI)	

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## NSF DEB Evolutionary Processes / Pop. & Comm. Ecology, \$621,000 2010

- 2013

Ecological and evolutionary dynamics of geographic range limits (PI)

#### NSF DEB Ecology, \$575,000

Functional biology and community dynamics of desert annual plants (coPI)

#### NSF DEB Ecology, \$404,000

Phenotypic constraints and community structure (PI)

#### NSF REU Supplement, \$9,125

2009

Phenotypic constraints and community structure (PI)

#### Shortgrass Steppe LTER V, \$23,900

2009

The effects of precipitation pulses on growing season length and species' life histories in a semi-arid grassland (coPI)

#### NSF DEB Evolutionary Processes, \$9,000

- 2004

Dissertation Research: The ecology and evolution of geographic range limits (coPI)

## Fellowships and Awards

Tier 2 Canada Research Chair in Conservation Ecology	2012 – 2022
National Evolutionary Synthesis Center Postdoctoral Fellowship (offer dec	lined) 2005
National Science Foundation Graduate Research Fellowship	1998 – 2001
Howard Hughes Medical Institute Undergraduate Research Fellowships	1996, 1997
Arthur Holly Compton Fellowship for Science & Math	1994 – 1998

### Invited presentations

#### Symposia

Canadian Society for Ecology and Evolution, Victoria, BC	2017
Symposium: Life on the Edge: Mechanisms of Adaptation to Climate Change "Demographic compensation, climatic tipping points, and evolutionary rescue"	
Society for the Study of Evolution, Austin, TX Symposium: How and Why? Towards an Evolutionary Physiology Synthesis "Lability and constraint during niche evolution"	2016
Canadian Botanical Association, Victoria, BC	2016

2007 – 2010

2009 - 2012

2001

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Symposium: Plant Species at the Edge "Why do plant species distributions lag recent climate change?"	
Linnean Centre of Plant Biology Network Meeting, <i>Uppsala, Sweden</i> "Dispersal or fitness limitation? Determining the proximate causes of species' geographic range limits" ( <b>Keynote</b> )	2015
Gordon Research Conference: Unifying Ecology Across Scales, Biddeford, ME "Relating intra- and interspecific variation in niche properties to differences in geographic range size"	2014
Eco-Evo Retreat Brackendale, BC "Functional biology and community assembly of desert annual plants" ( <b>Keynote</b>	2014 )
Forest Genetics, Whistler, BC "Forecasting future distributions: current limitations and next steps" <b>(Plenary)</b>	2013
Chicago Plant Science, Chicago, IL Symposium: Species: From Concepts to Conservation "The ecological and evolutionary dynamics of species' geographic ranges."	2011
Society for Integrative and Comparative Biology, Salt Lake City, UT Symposium: A synthetic approach to the response of organisms to climate chang "Incorporating population variation in thermal niche properties into geographic response shift predictions."	
Ecological Society of America, Pittsburgh, PA Symposium: Does Biology Matter in Predicting Responses to Climate Change? "Can species' traits predict recent range shifts?"	2010
American Society of Naturalists, Portland, OR Vice-Presidential Symposium: Ecological and Evolutionary Limits to Geographic R "Gene flow and phenotypic divergence across a geographic range."	2010 Ranges
Ecological Society of America, Las Cruces, NM Organized Oral Session: Projection Matrix Models: Investigating General Patterns Plant Demography	
"Population dynamics across species ranges: Comparative demography of centra marginal populations of <i>Mimulus cardinalis</i> and <i>M. lewisii.</i> "	i and
National Academy of Sciences Arthur M. Sackler Colloquium, Irvine, CA Biogeography, Niche Evolution and Climate Change "Species facing range limits."	2008

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Society for Integrative and Comparative Biology, San Diego, CA2005Symposium: Adaptations for Life at High Elevation"Trade-offs and the evolution of altitude range limits in monkeyflowers."

#### Departmental seminars

UC Santa Barbara	2018
University of Arizona	2017
University of Georgia	2017
Pennsylvania State University	2016
University of California Berkeley, Julius Thomas Hansen Lectureship	2016
Uppsala University, Evolutionary Biology Centre	2015
Duke University, Program in Ecology	2014
UC Davis, Ecology and Evolution Group	2014
University of Victoria, Centre for Forest Biology and Department of Biology	2014
Utah State University, Ecology Center	2013
Florida State University, Biology Colloquium	2013
University of Kansas, Department of Ecology and Evolutionary Biology	2012
SUNY Stony Brook, George William Lecture	
2012	
University of Minnesota, Plant Sciences Colloquium	2012
University of Montana, Ecology Seminar Series, Division of Biological Sciences	2011
Rancho Santa Ana Botanic Garden	2011
University of British Columbia, Biodiversity Research Centre	2010
University of Wyoming, Department of Botany	2010
Washington University, Ecology, Evolution and Population Biology Program	2010
University of Toronto, Department of Ecology and Evolutionary Biology	2010
University of Colorado, Department of Ecology and Evolutionary Biology	2009
University of Calgary, Department of Biology	2009
University of Washington, Jill Fredericksen-Adams Memorial Lecture	
2008	
University of Northern Colorado, Department of Biology	2008
Colorado State University, Bioagricultural Sciences and Pest Management	2008
University of California San Diego, Department of Ecology & Evolution	2007
Colorado State University, Department of Biology	2007
Harvard University, Department of Organismal & Evolutionary Biology	2007
University of Missouri St. Louis, Department of Biology	2007
University of Iowa, Department of Biology	2007

## Curriculum Vitae Amy Lauren Angert

# Submitted presentations

<ul> <li>Society for the Study of Evolution, Portland, OR</li> <li>"Is climate change disrupting local adaptation? A meta-analysis of field translocations." by AL Angert with MG Bontrager, C Mahoney, C Leven, R Germain, D Gamble, A Hargreaves, L Kleynhans</li> <li>"Effects of gene flow on the performance at the northern range margin of C. pulchella." by MG Bontrager with AL Angert</li> <li>"Niche divergence in Mimulus driven by range overlap and time." by Q Li with AL Angert</li> </ul>	
<ul> <li>Ecological Society of America, Baltimore, MD 20<sup>2</sup></li> <li>"Artificial selection reveals high genetic variation in phenology at the trailing edge of a species range," by <u>SN Sheth</u> with AL Angert</li> </ul>	15
<ul> <li>George Wright Society Conference, Oakland, CA 20<sup>7</sup></li> <li>"Assessing the potential for maladaptation during active management of limber pine populations" by <u>E. Borgman</u> with A. Schoettle and <b>AL Angert</b> (poster)</li> </ul>	
<ul> <li>Society for the Study of Evolution, Raleigh, NC</li> <li>"Life history selection drives the early evolution of reproductive barriers in <i>Mimulus guttatus</i>," by <u>M. Peterson</u> with AL Angert and K. Kay</li> <li>Honorable Mention, Hamilton Award</li> </ul>	14
<ul> <li>Ecological Society of America, Minneapolis, MN 207</li> <li>"Understanding maternal effects in long-lived plant species to improve genotype selection for conservation," by <u>E. Borgman</u> with A. Schoettle and AL Angert</li> </ul>	
<ul> <li>Society for the Study of Evolution, Snowbird, UT 20<sup>4</sup></li> <li>"Does a jack-of-all-temperatures have a large geographic range?" by <u>S. Sheth</u> with AL Angert</li> <li>"Population genomics and geographic range limits in the scarlet monkeyflowe (<i>Mimulus cardinalis</i>)," by <u>J. Paul</u> with AL Angert, T. Parchmann, and A. Buerkl</li> </ul>	er
<ul> <li>Ecological Society of America, Portland, OR</li> <li>"Genetic constraints and community structure: Testing the concordance of trade-offs within and among species," by AL Angert with <u>S Kimball</u>, <u>ML</u></li> <li><u>Peterson</u>, TE Huxman, and DL Venable</li> <li>"Using historical demography to investigate geographic range limits in the scarlet monkeyflower (<i>Mimulus cardinalis</i>)" by <u>J Paul</u> with AL Angert</li> </ul>	12

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- "Ecological niche attributes and geographic range size in western North American *Mimulus*" by <u>SN Sheth</u> with **AL Angert**
- "Range-wide patterns of genetic population structure and potential geographical range shifts of *Pinus contorta* (ssp. *latifolia, murrayana, contorta,* and *bolanderi*)" by S Bisbing with D Cooper and **AL Angert**
- "Water availability, functional trait diversity, and competitive interactions in Sonoran Desert winter annuals" by <u>JR Gremer</u> with <u>S Kimball</u>, **AL Angert**, TE Huxman, and DL Venable

American Geophysical Union, San Francisco, CA 2010

 "Time scales of biogeochemical and organismal responses to individual precipitation events." by J von Fischer with AL Angert, D Augustine, C Brown, F Dijkstra, J Derner, R Hufbauer, N Fierer, D Milchunas, J Moore, H Steltzer, and M Wallenstein

Society for the Study of Evolution, Portland, OR

- "Using historical demography to investigate geographic range limits in the scarlet monkeyflower (*Mimulus cardinalis*)" by JR Paul with **AL Angert**
- "Ecological niche attributes and geographic range size in western North American *Mimulus*" (poster) by <u>SN Sheth</u> with **AL Angert**

All Scientists Meeting, Long Term Ecological Research Network, Estes Park, CO 2009

 "The pulse experiment: relative timing and magnitude of response by plants, microbes and soil fauna to an experimental precipitation event on the Shortgrass Steppe LTER" (poster) by J. von Fischer with AL Angert, D Augustine, C Brown, F Dijkstra, J Derner, N Hanan, R Hufbauer, N Fierer, D Milchunas, J Moore, H Steltzer, and M Wallenstein

Ecological Society of America, Albuquerque, NM 2009

 "Climate induced changes in plant community composition in the Sonoran Desert," by <u>S Kimball</u> with AL Angert, TE Huxman, and DL Venable

American Geophysical Union, San Francisco, CA

 "Climate induced changes in plant community composition in the Sonoran Desert" (poster) by <u>S Kimball</u> with AL Angert, TE Huxman, and DL Venable

Ecological Society of America, Milwaukee, WI

- "Functional trade-offs promote species coexistence via the storage effect" by **AL Angert** with TE Huxman, P Chesson, and DL Venable
- "Phenological differences promote coexistence in Sonoran Desert Winter Annuals" by <u>S Kimball</u> with **AL Angert**, TE Huxman, and DL Venable

2008

2009

2010

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<ul> <li>Ecological Society of America, Memphis, TN</li> <li>"Functional trait variation and differential responsiveness to precipitation guild of Sonoran Desert winter annuals" by AL Angert with G Barron-Ga K Gerst, TE Huxman, and DL Venable</li> </ul>	
Society for the Study of Evolution, Fort Collins, CO <ul> <li>"The evolution of geographic range limits in monkeyflowers" by AL Ang</li> </ul>	2004 ert
<ul> <li>Ecological Society of America, Savannah, GA</li> <li>"Adaptation at geographic range limits of monkeyflowers (<i>Mimulus cardinand M. lewisii</i>)" by AL Angert</li> </ul>	2003 nalis
<ul> <li>Midwest Ecology and Evolution Conference, Akron, OH</li> <li>"Adaptation at geographic range limits of monkeyflowers (<i>Mimulus cardinand M. lewisii</i>)" by AL Angert</li> </ul>	2003 nalis
<ul> <li>Plant Speciation Symposium, Plant Canada Meeting, Antigonish, NS</li> <li>"Mechanisms of ecogeographic isolation between <i>Mimulus cardinalis</i> and <i>lewisii</i>" (poster) by AL Angert with DW Schemske</li> </ul>	2003 1 <i>M</i> .
Workshops and working groups	
Participant, CIEE working group, Vancouver, BC Effects of Evolution on the Predictability of Range Expansion	2018
Participant, AnDINa 4 working group, Bariloche, Argentina Species Range Shifts and Local Adaptation	2018
Participant, UBC Biodiversity Catalysis working group, Vancouver, BC	2017
Wildcards in Biotic Responses to Climate Change	
Wildcards in Biotic Responses to Climate Change Participant, CIEE working group, Regina, SK Canada's Phylogenetic Diversity in a Changing World	2014
Participant, CIEE working group, Regina, SK	2014 2014
Participant, CIEE working group, Regina, SK Canada's Phylogenetic Diversity in a Changing World Organizer and participant, workshop, Vancouver, BC	

Participant, NCEAS/NESCent working group, Santa Barbara and Durham 2007 – 2009 Mechanistic Distribution Models: Energetics, Fitness, and Population Dynamics

Curriculum Vitae Amy Lauren Angert	
Participant, iPlant Collaborative, Cold Spring Harbor, NY Introductory meeting	2008
Participant, graduate workshop, East Lansing, MI Scientific Teaching in Plant Biology by D. Ebert-May	2004 – 2005
Participant, graduate workshop, Kellogg Biological Station, MI Matrix Population Modeling by C. Horvitz	2002
Participant, OTS graduate course, Costa Rica Tropical Biology: An Ecological Perspective"	1998
Teaching	
<b>University of British Columbia</b> Advanced Ecology, BIOL 306 (co-instructor) Plant Ecology, BIOL 406	2014 – 2017 2012 – present

2015 – present

Graduate Presentations, BOTA 501	2016 – present
Colorado State University	
Plant Ecology, BZ 450	2010 – 2012
Molecular Ecology, BZ 425/525 (co-instructor)	2010 – 2012
Biology of Organisms, LIFE 103 (co-instructor)	2009 – 2011

## University service

### University of British Columbia

Graduate Population Ecology, BIOL 548m

Co-chair, Ecologist Search Committee, Depts. of Botany and Zoology	2016 – 2017
Member, Head Search Committee, Department of Botany	2016
Member, Evolutionary Biologist Search Committee, Dept. of Zoology	2015 – 2016
Member, Affiliated Fellowship Adjudication Committee, Office of the D	Dean 2016, 2017
Member, TA/Scholarships/Awards Committee, Department of Botany	2014 – present
University Examiner (~2-3 theses/year)	2012 – present
Member, Website Advisory Committee, Department of Botany	2014
Member, BRITE Awards Committee, Biodiversity Research Centre	2014
Member, Postdoc Selection Committee, Biodiversity Research Centre	2014
Colorado State University	
Member, Executive Committee, Plant Molecular Biology Program	2010 – 2012

Member, Ecologist Search Committee, Department of Biology 2010 – 2011

## Amy Lauren Angert

Member, Graduate Committee, Department of Biology	2008 – 2010
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Professional	service
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Council Member, Society for the Study of Evolution Associate Editor, <i>American Naturalist</i> Associate Editor, <i>Evolution</i>	2017 – 2019 2018 – present 2015 – 2017
Associate Editor, Ecology Letters	2014 – present
Member, selection committee for Editor-in-Chief of The American Nati	
External Examiner, University of Queensland	2015, 2016
Graduate Student Mentor, Gordon Research Conference	2014
Associate Editor, <i>Botany</i>	2013 – 2014
Chair, Plant Population Ecology Section, Ecological Society of America	
Vice-Chair, Plant Population Ecology Section, Ecological Society of America 2010	
Panelist, NSF Dimensions of Biodiversity Panel	2010
Panelist, NSF Population and Evolutionary Processes DDIG Panel	2009
Panelist, Committee for IT Development, American Society of Plant Biologists 2008	
Judge, Hamilton Award competition, Society for the Study of Evolution	n 2008, 2010
Ad hoc proposal reviewer	2007 – present
National Science Foundation, Austrian National Science	
Foundation, USGS Climate Change and Wildlife Research	
Center, Natural Sciences and Engineering Research Council,	
Netherlands Council for the Earth and Life sciences	
Ad hoc manuscript reviewer	2005 – present
Acta Oecologia, American Journal of Botany, American Naturalis	<del>,</del>
Annals of Botany, Annals of the New York Academy of Sciences,	
Biology Letters, Botany, Ecography, Ecology, Ecology Letters,	
Evolution, Evolutionary Applications, Functional Ecology, Global	
Change Biology, Global Ecology and Biogeography, Global	
Environmental Change, International Journal of Plant Sciences,	
Journal of Biogeography, Journal of Ecology, Journal of the Torre	ey
Botanical Society, Molecular Ecology, Nature, New Phytologist,	
Oecologia, Oikos, Perspectives in Plant Ecology, Evolution and	
Systematics, Plant Biology, PLoS Biology, Proceedings of the	
National Academy of Science, Proceedings of the Royal Society	
of London Series B, Science	

# Professional societies

## Curriculum Vitae Amy Lauren Angert

Society for the Study of Evolution

Ecological Society of America

Botanical Society of America

Community outreach	
Co-organizer, community round tables, Newhalem, WA Climate change effects on plant communities of the Pacific Northwest	2016 – present
Café Scientifique, Vancouver, BC 2014 Public lecture: Moving up or moving out? Predicting species' distributions in a warming world	
Vancouver Nature Society, Vancouver, BC 2013 Public lecture: Moving up or moving out? Predicting species' distributions in a warming world	
Parks as Classroom a, Yosemite, CA Development of teaching unit on climate change	2010 – 2012
Putnam Elementary Science Carnival, Fort Collins, CO Co-organizer, evolution activities and displays	2009
Pusch Ridge Academy, Tucson, AZ Science fair judge	2006