CURRICULUM VITAE
Nancy C. Emery, Ph.D.

CONTACT INFORMATION

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EDUCATION & TRAINING

01/2007 – 8/2008	Postdoctoral Researcher, Department of Integrative Biology and the University and Jepson Herbaria, University of California, Berkeley, CA Research advisors: D.D. Ackerly & B.G. Baldwin
9/1999 – 12/2006	Ph.D., Population Biology, University of California, Davis, CA Dissertation advisors: M.L. Stanton & K.J. Rice
8/1994 – 6/1998	Sc.B., Biology, Brown University, Providence, RI Research mentor/honor's thesis advisor: M.D. Bertness

ACADEMIC APPOINTMENTS

8/2018 – present	Associate Professor, Department of Ecology and Evolutionary Biology, University of Colorado Boulder, Boulder, CO
8/2015 – present	Assistant Professor, Department of Ecology and Evolutionary Biology, University of Colorado Boulder, Boulder, CO
8/2015 – 9/2016	Adjunct Assistant Professor, Department of Biological Sciences, Purdue University, West Lafayette, IN
8/2009 – 7/2015	Assistant Professor, Departments of Biological Sciences and Botany & Plant Pathology, Purdue University, West Lafayette, IN
8/2008 – 8/2009	Visiting Assistant Professor, Departments of Biological Sciences and Botany & Plant Pathology, Purdue University, West Lafayette, IN

NON-ACADEMIC POSITIONS

6/2006 – 12/2006	Restoration Ecologist, H.T. Harvey & Assoc. Environmental Consulting, Davis, CA

LEAVE

2/2010 – 5/2010	Maternity leave from faculty position, Purdue University
10/2005 – 12/2005	Maternity leave from Ph.D. program, University of California Davis

HONORS, AWARDS & FELLOWSHIPS

2014	College of Science Faculty Award for Outstanding Contributions to Undergraduate Teaching by an Assistant Professor, Purdue University
2014	Bravo Award for employee excellence, College of Agriculture, Purdue University
2012	Teaching for Tomorrow Fellowship Award, Purdue University

2012	Outstanding Graduate Educator Award, Department of Botany & Plant Pathology, Purdue University
2011	Outstanding Graduate Educator Award, Department of Botany & Plant Pathology, Purdue University
2001, 2002	Achievement Rewards for College Scientists (ARCS) Foundation Scholar, University of California at Davis
1999 – 2003	National Science Foundation Graduate Research Fellowship
1998	Honors, *Magna cum laude*, Brown University
1998	James F. Kidwell Prize in Population Biology and Genetics, Brown University

RESEARCH

Publications

**graduate student co-author; †undergraduate co-author*

Published Since Arriving at CU

33. *Tittes, S., *J.F. Walker, *L. Torres-Martínez and N.C. Emery. *Accepted pending minor revisions.* Grow where you thrive, or where only you can survive? An analysis of performance curve evolution in a clade with diverse habitat affinities. *American Naturalist.*
32. *Chambers, S.M. and N.C. Emery. 2018. Conserved thermal performance curves across the geographic range of a gametophytic fern. *AoB PLANTS*. https://doi.org/10.1093/aobpla/ply050
31. *LaRue, E., J.D. Holland and N.C. Emery. 2018. Environmental predictors of dispersal traits in a lakeshore plant species. *Ecology* **99** (8): 1847-1865.
30. Bruno, J.F., T.A. Rand, N.C. Emery and M.D. Bertness. 2017. Facilitative and competitive interaction components among New England salt marsh plants. *PeerJ* **5**:e4049.
29. *Carvajal-Endara, S.S., A.P. Hendry, N.C. Emery, and T.J. Davies. 2017. Habitat filtering not dispersal limitation shapes oceanic island floras: species assembly of the Galapagos Flora. *Ecology Letters* **20** (4): 495-504.
28. *Larue, E., *S. Chambers, and N.C. Emery. 2017. Eco-evolutionary dynamics in restored communities and ecosystems. *Restoration Ecology* **25** (1): 19-26. *One of* Restoration Ecology*'s top 20 most downloaded papers of 2017.*
27. Espeland, E.K., N.C. Emery, K.L. Mercer, S.A. Woolbright, K.M. Kettenring, P.L. Gepts, and J.R. Etterson. 2017. Evolution of plant materials for restoration: Insights from the applied and basic literature. *Journal of Applied Ecology* **54** (1): 102-115.
26. *Torres-Martínez, L.,†P. Weldy, M. Levy, and N. C. Emery. 2017. Spatiotemporal heterogeneity in precipitation patterns explain population-level germination strategies in an edaphic specialist. *Annals of Botany* **119** (2): 253-265.
25. Kaplan J.T., C.P. Neu, H. Drissi, N.C. Emery, D.M. Pierce. 2017. Cyclic loading of human articular cartilage: the transition from compaction to fatigue. *Journal of the Mechanical Behavior of Biomedical Materials* **65**: 734-742. (Provided statistical support)
24. *Van Den Elzen, C.L., *E. LaRue and N.C. Emery. 2016. Oh, the places you'll go! Understanding the evolutionary interplay between dispersal and habitat adaptation as a driver of plant distributions. *American Journal of Botany* **103** (12): 2013-2014. (Invited submission)
23. *Torres-Martínez, L. and N. C. Emery. 2016. Genome-wide SNP discovery in the annual herb, *Lasthenia fremontii* (Asteraceae): genetic resources for the conservation and restoration of a California vernal pool endemic. *Conservation Genetics Resources* **8** (2): 145-158.
22. *Chambers, S.M. and N.C. Emery. 2016. Local adaptation and countergradient variation across the geographic range of the fern *Vittaria appalachiana* (Pteridaceae). *American Journal of Botany* **103** (1): 86-98.

21. *Walker, J.F., R.K. Jansen, M.J. Zanis and N.C. Emery. 2015. Sources of inversion variation in the small single copy (SSC) region of chloroplast genomes. *American Journal of Botany* **102** (11): 1751-1752.
20. *Forrestel, E.J., D.D. Ackerly and N.C. Emery. 2015. The joint evolution of traits and habitat: ontogenetic shifts in leaf morphology and wetland specialization in *Lasthenia*. *New Phytologist* **208** (3): 949-959.
19. *Stevens, S.M. and N.C. Emery. 2015. Dispersal limitation and population differentiation in performance beyond a northern range limit in an asexually reproducing fern. *Diversity and Distributions* **21** (10): 1242-1253.
18. Emery, N.C. and D.D. Ackerly. 2014. Ecological release exposes genetically-based niche variation. *Ecology Letters* **17** (9): 1149-1157. *Selected Faculty of 1000 Prime.*
17. Kraft, N.J.B., G.M. Crutsinger, *E.J. Forrestel and N.C. Emery. 2014. Functional trait differences and the outcome of community assembly: an experimental test with vernal pool annual plants. *Oikos* **123** (11): 1391-1399.
16. *Walker, J.F., M.J. Zanis and N.C. Emery. 2014. Comparative analysis of complete chloroplast genome sequence and inversion variation in *Lasthenia burkei* (Madieae, Asteraceae). *American Journal of Botany* **101** (4): 722-729.
15. *Halbur, M.M., C.M. Sloop, M.J. Zanis and N.C. Emery. 2014. The population biology of mitigation: impacts of habitat creation on an endangered plant species. *Conservation Genetics* **15** (3): 679-695.
14. *Griebel A., A.B. Trippel, N.C. Emery, C.P. Neu. 2014. Noninvasive assessment of osteoarthritis severity in human explants by multicontrast MRI. *Magnetic Resonance in Medicine* **71** (2): 807-814. (Provided statistical support)
13. *Adams, M.T., T. Benjamin, N.C. Emery, S. Brouder, and K.D. Gibson. 2013. The effect of biochar on native and invasive prairie plant species. *Invasive Plant Science and Management* **6** (2): 197-207.
12. Gibson, K.D., *Quackenbush, P.M., N.C. Emery, M.A. Jenkins, and E.I. Kladivko. 2013. Invasive earthworms and plants in Indiana old and second growth forests. *Invasive Plant Science and Management* **6** (1): 161-174.
11. Emery, N.C., *E.J. Forrestel, *G. Jui, *M. Park, B.G. Baldwin and D.D. Ackerly. 2012. Niche evolution across spatial scales: climate and habitat specialization in California *Lasthenia* (Asteraceae). *Ecology* **93** (8): S151–S166. (Invited submission for Special Issue)
10. *Quackenbush, P.M., *R.A. Butler, N.C. Emery, M.A. Jenkins, E.I. Kladivko, and K.D. Gibson. 2012. *Lumbricus terrestris* prefers to consume Garlic Mustard (*Alliaria petiolata*) seeds. *Invasive Plant Science and Management* **5** (2): 148-152.
9. Emery, N.C., K.J. Rice and M.L. Stanton. 2011. Fitness variation and local distribution limits in an annual plant population. *Evolution* **65** (4): 1011-1020.
8. *Tucker, R.C., M. Zanis, N.C. Emery, and K.D. Gibson. 2011. Effects of water depth and seed provenance on the growth of wild rice (*Zizania aquatica*). *Aquatic Botany* **94** (3): 113-118.
7. Sargent, R., S. Kembel, N.C. Emery, E.J. Forrestel and D.D. Ackerly. 2011. Effect of local community phylogenetic structure on pollen limitation in an obligately insect-pollinated plant. *American Journal of Botany* **98** (2): 283-289.
6. Strauss, S.Y., M.L. Stanton, N.C. Emery, †*et al.* (15 undergraduate co-authors). 2009. Cryptic seedling herbivory by nocturnal introduced generalists impacts survival, performance of native and exotic plants. *Ecology* **90** (2): 419-429.
5. Emery, N.C. 2009. Ecological limits and fitness consequences of cross-gradient pollen movement in *Lasthenia fremontii*. *American Naturalist* **174** (2): 221-235.
4. Emery, N.C., M.L. Stanton and K.J. Rice. 2009. Factors driving distribution limits in an annual plant community. *New Phytologist* **181** (3): 734-747.
3. Baack, E.J., N.C. Emery and M.L. Stanton. 2006. Ecological factors limiting the distribution of *Gilia tricolor* in a California grassland mosaic. *Ecology* **87** (11): 2736-2745.
2. Rice, K.J. and N.C. Emery. 2003. Managing microevolution: Restoration in the face of global change. *Frontiers in Ecology and the Environment* **1** (9): 469-478.

1. Emery, N.C., P.J. Ewanchuk and M.D. Bertness. 2001. Competition and salt-marsh plant zonation: Stress tolerators may be dominant competitors. *Ecology* **82** (9): 2471-2485.

Submitted / In Review / In Revision

5. *Carscadden, K.A., M.E. Afkhami, *C.A. Arnillas, M.W. Cadotte, N.C. Emery, D. Gravel, *S.W. Livingstone and J.J. Wiens. Broadening the horizons of niche breadth research. *In revision* for submission to *Biological Reviews*.
4. Kim W., D.D. Chan, P. Gossett, K.D. Butz, E.A. Nauman, N.C. Emery and C.P. Neu. Correlation between intratissue relaxivity and strain in the human intervertebral disc under cyclic axial compression and bending. *In review* for *Spine*. (Provided statistical support)
3. Carvajal-Endara, S., A.P. Hendry, N.C. Emery, C.P. Neu, D. Carmona, K.M. Gotanda, T.J. Davies, J.A. Chaves and M.T.J. Johnson. Natural selection by Darwin's finches on fruit defense traits of *Tribulus cistoides* in the Galápagos Islands. *In review* for *Ecological Monographs*.
2. *LaRue, E., N.C. Emery, L. Briley and M.R. Christie. Geographic variation in dispersal influences eco-evolutionary range dynamics in response to climate change. *In review* for submission to *Diversity and Distributions*.
1. *Torres-Martínez, L. and N.C. Emery. Adaptive potential of an endemic wetland plant species in the face of extreme climate events. *In review* for *Ecology Letters*.

Peer-Reviewed Book Chapters

2. *Logan, L.H., *E.M. Karlsson, H.E. Gall, *J. Park, N.C. Emery, P. Owens, D. Niyogi and P.S.C. Rao. 2013. Freshwater Wetlands: Balancing Food and Water Security with Resilience of Ecological and Social Systems. Pp. 105-116 *in* R. Pielke, Sr. and D. Staley, editors. *Climate Vulnerability*, Vol. 2. Elsevier Inc., Academic Press.
1. Emery, N.C., *L.T. Martinez, *E.J. Forrestel, B.G. Baldwin and D.D. Ackerly. 2011. "The ecology, evolution and diversification of the vernal pool niche in *Lasthenia* (Madieae, Asteraceae)." Pp. 39-58 *in* D. G. Alexander and R. A. Schlising, editors. *Research and Recovery in Vernal Pool Landscapes*. Studies from the Herbarium, Vol. 16, Chico State University: Chico, CA.

Non-Technical Publications *(not peer reviewed)*

2. Emery, N.C. and *A.A. Robertshaw. 2012. "Field Notes from the Ross Reserve." Insights Magazine, College of Science, Purdue University. Spring 2012 issue.
1. *Jensen, M. and N.C. Emery. 2010. Conservation & Community Among the Santa Rosa Plain Vernal Pools. *Fremontia* **38** (1): 40-43.

Grants & Research Awards

Awards as Principal Investigator / Primary Author

5/2017 – 4/2021	United States Fish & Wildlife Program, Traditional Section 6 Species Recovery Grant; Contract awarded through California Department of Fish & Wildlife. "Conservation genetics and habitat mitigation for *Lasthenia burkei* (Burke's Goldfields) and *L. conjugens* (Contra Costa Goldfields) in the Bay Delta Region" (sole PI) Total amount awarded: $121,715
7/2016 – 6/2021	National Science Foundation, DEB #1553053. "CAREER: Habitat specialization and the evolution of dispersal." (sole PI) Total amount awarded: $890,000
9/2014 – 10/2018	National Science Foundation, DEB #1354900. "Plant adaptation in variable environments." (PI). Co-PI: P.S.C. Rao, Purdue University. Total amount awarded: $105,000 REU supplement awarded 6/2015: $6500

5/2017 – 8/2017	NWT LTER project ID NWT_VII_yr1_04. "The role of population variation in shaping species' responses to climate change: Experimental studies using *Potentilla* at Niwot." (sole PI) Total amount awarded: $10,700 (summer GRA support for K.A. Carscadden)
7/2014 – 6/2017	Ralph W. and Grace M. Showalter Research Trust. "Linking hydrological variability and plant community organization in natural and managed wetlands." (PI) Co-PI: P.S.C. Rao, Purdue University. Total amount awarded: $62,500
6/2014 – 5/2016	National Science Foundation, DEB #1407011. "DISSERTATION RESEARCH: Gene flow by seed and pollen: implications for plant adaptation to changing climates." (PI). Graduate student co-author: L. Torres-Martínez, Purdue University. Total amount awarded: $20,020
9/2011 – 8/2015	Department of Botany and Plant Pathology Incentive Award, Purdue University. "Biodiversity and climate change in natural and managed landscapes." (sole PI) Total amount awarded: $18,000
6/2013 – 5/2015	Purdue Research Foundation, Purdue University. "Variation in dispersal propensity: implications for gene flow and habitat adaptation." (sole PI) Total amount awarded: 2 years of GRA support for L. Torres-Martínez
12/2014 – 2/2015	Purdue Research Foundation International Travel Grant, Purdue University. "Effects of diet variation in the Galapagos finches on the structure & evolutionary dynamics of the resident plant communities" (sole PI) Total amount awarded: $1,000
7/2013 – 8/2014	Showalter Trust Research Award, Purdue University. "Gene flow and dispersal evolution." (sole PI) Total amount awarded: $8,000 in services from Purdue bioinformatics core facility.
7/2011 – 8/2014	Purdue Climate Change Research Center Seed Grant, Purdue University. "Effects of climate change on phenology and reproductive success in the spring ephemeral herbaceous plant community." (sole PI) Graduate student co-author: A.A. Robertshaw, Purdue University. Total amount awarded: $5,000
1/2014 – 7/2014	Water Drops Seed Grant Program, Purdue University Water Community. "Hydrological drivers of plant community structure in vernal pool wetlands." (PI) Co-PI: P.S.C. Rao, Purdue University. Total amount awarded: $6,000
5/2012 – 8/2012	Purdue Research Foundation, Purdue University. "Dispersal variation and the evolution of species ranges." (sole PI) Total amount awarded: $8,000 (towards summer salary)
1/2007 – 6/2012	National Science Foundation, DEB #0621377. "Niche conservatism, functional trait evolution and the diversification of the California vernal pool flora." (Graduate student co-author) PI: D.D. Ackerly, University of California Berkeley. Co-PI: B.G. Baldwin, University of California Berkeley Total amount awarded: $525,000 (provided 2007-2008 postdoctoral salary)
5/2011 – 8/2011	Purdue Research Foundation, Purdue University. "Adaptation to climate change: integrating and testing evolutionary theory." (sole PI) Total amount awarded: $8,000 (towards summer salary)

6/2003 – 12/2005 National Science Foundation, DEB #0309006. "DISSERTATION RESEARCH: Ecology and evolution of distribution patterns in a vernal pool annual plant." (Primary author) Advisor PI: M.L. Stanton, graduate advisor.
Total amount awarded: $12,000

Awards as Co-PI, Senior Personnel, or Major User

12/2016 – 11/2022 National Science Foundation-LTER, DEB #1637686. "LTER: Long-term research on the dynamics of high-elevation ecosystems – a framework to understand ecological sensitivity to climate change." (Senior Personnel) PI: K. Suding, University of Colorado Boulder. Co-PI's: J. Neff, N. Molotch, W. Bowman, P. Johnson, University of Colorado Boulder.
Total amount awarded: $6,762,000

5/2017 – 8/2021 National Science Foundation, Major Research Instrumentation (MRI) Grant. "MRI: Acquisition of a 4D high-resolution X-ray micro-computed tomography system for the Rocky Mountain Region." (Major User) PI: W. Srubar, University of Colorado Boulder. Co-PI's: V. Ferguson, S. Bryant, M. Hubler, and R. McLeod, University of Colorado Boulder.
Total amount awarded: $450,000 (all funds for instrument purchase)

3/2016 – 2/2019 USDA-NIFA, Agriculture and Food Research Initiative Competitive Grant Program. "Farming with phylogenetics: Can evolutionary history inform farm management?" (Co-PI) PI: I. Kaplan, Purdue University. Co-PI: J. Tooker, PennState University.
Total amount awarded: $499,613 (summer support)

9/2013 – 8/2018 NIH R01 AR063712. "Probing osteoarthritis pathogenesis by noninvasive imaging of cartilage strain" (Co-I) PI: C. Neu, University of Colorado Boulder. Co-I's: G. Breur and S. Trippel, Purdue University / Indiana University; T. Talavage and A. Wrywicz, Purdue University / Northshore Health System; T. Schmid, Rush University.
Total amount awarded: $1,636,250 (summer support)

6/2016 – 5/2018 NIH R21 AR066665. "Intervertebral disc mechanics measured by dualMRI *in vivo*." (Co-I) PI: C. Neu, University of Colorado Boulder. Co-I's: S. Khan, Ohio State University; E. Neuman, Purdue University
Total amount awarded: $407,789 (summer support)

4/2014 – 3/2018 NIH R21 AR066230. "Biomechanics of human articular cartilage measured *in vivo*." (Co-I) PI: C. Neu, University of Colorado Boulder. Co-I's: S. Trippel, Purdue / Indiana University; E. Neuman and T. Talavage, Purdue University
Total amount awarded: $402,254 (summer support)

9/2010 – 8/2011 USDA. "Miinikaan (the Place of the Blueberry): Participatory research on a food and medicinal plant on the Lac Courte Oreilles reservation." (Co-PI) PI: D. White, Lac Court Oreilles Ojibwe Community College. Co-PI: K. Gibson, Purdue University.
Total amount awarded: $200,000 (summer support)

Grants Awarded to Graduate Students

2018 Van Den Elzen, C.L., National Sciences and Engineering Research Council of Canada Postgraduate Scholarship - Doctoral Program

2018 Carscadden, K.A., Summer Fellowship & Research Award, Niwot Ridge Long Term Ecological Research

2018 Carscadden, K.A., Snyder Endowment, Rocky Mountain Biological Laboratories

2018 Carscadden, K.A., EBIO Research Grant Award – University of Colorado Boulder

2018 Carscadden, K.A. and C.L. Van Den Elzen, United Government of Graduate Students Small Groups Grant

2017	Carscadden, K.A., Beverly Sears Grant, University of Colorado Boulder
2017	Carscadden, K.A., John W. Marr Ecology Fund, University of Colorado Boulder
2017	Carscadden, K.A., EBIO Research Award, University of Colorado Boulder
2017	Van Den Elzen, C.L., American Society of Naturalists Travel Award
2016	Larue, E.A., Purdue Research Foundation Dissertation Year Fellowship
2014	Torres-Martínez, L., Women in Science Travel Grant, Purdue University
2014	Larue, E.A., Society for the Study of Evolution Rosemary Grant Research Award
2014	Stevens, S.M., Travel Award, American Fern Society and Pteridological Section of the Botanical Society of America
2014	Larue, E.A., Andrews/Blosser Environmental Travel Grant, Graduate School, Purdue University
2013	Walker, J.F., Education Grant, California Native Plant Society
2013	Larue, E.A., Alton A. Lindsey Graduate Fellowship in Ecology, Department of Biological Sciences, Purdue University
2013	Larue, E.A., Yeunkyung Woo Achieve Excellence Travel Award, Department of Biological Sciences, Purdue University
2013	Larue, E.A., Women in Science Travel Grant, Purdue University
2013	Stevens, S.M., Graduate Student Travel Award, Botanical Society of America
2013	Stevens, S.M., Graduate Student Travel Award, Pteridological section of the Botanical Society of America and American Fern Society
2013	Stevens, S.M., Andrews/Blosser Travel Grant, Purdue University Graduate School
2013	Torres-Martínez, L., Frederick N. Andrews Environmental Travel Grant, Purdue University Graduate School
2012	Walker, J.F., Fellowship for Graduate Student Travel, Society for Integrative and Comparative Biology
2012	Stevens, S.M., College of Agriculture Summer Research Fellowship
2012	LaRue, E.A., Andrews Graduate Fellowship, Purdue University Graduate School
2011	Robertshaw, A.A., Indiana Academy of Science Senior Research Grant
2011	Robertshaw, A.A., National Science Foundation Graduate Research Fellowship
2011	Stevens, S.M., Honorable Mention, National Science Foundation Graduate Research Fellowship
2011	Stevens, S.M., Society for the Study of Evolution Rosemary Grant Research Award
2010	Robertshaw, A.A., *Sigma Xi* Grants-in-Aid-of-Research Award
2010	Jensen, M., Educational Grant, California Native Plant Society

Research Presentations

*‡postdoctoral researcher co-author, *graduate student co-author; †undergraduate co-author*

Invited Seminars

9/2018	Keynote Speaker, Guild of Rocky Mountain Ecologists and Evolutionary Biologists
2/2018	Department of Ecology, Evolutionary Biology and Behavior, Michigan State University, East Lansing, MI
10/2017	Plant Biology and Conservation Program, Northwestern University and Chicago Botanical Garden, Chicago, IL
10/2017	Department of Biology, Willamette University, Salem, OR
9/2017	Department of Plant and Microbial Biology, University of Minnesota, Minneapolis, MN
7/2017	Rocky Mountain Biological Laboratory, Gothic, CO
4/2017	Department of Biology, William H. Telfer Endowed Lectureship, University of Pennsylvania, Philadelphia, PA

3/2016	Bioagricultural Sciences & Pest Management, Colorado State University, Fort Collins, CO
2/2016	Biodiversity Research Centre, University of British Columbia, Vancouver, BC, Canada
2/2015	Department of Ecology & Evolutionary Biology, University of California Los Angeles, Los Angeles, CA
1/2015	Department of Ecology & Evolutionary Biology, University of Colorado at Boulder, Boulder, CO
3/2014	School of Biology, Georgia Tech University, Atlanta, GA
1/2014	Department of Biology, McGill University, Montreal, QC, Canada
1/2014	Kellogg Biological Station, Michigan State University, Hickory Corners, MI
11/2013	Biology Department, Case Western Reserve University, Cleveland, OH
2/2013	Department of Biology, University of Louisville, Louisville, KY
2/2013	Center for the Environment, Purdue University, West Lafayette, IN
1/2013	Department of Biology, Indiana University, Bloomington, IN
10/2012	Department of Biology, Indiana State University, Terra Haute, IN
1/2012	Department of Biology, University of Minnesota Duluth, Duluth, MN
11/2011	Purdue Water Group, Purdue University, West Lafayette, IN
9/2011	The Field Museum - A. Watson Armour Research Seminar Series, Chicago IL
3/2011	Dept. of Horticulture & Landscape Architecture, Purdue University, West Lafayette, IN
4/2010	Department of Biological Sciences, Purdue University Calumet, Hammond, IN
3/2009	Department of Botany & Plant Pathology, Purdue University, West Lafayette, IN
3/2009	Department of Biological Sciences, Purdue University, West Lafayette, IN

Conference Symposia & Working Groups

*Carscadden, K.A. and N.C. Emery. 2017. Co-organizer. American Society of Naturalists Symposium: "Across the Nth Dimension: Quantitative and Conceptual Advances in the Study of Niche Breadth." *Evolution Meeting*, Portland, OR

*Carscadden, K.A., *C. Alberto Arnillas, N.C. Emery, M. Cadotte, D. Gravel, M. Afkhami, J.S. MacIvor. Quantifying niche breadth: Classifying and comparing niche breadth estimators to provide a user guide. American Society of Naturalist Symposium: "Across the Nth Dimension: Quantitative and Conceptual Advances in the Study of Niche Breadth." *Evolution Meeting*, Portland, OR

Emery, N.C. 2015. Evolution of phenotypic plasticity and ecological specialization in temporally varying environments. Organized oral session: "Shifting dimensions: temporal ecology for the next 100 years and beyond." *Ecological Society of America Annual Meeting*, Baltimore, MD

Emery, N.C. and *L. Torres-Martínez. 2015. Rapid Evolution and Phenotypic Plasticity of Vernal Pool Plants in Response to Climate Change. Symposium title: "Best Management Practices for Climate Change Adaptation: A Wetlands Perspective." *Society for Wetland Scientists*, Providence, RI

Emery, N.C. 2014. Niche evolution and habitat specialization in variable environments: Implications for conservation and restoration. *Plant Ecology, Evolution, and Conservation: A Celebration of Big Science.* University of California at Davis, Davis, CA

Emery, N.C. 2014. Species interactions and niche conservatism determine ecological distributions in vernal pool species. Symposium: "Insights into classic ecological questions gained from phylogenetic historical approaches." *Conference of the American Society of Naturalists.* Asilomar Conference Center, Pacific Grove, CA

*Torres-Martínez, L. and N.C. Emery. 2014. Germination and Dormancy Variation in Fremont's Goldfields: Implications for Vernal Pool Plant Responses to Climate Change. *Northern California Botanists Symposium.* California State University, Chico, CA

*Stevens, S.M. and N.C. Emery. 2013. No place like home? Testing for local adaptation and dispersal limitation in *Vittaria appalachiana*. Colloquium: "Frontiers in fern gametophyte research," *Botany 2013*. New Orleans, LA

Emery, N.C. 2012. Managing microevolution: ecological specialization and the evolution of distribution patterns. Symposium: "Evolutionary processes and managed populations: Managing for long-term success." *EcoSummit 2012*. Columbus, OH

Emery, N.C., *E.J. Forrestel, *G. Jui, *M. Park, B.G. Baldwin and D.D. Ackerly. 2010. Niche evolution and wetland habitat specialization in *Lasthenia*. National Center for Ecological Analysis and Synthesis, Ecophylogenetics working group, Santa Barbara, CA

*Carscadden, K. *C. Arnillas, N.C. Emery, M. Cadotte, D. Gravel, M. Afkhami, and S. MacIvor. Niche breadth measures yield different estimates: Classifying and comparing measures from across ecology and evolutionary biology. Oral Presentation, *American Society of Naturalists*. Pacific Grove, CA

*Tittes, S. and N.C. Emery. A novel Bayesian inference method to model tolerance curves. Oral Presentation, *American Society of Naturalists*. Pacific Grove, CA

*Van Den Elzen, C. and N.C. Emery. 2018. Dispersal traits correlate with microhabitat adaptation in wind-dispersed vernal pool congeners. Oral Presentation, *American Society of Naturalists*. Pacific Grove, CA

‡La Rosa, R.J. and N.C. Emery. 2018. Plasticity, specialization, and species distributions across environmental gradients. Lightening Presentation, *American Society of Naturalists*. Pacific Grove, CA

Emery, N.C. and ‡R.J. La Rosa. 2017. Plasticity and specialization in variable environments: Adaptation in vernal pool goldfields. Oral Presentation, *Evolution Meeting*. Portland, OR

*Van Den Elzen, C.L., N.C. Emery, S.L. Flaxman and B.A. Melbourne. 2017. Not all those who wander are lost: A model of evolutionary interplay between dispersal and niche evolution in plants. Poster Presentation, *Evolution Meeting*. Portland, OR

‡La Rosa, R.J. and N.C. Emery. 2016. Plant adaptation to hydrologically variable environments. Oral Presentation, *Botanical Society of America Annual Meeting*. Savannah, GA

*LaRue, E.A., M.R. Christie and N.C. Emery. 2016. Incorporating geographic variation in dispersal to better predict a species' distribution under climate change. Oral Presentation, *Ecological Society of America Annual Meeting*. Fort Lauderdale, FL

*LaRue, E.A., M.R. Christie, J. Holland and N.C. Emery. 2016. Incorporating geographic variation in dispersal in order to better predict species' distributions. Oral Presentation, *U.S. Regional Association of the International Association for Landscape Ecology*. Asheville, NC

*Robertshaw, A.A. and N.C. Emery. 2014. Effects of climate change on plant reproductive success in the Indiana spring ephemeral community. Oral Presentation, *Botany Meeting*. Boise, ID

Emery, N.C. and E.J. Forrestel. 2014. The evolutionary interplay between dispersal traits and habitat adaptation. Oral Presentation, *Evolution Meeting*. Raleigh, NC

*Logan, L.H., N.C. Emery and A.S. Stillwell. 2014. The science not yet behind wetland policy: ecology, hydrology, public perception, and conservation. *World Environmental and Water Resources Congress 2014*. Portland, OR

*Robertshaw, A.A. and N.C. Emery. 2013. Effects of temperature, resources, and pollinator interactions on the reproductive success of *Claytonia virginica* (Montiaceae). Oral Presentation, *Ecological Society of America Annual Meeting*. Minneapolis, MN

Emery, N.C., *L. Torres-Martínez and †M. Madden. 2013. Reaction norm evolution and habitat specialization in California goldfields (*Lasthenia*, Asteraceae). Oral Presentation, *Evolution Meeting*. Snowbird, UT

*Robertshaw, A.A. and N.C. Emery. 2012. Effects of temperature, resources, and plant-pollinator interactions on reproductive success in *Claytonia virginica* (Portulacaceae). Oral Presentation, *Botany 2012*. Columbus, OH

*Stevens, S.M. and N.C. Emery. 2012. Stuck between a rock and a hot place: the role of climate in driving population and species boundaries in an endemic Appalachian fern species. Poster Presentation, *Botany Meeting*. Columbus, OH

Emery, N.C. and D.D. Ackerly. 2011. Release from competition reveals additive genetic variation in the ecological niche. Poster presentation*, European Research Networking Programme Frontiers of Speciation Research: Niche Theory and Speciation Workshop*, Keszthely, Hungary

Dalgleish, H.J., *S.M. Stevens and N.C. Emery. 2011. Creating active learning modules to incorporate statistics and experimental design across life science curricula through a Faculty Learning Community. Poster Presentation, *Ecological Society of America Annual Meeting*. Austin, TX

†Walker, J.F., *S.A. Walker, *R.C. Tucker, P.K. Morton, N.C. Emery, K.D. Gibson, and M.J. Zanis. 2010. The Evolution and biogeography of *Zizania* sp. based on chloroplast, mitochondrial, and nuclear gene sequence data. Poster presentation, *Botany 2010*. Providence, RI

*E.J. Forrestel, D.D. Ackerly and N.C. Emery. 2010. Niche evolution and functional trait convergence in vernal pool endemics of the genus *Lasthenia*. Oral presentation, *Botany Meeting*. Providence, RI

Sargent, R.S., S. Kembel, N. Emery and D. Ackerly. 2009. No evidence for a correlation between local species diversity and pollination service in a California vernal pool endemic. Oral presentation, *Ecological Society of American Annual Meeting*. Albuquerque, NM

Emery, N.C., R. Solan and D.D. Ackerly. 2009. Selection, genetic variation and niche conservatism in *Lasthenia fremontii*. Oral presentation, *Ecological Society of America Annual Meeting*. Albuquerque, NM

TEACHING

Courses Designed & Taught

2016, 2017, 2018	Evolutionary Ecology (BIOL 4600/5600), Department of Ecology & Evolutionary Biology, University of Colorado, Boulder, CO. Fall semester; lecture + lab format, 4 CR. Solo instructor.
2016	Special Topics: Evolutionary Ecology (BIOL 4460/5460), Department of Ecology & Evolutionary Biology, University of Colorado, Boulder, CO. Fall semester; lecture + lab format, 3 CR. Solo instructor.
2015, 2016, 2017, 2018	Evolutionary Biology (BIOL 3080-010), Department of Ecology & Evolutionary Biology, University of Colorado, Boulder, CO. Fall semester 2015, spring semester 2016 & 2017; lecture + lab format, 4 CR. Solo instructor, lecture; co-instructor, lab.
2008, 2009, 2010, 2011, 2014	Ecology (BIOL 58500), Department of Biological Sciences, Purdue University, West Lafayette, IN. Fall semester; lecture + lab format, 3 CR. Solo instructor in 2014; co-instructor with Dr. Richard Howard in 2008, 2009, 2010 and 2011.
2014	Senior Seminar in Plant Ecology (BIOL 49500), Department of Biological Sciences, Purdue University, West Lafayette, IN. Fall semester; discussion format. 1 CR. Solo instructor.
2013	First Year Research Experience (FYRE) Introductory Biology Lab: The Ecology of Plant Reproduction (BIOL 19500), Department of Biological Sciences, Purdue University, West Lafayette, IN. Fall semester, lecture + lab format, 2 CR. Co-instructor with Ph.D. candidate Sally Chambers.
2010, 2012, 2013	Field Ecology (BIOL 59100), Department of Biological Sciences, Purdue University, West Lafayette, IN. Fall semester, lecture + lab format, 4 CR. Solo instructor in 2012 and 2013, co-instructor with Dr. Kerry Rabenold in 2012)
2009, 2010	Advanced Evolution Discussion (BIOL 65300), Department of Biological Sciences, Purdue University, West Lafayette, IN. Discussion format (1 hr/week). Solo instructor for two discussions in 2010 and one discussion in 2009.

2008, 2010, 2011 Advanced Ecology Discussion (BIOL 65200), Department of Biological Sciences, Purdue University, West Lafayette, IN. Fall semester, 2 CR. Discussion format (1 hr/week). Solo instructor for two discussions/semester in 2010 and 2011 and one discussion in 2008.

Teaching Publications

*Angra, A., H.J. Dalgleish, *S.M. Chambers, *D. Pita and N.C. Emery. Data, distributions and hypotheses: Exploring diversity & disturbance in the tallgrass prairie. *Revisions requested* for *CourseSource.*

Teaching Workshop Participation

2017 TRESTLE (Transforming Education, Stimulating Teaching and Learning Excellence) Community Scholars Learning Community. "Exploring course-based undergraduate research experiences. How can I design a course in which students begin to see themselves as scientists?" TRESTLE Project and Center for STEM Learning, CU Boulder. Facilitated by Dr. Lisa Corwin and Dr. Pamela Harvey, University of Colorado Boulder. Topics & activities: Design CURE elements and assessments for existing courses. Time commitment: Biweekly 90-minute meetings during fall semester.

2016 FTEP (Faculty Teaching Excellence Program) Summer Assessment Institute. "Achieving Course Goals: Gathering Evidence About Student Learning." Facilitated by Dr. Daniel Bernstein, University of Kansas. Topics & activities: Learned tools for designing assessments and publishing student learning gains. Time commitment: 1 full week during summer session (8:30-4 pm, 5/9 – 5/13).

2015, 2016 Faculty Learning Community on Pedagogy and Teaching practices in EBIO. Facilitated by Dr. Andrew Martin and Dr. Nichole Barger, Department of Ecology & Evolutionary Biology, University of Colorado Boulder. Topics & activities: Developed and shared active learning modules for existing courses (2015) and designed and initiated a research study to evaluate barriers to student learning in Evolutionary Biology (2016). Time commitment: Biweekly to monthly 1-hour discussions, fall semester of each year.

2015 Faculty Teaching Excellence Program (FTEP) and Leadership Education for Advancement and Promotion (LEAP) Program Event. "Bringing Research into the Classroom." Facilitated by Dr. Elizabeth Fenn, Department of History, University of Colorado Boulder. Topic & activities: Discussed strategies for integrating research into courses to engage students in the scholarly enterprise. Time commitment: One 1-hour discussion during fall semester (10/20/2015).

8/2010 – 7/2011 Howard Hughes Medical Institute Faculty Learning Community at Purdue University. "Integrating Statistical Analysis and Experimental Design into Life Science Education." Facilitated by Dr. James Forney, Department of Biochemistry, Purdue University. Topics & activities: Designed modules for incorporating statistical tools into existing courses. Time commitment: Biweekly 90-minute meetings for one academic year, plus additional time investment to publish teaching module (see Teaching Publications).

MENTORING

Postdoctoral Mentoring

6/2018 – present	Meagan Oldfather, Department of Ecology & Evolutionary Biology, University of Colorado Boulder
1/2017 – present	Anne Marie Panetta, Department of Ecology & Evolutionary Biology, University of Colorado Boulder. *Winslow Fellow* (self-funded by the Winslow Foundation)
11/2015 – 1/2019	Raffica La Rosa, Department of Ecology & Evolutionary Biology, University of Colorado Boulder

Graduate Student Mentoring

Primary Advisor or Co-Advisor

Summary: 4 Ph.D. and 3 M.S. students graduated; 4 Ph.D. students currently in training

8/2018 – present	William Reed, Ph.D. student, Department of Ecology & Evolutionary Biology, University of Colorado Boulder.
6/2017 – present	Silas Tittes, Ph.D. student, Department of Ecology & Evolutionary Biology, University of Colorado Boulder. (Co-advised with Dr. Nolan Kane).
8/2016 – present	Kelly A. Carscadden, Ph.D. student, Department of Ecology & Evolutionary Biology, University of Colorado Boulder. (Co-advised with Dr. Daniel Doak)
8/2016 – present	Courtney L. Van Den Elzen, Ph.D. student, Department of Ecology & Evolutionary Biology and Interdisciplinary Quantitative Biology Program, University of Colorado Boulder.
5/2016 – present	Margaret Habib, M.S. student, Department of Ecology & Evolutionary Biology, University of Colorado Boulder.
8/2012 – 7/2017	Elizabeth A. LaRue, Ph.D. candidate, Department of Biological Sciences, Purdue University. Current position: Post-doctoral scientist, Department of Forestry & Natural Resources, Purdue University. Advisor: Dr. Brady Hardiman.
8/2010 – 8/2016	Lorena Torres-Martínez, Ph.D, Department of Biological Sciences, Purdue University. Current position: Koch-Richardson Postdoctoral Fellow, Department of Ecology & Evolutionary Biology, Tulane University.
1/2010 – 5/2015	Asya A. Robertshaw, Ph.D., Department of Botany & Plant Pathology, Purdue University. Current position: Mother and primary caretaker for two young children.
1/2010 – 12/2014	Sally M. Chambers (formerly Stevens), Ph.D., Department of Botany & Plant Pathology, Purdue University. Current position: Research Botanist, Selby Botanical Gardens, Sarasota Bay, FL.
6/2012 – 8/2014	Joseph F. Walker, M.S., Department of Botany & Plant Pathology, Purdue University. Current position: Ph.D. candidate, Department of Ecology & Evolutionary Biology, University of Michigan. Advisors: Dr. Stephen Smith and Dr. Patricia Wittkopp.
9/2012 – 5/2013	Lauren H. Logan, M.S., Biological Sciences / Ecological Sciences & Engineering, Purdue University. Current position: Ph.D. candidate, Department of Civil & Environmental Engineering, University of Illinois at Urbana-Champaign. Advisor: Dr. Ashlynn S. Stillwell.

8/2008 – 8/2011	Michelle Halbur (formerly Jensen), M.S., Department of Botany & Plant Pathology, Purdue University. Current position: Preserve Ecologist, Pepperwood Preserve, Santa Rosa, CA.

Graduate Student Committee Participation

Summary: Served (or currently serving) on 18 Ph.D. committees and 2 M.S. committees

Undergraduate Mentoring

Summary: 53 undergraduate students mentored as research assistants (27 at CU Boulder and 26 at Purdue University)
4 students completed research towards honor's degree, 1honor's student currently in training

Undergraduate Mentoring Program Participation

6/2017– 8/2017	REU Mentor, University of Colorado Boulder Mountain Research Station REU program
6/2017– 8/2017	Faculty Mentor, CU Science Discovery High School Summer Research Program (2 students hosted)
8/2011– 8/2017	Undergraduate Faculty Mentor, Department of Biological Sciences, Purdue University
5/2011 – 8/2011	Faculty Mentor, Department of Botany and Plant Pathology summer internship program, Purdue University
2010, 2013	Faculty Mentor, HORIZONS student support program, Purdue University
8/2009 – 2011	Faculty Research Mentor, NSF FEELS (Food, Environment, Engineering & Life Sciences) program, Purdue University

High School Mentoring

8/2017 – 8/2018	Kami Leka, Senior at Boulder High School, Boulder, CO; paid internship
7/2017	Host lab, CU Science Discovery STEM Research Experience High School Mentoring Program. (Provided internships for 2 local high school students: 1 rising freshman, 1 rising junior).

SERVICE

Professional Societies

Society Memberships

American Society of Naturalists, Botanical Society of America, Ecological Society of America, Society for the Study of Evolution, Sigma Xi Scientific Research Society, Indiana Academy of Science, Northern California Botanists

Society Activities

2016 – present	Co-Chair, Ruth Patrick Award Committee, American Society of Naturalists (best student poster at annual meetings)
2017	Faculty mentor, Society for the Study of Evolution, student-faculty networking lunch, *Evolution Meeting,* Portland, OR
2016	Judge, Ed Ricketts Student Talk Award (best student oral presentation), American Society of Naturalists, *American Society of Naturalists* standalone meeting, Asilomar Conference Grounds, Pacific Grove, CA

2014	Judge, Student Presentation Awards (oral & poster), Ecology Section, *Botany Meeting,* Boise, ID
2014	Judge, Hamilton Award (best student oral presentation), Society for the Study of Evolution, *Evolution Meeting,* Raleigh, NC
2014	Judge, Ruth Patrick Award (best student poster), American Society of Naturalists, *Evolution Meeting,* Raleigh, NC
2013	Judge, Hamilton Award (best student oral presentation), Society for the Study of Evolution, *Evolution Meeting,* Snowbird, UT

Peer Review Activities

Ad Hoc & Panel Reviews for Federal Granting Agencies

Panelist, National Science Foundation, Dimensions of Biodiversity
Panelist, National Science Foundation, Division of Environmental Biology (three full proposal panels, one pre-proposal panel)
Ad hoc reviewer (6 times), National Science Foundation, Division of Environmental Biology

Journal Editorial Activities

1/1/18 – present	*Evolution*, Associate Editor
4/2017 – present	*Journal of Ecology*, Associate Editor
10/2016 – present	*Ecosphere*, Subject Matter Editor

Journal Referee Activities

American Midland Naturalist, American Naturalists, American Journal of Botany, Conservation Biology, Conservation Genetics, Climatic Change, Ecography, Ecological Applications, Ecology, Ecology and Evolution, Ecology Letters, Evolution, Heredity, International Journal of Plant Sciences, Journal of Biogeography, Journal of Evolutionary Biology, Journal of Landscape Ecology, Journal of Plant Ecology, Molecular Ecology, Madroño, Nature, Nature Communications, Nature Ecology and Evolution, Nature Reviews Genetics, New Phytologist, Oikos, Plant Biology, Plant Ecology and Diversity, Restoration Ecology

University Service

Academic Committees & Program Participation at CU Boulder

1/2019 – present	Faculty Mentoring Committee, Department of Ecology & Evolutionary Biology
8/2018 – present	Faculty Sponsor, EBIO club
8/2017 – 5/2018	Merit Review Committee, Department of Ecology & Evolutionary Biology
8/2015 – present	Graduate Committee, Department of Ecology & Evolutionary Biology
2/15/2017	Panelist, NSF CAREER Kickoff Workshop, Research & Innovation Office
8/2016 – 8/2017	Executive Committee, Department of Ecology & Evolutionary Biology

Academic Committees & Program Participation at Purdue University

9/2014 – 5/2015	Faculty Search Committee, Center for Molecular Agriculture (5 positions)
8/2014 – 5/2015	Director of the Ross Biological Reserve, Department of Biological Sciences
8/2014 – 5/2015	Qualifying Exam Convener, Ecology, Evolution, and Behavior cluster, Department of Biological Sciences
8/2014 – 5/2015	Undergraduate Studies Committee, Department of Biological Sciences
4/2013 – 5/2015	Faculty Executive Committee, Purdue Climate Change Research Center
10/2012 – 5/2015	Faculty Executive Committee, Purdue Center for the Environment (C4E)

9/2012 – 5/2015	Undergraduate Placement Committee, Department of Biological Sciences
6/2012 – 5/2015	EcoLunch Coordinator, Department of Biological Sciences
8/2011 – 5/2015	Graduate Studies Committee, Department of Biological Sciences
8/2010 – 5/2015	Interdisciplinary Graduate Program Governance Committee, Ecological Science & Engineering
4/2009 – 5/2015	Ross Biological Reserve Committee, Department of Biological Sciences
8/2013 – 4/2014	Faculty Search Committee, Department of Biological Sciences
1/2012 – 9/2014	Purdue campus delegate, Organization for Tropical Studies (OTS)
1/2012 – 8/2012	Organizer, Plant Biology Institute Level 1 Community: Plant Ecology and Evolution in Natural and Managed Landscapes
1/2012 – 5/2014	Daycare Task Force (appointed by Provost)
10/2012 – 5/2013	Faculty Search Committee, Departmental of Biological Sciences
4/2012	Organizing Committee, 2012 Earth Day Symposium: *Linking Biodiversity and Sustainability in Natural and Managed Landscapes*
2011, 2012	Graduate Admissions Committee, Department of Biological Sciences
9/2011	Panel member for the Faculty Advancement, Success and Tenure Professional Development Series, ADVANCE-Purdue and the Center for Faculty Success
4/2010, 2011	Carpenter Scholarship Committee, Department of Biological Sciences

Public Outreach

2017, 2018	"Strange Plants" activity, 1st & 2nd grade classrooms, Columbine Elementary, Boulder, CO
2015	Workshop Co-Instructor, *Friends of the Jepson Herbarium*, UC Berkeley. "Native Plants of the UC Merced Vernal Pool Grasslands Reserve," UC Merced Grassland Reserve, Merced, CA
2015	Co-instructor, West Lafayette High School Honor's Biology field trip, Ross Biological Reserve, West Lafayette, IN
2014	Oral presentation, *Indiana Native Plant & Wildflower Society* (West Central Chapter). "Are spring ephemerals threatened by climate change?" Celery Bog Nature Preserve, West Lafayette, IN
2011- 2014	Instructor, *U.S. Biology Olympiad* plant ecology lab practical module, Purdue University and Ross Biological Reserve, West Lafayette, IN
2013	Oral presentation for "Wednesdays in the Wild," *Tippecanoe County Parks & Recreation Department*. "Spring creep and spring flowers: effects of climate change on plant-pollinator interactions." Celery Bog Nature Center, West Lafayette, IN
2013	Oral presentation, Purdue Biological Sciences high school "Focus" day, Purdue University, West Lafayette, IN