

**JEREMY W. LICHSTEIN**  
**Curriculum Vitae**

University of Florida  
Department of Biology  
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Gainesville, FL 32611-8525

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**POSITIONS**

2018- Associate Professor, University of Florida, Department of Biology  
2011-2018 Assistant Professor, University of Florida, Department of Biology  
2007-2010 Postdoctoral Research Fellow, Princeton University, Department of Ecology and Evolutionary Biology

**EDUCATION**

2007 Ph.D. Ecology and Evolutionary Biology, Princeton University  
2000 M.S. Zoology (Statistics minor), North Carolina State University  
1995 B.A. College of Liberal Arts Honors Program, University of Texas at Austin

**RESEARCH & TEACHING INTERESTS**

Forest ecology, carbon cycle, climate change, global change biology, community and ecosystem ecology, biodiversity, quantitative methods

**HONORS & AWARDS (selected)**

Sabbatical fellow, German Centre for Integrative Biodiversity Research, 2018-19  
University of Florida Excellence Award for Assistant Professors, 2016  
Florida Climate Institute Faculty Fellow 2016  
Princeton University Honorific Fellowship, 2006-07  
Princeton University Centennial Fellowship in Sciences and Engineering, 2002-07  
Fulbright Scholarship, Argentina, 2000-01  
NSF Graduate Research Fellowship, 1998-2000  
Andrews Graduate Fellowship, North Carolina State University, 1997-99

**FUNDING**

**Grants awarded (\$2.7 million total; \$1.32 million to Lichstein)**

NSF OPP-1708129. Collaborative Research: Fire Influences on Forest Recovery and Associated Ecosystem Feedbacks in Arctic Larch Forests. PI: **J.W. Lichstein** (\$382,087 to UF, \$204,289 to Lichstein). 2017-21.  
USDA Forest Service 16-JV-11242306-050. Landscape-scale forest carbon and climate assessments: decision support for managers and policy makers. PIs: **J.W. Lichstein**, D.Y. Hollinger. \$250,004. 2016-19.  
NSF DEB-1442280. Dimensions US-China: How historical constraints, local adaptation, and species interactions shape biodiversity across an ancient floristic disjunction. PI: P. Soltis; Co-PIs: **J.W. Lichstein**, M.C. Mack, D. Soltis, E. Triplett. \$1,199,043 (\$328,987 to Lichstein). 2015-19.

- USDA Forest Service 11-JV-11242306-059. Modeling the response of US forests to global change: decision support for managers and policy makers. PIs: **J.W. Lichstein**, R.A. Birdsey. \$443,303. 2011-16.
- NSF IOS-1051789. Temperature responses of leaf dark respiration and their implications for tropical forest carbon balance. PI: K. Kitajima; Co-PIs: S.J. Wright, **J.W. Lichstein (lead PI 2013-16)**, H. Muller-Landau, S.A. Bohlman. \$444,698 (\$99,575 to Lichstein). 2011-14 (with extensions to 2016).
- USDA Forest Service 09-JV-11242306-051. Sustaining U.S. forests and managing carbon under a changing climate: a decision support system for land managers. PIs: S.W. Pacala, **J.W. Lichstein**. \$107,000 (\$0 to Lichstein due to postdoctoral status). 2009-10.

## PUBLICATIONS

**G** = Graduate students on whose committees I served during the time the research was conducted.

**P** = Postdoctoral researchers I supervised during the time the research was conducted.

## Refereed journal articles

Google Scholar: <https://scholar.google.com/citations?user=hx5g9hwAAAAJ&hl=en>

- (42) Osnas, J.L.D.<sup>P</sup>, M. Katabuchi<sup>P</sup>, S.J. Wright, K. Kitajima, N. Kraft, P.B. Reich, M.J. Samaniego, S.A. Van Bael, S.W. Pacala, and **J.W. Lichstein**. 2018. Divergent drivers of leaf trait variation within species, among species, and among functional groups. *Proceedings of the National Academy of Sciences U.S.A.* 115:5480-5485.
- (41) Zhang, T.<sup>P</sup>, Ü. Niinemets, J. Sheffield, and **J.W. Lichstein**. 2018. Shifts in tree functional composition amplify the response of forest biomass to climate. *Nature* 556:99-102.
- (40) Fell, M., J. Barber, **J.W. Lichstein**, and K. Ogle. 2018. Multidimensional trait space informed by a mechanistic model of tree growth and carbon allocation. *Ecosphere* 9(1):e02060, pages 1-25.
- (39) Fisher, R.A., C.D. Koven, W.R.L. Anderegg, B.O. Christoffersen, M.C. Dietze, C. Farrior, J.A. Holm, G. Hurtt, R.G. Knox, P.J. Lawrence, **J.W. Lichstein**, M. Longo, A.M. Matheny, D. Medvigy, H.C. Muller-Landau, T.L. Powell, S.P. Serbin, H. Sato, J. Shuman, B. Smith, A.T. Trugman, T. Viskari, H. Verbeeck, E. Weng, C. Xu, X. Xu, T. Zhang<sup>P</sup>, P. Moorcroft. 2018. Vegetation demographics in Earth System Models: A review of progress and priorities. *Global Change Biology* 24:35-54.
- (38) Liao, W., D.N.L. Menge, **J.W. Lichstein**, and G. Ángeles-Pérez. 2017. Global climate change will increase the abundance of symbiotic nitrogen-fixing trees in much of North America. *Global Change Biology* 23:4777-4787.
- (37) Menge, D.N.L., S.A. Batterman, W. Liao, B.N. Taylor, **J.W. Lichstein**, and G. Ángeles-Pérez. 2017. Nitrogen-fixing trees comprise similar fractions of tree diversity in higher-latitude and lower-latitude forests in North America despite wide differences in abundance. *Ecology Letters* 20:842-851.
- (36) Huang, Y.<sup>G</sup>, S. Gerber, T. Huang<sup>G</sup>, and **J.W. Lichstein**. 2016. Evaluating the drought response of CMIP5 models using global gross primary productivity, leaf area,

- precipitation, and soil moisture data. *Global Biogeochemical Cycles*, 30, doi:10.1002/2016GB005480, pages 1-20.
- (35) Caughlin, T.T.<sup>P</sup>, S. Elliott, and **J.W. Lichstein**. 2016. When does seed limitation matter for scaling up reforestation from patches to landscapes? *Ecological Applications* 26(8):2439-2450.
- (34) Rifai, S.W.<sup>G</sup>, J.D.U. Muñoz, R. Negrón-Juarez, F.R.R. Arévalo, R. Tello-Espinoza, M.C. Vanderwel<sup>P</sup>, **J.W. Lichstein**, J.Q. Chambers, and S.A. Bohlman. 2016. Landscape-scale consequences of differential tree mortality from catastrophic wind disturbance in the Amazon. *Ecological Applications* 26(7):2225-2237.
- (33) Tautenhahn, S., **J.W. Lichstein**, M. Jung, J. Kattge, S.A. Bohlman, H. Heilmeyer, A. Prokushkin, A. Kahl, and C. Wirth. 2016. Dispersal limitation drives successional pathways in Central Siberian forests under current and intensified fire regimes. *Global Change Biology* 22:2178-2197.
- (32) Vanderwel, M.C.<sup>P</sup>, H. Zeng, J.P. Caspersen, G. Kunstler, and **J.W. Lichstein**. 2016. Demographic controls of aboveground forest biomass across North America. *Ecology Letters* 19:414-423.
- (31) Anderegg W.R.L., J.A. Hicke, R.A. Fisher, C.D. Allen, J. Aukema, B. Bentz, S. Hood, **J.W. Lichstein**, A.K. Macalady, N. McDowell, Y. Pan, K. Raffa, A. Sala, J.D. Shaw, N.L. Stephenson, C. Tague, and M. Zeppel. 2015. Tree mortality from drought, insects, and their interactions in a changing climate. *New Phytologist* 208:674-683. [Faculty of 1000 recommended: <http://f1000.com/prime/725547750>]
- (30) Weng, E., S. Malyshev, **J.W. Lichstein**, C.E. Farrior, R. Dybzinski, T. Zhang<sup>P</sup>, E. Shevliakova, and S.W. Pacala. 2015. Scaling from individuals to ecosystems in an Earth System Model using a mathematically tractable model of height-structured competition for light. *Biogeosciences* 12:2655-2694.
- (29) Vanderwel, M.C.<sup>P</sup>, M. Slot<sup>G</sup>, **J.W. Lichstein**, P.B. Reich, J. Kattge, O.K. Atkin, K.J. Bloomfield, M.G. Tjoelker, and K. Kitajima. 2015. Global convergence in leaf respiration from estimates of thermal acclimation across time and space. *New Phytologist* 207:1026-1037.
- (28) Caughlin, T.T.<sup>G</sup>, J. Ferguson, and **J.W. Lichstein**, P.A. Zuidema, S. Bunyavejchewin, and D. Levey. 2015. Loss of animal seed dispersal increases extinction risk in a tropical tree species due to pervasive negative density dependence across life stages. *Proceedings of the Royal Society B* 298:20142095, pages 1-9.
- (27) Slot, M.<sup>G</sup>, C. Rey-Sánchez, S. Gerber, **J.W. Lichstein**, K. Winter, and K. Kitajima. 2014. Thermal acclimation of leaf respiration of tropical trees and lianas: response to experimental canopy warming, and consequences for tropical forest carbon balance. *Global Change Biology* 20:2915-2926.
- (26) Menge, D.N.L., **J.W. Lichstein**, and G. Ángeles-Pérez. 2014. Nitrogen fixation strategies explain the latitudinal shift in nitrogen-fixing tree abundance. *Ecology* 95(8):2236-2245.
- (25) **Lichstein, J.W.**, N. Golaz, S. Malyshev, E. Shevliakova, T. Zhang<sup>P</sup>, J. Sheffield, R. A. Birdsey, J.L. Sarmiento, and S.W. Pacala. 2014. Confronting terrestrial biosphere models with forest inventory data. *Ecological Applications* 24(4):699-715.

- (24) Caughlin, T.T.<sup>G</sup>, J. Ferguson, **J.W. Lichstein**, S. Bunyavejchewin, and D. Levey. 2014. The importance of long distance seed dispersal for the demography and distribution of a canopy tree species. *Ecology* 95:952-962.
- (23) Chen, A., **J.W. Lichstein**, J.L.D. Osnas, and S.W. Pacala. 2014. Species-independent down-regulation of leaf photosynthesis and respiration in response to shading: evidence from six temperate forest tree species. *PLoS ONE* 9(4):e91798, pages 1-11.
- (22) Zhang, T.<sup>P</sup>, **J.W. Lichstein**, and R.A. Birdsey. 2014. Spatial and temporal heterogeneity in the dynamics of eastern U.S. forests: implications for developing broad-scale forest dynamics models. *Ecological Modelling* 279:89-99.
- (21) Ogle, K., S. Pathikonda, K. Sartor, **J.W. Lichstein**, J.L.D. Osnas, and S.W. Pacala. 2014. A model-based meta-analysis for estimating species-specific wood density and identifying potential sources of variation. *Journal of Ecology* 102:194-208.
- (20) Melvin, A.M., **J.W. Lichstein**, and C.C. Goodale. 2013. Forest liming increases forest floor carbon and nitrogen stocks in a mixed hardwood forest. *Ecological Applications* 23(8):1962-1975.
- (19) Vanderwel, M.C.<sup>P</sup>, W.P. Cropper, **J.W. Lichstein**, and F.E. Putz. 2013. Predicting broad-scale carbon loss and recovery in managed tropical forests. *Carbon Management* 4(6):575-577.
- (18) Osnas, J.L.D., **J.W. Lichstein**, P.B. Reich, and S.W. Pacala. 2013. Global leaf trait relationships: mass, area, and the leaf economics spectrum. *Science* 340:741-744. [Faculty of 1000 recommended: <http://f1000.com/prime/718013252>]
- (17) Caughlin, T.<sup>G</sup>, J.H. Wheeler, J. Jankowski, and **J.W. Lichstein**. 2012. Urbanized landscapes favored by fig-eating birds increase invasive but not native juvenile strangler fig abundance. *Ecology* 93(7):1571-1580.
- (16) **Lichstein, J.W.** and S.W. Pacala. 2011. Local diversity in heterogeneous landscapes: quantitative assessment with a height-structured forest metacommunity model. *Theoretical Ecology* 4:269-281.
- (15) **Lichstein, J.W.**, J. Dushoff, K. Ogle, A. Chen, D.W. Purves, J.P. Caspersen, and S.W. Pacala. 2010. Unlocking the forest inventory data: relating individual-tree performance to unmeasured environmental factors. *Ecological Applications* 20(3):684-699.
- (14) Malizia, A., H.R. Grau, and **J.W. Lichstein**. 2010. Soil phosphorus and disturbances influence liana communities in a subtropical montane forest. *Journal of Vegetation Science* 21:551-560.
- (13) Menge, D.N.L., J.L. DeNoyer, and **J.W. Lichstein**. 2010. Phylogenetic constraints do not explain the rarity of nitrogen-fixing trees in late-successional temperate forests. *PLoS ONE* 5(8):e12056, pages 1-11.
- (12) Chisholm, R.A. and **J.W. Lichstein**. 2009. Linking dispersal, immigration and scale in the neutral theory of biodiversity. *Ecology Letters* 12:1385-1393.
- (11) Purves, D.W., **J.W. Lichstein**, N. Strigul, and S.W. Pacala. 2008. Predicting and understanding forest dynamics using a simple, tractable model. *Proceedings of the National Academy of Sciences U.S.A.* 105(44):17018-17022.
- (10) Wirth C., **J.W. Lichstein**, J. Dushoff, A. Chen, and F.S. Chapin III. 2008. White spruce meets black spruce: dispersal, postfire establishment, and growth in a warming climate. *Ecological Monographs* 78(4):489-505.

- (9) **Lichstein, J.W.**, J. Dushoff, S.A. Levin, and S.W. Pacala. 2007. Intraspecific variation and species coexistence. *American Naturalist* 170(6):807-818.
- (8) Purves, D.W., **J.W. Lichstein**, and S.W. Pacala. 2007. Crown plasticity and competition for canopy space: a new spatially implicit model parameterized for 250 North American tree species. *PLoS ONE* 2(9):e870, pages 1-11.
- (7) **Lichstein, J.W.** 2007. Multiple regression on distance matrices: a multivariate spatial analysis tool. *Plant Ecology* 188(2):117-131.
- (6) Jetz, W., C. Rahbek, and **J.W. Lichstein**. 2005. Local and global approaches to spatial data analysis in ecology. *Global Ecology and Biogeography* 14(1): 97-98.
- (5) Roy, S.B., P.D. Walsh, and **J.W. Lichstein**. 2005. Can logging in equatorial Africa affect adjacent parks? *Ecology and Society* 10(1):article 6, pages 1-11.
- (4) **Lichstein, J.W.**, H.R. Grau, and R. Aragón. 2004. Recruitment limitation in secondary forests dominated by an exotic tree. *Journal of Vegetation Science* 15(6):721-728.
- (3) **Lichstein, J.W.**, T.R. Simons, and K.E. Franzreb. 2002. Landscape effects on breeding songbird abundance in managed forests. *Ecological Applications* 12(3):836-857.
- (2) **Lichstein, J.W.**, T.R. Simons, S.A. Shriner, and K.E. Franzreb. 2002. Spatial autocorrelation and autoregressive models in ecology. *Ecological Monographs* 72(3):445-463.
- (1) **Lichstein, J.W.**, M.L. Ballinger, A.R. Blanchette, H.M. Fishman, and G.D. Bittner. 2000. Structural changes at cut ends of earthworm giant axons in the interval between dye barrier formation and neuritic outgrowth. *Journal of Comparative Neurology* 416(2):143-157.

#### **Book chapters and government reports**

- (4) Dugan, A. J., A. Steele, D. Hollinger, R. Birdsey, **J. Lichstein**. 2018. Assessment of forest sector carbon stocks and mitigation potential for the state forests of Pennsylvania: A report for the Pennsylvania Department of Conservation and Natural Resources. U.S. Department of Agriculture, Forest Service. 76 pages.
- (3) Birdsey, R., Y. Pan, M. Janowiak, S. Stewart, S. Hines, L. Parker, S. Gower, **J. Lichstein**, K. McCulloch, F. Zhang, J. Chen, D. Mladenoff, C. Wayson, and C. Swanston. 2014. Past and prospective carbon stocks in forests of northern Wisconsin. General Technical Report NRS-127. U.S. Department of Agriculture, Forest Service, Newtown Square, PA. 52 pages.
- (2) **Lichstein, J.W.**, C. Wirth, H.S. Horn, and S.W. Pacala. 2009. Biomass chronosequences of United States forests: implications for carbon storage and forest management. Pages 301-341 in C. Wirth, G. Gleixner, and M. Heimann, eds. *Old-growth forests: function, fate and value*. Ecological Studies vol. 207, Springer-Verlag, Berlin, Heidelberg.
- (1) Wirth, C. and **J.W. Lichstein**. 2009. The imprint of succession on old-growth forest carbon balances: insights from a trait-based model of forest dynamics. Pages 81-113 in C. Wirth, G. Gleixner, and M. Heimann, eds. *Old-growth forests: function, fate and value*. Ecological Studies vol. 207, Springer, Berlin, Heidelberg.

## TEACHING

### Courses taught at University of Florida

For details, see <http://people.clas.ufl.edu/jlichstein/teaching/>

#### Undergraduate

General Ecology (4 credit hours): fall 2014, spring 2015, fall 2015, spring 2016, fall 2016, spring 2017, fall 2017

Global Change Ecology and Sustainability (3 credit hours): spring 2013, spring 2015

Climate Change Biology (3 credit hours): fall 2011, fall 2012

#### Graduate

Principles of Ecosystem Ecology (3 credit hours): spring 2018

Ecophylogenetics (1 credit hour): fall 2016

Ecology Seminar (1 credit hour): every semester from fall 2014 through fall 2017

IPCC Biogeochemistry (1 credit hour): spring 2014

Forest Growth Response to Global Change (1 credit hour): fall 2013

Global Carbon Cycle (1 credit hour): spring 2012

### Other teaching

Guest instructor for Plant Diversity (Dr. Stuart McDaniel), University of Florida, 2017.

Guest instructor for Tropical Ecology (Dr. Stephanie Bohlman), University of Florida, 2017.

Guest speaker for Colloquium on Climate Change – Seminar in Herpetology (Drs. Harvey Lillywhite and David Blackburn), University of Florida, 2016.

Guest instructor for Land Biogeochemistry Modeling (Dr. Stefan Gerber), University of Florida, 2014.

Guest instructor for Facets of Sustainability (Dr. Les Thiele), University of Florida, 2012.

Graduate seminar on likelihood statistical methods (eight one-hour sessions; no formal credit hours), Princeton University, 2010.

Instructor: Intensive landscape-scale measurements of forest carbon for reference sites in the Americas. USDA Forest Service workshop for Latin American researchers, Silas Little Experimental Forest, New Jersey, September, 2010.

Ecology and conservation of tropical dry forests (one-week field course in Panama for undergraduates, with Dr. Stephanie Bohlman), Princeton University, 2008.

Graduate Teaching Assistant, Princeton University, Dept. of Ecology and Evolutionary Biology, 2003, 2005.

Guest instructor, Conservation of Neotropical migratory songbirds, Mars Hill College, Dept. of Biology, May 2000.

Informal workshop (4 hours) on multivariate statistics, North Carolina State University, 1999.

Graduate Teaching Assistant, North Carolina State University, Dept. of Zoology, 1997-1998.

## SERVICE

### Service for the profession

Associate Editor for *Oecologia*, 2011-

U.S. Dept. of Energy review panel for Oak Ridge National Laboratory, Terrestrial Ecosystem Sciences program, 2015

U.S. Dept. of Energy review panel for Early Career Research Program, 2016  
German Research Foundation (DFG) review panel, Marburg, Germany, October 2017  
Reviewer for funding agencies: NSF, NOAA, Israeli Ministry of Science Technology and Space, European Research Council  
Reviewer for U.S. National Park Service, Forest Health Monitoring Protocol, 2009  
Reviewer for journals: *Biodiversity and Conservation*, *Biogeosciences*, *BioScience*, *Diversity and Distributions*, *Ecography*, *Ecological Applications*, *Ecological Monographs*, *Ecology*, *Ecology Letters*, *Ecosystems*, *Global Ecology and Biogeography*, *Journal of Advances in Modeling Earth Systems*, *Journal of Applied Ecology*, *Journal of Biogeography*, *Journal of Geophysical Research*, *Journal of Vegetation Science*, *Landscape Ecology*, *Nature*, *Nature Climate Change*, *Oikos*, *PNAS*.

Textbook reviews:

- *Climate Change Biology* (Hannah 2010)
- *Ecology: The Economy of Nature, Seventh Edition* (Ricklefs and Relyea 2014)

### **Service at University of Florida**

Department of Biology:

- Faculty Search Committees (3), 2012, 2016, 2017
- Advisory Council, 2014-17
- Strategic Planning Committee, 2014-15
- Recruitment Committee, 2013-16 (Chair 2013-15)
- Big Data / Bioinformatics Working Group, 2013-14
- By-Laws Committee, 2012
- Colloquium Committee, 2011-14 (Chair 2013-14)

College of Liberal Arts and Sciences:

- Bachelor of Arts in Sustainability Studies, Oversight Committee, 2012-16

University:

- Florida Climate Institute, Advisory Committee, 2015-
- UF Biodiversity Institute, Advisory Board, 2015-
- Tropical Conservation and Development, Working Group review panel, 2014
- Climate Concentration Steering Committee, 2014-

### **PROFESSIONAL MEMBERSHIPS & AFFILIATIONS**

Florida Climate Institute, faculty affiliate, 2011-

Memberships: Ecological Society of America, American Geophysical Union

### **INVITED PRESENTATIONS**

German Centre for Integrative Biodiversity Research (iDiv), Leipzig, Germany, Sep. 2018. Plant functional diversity and the global carbon cycle.

Helmholtz Centre for Environmental Research, Leipzig, Germany, Sep. 2018. Plant functional diversity and the global carbon cycle.

USDA Agricultural Research Service, Gainesville, FL, April 2018. Forest responses and feedbacks to climate change.

German Centre for Integrative Biodiversity Research (iDiv), Leipzig, Germany, Oct. 2017. Plant functional diversity: leaves, trees, and the global carbon cycle.

- Ecological Society of America annual meeting, Organized Session, Portland, OR, Aug. 2017. Response of forest functional composition and biomass to climate variability: understanding patterns using data and models.
- International Botanical Conference, Symposium, Shenzhen, China, July 2017. Ecological traits and recent population dynamics of eastern Asian-eastern North American disjunct tree species in North America.
- University of Michigan, Dept. of Ecology and Evolutionary Biology, Sep. 2016. Biodiversity and the changing Earth System: computational challenges and new answers to old questions.
- American Geophysical Union fall meeting, Organized Session, San Francisco, CA, December 2015. Competition for light and water increases tree carbon allocation to fine roots and leaves in a next-generation dynamic vegetation model.
- U.S. Department of Energy workshop, Plenary Talk, Rockville, MD, November 2015. The origin and consequences of plant functional diversity in dynamic vegetation models.
- National Center for Atmospheric Research, Boulder, CO, October 2014. Competitive plant allocation in a prototype GFDL land model.
- Ecological Society of Japan, Organized Session, Hiroshima, Japan, March 2014. *Invitation declined due to scheduling conflict.*
- University of Florida, Biomath Seminar (Dept. of Mathematics), Nov. 2013. Tree species coexistence in heterogeneous landscapes.
- University of Missouri, Division of Biological Sciences, Sep. 2013. Biodiversity and the global carbon cycle.
- Ecological Society of America annual meeting, Organized Session, Minneapolis, MN, Aug. 2013. Quantifying the effects of drought and insect outbreaks on tree mortality rates using imperfect data.
- National Center for Ecological Analysis and Synthesis, Santa Barbara, CA. Feb. 2013. Quantifying the effects of drought and insect outbreaks on tree mortality rates.
- Seventh Regional Workshop on Forest Monitoring, Technical America Initiatives, Group on Earth Observation (GEO) Forest Carbon Tracking (FCT), Mérida, México, Jan. 2013. *Invitation declined due to scheduling conflict.*
- Smithsonian Tropical Research Institute, Panama, May 2012. Forest dynamics across time and space: scaling from individuals to ecosystems.
- Smithsonian Tropical Research Institute, Panama, May 2012. Understanding the worldwide leaf economics spectrum.
- National Institute for Mathematical and Biological Synthesis, Knoxville, TN, Feb. 2012. Scaling up ecosystem dynamics and disturbance regimes.
- Pennsylvania State University, Depts. of Forest Resources and Horticulture, March 2010. Ecological consequences of forest fragmentation.
- Pennsylvania State University, Depts. of Forest Resources and Horticulture, March 2010. Biodiversity and the global carbon cycle.
- University of Arizona, School of Natural Resources and the Environment, Feb. 2010. Biodiversity, phenology, and the global carbon cycle.
- University of Florida, Dept. of Biology, Feb. 2010. Biodiversity and the global carbon cycle.



- University of Maryland, Appalachian Laboratory, Nov. 2008. Forest dynamics: from landscape to global scales.
- Tulane University, Dept. of Ecology and Evolutionary Biology, April 2008. Predicting forest dynamics with a simple, tractable model: implications for studying climate-vegetation feedbacks.
- University of California, Berkeley, Dept. of Environmental Science, Policy, and Management, Feb. 2008. Predicting forest dynamics with a simple, tractable model: implications for studying climate-vegetation feedbacks.
- University of Wyoming, Dept. of Botany, July 2008. Predicting forest dynamics with a simple, tractable model.

## **CONTRIBUTED PRESENTATIONS**

### **First-authored presentations at national and international conferences**

- European Geosciences Union General Assembly, Vienna, Austria, 2017. Changes in tree functional composition amplify the response of forest biomass to climate variability.
- Ecological Society of America, Baltimore, Maryland, 2015. Incorporating plant functional diversity into Earth system models: Plant carbon allocation strategies in light- and water-limited ecosystems.
- North American Carbon Program All-Investigators Meeting, Albuquerque, New Mexico, 2013, Model-data fusion bias due to errors in ancillary data. [poster]
- Ecological Society of America, Portland, Oregon, 2012. Constraining terrestrial biosphere models with forest inventory data.
- North American Carbon Program All-Investigators Meeting, New Orleans, Louisiana, 2011. Confronting terrestrial ecosystem models with forest inventory data. [poster]
- Forest Inventory and Analysis Symposium, Park City, Utah, 2008. Temperature sensitivity of forest biomass and productivity: comparing the GFDL-LM3V land model to FIA data.
- Ecological Society of America, Memphis, Tennessee, 2006. A resource-based neighborhood competition model of sapling growth.
- Ecological Society of America, Portland, Oregon, 2004. Parameterizing sapling growth-light models from forest inventory data.
- American and British Ornithologists' Unions, St. John's, Newfoundland, 2000. Autoregressive models of songbird habitat use in managed southern Appalachian forests: landscape effects and spatial autocorrelation.
- American and British Ornithologists' Unions, St. John's, Newfoundland, 2000. Comparison of normal, Poisson, and negative binomial regression models for analyzing count data: an example with southern Appalachian songbirds.
- Symposium: Predicting species occurrences: issues of scale and accuracy. Snowbird, Utah, 1999. A multi-scale assessment of the effects of landscape composition on breeding birds in southern Appalachian forests. [poster]
- North American Ornithological Conference, St. Louis, Missouri, 1998. Patterns of breeding bird diversity and abundance across land use gradients in the southern Appalachians.

## **NATIONAL & INTERNATIONAL WORKSHOPS**

Invited panelist: After the extreme: Measuring and modeling impacts on terrestrial ecosystems when thresholds are exceeded. CLIMMANI/INTERFACE Workshop, Florence, Italy, April 2016.

Invited participant: Ecosystem Demographics in Earth System Models. National Center for Atmospheric Research, Boulder, CO, Jan. 2016. *Invitation declined due to scheduling conflict.*

Invited participant: U.S. Department of Energy, Trait-based methods to represent ecosystem change in land systems and climate models. Rockville, MD, November 2015.

Invited participant: Scaling across space and time: Benefits and challenges of informing large-scale models with small-scale experiments. CLIMMANI/INTERFACE Workshop, Mikulov, Czech Republic, June 2013. *Invitation declined due to scheduling conflict.*

Invited participant: Nonautonomous Systems and Terrestrial Carbon Cycle. National Institute for Mathematical and Biological Synthesis, Knoxville, Tennessee, May 2013. *Invitation declined due to scheduling conflict.*

Invited participant: Synthesizing frontiers in modeling drought- and insect-induced tree mortality with climate change. National Center for Ecological Analysis and Synthesis, Santa Barbara, CA. Feb. 2013 and Aug. 2013.

Invited participant: Disturbance Regimes and Climate-Carbon Feedback. National Institute for Mathematical and Biological Synthesis, Knoxville, Tennessee, Feb. 2012.

Advisory committee: National Forests Climate Change Workshop: A workshop to develop protocols for an assessment of the climate mitigation capacity of National Forests. USDA Forest Service, Washington DC, 2010.

Invited participant: Climate Change Response Framework for Chequamegon-Nicolet National Forest. USDA Forest Service, Madison, Wisconsin, 2010.

Invited participant: Ecophylogenetics Working Group. National Center for Ecological Analysis and Synthesis, Santa Barbara, California, May 2008.

## **ADVISEES**

### **Postdoctoral Research Associates**

#### Former

Trevor Caughlin, 2013-14

Cynthia Chang, 2011-12

Masatoshi Katabuchi, 2014-16

Jessica Langebrake, 2013-14

Jeanne Osnas, 2013

Mark Vanderwel, 2013-14

Tao Zhang, 2011-18

### **Graduate Students**

#### Current

Justin Gearhart (M.S.), 2017-

Tongyi Huang (PhD), 2012-

John Park (PhD), 2015-

Seth Robinson (PhD), 2018-

Elizabeth Webb (PhD), 2018-

### **Undergraduate Researchers**

#### Former

Katharine LeGros, 2016

Zoey Li, 2014-15

Brandon Peterson, 2013-17

Brendan Regnery, 2014

Sarah Sharkey, 2016-17

Alyssa Towns, 2016-17