Curriculum Vitae

KIONA OGLE

Updated 11/20/17

CONTACT INFORMATION

Address

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EDUCATION

2003	Ph.D., Biology, Duke University, Durham, NC. Title of Ph.D. Thesis: Desert dogma revisited: Physiological and growth responses of *Larrea tridentata* (creosotebush) to annual, seasonal, and pulse precipitation
2003	M.S., Statistics, Duke University, Durham, NC.
1997	B.S., Biology and Mathematics (dual major), Northern Arizona University, Flagstaff, AZ.

ACADEMIC POSITIONS

2016-	Associate Professor, School of Informatics, Computing & Cyber Systems, Northern Arizona University, Flagstaff, AZ
2015-2016	Associate Professor, Informatics & Computing Program, Northern Arizona University, Flagstaff, AZ
2015-	Adjunct Associate Professor, School of Life Sciences, Arizona State University, Tempe, AZ
2013-2015	Associate Professor, School of Life Sciences, Arizona State University, Tempe, AZ
2011-2013	Assistant Professor, School of Life Sciences, Arizona State University, Tempe, AZ
2011-2014	Adjunct Faculty, Department of Botany, University of Wyoming, WY
2006-2010	Assistant Professor, Departments of Botany (75%) and Statistics (25%), University of Wyoming, Laramie, WY
2005-2006	Research Associate, Department of Ecology and Evolutionary Biology, Princeton University, Princeton, NJ
2003-2005	National Science Foundation (NSF) Interdisciplinary Informatics Postdoctoral Fellow, Department of Ecology and Evolutionary Biology, Princeton University, Princeton, NJ

OTHER POSITIONS

2009	Visiting Scientist, National Center for Atmospheric Research (NCAR), Boulder, CO (by invitation, June 2009).
2000-2003	National Aeronautics and Space Administration (NASA) Earth Systems Science Graduate Fellow, Department of Biology, Duke University, Durham, NC.
2001	Graduate Teaching Assistant, Institute of Statistics and Decision Sciences, Duke University, Durham, NC.
2000	Graduate Teaching Assistant, Department of Biology, Duke University, Durham, NC.
1999-2000	Graduate Research Assistant, Department of Biology, Duke University, Durham, NC.
1997-1998	Graduate Teaching Assistant, Department of Biology, Duke University, Durham, NC.
1996-1997	NSF Research Experience for Undergraduates, Pinyon Ecology Lab, Department of Biological Sciences, Northern Arizona University, Flagstaff, AZ.
1995-1997	Tutor, Learning Assistance Center, Northern Arizona University, Flagstaff, AZ.
1993-1996	Biological Technician, United States Forest Service, Rocky Mountain Research Station, Flagstaff, AZ.

TEACHING

Date	***Course No./Title***	***Cr. Hrs.***	***Level***	***Enrollment***
	University of Wyoming			
2006 Fall	*Ecological Systems Modeling	4	Grad	6
2006 Fall	*Ecological Systems Modeling Lab	0	*same as above*	
2007 Fall	*[&]Bayesian Data Analysis	3	Grad	11 (1 undergrad)
2008 Spring	*[†]Hierarchical Bayesian in Ecology	1	Grad	5 (1 undergrad)
2008 Spring	*[†]Inverse Analysis in Isotope Ecology	2	Grad	2
2008 Fall	[&]Bayesian Data Analysis	3	Grad	8
2009 Fall	Ecological Systems Modeling	4	Grad	4
2009 Fall	Ecological Systems Modeling Lab	0	*same as above*	
2010 Spring	[&]Bayesian Data Analysis	3	Grad	14
2010 Spring	*[&]Bayesian Data Analysis Lab	1	*same as above*	
2010 Fall	[†]Inverse Analysis in Isotope Ecology	2	Grad	9
	Arizona State University			
2011 Fall	[†]Bayesian Modeling for the Life Sciences & Lab	4	Grad	7
2012 Spring	*Fundamentals of Ecology (co-taught)	3	Undergrad	180
2012 Fall	Fundamentals of Ecology (co-taught)	3	Undergrad	178

Date	***Course No./Title***	***Cr. Hrs.***	***Level***	***Enrollment***
2013 Spring	Bayesian Modeling for the Life Sciences & Lab	4	Grad	10
2013 Fall	Fundamentals of Ecology (co-taught)	3	Undergrad	128
2013 Fall	*†Topic: Life & Water in the Desert	1	Undergrad	19
2013 Fall	*†Topic: Bayesian Modeling in Practice	1	Grad	5
2014 Fall	Bayesian Modeling for the Life Sciences	4	Grad	10
2015 Spring	*Population & Community Ecology	3	Undergrad	13
	Northern Arizona University			
2016 Fall	Applied Bayesian Modeling & Lab	4	Grad	7
2017 Fall	Applied Bayesian Modeling & Lab	4	Grad	7 (in progress)

*New course and/or taught for the first time
&Cross-listed with Botany/Ecology and Statistics
†Seminar/special topics course

PUBLICATIONS IN PROGRESS

Summary: H-index = 29, i10-index = 44, total times cited = 3647 (Google Scholar profile, 11/20/2017; public URL: http://scholar.google.com/citations?user=iNqaSrgAAAAJ)

*Indicates publications with my graduate students (underline), undergraduate students (double underline), or postdoctoral associates (*italics*).

Published Journal Articles

2000

1. **Ogle, K.**, T.G. Whitham, and N.S. Cobb. (2000) Tree-ring variation in pinyon predicts the likelihood of death following severe drought. *Ecology* 81:3237-3243.

2001

2. Norby, R.J., **K. Ogle**, P.S. Curtis, F.-W. Badeck, A. Huth, G.C. Hurtt, T. Kohyama, and J. Peñuelas. (2001) Aboveground growth and competition in forest gap models: an analysis for studies of climatic change. *Climatic Change* 51:415-447.
3. Bugmann, H.K.M, S.D. Wullschleger, D.T. Price, **K. Ogle**, D.F. Clark, and A.M. Solomon. (2001) Comparing the performance of forest gap models in North America. *Climatic Change* 51:349-388.

2002

4. **Ogle, K.** and J.F. Reynolds. (2002) Desert dogma revisited: coupling of stomatal conductance and photosynthesis in the desert shrub, *Larrea tridentata*. *Plant, Cell and Environment* 25:909-921.

2003 – Finished PhD, started post-doc

5. **Ogle, K.** (2003) Implications of interveinal distance for quantum yield in C4 grasses: a modeling and meta-analysis. *Oecologia* 136:532-542.

2004

6. **Ogle, K.**, R.L. Wolpert, and J.F. Reynolds. (2004) Reconstructing plant root area and water uptake profiles. *Ecology* 85:1967-1978.
7. **Ogle, K.** and J.F. Reynolds. (2004) Plant responses to precipitation in desert ecosystems: Integrating functional types, pulses, thresholds, and delays. *Oecologia* 141:282-294.
8. Reynolds, J.F., P.R. Kemp, **K. Ogle**, and R.J. Fernández. (2004) Modifying the 'pulse-reserve' paradigm for deserts of North America: Precipitation pulses, soil water, and plant responses. *Oecologia* 141:194-210.
9. Huxman, T.E., K.A. Snyder, D. Tissue, A.J. Leffler, **K. Ogle**, W.T. Pockman, D.R. Sandquist, D.L. Potts, and S. Schwinning. (2004) Precipitation pulses and carbon fluxes in semi-arid and arid systems. *Oecologia* 141:254-268.

2006 – Started as an Assistant Professor at the University of Wyoming

10. Weitz, J.S., **K. Ogle**, and H.S. Horn (2006). Ontogenetically stable hydraulic design in woody plants. *Functional Ecology* 20:191-199.

2007

11. Purves, D.W., M.A. Zavala, **K. Ogle**, F. Prieto, and J.M. Rey-Benayas (2007). Coupling environmental forcing, metapopulations dynamics, and dispersal of *Quercus* species in central Spain. *Ecological Monographs* 77:77-97.

2008

12. **Ogle, K.** and J.J. Barber (2008). Bayesian data-model integration in plant physiological and ecosystem ecology. *Progress In Botany* 69:281-311.
13. Hui, D.F., Y.Q. Luo, D. Schimel, J.S. Clark, A. Hastings, **K. Ogle**, and M. Williams. (2008) Converting raw data into ecologically meaningful products: A meeting report on data-model assimilation in ecology: Techniques and applications, Norman, Oklahoma, 22-24 October 2007. *EOS, Transactions, American Geophysical Union*, Jan 25, 2008.
14. **Cable, J.M.*, **K. Ogle**, D.G. Williams, J. Weltzin, and T.E. Huxman. (2008) Soil texture drives responses of soil respiration to precipitation pulses in the Sonoran Desert: Implications for climate change. *Ecosystems* 11:961-979.
15. Yiqi, L., J. Clark, T. Hobbs, S. Lakshmivarahan, A. Latimer, **K. Ogle**, D. Schimel, and X. Zhou. (2008) Symposium 23. Toward Ecological Forecasting. *Bulletin of the Ecological Society of America* 89:467-474.

2009

16. **Ogle, K.** (2009) Hierarchical Bayesian statistics: Merging experimental and modeling approaches in ecology. *Ecological Applications* 19:577-581.
17. **Ogle, K.** and S.W. Pacala. (2009) A modeling framework for inferring tree growth and allocation from physiological, morphological, and allometric traits. *Tree Physiology* 29:578-605.
18. **Patrick, L.D.*, **K. Ogle**, D. Tissue, C.W. Bell, and J. Zak. (2009) Physiological responses of two contrasting desert plant species to precipitation variability are differentially regulated by soil moisture and nitrogen dynamics. *Global Change Biology* 15:1214-1229.
19. ***Ogle, K.**, J.J. Barber, C.J. Willson, and B. Thompson. (2009) Hierarchical statistical modeling of xylem vulnerability to cavitation. *New Phytologist* 182:541-554.
20. **Cable, J.M.*, **K. Ogle**, A.P. Tyler, M.A. Pavao-Zuckerman, and T.E. Huxman. (2009) Woody plant encroachment impacts on soil carbon and microbial processes: Results from a hierarchical Bayesian analysis of soil incubation data. *Plant and Soil* 320:153-167.

21. Price, C.A., **K. Ogle**, E.P. White, and J. Weitz. (2009) Evaluating scaling models in biology using hierarchical Bayesian approaches. *Ecology Letters* 12:641-651.
22. **Patrick, L.D.*, **K. Ogle**, and D.T. Tissue. (2009) A hierarchical Bayesian approach for estimation of photosynthetic parameters of C_3 plants. *Plant, Cell and Environment* 32:1695-1709.

2010

23. Resco, V., J.I. Querejeta, **K. Ogle**, J. Voltas, M.-T. Sebastia, P.Serrano-Ortiz, J.C. Linares, C. Moreno-Gutierrez, A. Herrero, J.A. Carreira, P. Torres-Canabate, F. Valladares. (2010) Stable isotope views on ecosystem function: challenging or challenged? *Biology Letters* doi:10.1098/rsbl.2009.0950.
24. Lichstein, J.W., J. Dushoff, **K. Ogle**, A. Chen, D.W. Purves, J.P. Caspersen, S.W. Pacala. (2010) Unlocking the forest inventory data: relating individual-tree performance to unmeasured environmental factors. *Ecological Applications* 20:684-699.
25. **Cable J.M.*, **K. Ogle**, *R.W. Lucas*, T.N. Charlet, M. Cleary, B.E. Ewers, A. Griffith, T.E. Huxman, M.E. Loik, R.S. Nowak, E. Pendall, M. Rogers, S.D. Smith, H. Steltzer, P.F. Sullivan, D.T. Tissue, N.C. van Gestel, J.M. Welker. (2010) The temperature responses of soil respiration in deserts: a seven desert synthesis. *Biogeochemistry* 103:71-90

2011 – Moved to Arizona State University

26. Kattge, J., **K. Ogle**, G. Boenisch, S. Díaz, S. Lavorel, J. Madin, K. Nadrowski, S. Noellert, K. Sartor, and C. Wirth. (2011) A generic structure for plant trait databases. *Methods in Ecology and Evolution* 2:202-2013
27. **Cable, J.M.*, **K. Ogle**, D. Williams (2011). Contribution of glacier meltwater to streamflow in the Wind River Range, Wyoming, inferred via a Bayesian mixing model applied to isotopic measurements. *Hydrological Processes* 25:2228-2236
28. Hobbs, N.T., **K. Ogle** (2011). Introducing data-model assimilation to students of ecology. *Ecological Applications* 21:1537-1545.
29. *Luo, Y., **K. Ogle**, C. Tucker, S. Fei, C. Gao, S. LaDeau, J. Clark, D. Schimel (2011). Ecological forecasting and data assimilation in a data-rich era. *Ecological Applications* 21:1425-1442.

2012

30. **Cable J.M.*, G. Barron-Gafford, **K. Ogle**, M. Pavao-Zuckerman, R.L. Scott, D.G. Williams, T.E. Huxman (2012). Shrub encroachment alters sensitivity of soil respiration to temperature and moisture. *Journal Geophysical Research – Biogeosciences* Vol. 117 (G1), doi: 10.1029/2011JG001757
31. Resco de Dios, V., M.L. Goulden, **K. Ogle**, A.D. Richardson, D.Y. Hollinger, E.A. Davidson, J.G. Alday, G.A. Barron-Gafford, A. Carrara, A.S. Kowalski, W.C. Oechel, B.R. Reverter, R.L. Scott, R.K. Varner, R. Diaz-Sierra, J.M. Moreno (2012). Endogenous circadian regulation of carbon dioxide exchange in terrestrial ecosystems. *Global Change Biology*, 18: 1956-1970
32. ***Ogle, K.**, *R.W. Lucas*, *L.P. Bentley*, *J.M. Cable*, G. Barron-Gafford, A. Griffith, D. Ignace, G.D. Jenerette, A. Tyler, T.E. Huxman, M.E. Loik, S.D. Smith, D.T. Tissue (2012). Differential daytime and nighttime stomatal behavior in plants from North American deserts. *New Phytologist* 194:464-476

2013 – Promoted to Associate Professor

33. **Ogle, K.**, J.J. Barber, K. Sartor (2013). Feedback and modularization in a Bayesian meta-analysis of tree traits affecting forest dynamics. *Bayesian Analysis* 8:133-168.
34. *Tucker, C., J. Bell, E. Pendall, **K. Ogle** (2013) Does declining carbon-use efficiency explain thermal acclimation of soil respiration with warming? *Global Change Biology* 19:252-263.
35. **Sonderegger, D.*, **K. Ogle**, R. D. Evans, R.S. Nowak, S. Ferguson (2013). Temporal dynamics of fine roots under long-term exposure to elevated CO_2 in the Mojave Desert. *New Phytologist* 198:127-138.
36. Newingham, B.A., C.H. Vanier, T.N. Charlet, **K. Ogle**, S.D. Smith, R.S. Nowak. No cumulative effect of ten years of elevated [CO_2] on perennial plant biomass components in the Mojave Desert (2013). *Global Change Biology* 19:2168-2181
37. Mailloux, J., **K. Ogle**, and C. Frost (2013). Application of a Bayesian model to infer the - contribution of coalbed natural gas produced water in the Powder River, Wyoming and Montana. *Hydrological Processes* 28:2361-2381
38. **Cable, J.M.*, **K. Ogle**, *G. Barron-Gafford*, *L.P. Bentley*, W.L. Cable, R.L. Scott, D.G. Williams, T.E. Huxman (2013). Antecedent conditions influence soil respiration differences in shrub and grass patches. *Ecosystems* 16:1230-1247
39. **Cable, J.M.*, **K. Ogle**, W.R. Bolton, L.P. Bentley, V. Romanovsky, H. Iwata, Y. Harazono, and J. Welker (2013). Permafrost thaw affects boreal deciduous plant transpiration through increased soil water, deeper thaw, and warmer soils. *Ecohydrology* 4:982-997.
40. Stahl, U., J. Kattge, B. Reu, W. Voigt, **K. Ogle**, J. Dickie, C. Wirth (2013). Whole-plant trait spectra of North American woody plant species reflect fundamental ecological strategies. *Ecosphere* 4:art128
41. *Gemoets, D.E., J.J. Barber, **K. Ogle** (2013). Reversible jump MCMC for inference in a deterministic individual-based model of tree growth for studying forest dynamics. *Environmetrics.* 24: 433-448

2014 – Maternity leave for part of year

42. ***Ogle, K.**, *Pathikonda, S.*, K. Sartor, J.W. Lichstein, J. Osnas, 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
43. ***Ogle, K.,** C. Tucker, *J.M. Cable* (2014). Beyond simple linear mixing models: Process-based isotope partitioning of ecological processes. *Ecological Applications* 24:181-195
44. **Barron-Gafford, G.*, *J.M. Cable*, *L. P. Bentley*, R.L. Scott, T.E. Huxman, G.D. Jenerette, **K. Ogle** (2014). Quantifying the time scales over which exogenous and endogenous conditions affect soil respiration. *New Phytologist* 202:442-454
45. Barber, J.J., **K. Ogle** (2014). To *P* or not to *P*? *Ecology* 95:621-626.
46. *Evans, R.D., A. Koyama, *D.L. Sonderegger*, T.N. Charlet, B. Newingham, L.F. Fenstermaker, B. Harlow, V. Jin, **K. Ogle**, S.D. Smith, R.S. Nowak (2014). Greater ecosystem carbon in the Mojave Desert after ten years exposure to elevated CO_2. *Nature Climate Change* 4:394-397
47. Pietsch, K., **K. Ogle**, H. Cornelissen, W. Cornwell, G. Bönisch, J. Craine, B. Jackson, J. Kattge, D. Peltzer, J. Penuelas, P. Reich, D. Wardle, J. Weedon, I. Wright, A. Zanne, C. Wirth (2014). Global relationship of leaf and wood decomposability: the role of functional traits within and across plant organs. *Global Ecology and Biogeography* 23:1046-1057

48. *Tucker, C., *J.M. Young*, D. Williams, **K. Ogle** (2014). Process-based partitioning of winter soil respiration in a subalpine ecosystem reveals importance of rhizospheric respiration. *Biogeochemistry* 121:389-408.

2015 – Moved to Northern Arizona University

49. Barber, J.J., P. Gupta, W. Edwards, **K. Ogle**, L. Waller (2015). Combining and comparing multiple serial dilution assays of particles in solution: Application to Brucellosis in elk of the Greater Yellowstone Ecosystem. *Ecological & Environmental Statistics* 22:161-177

50. ***Ogle, K.**, J.J. Barber, G.A. Barron-Gafford, *L.P. Bentley*, *J.M. Cable*, T.E. Huxman, M.E. Loik, D.T. Tissue (2015). Quantifying ecological memory of plant and ecosystem processes. *Ecology Letters* 18:221-235

51. *Kropp, H. and **K. Ogle** (2015). Seasonal stomatal behavior and the influence of plant neighbors on stomatal conductance in a common desert shrub. *Oecologia.* 177:345-355

52. **Ogle, K.**, E. Pendall (2015) Isotope partitioning of soil respiration: Bayesian solution to accommodate multiple sources of variability. *Journal of Geophysical Research –Biogeosciences* 120: 221-236

53. **Ryan, E.*, **K. Ogle**, T.J. Zelikova, D.R. LeCain, D.G. Williams, J.A. Morgan, E. Pendall (2015) Antecedent moisture and temperature conditions modulate the response of ecosystem respiration to elevated CO_2 and warming CO_2. *Global Change Biology* 21:2588-2602.

54. Anderegg, W.R.L, C. Schwalm, F. Biondi, J.J. Camarero, G. Koch, M. Litvak, **K. Ogle**, J.D. Shaw, E. Shevliakova, A.P. Williams, A. Wolf, E. Ziaco, S. Pacala (2015). Pervasive drought legacies in forest ecosystems and their implications for carbon cycle models. *Science* 349:528-532.

2016

55. Dong, X., N. Grimm, **K. Ogle** (2016) Temporal variability in hydrology modifies the influence of geomorphology on wetland distribution along a desert stream. *Journal of Ecology* 104:18-30.

56. Oberle, B. **K. Ogle**, J.C. Penagos, J. Sweeney, A. Zanne (2016). A Bayesian model for xylem vessel length accommodates subsampling and reveals skewed distributions in species that dominate seasonal habitats. *Journal of Plant Hydraulics* 3:e-003, 17 pages.

57. *Kropp, H., **K. Ogle**, M.F. Wojciechowski (2016). A framework for partitioning plant rooting profiles from neighbors using multiple data types. *Journal of Vegetation Science* 27:587-595

58. Hungate, B.A., D.N. Kearns, **K. Ogle**, M. Caron, J.C. Marks, H.W. Rogg (2016). Hydrogen isotopes as a sentinel of biological invasion by the Japanese beetle, *Popillia japonica* (Newman). *PloS ONE* 11(3):e0149599

59. **Ogle, K.**, J.J. Barber (2016) Plant and ecosystem memory. *CHANCE* 29:16-22

60. *Peltier, D., M. Fell, **K. Ogle** (2016). Legacy effects of drought in the southwestern United States: A multi-species synthesis. *Ecological Monographs* 86:312-326

61. *Tucker, C., S. Tamang, E. Pendall, **K. Ogle** (2016). Shallow snowpack inhibits soil respiration in sagebrush steppe through multiple biotic and abiotic mechanisms. *Ecosphere* 7(5):e01297

62. Hinckley, E-L., G. Bonan, G. Bowen, B. Colman, P. Duffy, C. Goodale, B. Houlton, E. Marín-Spiotta, **K. Ogle**, S. Ollinger, E. Paul, P. Vitousek, K. Weathers, D. Williams (2016). The soil and plant biogeochemistry sampling design for the National Ecological Observatory Network. *Ecosphere* 7(3):e01234 (Special Feather: NEON Design)

63. *__Ogle, K.__, *E. Ryan*, F. Dijkstra, E. Pendall (2016). Quantifying and reducing uncertainties in soil CO_2 fluxes with hierarchical data-model integration. *Journal of Geophysical Research – Biogeosciences*, 121:2935-2948, doi:10.1002/2016JG003385.

2017

64. **Ryan, E.*, __K. Ogle__, D. Peltier, A.P. Walker, M.G. De Kauwe, B.E. Medlyn, D.G. Williams, W. Parton, S. Asao, B. Guenet, A.B. Harper, X. Lu, K.A. Luus, S. Zaehle, S. Shu, C. Werner, J. Xia, E. Pendall (2017). Gross primary production responses to warming, elevated CO_2, and irrigation: quantifying the drivers of ecosystem physiology in a semiarid grassland. *Global Change Biology*, doi: 10.1111/gcb.13602

65. Young-Roberston, J.M., **K. Ogle**, J.M. Welker (2017). Thawing seasonal ground ice: An important water source for boreal forest plants in Interior Alaska. *Ecohydrology* 10(3):e1796, DOI 10.1002/eco.1796

66. *Kropp, H., __K. Ogle__, E.R. Vivoni, K.R. Hultine (2017). The sensitivity of evapotranspiration to inter-specific plant neighbor interactions: Implications for models. *Ecosystems*, DOI: 10.1007/s10021-017-0112-5

67. Schwalm, C.R., W.R.L. Anderegg, F. Biondi, G. Koch, M. Litvak, **K. Ogle**, J.D. Shaw, A. Wolf, MsTMIP Participants. Global patterns of drought recovery. *Nature* 548:202-205

Publications Accepted and/or in Press

68. Harris, J.A., C.W. Marean, **K. Ogle**, J. Thompson. The trajectory of bone surface modification studies in paleoanthropology and a new Bayesian solution to the identification controversy. *Journal of Human Evolution* 110:69-81.

69. **Ryan, E.*, __K. Ogle__, H. Kropp, *K.E. Samuels-Crow*, Y. Carrillo, E. Pendall. Modelling soil CO_2 production and transport with dynamic source and diffusion terms. Testing the steady-steady assumption using DETECT v1.0. Accepted by *Geoscientific Model Development*

70. *Peltier, D., J.J. Barber, **K. Ogle**. Quantifying antecedent climatic drivers of tree growth in the Southwestern US. To appear in *Journal of Ecology*, DOI: 10.1111/1365-2745.12878

71. *Fell, M., J. Barber, J. Lichstein, **K. Ogle**. Multidimensional trait space informed by a mechanistic model of tree growth and carbon allocation. To appear in *Ecosphere*

Chapters in Books

72. Reynolds, J.F., P.R. Kemp, **K. Ogle**, R.J. Fernández, Q. Gao, and J. Wu (2006). Modeling the unique attributes of desert ecosystems: Potentials and limitations based on lessons from the Jornada Basin. In: L.F. Huenneke, K.M. Havstad, W.H. Schlesinger (Eds.). *Structure and Function of a Chihuahuan Desert Ecosystem: Long-term Ecological Research in the Jornada Basin, New Mexico*. Oxford University Press, Oxford, UK.

73. __Ogle, K.__, M. Uriarte, J. Thompson, J. Johnstone, A. Jones, Y. Lin, E. McIntire, and J. Zimmerman (2006). Implications of vulnerability to hurricane damage for long-term survival of tropical tree species: A Bayesian hierarchical analysis. In: J.S. Clark and A.E. Gelfand (Eds.) *Hierarchical Modeling for the Environmental Sciences: Statistical Methods and Applications*. Oxford University Press, Oxford, UK.

74. **Ogle, K.,** J.J. Barber (2012). Bayesian Statistics. In: A. Hastings, L. Gross (Eds.). *Encyclopedia of Theoretical Ecology*. University of California Press, Berkeley.

Book Reviews

75. **Ogle, K.** (2007) A Collection of computer-intensive methods. Book Review. *BioScience* 57:886-887.

Other

76. **Ogle, K.**, R.L. Wolpert, and J.F. Reynolds (2003) Reconstructing plant root area and water uptake profiles. Institute of Statistics and Decision Sciences Discussion Paper #2003-06, Duke University, 32 pp.
77. Cressie, N., J.A. Hoeting, S. Lele, R. McRoberts, **K. Ogle**, R. Smith, L. Stefanski, G. Ziv (2011). Appendix 3: Measuring, Monitoring, and Forecasting Progress toward Sustainability ("white paper"). In: J. Rehmeyer (science writer), M. Cozzens (ed.), and F.S. Roberts (ed.), *Mathematical and Statistical Challenges for Sustainability: Report of a Workshop held November 15-17, 2010*; an NSF-sponsored workshop.

In Review or In Revision

78. Oberle, B., **K. Ogle**, A. Zanne, C. Woodall. When a tree falls: controls on wood decay predict standing dead tree failure and new risks in changing forests. In review with *PLOS*
79. Bahn, M., S. Vicca, C. Körner, **K. Ogle**, V. Vandvik, G. Kröel-Dulay, K.S. Larsen, J. Peñuelas. Towards a new generation of global change experiments and meta-analyses. In revision for *TREE*
80. *Fell, M., **K. Ogle**. Refinement of a theoretical trait space for North American trees via environmental filtering. In revision for *Ecological Monographs*.
81. Truettner, C., W.R.L. Anderegg, F. Biondi, G.W. Koch, **K. Ogle**, C. Schwalm, M.E. Litvak, J.D. Shaw, E. Ziaco. Seasonal climate responses and drought legacy effects in tree-ring chronologies from the southwestern USA. In revision for *Forest Ecology and Management*.
82. **Samuels-Crow, K.E.*, *E. Ryan*, E. Pendall, **K. Ogle**. Can we use surface soil respiration to infer subsurface carbon fluxes: Insights from modeled subsurface CO_2 production and efflux. In review with *Journal of Geophysical Research – Biogeosciences*.

POPULAR PRESS

2014 Provided a quick response/explanation for National Public Radio's (NPR) *Wait Wait Don't Tell Me* episode about the "circadian clock," featuring results from: Resco de Dios, V., M.L. Goulden, **K. Ogle**, A.D. Richardson, D.Y. Hollinger, E.A. Davidson, J.G. Alday, G.A. Barron-Gafford, A. Carrara, A.S. Kowalski, W.C. Oechel, B.R. Reverter, R.L. Scott, R.K. Varner, R. Diaz-Sierra, J.M. Moreno (2012). Endogenous circadian regulation of carbon dioxide exchange in terrestrial ecosystems. *Global Change Biology*, 18: 1956-1970

CONTRACTS & GRANTS

Summary: Total amount of grant funds awarded since 2006 = $5.72 million, with approximately $3.1 million directly awarded to Ogle's institution; overall annual funding rate = $520K/year, and funding rate based on funds awarded directly to Ogle's institution = $283K/year. (Grant funding summaries do not include fellowships awarded to my post-docs.)

Funded Projects as PI

2017-2018 Research Equipment Acquisition Program: $\delta^{18}O$, δD and ^{17}O-excess Isotopic Water Analyzer (Picarro, Inc.). Co-PIs: George Koch (NAU), Kevin Hultine (Desert Botanical Gardens and NAU), Ben Ruddell (NAU), Abe Springer (NAU), Ben Koch (NAU), Kym Samuels-Crow (NAU). NAU TRIF-REAP, $100,000 (1 year).

2017-2018 REU Supplement: RAPID: Leveraging the 2015-2016 El Nino to evaluate drought legacy effects on tree growth responses to rare wet events. Co-PIs: George Koch (NAU), William Anderegg (Univ Utah), Dave Auty (NAU), Marcy Litvak (Univ. New Mexico). NSF RAPID Emerging Frontiers, $14,997 (1 year).

2016-2018 RAPID: Leveraging the 2015-2016 El Nino to evaluate drought legacy effects on tree growth responses to rare wet events. Co-PIs: George Koch (NAU), William Anderegg (Univ Utah), Dave Auty (NAU), Marcy Litvak (Univ. New Mexico). NSF RAPID Emerging Frontiers, $190,873 (1 year + 1 year extension).

2014-2017 ABI Innovation: Quantifying, simulating, and visualizing tree growth and its antecedent endogenous and climatic predictors. Co-PI: Jarrett Barber (NAU). NSF Advances in Biological Informatics, $818,660 (3 years).

2014 Coupling of plant carbon and water dynamics in desert ecosystems. ASU School of Life Sciences Single Discipline Grant, $5000 (1 year)

2009-2014 A theoretical and computational framework for linking tree form and function to forest diversity and productivity. CoPI: Jarrett Barber (University of Wyoming). NSF Advances in Biological Informatics, $808,673 (3 years, with extensions).

2010-2011 NICCR Focus 4: Quantifying the importance of aboveground controls on soil carbon efflux in deserts of the Southwest. National Institute for Climate Change Research (NICCR), US Department of Energy (DOE), $125,909 (1 year).

2009-2010 Unlocking the mysteries of belowground plant form and function. UW Faculty Grand-in-Aid Program, $7,050 (1 year).

2008-2009 Understanding forest responses to climate change: Developing a mechanistic framework of tree and forest carbon dynamics. Wyoming NASA Space Grant Consortium, $20,000 (1 year).

2006-2009 NICCR Focus 4: Synthesis of existing datasets to explore the implications of altered precipitation for carbon and water dynamics in desert ecosystems of the southwestern US. CoPIs: Travis Huxman (University of Arizona), Michael Loik (University of California, Santa Cruz), Stan Smith (University of Nevada, Las Vegas), and David Tissue (Texas Tech). National Institute for Climate Change Research (NICCR), US Department of Energy (DOE), $405,871 (3 years).

2006-2007 Bioinformatics Starter Grant: Species-specific traits controlling forest and woodland dynamics revealed by Bayesian melding of diverse data and process models. National Science Foundation (NSF), $50,000 (1 year).

2003-2005 Bayesian melding of ecological models and data: Linking plant physiology and population processes. NSF Interdisciplinary Informatics Postdoctoral Fellowship, $100,000 (2 years).

Funded Projects as CoPI

2014-2016 Collaborative Research: Extreme events and ecological acclimation: Scaling from cells to ecosystems. PI: Steve Pacala (Princeton), co-PIs: William Anderegg

(Princeton), Adam Wolf (Princeton), Kiona Ogle (ASU), Franco Biondi (Univ Nevada, Reno), Christopher Schwalm (Northern Ariz Univ), George Koch (Northern Ariz Univ). NSF Macrosystems, total award = $589,300; ASU subcontract = $41,771 (2 years).

2012-2015 Building capacity in Bayesian analysis for practicing ecologists. CoPIs: N.T. (Tom) Hobbs (PI) (Colorado State Univ), James Clark (Duke Univ), Mevin Hooten (Colorado State Univ & USGS), Maria Uriarte (Columbia Univ). NSF Population & Community Cluster, total award = $385,005; ASU subcontract = $43,272 (3 years).

2012-2015 Hydrological regulation of grassland carbon metabolism responses to warming and elevated CO_2. CoPIs: Elise Pendall (PI, Univ of Wyoming), David Williams (Univ Wyoming), Jana Heisler-White (Univ Wyoming), Jack Morgan (USDA-ARS, Ft. Collins), Feike Dijkstra (USDA-ARS, Ft. Collins), Bill Parton (Colorado State Univ.). DOE Office of Biological and Environmental Research, total award = $1,044,169; ASU subcontract = $318,332 (3 years).

2009-2014 RCN: Forecasts Of Resource and Environmental Changes: data Assimilation Science and Technology (FORECAST). CoPIs: Yiqi Luo (PI) (Univ of Oklahoma), Shannon LaDeau (Cary Institute of Ecosystem Science), James Clark (Duke Univ), David Schimel (NCAR). NSF Research Coordination Networks, total award = $500,000; UW/ASU subcontract = $0 (4 years with extension).

2009-2011 Biotic processes regulating the carbon balance of desert ecosystems. CoPIs: Bob Nowak (PI) (Univ Nevada, Reno), Dave Evans (Washington State Univ), Stan Smith (Univ Nevada, Las Vegas), Lynn Fenstermaker (Desert Research Institute). Department of Energy (DOE), $530,260; UW/ASU subcontract = $37,562 (2 years).

Funded Projects as Graduate Student Sponsor

2017-2019 Dissertation Research: Role of non-structural carbohydrate dynamics in legacy effects of drought in Southwestern forests. PI: Ogle; PhD Fellow: Drew Peltier (NAU, Biology). NSF Doctoral Dissertation Improvement Grant, $19,760 (2-years).

2011-2013 Dissertation Research: Winter soil respiration in southeast Wyoming. PI: Ogle; PhD Fellow: Colin Tucker (Univ of Wyoming, Program in Ecology). NSF Doctoral Dissertation Improvement Grant, $14,922 (2-years).

2009-2011 Wintertime plant, soil, and ecosystem carbon cycling: Scaling plot-level mechanisms to landscape-level patterns. PI: Ogle; PhD Fellow: Colin Tucker (Univ of Wyoming, Program in Ecology). NASA Earth System Science Fellowship, $90,000 (3-year fellowship).

Funded Projects as Postdoctoral Sponsor or Co-sponsor

2009-2011 The consequences of permafrost degradation on plant water-use. PI/Fellow: Jessica Cable (Univ of Wyoming). Primary Sponsor: Jeff Welker (Univ of Alaska), Secondary Sponsor: Kiona Ogle. NSF Postdoctoral Fellowships in Polar Regions Research (2-year fellowship).

2009-2011 Linking scaling and physiological models to estimate carbon and water fluxes of diverse plant species. PI/Fellow: Lisa Patrick Bentley (Univ of Arizona). Primary Sponsor: Brian Enquist (Univ of Arizona), Secondary Sponsor: Kiona Ogle. NSF Postdoctoral Fellowships in Biological Informatics (2-year fellowship).

2012-2014 Quantifying soil microbial memory and its influence on temporal ecosystem lags using hierarchical Bayesian modeling. PI/Fellow: Sarah Evans (Colorado State University). NSF Postdoctoral Research Fellowships in Biology, $123,000 (2 years).

PROFESSIONAL AFFILIATIONS & ACTIVITIES

Memberships in Professional Societies

Ecological Society of America (ESA)

American Geophysical Union (AGU)

American Statistical Association (ASA)

Offices held in Professional Societies

Secretary, Physiological Ecology Section, ESA (Jan 2008 – Dec 2009)

Advisory Boards

Member, Advisory Board, NIMBioS (National Institute for Mathematical and Biological Synthesis) (Oct 2010 – Oct 2013)

Other Committee Activities

2013 Chair, Selection Committee, Travel & Workshop Awards for the DOE workshop on "Strategies to Promote Integrated Experiment-Model Approaches to Terrestrial Ecosystem Studies," organizers: Yiqi Luo (Univ. Oklahoma), Dennis Baldocchi (UC-Berkeley), James Randeron (UC-Irvine), Margaret Tom (LBL), Stan Wullschleger (ORNL), Washington DC

2012-2013 Member, Biogeochemistry Technical Working Group, Nation Ecological Observatory Network (NEON), lead NEON staff scientist: Eve-Lyn Hinkley, working group includes ~10 expert scientists.

Grant Review Panels

2006 National Science Foundation (NSF), Biological Informatics Postdoctoral Fellowships

2008 NSF, Biological Informatics Postdoctoral Fellowships

NSF, Ecosystems

2009 NSF, Biological Informatics Postdoctoral Fellowships

NSF, Ecosystems

2010 NSF, Ecosystems

2012 NSF, Broadening Participation in Biology Postdoctoral Fellowships

2013 NSF, Postdoctoral Research Fellowships in Biology

2015 NSF, Advances in Biological Informatics

2016 NSF, NSF-DEB Ecosystems preproposal panel

Invitations declined: NSF, Cyber-Enabled Discovery and Innovation (2008); NSF, Ecosystems (fall 2008; fall 2009); NSF, Advances in Biological Informatics (Dec 2009, April 2010, Dec 2010); NSF, Decadal and Regional Climate Prediction using Earth System Models (Aug 2010); NFS, Software Infrastructure for Sustained Innovation (2010); NSF, Ecosystems preproposals (2012)

Grant Refereeing

2005 NSF-QEIB (1)

2006 NSF-DEB Ecological Biology Cluster (1), NSF-DEB Ecology (1), NSF-DEB Ecosystems (2), US Department of Energy-NICCR (6)

2007 US Department of Energy-NICCR (7)

2008 US Department of Energy-NICCR (1)

2009 US Department of Energy-NICCR (4)

2010 NSF-DEB Ecosystems (4)

2011 NSF-DEB Population & Community Ecology (1)

2012 NSF-DEB Population & Community Ecology (1)

Manuscript Refereeing

2004 *Journal of Theoretical Biology* (1), *Tree Physiology* (1)

2005 *Ecology* (1), *Journal of Arid Environments* (1), *Journal of Theoretical Biology* (1), *Plant Ecology* (2)

2006 *Annals of Botany* (1), *Journal of Arid Environments* (2), *Journal of Geophysical Research* (1)

2007 *Ecological Applications* (2), *Ecology* (1), *Journal of Geophysical Research* (1), *Journal of Mathematical Biology* (1)

2008 *Ecology* (1), *Oecologia* (1), *New Phytologist* (2)

2009 *Ecology* (3), *Functional Ecology* (1), *Functional Plant Biology* (1), book chapter on meta-analysis in ecology (1)

2010 *Ecological Applications* (3), *Ecology* (2), *New Phytologist* (1), *Limnology and Oceanography* (1)

2011 *Annals of Applied Statistics* (1), *Ecology Letters* (1), *Journal of Geophysical Research* (2), *Oecologia* (1), *Proceeding of the National Academy of Science* (2)

2012 *Annals of Applied Statistics* (1), *Ecological Applications* (2), *Oecologia* (1), *Plant and Soil* (1)

2013 *Plant Functional Biology* (1), *Proceedings of the National Academy of Sciences* (1), *Ecology* (1), *Journal of Ecology* (1)

2014 *Forest Ecology & Management* (1)

2015 *Ecological Monographs* (1), *Ecological Applications* (1), *Journal of Geophysical Research-Biogeosciences* (1), *Oecologia* (1)

2016 *Methods in Ecology and Evolution* (1), *Science* (1), *Ecology Letters* (1), *Ecology* (1), *Ecosphere* (1), *Journal of Geophysical Research-Biogeosciences* (1), *Science* (1), *Water Resources Reasearch* (1)

2017 *Oecologia* (1), *Functional Ecology* (1), *Ecology* (1), *Ecosystems* (1), *New Phytologist* (1)

Journal Editorial Activities

2010 Guest editor for *Ecological Applications*

2013 Guest editor for *Ecological Applications*

2015 Guest editor for *Ecological Applications*

HONORS & AWARDS

2000-2003 Graduate Fellow, NASA Earth Systems Science Fellowship, Department of Biology, Duke University, Durham, NC

2002 Forrest Shreve Desert Research Award, Ecological Society of America, Department of Biology, Duke University, Durham, NC

2001 Grants-in-Aid-of-Research, Department of Biology, Duke University, Durham, NC

2000 Forrest Shreve Desert Research Award, Ecological Society of America, Department of Biology, Duke University, Durham, NC

1999 Grants-in-Aid-of-Research, Sigma Xi, Department of Biology, Duke University, Durham, NC

1999 Keever Award for Field Research, Department of Botany, Duke University, Durham, NC

1999 Giles Award for Phytotron Research, Department of Botany, Duke University, Durham, NC

1997 Bayless Research Award for Outstanding Undergraduate Research, Northern Arizona University (NAU), Flagstaff, AZ

1997 Outstanding Senior (valedictorian) in the College of Arts and Sciences and in the Departments of Mathematics and Biological Sciences, NAU, Flagstaff, AZ

1997 Honor Society of Phi Kappa Phi, NAU, Flagstaff, AZ

1996 Meritorious Award, Mathematical Modeling Contest, The Consortium for Mathematics and Its Applications (COMAP), NAU, Flagstaff, AZ

1995, 1996 Outstanding Achievement Award, Rocky Mountain Research Station, U.S. Forest Service, Flagstaff, AZ

1995, 1996 Invited participant of the William Lowell Putnam Mathematical Competition, Department of Mathematics, NAU, Flagstaff, AZ

1992-1996 Northern Arizona University General Academic Scholarship, NAU, Flagstaff, AZ

PAPERS PRESENTED, SYMPOSIA & INVITED SEMINARS

*Indicates presentations/posters with my graduate students (underline), undergraduate students (double underline), or postdoctoral associates (*italics*).

Keynote Presentations

2017 *Integrating data and models to learn about the memory of ecological systems*. National Institute for Mathematical and Biological Synthesis (NIMBioS) Ninth Annual Undergraduate Research Conference at the Interface of Mathematics and Biology, Knoxville, TN.

2010 *Application of mechanistic isotope mixing models for partitioning plant and ecosystem fluxes*, symposium on Stable Isotopes as Early Indicators of Global Change, Spanish Ecological Society, Úbeda, Spain

Presentations and Posters (#invited, otherwise contributed)

2017 #*D. Peltier, J. Guo, *K. Samuels-Crow*, *L. Yocom-Kent*, *Y. Liu*, W. Anderegg, M. Fell, G. Koch, **K. Ogle**. Differential growth responses of pinyon and juniper during El Niño and La Niña periods. 14th Biennial Conference of Science & Management on the Colorado Plateau & Southwest Region, Flagstaff, AZ.

#*_Yocom-Kent, L._, **K. Ogle (presenter)**, _Y. Liu_, P. Szejner, R.K. Monson, and _D. Peltier_. Tree growth response to climate varies across a monsoon precipitation gradient. 14th Biennial Conference of Science & Management on the Colorado Plateau & Southwest Region, Flagstaff, AZ.

*Guo, J.S., L.F. Gear, K.R. Hultine, **K. Ogle**. Seasonal trends in leaf non-structural carbohydrates driven by depletion of starch in *Larrea tridentata*. Ecological Society of America 102nd Annual Meeting, Portland, OR.

*D. Peltier, J. Guo, *K. Samuels-Crow*, *L. Yocom-Kent*, *Y. Liu*, W. Anderegg, C. Schwalm, M. Litvak, D. Auty, M. Fell, G. Koch, **K. Ogle**. Does drought stress constrain the response of southwestern US trees to an El Niño precipitation surplus? Ecological Society of America 102nd Annual Meeting, Portland, OR.

K.E. Samuels-Crow*, *Y. Liu*, D. Peltier, J. Welker, W. Anderegg, G. Koch, **K. Ogle. Variability in foundation tree species water sources across an elevation gradient in the semiarid southwestern U.S. Ecological Society of America 102nd Annual Meeting, Portland, OR.

L.L. Yocom-Kent*, **K. Ogle, *Y. Liu*, P. Szejner, R.K. Monson, D. Peltier. Tree growth response to climate varies across a monsoon precipitation gradient. Ecological Society of America 102nd Annual Meeting, Portland, OR.

#**Y. Liu*, **K. Ogle**, C. Schwalm, *K.E. Samuels-Crow*. Ecological memory and climatic response of daily net ecosystem exchange (NEE) across the globe. Ecological Society of America 102nd Annual Meeting, Portland, OR.

*M. Fell, **K. Ogle**, J. Barber, J. Lichstein. Effects of environmental filtering and non-random mortality on the theoretical trait space of North American Trees. Ecological Society of America 102nd Annual Meeting, Portland, OR.

#**K. Ogle**. Over what time-scales does precipitation influence plant and ecosystem fluxes? Ecological Society of America 102nd Annual Meeting, Portland, OR.

#**K. Ogle**, J. Barber, M. Fell, A. Leighton, J. Lichstein. Computationally efficient, large-scale application of individual- and trait-based models of tree growth and mortality. Ecological Society of America 102nd Annual Meeting, Portland, OR.

P. Pappalardo, **K. Ogle**, E.A. Hamman, J.R. Bence, C.W. Osenberg. Comparing traditional and Bayesian approaches to ecological meta-analyses. Ecological Society of America 102nd Annual Meeting, Portland, OR.

#**K. Ogle**. Bayesian synthesis of ecosystem responses from long-term, multi-factor experiments. 3rd IMBALANCE-P Annual Meeting, Paris, France.

2016 #***K. Ogle**, M. Fell, J. Barber. Quantifying multi-dimensional functional trait spaces of trees: empirical versus theoretical approaches. American Geophysical Union Fall Meeting, San Francisco, CA.

K. Samuels-Crow*, **K. Ogle, *E. Ryan*, E. Pendall. Biotic and abiotic controls on the temporal relationship between subsurface CO_2 production and efflux in prairie grasslands. American Geophysical Union Fall Meeting, San Francisco, CA.

*E. Pendall, D.M. Blumenthal, Y. Carrillo, F.A. Dijkstra, K.E. Mueller, L. Nelson, M. Nie, **K. Ogle**, *E. Ryan*, *K.E. Samuels-Crow*, D.W. Williams, T.J. Zelikova. Interactive effects of experimental warming and elevated CO_2 on belowground allocation and soil organic matter decomposition at the Prairie Heating and CO_2 Enrichment Experiment. American Geophysical Union Fall Meeting, San Francisco, CA.

K. Ogle, S. Pacala, W. Anderegg, C. Schwalm, G. Koch, F. Biondi, A. Wolf, M. Litvak, J. Shaw. Extreme events and ecological acclimation (legacies): Scaling from cells to ecosystems. National Science Foundation (NSF) Macrosystems Biology (MSB) PI Meeting, Arlington, VA.

J. Guo, **K. Ogle**. Antecedent soil moisture and VPD interactively control water potential and hydraulic thresholds in *Larrea tridentata*. Ecological Society of America 101th Annual Meeting, Ft. Lauderdale, FL.

#D. Peltier, J. Barber, **K. Ogle**. Evaluating the temporal lags and influence of past climate on tree growth in the Southwest: Implications for responses to climate change. Ecological Society of America 101th Annual Meeting, Ft. Lauderdale, FL.

#**K. Ogle,** D. Peltier, M. Fell, J. Guo, H. Kropp, J. Barber. When and how should we adjust for multiple comparisons in hierarchical Bayesian models? Ecological Society of America 101th Annual Meeting, Ft. Lauderdale, FL.

J.A. Harris, C.W. Marean, **K. Ogle**, J. Thompson, K. Reed. A Bayesian model for identifying bone surface modification and application to the ~2.82 ma Ledi-Geraru assemblage. Annual Meeting of the Paleoanthropology Society, Atlanta, GA.

2015 W. Anderegg, C. Schwalm, F. Biondi, J. J. Camarero, G. Koch, M. Litvak, **K. Ogle**, J. Shaw, E. Shevliakova, P. Williams, A. Wolf, E. Ziaco, S. Pacala. Pervasive drought legacy effects in forest ecosystems and their carbon cycle implications. American Geophysical Union Fall Meeting, San Francisco, CA.

#**K. Ogle**, *E. Ryan*, E. Pendall Quantifying productivity responses to antecedent environmental drivers at multiple time-scales, Ecological Society of America 100th Annual Meeting, Baltimore, MD

J Guo, K. Hultine, **K. Ogle.** Non-structural carbohydrates vary by species, organ, and season in woody plants of the Sonoran Desert, Ecological Society of America 100th Annual Meeting, Baltimore, MD

D. Peltier, M. Fell, **K. Ogle**, Altered climatic sensitivity of tree growth following drought: a synthesis of tree-ring data from multiple species across the Southwest, Ecological Society of America 100th Annual Meeting, Baltimore, MD

L. Monks, H. Kropp, K Ogle. Proximity to and identity of plant neighbors affect the water status of *Larrea tridentata*, a dominant desert shrub, Ecological Society of America 100th Annual Meeting, Baltimore, MD

Osnas, J.L.D., **K. Ogle**, J.S. Duke, D.S. LeBauer, A comprehensive synthesis of foliar trait responses to global environmental changes, Ecological Society of America 100th Annual Meeting, Baltimore, MD

2014 H. Kropp, **K. Ogle**, M. Wojciechowski. *The effect of plant neighbors on root profiles of a common desert shrub*, Larrea tridentata, Ecological Society of America 99th Annual Meeting, Sacramento, CA.

***K. Ogle**, *E. Ryan*, F. Dijkstra, E. Pendall. *A hierarchical modeling approach to estimating soil trace gas fluxes from static chambers*, American Geophysical Union (AGU) Fall Meeting, San Francisco, CA

E. Ryan*, **K. Ogle, D. Peltier, D.G. Williams, E. Pendall. *Gross primary production of a semiarid grassland is enhanced by six years exposure to atmospheric CO_2, warming, and irrigation*, American Geophysical Union (AGU) Fall Meeting, San Francisco, CA

2013 B. Oberle, A. Zanne, **K. Ogle**, C.W. Woddall. *When a tree falls: Forest inventories illustrate how wood mechanical properties influence standing to down transitions in US forests*, Ecological Society of America 98th Annual Meeting, Minneapolis, MN.

*H. Kropp, **K. Ogle**. *Neighborhood association affects nocturnal and daytime transpiration fluxes of a common desert shrub,* Larrea tridentata, Ecological Society of America 98th Annual Meeting, Minneapolis, MN.

*M. Fell, **K. Ogle**. *Variation in mesophyll conductance across local and regional aridity gradients*, Ecological Society of America 98th Annual Meeting, Minneapolis, MN.

Y. Liu, S.T. Jackson, **K. Ogle**, J.W. Lichstein. *Modeling the pollen and vegetation relationships for comparing simulated vegetation with fossil pollen data*, Ecological Society of America 98th Annual Meeting, Minneapolis, MN.

***K. Ogle**, *E. Ryan*, E. Pendall. *Acclimatization of the temperature sensitivity of ecosystem respiration: Synthesis of a 5-year global change experiment*, American Geophysical Union (AGU) Fall Meeting, San Francisco, CA

E. Ryan*, **K. Ogle, E. Pendall. *A synthesis data-model integration of the 5-year response of ecosystem respiration to altered temperature, moisture and atmospheric CO_2*, American Geophysical Union (AGU) Fall Meeting, San Francisco, CA

2012 #**K. Ogle**. *Global change and the structure of forests from individuals to ecosystems*, Gordon Research Conference: Metabolic Basis of Ecology, Biddeford, ME

#**K. Ogle**, J.J. Barber. *Strategies for applying individual-based models at regional to continental scales.* New Investigators Conference on "New Perspectives on Data Assimilation in Global Change Science," Woods Hole, MA.

B. Oberle, J.A. Myers, J.C. Penagos, J. Sweeny, **K. Ogle**, A. Zanne. *Climate change, death, and decomposition: Xylem vessel length influences both mortality and decay among Ozark forest trees,* Ecological Society of America 97th Annual Meeting, Portland, OR.

E. Pendall, Y. Carrillo, J.L. Heisler-White, F.A. Dijkstra, J. Morgan, D.G. Williams, M.D. Wallenstein, A. Brennan, **K. Ogle**. *Carbon cycling in a native grassland exposed to elevated CO2 and warming: A role for priming,* Ecological Society of America 97th Annual Meeting, Portland, OR.

*C. Tucker, **K. Ogle**, E. Pendall. *Carbon-use efficiency explains thermal acclimation of soil respiration*, Ecological Society of America 97th Annual Meeting, Portland, OR.

2011 **K. Ogle**, J.J. Barber. *Feedback and modularization in a Bayesian meta-analysis of tree traits affecting forest dynamics*, Joint Statistical Meetings (JSM), Miami Beach, FL

#**K. Ogle**. *Antecedent moisture and biological inertia as predictors of plant and ecosystem productivity in arid and semiarid systems*, American Geophysical Union (AGU) Fall Meeting, San Francisco, CA

*G.A. Barron-Gafford, *J.M. Cable*, *L.P. Bentley*, R.L. Scott, T.E. Huxman, **K. Ogle**. *Inclusion of photosynthetic activity and exogenous antecedent conditions significantly improves predictability of soil respiratory efflux from multiple microhabitats*, American Geophysical Union (AGU) Fall Meeting, San Francisco, CA

J.M. Cable*, **K. Ogle, J.M. Welker. *Transpiration response of boreal forest plants to permafrost thaw*, American Geophysical Union (AGU) Fall Meeting, San Francisco, CA

*R.D. Evans, A. Koyama, *D. Sonderegger*, D. Charlet, B.A. Newingham, L. Fenstermaker, **K. Ogle**, S.D. Smith, R. Nowak. *Whole-ecosystem exposure to elevated carbon dioxide increases*

total ecosystem carbon and nitrogen in the Mojave Desert, American Geophysical Union (AGU) Fall Meeting, San Francisco, CA

*C. Tucker, **K. Ogle**, *J.M. Cable. Estimating sources of winter soil respiration in a subalpine forest using a hierarchical Bayesian process-based stable isotope mixing model*, American Geophysical Union (AGU) Fall Meeting, San Francisco, CA

D. Sonderegger*, A. Koyama, V. Jin, S. A. Billings, **K. Ogle, R.D. Evans. *Leaf $\delta^{15}N$ as a temporal integrator of nitrogen-cycling processes at the Mojave Desert FACE experiment*, American Geophysical Union (AGU) Fall Meeting, San Francisco, CA

S. Pathikonda*, **K. Ogle. *The differential importance of environmental heterogeneity and evolutionary history for specific leaf area and wood density*, the Ecological Society of America 96th Annual Meeting, Austin, TX

*M. Fell, **K. Ogle**, I. Ibanez. *Tree functional traits and their relationship to survival in seedlings of seven species from a latitudinal gradient*, the Ecological Society of America 96th Annual Meeting, Austin, TX

*G.A Barron-Gafford, *J.M. Cable*, *L.P. Bentley*, R.L. Scott, T.E. Huxman, **K. Ogle**. *Quantifying endogenous and exogenous legacy effects (ecological memory) of soil respiratory efflux in response to abiotic and biotic drivers in a semiarid shrubland*, the Ecological Society of America 96th Annual Meeting, Austin, TX

J.M. Cable*, **K. Ogle, G.A. Barron-Gafford, *L.P. Bentley*, R.L. Scott, T.E. Huxman. *Shrub encroachment lengthens the memory of soil respiration to antecedent soil conditions*, the Ecological Society of America 96th Annual Meeting, Austin, TX

***K. Ogle**, G.A. Barron-Gafford, *L.P. Bentley*, *J.M. Cable*, *R. Lucas*, T.E. Huxman, M.E. Loik, S.D. Smith, D.T. Tissue. *Quantifying ecological "memory" of plant and ecosystem productivity*, the Ecological Society of America 96th Annual Meeting, Austin, TX

#**K. Ogle**, *J.M. Cable. Stable isotopes and plant water sources and rooting depths.* Biogeosphere-Atmosphere Stable Isotope Network (BASIN) meeting on "The Roles of Stable Isotopes in Water Cycle Research", Keystone, CO

J.M. Cable*, **K. Ogle, H. Iwata, Y. Harazono, J. Welker. *The isotope composition of water ($\delta^{8}O$ and δD) for Interior Alaskan boreal ecosystems reveals temporal scales of water availability and vapor fluxes.* Biogeosphere-Atmosphere Stable Isotope Network (BASIN) meeting on "The Roles of Stable Isotopes in Water Cycle Research", Keystone, CO

2010 #***K. Ogle**, G. A. Barron-Gafford, *L. P. Bentley*, *J. M. Cable*, *R. W. Lucas*, T. E. Huxman, M. E. Loik, S. D. Smith, D. T. Tissue. *Quantifying ecological "memory" of plant and ecosystem processes in variable environments*, American Geophysical Union (AGU) Fall Meeting, San Francisco, CA

J. M. Cable*, **K. Ogle, B. Cable, J. M. Welker. *Ecohydrology of permafrost-affected boreal forest ecosystems: sources of water utilized by plants and fluxed by ecosystems*, American Geophysical Union (AGU) Fall Meeting, San Francisco, CA

***K. Ogle**, *J. M. Cable. Process-based isotope mixing models for partitioning flux components within a Bayesian framework*, the 7th International Conference on Applications of Stable Isotope Techniques to Ecological Studies, Fairbanks, AK

J. M. Cable*, **K. Ogle, T. E. Huxman, R. Scott. *Shrub encroachment does not alter the direct and indirect contributions of grasses to soil respiration*, the 7th International Conference on Applications of Stable Isotope Techniques to Ecological Studies, Fairbanks, AK

J. M. Cable*, **K. Ogle, J. Welker. *Ecohydrological feedbacks in subarctic and arctic ecosystems: deep soil water buffers ecosystems from climate variability*, the 7th International Conference on Applications of Stable Isotope Techniques to Ecological Studies, Fairbanks, AK

Mailloux, J. M., **K. Ogle**, C. D. Frost. *Using a Bayesian statistical model to determine the amount of coalbed natural gas co-produced water in the Powder River, WY and MT*, Goldschmidt Earth, Energy, and the Environment Conference, Knoxville, Tennessee

#***K. Ogle** and *S. Pathikonda. The importance of functional trait variability for tree growth and mortality: Implications for forest dynamics*, the Ecological Society of America 95th Annual Meeting, Pittsburgh, PA

L. P. Bentley*, **K. Ogle, *J. M. Cable*, G. A. Barron-Gafford, T. E. Huxman, M. E. Loik, S. D. Smith, D. T. Tissue. *Quantifying the precipitation "memory" of plant photosynthesis in deserts*, the Ecological Society of America 95th Annual Meeting, Pittsburgh, PA

S. Pathikonda*, **K. Ogle, J. Lichstein, J. DeNoyer, K. Sartor. *Meta-analysis of wood density: The roles of evolutionary history and environmental influences*, the Ecological Society of America 95th Annual Meeting, Pittsburgh, PA

#**D. Sonderegger*, **K. Ogle**, R. S. Nowak, S. Ferguson. *Temporal dynamics of root growth under long-term exposure to elevated CO2 in the Mojave Desert*, the Ecological Society of America 95th Annual Meeting, Pittsburgh, PA

C. Tucker*, *J. M. Cable*, **K. Ogle. *Determining drivers of winter soil respiration using carbon isotope flux gradients, and laboratory incubations,* poster, the Ecological Society of America 95th Annual Meeting, Pittsburgh, PA

#*Y. Luo, **K. Ogle**, *C. Tucker*, S. Fei, S. L. LaDeau, J. S. Clark, D. S. Schimel. *Data assimilation and ecological forecasting in a data-rich era*, the Ecological Society of America 95th Annual Meeting, Pittsburgh, PA

2009 #**K. Ogle**. *Data-model integration for understanding belowground ecosystems*, the International Biometric Society, Eastern North American Region (ENAR) 2009 Spring Meeting, invited presenter in the symposium on Model Specification and Uncertainty in Ecological Analyses, San Antonio, TX

#**Lucas, R.W.*, **K. Ogle**, *L.D. Patrick*, J.*M. Cable*, G. Barron-Gafford, A. Griffith, D. Ignace, G.D. Jenerette, A. Tyler, T.E. Huxman, M.E. Loik, S.D. Smith, and D.T. Tissue. *Nighttime water loss in desert plants: a call for revisiting theories of optimal stomatal behavior*, the Ecological Society of America 94th Annual Meeting, Albuquerque, NM

Gemoets, D.E.*, **K. Ogle, and J.J. Barber. *Bayesian parameter estimation for partial differential equation models*, Joint Statistical Meetings, Washington, DC

*Barber, J.J., *D.E. Gemoets*, and **K. Ogle**. *Reversible jump MCMC for inference in a deterministic individual-tree-based growth model for studying forest dynamics*, Joint Statistical Meetings, Washington, DC

Cable, J.M., **K. Ogle**, and J. Welker. *Ecohydrological feedbacks in subarctic and arctic ecosystems: deep soil water buffers ecosystems from climate variability*, AGU Chapman Conference on Examining Ecohydrological Feedbacks of Landscape Change Along Elevation Gradients in Semiarid Regions, Boise and Sun Valley, Idaho

2008 #***K. Ogle** and *J.M. Cable. Data-model integration for partitioning belowground ecosystem processes*, the Ecological Society of America 93nd Annual Meeting, symposium presenter, Milwaukee, WI

Lucas, R.W., **K. Ogle**, *J.M. Cable*, T.E. Huxman, M.E. Loik, S.D. Smith, and D.T. Tissue. *Soil respiration in arid ecosystems and the role of antecedent soil moisture*, the Ecological Society of America 93nd Annual Meeting, Milwaukee, WI

Price, C.A., E.P. White, J.S. Weitz, and **K. Ogle**. *Evaluating scaling models in biology using a hierarchical Bayesian framework*, the Ecological Society of America 93nd Annual Meeting, Milwaukee, WI

Patrick, L., **K. Ogle**, and D. Tissue. *The use of Bayesian modeling to estimate photosynthesis parameters in C3 and C4 desert plants*. Gordon Research Conference: CO_2 Assimilation in Plants: Gene to Biome, Biddeford, ME

2007 #**K. Ogle**. *Bayesian meta-analysis of tree functional traits*, the Ecological Society of America 92nd Annual Meeting, San Jose, CA

Cable, J.M., **K. Ogle**, and D.G. Williams. *Subniveal Carbon Flux in a Wyoming Subalpine Ecosystem*, the American Geophysical Union (AGU) 2007 Fall Meeting, San Francisco, CA

*Patrick, L., **K. Ogle**, D. Tissue, and *J.M. Cable*. *The use of Bayesian modeling to assess the impact of altered precipitation on leaf-level carbon exchange in four desert savanna ecosystems*, the AGU 2007 Fall Meeting, San Francisco, CA

2006 **K. Ogle**, S. Pacala, J.J. Barber, J. Lichstein, and D. Purves. *Species-specific traits controlling forest dynamics revealed by Bayesian melding of diverse data sources and mechanistic tree growth models*, the Ecological Society of America (ESA) 91st Annual Meeting, poster presenter, Memphis, TN

#Purves, D., J. Lichstein, **K. Ogle**, N. Strigul, S. Bohlman, and S. Pacala. *Building a mechanistic theory of forest biogeography*, the ESA 91st Annual Meeting, Memphis, TN

Lichstein, J., S. Pacala, D. Purves, J. Dushoff, and **K. Ogle**, *A resource-based neighborhood competition model of sapling growth*, the ESA 91st Annual Meeting, Memphis, TN

#*K. Ogle, *J.M. Cable*, and T.E. Huxman. *A Bayesian deconvolution approach to partitioning soil respiration: Coupling carbon flux and isotope data with process-based flux and mixing models*, the American Geophysical Union (AGU) 2006 Fall Meeting, presenter, San Francisco, CA

Cable J.M., W. Sun, **K. Ogle**, D.G. Williams, D.L. Potts, R.L. Scott, and T. E. Huxman. *Non-linear responses to precipitation and shrub encroachment in semi-arid grassland: isotopes and CO_2 fluxes reveal soil microsite alteration as explanation*, the AGU 2006 Fall Meeting, San Francisco, CA

2005 **K. Ogle** and S. Pacala. *Inferring tree growth and allocation from physiological, starvation, and allometric traits*, the Ecological Society of America (ESA) 90th Annual Meeting, presenter, Montréal, Canada

#Pacala, S., D. Purves, **K. Ogle**, J. Lichstein, C. Wirth, A. Chen, E. Shevliakova, S. Malyshev, and N. Strigul. *Towards a global individual-based model of forest dynamics*, the ESA 90th Annual Meeting, Montréal, Canada

2004 #**K. Ogle** and S. Pacala. *Melding of tree growth models and data: Understanding forest dynamics*, the 6th International Symposium on Plant Responses to Air Pollution and Global Changes, invited presenter, Tsukuba, Japan

#**K. Ogle.** *Inverse analysis of plant-soil-water interactions: Unraveling plasticity in root activity and water sources*, the Ecological Society of America (ESA) 89th Annual Meeting, symposium: Ecohydrology, invited presenter, Portland, OR

Lichstein, J., S. Pacala, D. Purves, J. Caspersen, and **K. Ogle**. *Parameterizing sapling growth-light models from forest inventory data*, the ESA 89th Annual Meeting, Portland, OR

Weitz, J. **K. Ogle**, and H. Horn. *Scaling of plant hydraulic architecture*, Gordon Research Conference, Metabolic Basis of Ecology, Lewiston, NE

2003 **K. Ogle** and J.F. Reynolds. *The importance of precipitation seasonality to the growth dynamics of a desert shrub*, the Ecological Society of America 88th Annual Meeting, presenter, Savannah, GA

2002 **K. Ogle**, R. Wolpert, and J.F. Reynolds. *Reconstructing plant water uptake and root area profiles*, the Ecological Society of America 87th Annual Meeting, presenter, Tucson, AZ

K. Ogle and J.F. Reynolds. *The importance of precipitation seasonality to the growth of the desert shrub* Larrea tridentata *(creosotebush)*, Workshop on Resource Pulse Use in Arid Ecosystems, invited poster, Tucson, AZ

2001 **K. Ogle** and J.F. Reynolds. *Nonlinear responses of desert shrubs to episodic rainfall events*, American Geophysical Union 2001 Fall Meeting, special session: Nonlinearity and Complexity in the Biogeosciences I, invited presenter, San Francisco, CA

K. Ogle, N.S. Cobb, and T. Whitham. *The importance of facilitation to pinyon- juniper woodland dynamics*, the 6th Biennial Conference of Research on the Colorado Plateau, presenter, Flagstaff, AZ

K. Ogle and J.F. Reynolds. *Desert dogma revisited: coupling stomatal conductance and photosynthesis in a desert shrub*, the Ecological Society of America 86th Annual Meeting, presenter, Madison, WI

K. Ogle, T. Whitham, and N.S. Cobb. *Drought-induced pinyon mortality: the role of environmental stress, tree age, and recent growth*, Workshop on Biocomplexity in Pinyon-Juniper Woodlands, invited presenter, Flagstaff, AZ

2000 **K. Ogle** and J.F. Reynolds. *Physiological responses of the desert shrub* Larrea tridentata *to short-term variation in summer rainfall*, the Ecological Society of America 85th Annual Meeting, presenter, Snowbird, UT

1997 **K. Ogle**, T. Whitham, and N.S. Cobb. *A severe drought resulted in differential pinyon mortality providing a mechanism for a shift in species distribution*, the Ecological Society of America 82nd Annual Meeting, undergraduate presenter, Albuquerque, NM

Invited Seminars and Lectures

2017 *Drivers of plant and ecosystem functioning and their time-scales of influence.* Department of Biology, University of New Mexico, Albuquerque, NM

Drivers of plant and ecosystem functioning and their time-scales of influence. Department of Ecology and Evolutionary Biology, University of Arizona, Tucson, AZ

Stochastic antecedent modeling of tree growth-climate relationships: lags, legacies, and climatic memory. Laboratory of Tree-Ring Research, University of Arizona, Tucson, AZ

2016 *Bayesian and non-Bayesian approaches to quantifying physiological, morphological, and allometric traits of U.S. tree species.* Department of Mathematics and Statistics, Northern Arizona University, Flagstaff, AZ

2015 *Ecological Memory of Plant and Ecosystems Spanning Multiple Time-Scales.* Department of Ecology and Evolutionary Biology, Columbia University, New York

Variation in tree functional traits and implications for tree growth and mortality. Department of Ecology and Evolutionary Biology, University of Tennessee, Knoxville, TN

Ecological Memory of Plant and Ecosystem Spanning Multiple Time-Scales. Department of Ecology and Evolutionary Biology, University of California, Irvine, CA

2014 *Ecological synthesis in an era of big data: Multi-scale synthesis of plant and ecosystem functioning from deserts to forests*. Department of Biology Seminar, University of Florida, Gainesville, FL

2013 *Strategies for applying individual-based models of forest dynamics at regional to continental scales*, Advanced Studies Program Graduate Student Colloquium: Carbon-Climate Connections in the Earth System, National Center for Atmospheric Research, Boulder, CO.

Variation in tree functional traits and implications for understanding tree growth and mortality, Ecology and Evolutionary Biology Seminar Series, University of Missouri, Columbia, MO.

Exogenous and endogenous controls on soil carbon efflux in arid and semi-arid ecosystems, Department of Soil & Crop Sciences Seminar Series, Colorado State University, Ft. Collins, CO.

Exogenous and endogenous controls on soil carbon efflux in arid and semi-arid ecosystems, Department of Botany, University of Wyoming, Laramie, WY.

2012 *Living in the past: Quantifying ecological "memory" of plant and ecosystem processes,* Department of Plant Biology, University of Minnesota, MN

Strategies for applying individual-based models at regional to continental scales. Mathematical Biology Seminar, School of Mathematical and Statistical Sciences, Arizona State University, AZ

2011 *Hierarchical Bayesian synthesis of soil respiration across seven deserts,* School of Mathematical and Statistical Sciences, Arizona State University, AZ

Living in the past: Quantifying ecological "memory" of plant and ecosystem processes, Department of Biology, Northern Arizona University, AZ

2010 *Living in the past: Quantifying the ecological memory of plant and ecosystem processes*, Cary Institute of Ecosystem Studies, Millbrook, NY

Hierarchical Bayesian Analysis in Plant and Ecosystem Ecology: Understanding Carbon-Water Dynamics in Deserts of the Southwest, Division of Biology, Kansas State University, Manhattan, KS

2009 *Hierarchical Bayesian Analysis in Plant and Ecosystem Ecology: Understanding Carbon-Water Dynamics in Deserts of the Southwestern US*, Max Planck Institute for Biogeochemistry, Jena, Germany

Learning about Ecological Systems through Multiple Data Sources and Process-based Models, seminar and round table discussion with National Science Foundation (NSF) program directors in the Biosciences Directorate, Arlington, VA

Bayesian meta-analysis of literature information: estimating species-specific tree functional traits, Department of Statistics, Colorado State University, Fort Collins, CO

Hierarchical Bayesian synthesis of soil respiration across seven desert ecosystems, National Center for Atmospheric Research (NCAR), Institute for Mathematics Applied to Geosciences (IMAGe) "brown bag lunch" seminar, Boulder, CO

2008 *Data-model integration for understanding belowground ecosystem carbon dynamics*, Oak Ridge National Laboratory, Biological& Environmental Sciences Directorate, Invited Seminar Series, Oak Ridge, TN

Data-model integration: Examples from belowground ecosystem ecology, Statistical and Applied Mathematical Sciences Institute, Program on Environmental Sensor Networks, Research Triangle Park, NC

2007 *Bayesian meta-analysis of tree functional traits with implications for tree growth and forest dynamics*, Department of Botany, University of Wyoming, Laramie, WY

A Bayesian deconvolution approach to partitioning soil respiration, Natural Resource Ecology Laboratory, Seminar Series on "Emerging Approaches in Ecology," Colorado State University, Ft. Collins, CO

Bayesian meta-analysis of tree functional traits, Department of Statistics, University of Wyoming, Laramie, WY

2005 *Bayesian melding of models and data: A potpourri of plant ecology examples*, A Showcase of Promising Scientists in Natural Resources sponsored by the School of Natural Resources, selected as 1 of 6 (out of 100+ nominations) "promising scientists," University of Arizona, Tucson, AZ

Linking species-specific physiological, starvation, and structural allometries to forest dynamics, Department of Ecology, Montana State University, Bozeman, MT

2004 *Linking root, shoot, whole-plant, population and community processes: A mechanistic framework for studying vegetation dynamics*, Department of Ecology and Evolutionary Biology, University of Arizona, Tucson, AZ

2003 *Pulse precipitation use by a desert shrub: A Bayesian inverse analysis of root and water uptake profiles*, University Program in Ecology, Duke University, Durham, NC

An integrated view of the responses of a desert shrub to seasonal rainfall, Center for Population Biology, University of California, Davis, CA

An integrated view of the responses of a desert shrub to seasonal rainfall. Department of Ecology, Montana State University, Bozeman, MT

2001 *Desert dogma revisited: how important is summer rainfall to* Larrea tridentata *(creosotebush) growth and physiology?* Department of Biological Sciences, Northern Arizona University, Flagstaff, AZ

Desert dogma revisited: the link between stomatal conductance and photosynthesis in the desert shrub Larrea tridentata, University Program in Ecology, Duke University, Durham, NC

1997 *Drought induced pinyon mortality: long-term studies of those who live and die*, Department of Botany, Duke University, Durham, NC

ORGANIZED & INVITED SYMPOSIUMS, WORKSHOPS, OR SHORT-COURSES

Organized Conferences

2012 *New Investigators Conference: Promoting New Perspectives on Data Assimilation in Global Change Science*, organizers: Yiqi Luo (lead organizer), Jim Clark, Shannon LaDeau, Kiona Ogle, Shuli Niu, David Schimel. Woods Hole, MA (October, 9-11)

Organized Short Courses

2013-2016 *Training in Bayesian Modeling for Practicing Ecologists,* NSF-sponsored two-week workshop to provide intensive training in Bayesian modeling for post-doctoral researchers, academic faculty, and agency scientists, organizers: Tom Hobbs (lead), Kiona Ogle, Mevin Hooten, Maria Uriarte, held at Colorado State University, Ft. Collins, CO

Organized Research Workshops

2015 *Coupling demographic and physiological processes to forecast species performance under novel conditions*, organizers: Ines Ibanez (Univ Michigan), Kiona Ogle, Lauren Buckley (Univ Washington), sponsor: NSF via the RCN-FORECAST project, location: Arizona State University, Tempe, AZ

2014 *Development of a 'super model' approach: Application to soil carbon cycle models*, organizers: Kiona Ogle, Jennifer Powers (Univ Minnesota), David Lebauer (Univ Illinois), sponsor: NSF via the RCN-FORECAST project, location: Biosphere 2, University of Arizona, Oracle, AZ

2010 *Forecasts Of Resource and Environmental Changes: data Assimilation Science and Technology (FORECAST)*, organizing committee: Yiqi Luo (Univ of Okalahoma), David Schimel (NEON), Jim Clark (Duke), Kiona Ogle, Tom Hobbs (Colorado State Univ), Andrew Richardson (Harvard), sponsor: workshop funded by NSF-sponsored Research Coordination Networks (RCN) project, location: Neon Inc., Boulder, Co

2007 *Data-model Assimilation in Ecology: Techniques and Applications*, organizing committee: Yiqi Luo (Univ of Okalahoma), David Schimel (NCAR), Jim Clark (Duke), Alan Hastings (UC Davis), Kiona Ogle, Matthew Williams (Univ of Edinburgh), sponsor: NSF, location, University of Okalahoma, Norman, OK

Organized Training Workshops

2017 *Topics in Hierarchical Bayesian Modeling in Ecology* (invited), sponsors: IMBALANCE-P European research group, hosts: Jennifer Soong (Univ. of Antwerpen, Belgium), Sara Vicca (Univ. of Antwerpen, Belgium), and Daniel Goll (Laboratoire des Sciences du Climat et de l'Environnement, France), Paris, France

2015 *Bayesian approaches and applications in ecosystem science: NutNet workshop* (invited), sponsors: NutNet (Nutrient Network), and NSF-RCN sponsored activity, hosts: Charlotte Riggs and Eric Lind, Department of Ecology, Evolution & Behavior, University of Minnesota

2013 *A Brief Introduction to Bayesian and Hierarchical Bayesian Modeling in Ecology* (invited), sponsors: Ricardo Holdo and Ray Semlitsch, Division of Biological Sciences, University of Missouri, Columbus, MO

2012 *A Brief Introduction to Bayesian and Hierarchical Bayesian Modeling in Ecology*, the Ecological Society of America 97th Annual Meeting, Pre-meeting Workshop, organizers: Mike Dietze, Kiona Ogle, Portland, OR

2011 *A Brief Introduction to Bayesian and Hierarchical Bayesian Modeling in Ecology*, the Ecological Society of America 96th Annual Meeting, Pre-meeting Workshop, organizers: Kiona Ogle, Ines Ibanez, Mike Dietze, Austin, TX

2010 *A Brief Introduction to Bayesian Modeling in Ecology* (invited), Division of Biology, Kansas State University, Manhattan, KS

A Brief Introduction to Bayesian and Hierarchical Bayesian Modeling in Ecology, the Ecological Society of America 95th Annual Meeting, Pre-meeting Workshop, organizer, Pittsburgh, PA

2009 *A Brief Introduction to Bayesian Modeling in Ecology* (invited), the Spanish Ecological Society, Invited Pre-meeting Workshop, organizer, Úbeda, Spain

A Brief Introduction to Bayesian and Hierarchical Bayesian Modeling in Ecology, the Ecological Society of America 94th Annual Meeting, Pre-meeting Workshop, organizers: Kiona Ogle, Ines Ibanez, Mike Dietze, Shannon LaDeau, Janneke Hil Ris Lambers, Albuquerque, NM

Hierarchical Bayesian Modeling in Plant and Ecosystem Ecology (invited), Max-Plank Institute for Biogeochemistry, organizer, Jena, Germany

2008 *A Brief Introduction to Bayesian and Hierarchical Bayesian Modeling in Ecology*, the Ecological Society of America 93rd Annual Meeting, Pre-meeting Workshop, organizers: Kiona Ogle, Ines Ibanez, Milwaukee, WI

2007 *A Brief Introduction to Bayesian and Hierarchical Bayesian Modeling in Ecology*, the Ecological Society of America 92nd Annual Meeting, Pre-meeting Workshop, organizers: Kiona Ogle, Ines Ibanez, San Jose, CA

2006 *A Brief Introduction to Hierarchical Bayesian Modeling in Ecology*, the Ecological Society of America 91st Annual Meeting, Pre-meeting Workshop, organizers: Kiona Ogle, Ines Ibanez, Memphis, TN

Organized Symposiums

2010 *Data Assimilation and Multiscale Methods for Improving Biogeochemical Models Across Multiple Scales II*, American Geophysical Union (AGU) Fall Meeting, convener (other conveners: Paul Stoy, Tristan Quaife, Rodrigo Vargas), San Francisco, CA

Invited Workshops (as a Contributor/Instructor)

2015 NIMBioS Graduate Workshop on *Current Issues in Statistical Ecology*, *organizers: Teresa Mourad (Ecological Society of America), Richard Smith (SAMSI), Suzanne Lenhart (NIMBioS), Louis Gross (NIMBioS), Jim Clark (Duke), National Institute for Mathematical and Biological Synthesis (NIMBioS), Knoxville, TN.
**Co-organized by the Ecological Society of America SEEDS (Strategies for Ecology Education, Diversity & Sustainability) program and SAMSI (Statistical & Applied Mathematical Sciences Institute). Alumni of the SEEDS program will receive priority consideration to attend.*

2013 Advanced Studies Program Graduate Student Colloquium on *Carbon-Climate Connections in the Earth System*, organizers: Quinn Thomas (Virginia Tech), Naomi Levine (Univ. Southern Californina), National Center for Atmospheric Research, Boulder, CO.

5th workshop of the TRY initiative: *Quantifying and scaling global plant trait diversity*, organizers: Christian Wirth (iDiv, Univ. Leipzig), Markus Reichstein (Max-Planck), Paul Leadley (Univ. Paris), German Centre for Integrative Biodiversity Reseach, Leipzig, Germany.

2012 DOE workshop on *Strategies to Promote Integrated Experiment-Model Approaches to Terrestrial Ecosystem Studies*, organizers: Yiqi Luo (Univ. Oklahoma), Dennis Baldocchi (UC-Berkeley), James Randeron (UC-Irvine), Margaret Tom (LBL), Stan Wullschleger (ORNL), Washington DC (could not attend)

Northern Arizona Research Visioning Workshop, The Arboretum at Flagstaff and Northern Arizona University, organizers: Kristin Haskins (The Arboretum at Flagstaff) and Amy Whipple (Northern Arizona University), participant, Flagstaff, AZ

2010 Workshop on Mathematical Challenges for Sustainability, organizers: Richard Smith (SAMSI), Fred Roberts (DIMACS), Alejandro Adem (PIMS), Russell Caflisch (IPAM), Luo Gross (NIMBioS), Iain Johnston, Simon Levin (Princeton), Christian Rousseau, participant and raporteur, DIMACS (Center for Discrete Mathematics & Theoretical Computer Science), Rutgers University, Piscataway, NJ

2010 Working group on *Linking Decomposability of Leaves and Stems to their Traits: a Global Meta-analysis*, organizers: Christian Wirth (Max-Planck) and Hans Cornelissen (Vrije Universiteit Amsterdam), participant, Akaroa, New Zealand

2008 *Program on Environmental Sensor Networks: Tutorials and Opening Workshop*, Statistical and Applied Mathematical Sciences Institute, participant and presenter, Research Triangle Park, NC

2006 *Uncertainty in Ecological Analysis*, Mathematical Biosciences Institute, the Ohio State University, participant and presenter, Columbus, OH

2003 *Resiliency and Change in Ecological Systems*, Santa Fe Institute, participant, Santa Fe, NM

2002 *Resource Pulse Use in Arid Ecosystems*, University of Arizona, participant, Tucson, AZ

2001 *Nonlinear Responses to Global Environmental Change: Critical Thresholds and Feedbacks,* Duke University, participant, Durham, NC

Workshop on Biocomplexity in Pinyon-Juniper Woodlands, Northern Arizona University, participant and presenter, Flagstaff, AZ

1999 *Intercomparison of Gap Models and Examination of How Much Physiology is Needed in Them*, GCTE Focus 1/Focus 2, participant, Pingree Park, CO

Invited Short Courses (as an Instructor)

2013 *Connecting Biological Data with Mathematical Models,* MBI-NIMBioS-CAMBAM Summer Graduate Program; contributed day-long lecture and hands-on modeling exercises in Bayesian hierarchical models applied to plant physiological data, National Institute for Mathematical and Biological Synthesis (NIMBioS), Knoxville, TN

2008-2011 *Flux Measurements and Modeling*, day-long lecture and hands-on modeling exercises on "Bayesian statistical approaches to analyzing soil flux data," University of Colorado Mountain Research Station near Nederland, CO

Advanced Training/Short-Courses (as a Participant)

2004 *Uncertainty and Variability in Ecological Inference, Forecasting, and Decision Making: An Introduction to Modern Statistical Computation*, Center on Global Change and the Nicholas School of the Environment & Earth Sciences (Duke), National Science Foundation, and the Ecological Society of America, Duke University, invited participant, Durham, NC

Ecoinformatics Training for Ecologists, Long Term Ecological Research Network (UNM), San Diego Supercomputer Center (UCSD), Natural History Museum and Biodiversity Research Center (KU), and National Center for Ecological Analysis and Synthesis (UCSB), University of New Mexico, invited participant, Albuquerque, NM

2003 *Pathways to the Professoriate: Developing the Teaching Skills of Graduate Students*, Academic Support Programs, Duke University Graduate School, participant, Durham, NC

2002 *Inverse Problem Methodology in Complex Stochastic Models*, Statistical and Applied Mathematical Sciences Institute, participant, Research Triangle Park, NC

2000 *Stable Isotope Ecology*, Department of Biology, University of Utah, invited participant, Salt Lake City, UT

STUDENT ADVISING/GRADUATE SUPERVISION

High School Students

4 – previous at Northern Arizona University: *Wren Cooperrider*, Flagstaff High School capstone project, unfunded (summer 2017), *Ari Schwartz*, paid research assistant (summer 2016), *Abby Collier*, paid research assistant (summer 2016), *Zane Koch*, paid research assistant (summer 2016).

1 – previous at Arizona State University: *Daphne Guo*, volunteer research assistant (summer 2014)

4 – previous at University of Wyoming: *Arla Mystica*, Wheatland, WY (2007), *Alex Treskov*, Denver, CO (2008), *Leo Lopez*, Glendo, WY (2010), and *Mariah Strike*, Pinedale, WY (2010), all part of the University of Wyoming EPSCoR Summer Research Apprentice Program (SRAP)

Undergraduate Students

3 – current at Northern Arizona University: *Phiyen Nguyen* (REU student, summer 2017-current), *Michelle Wilson* (REU student, summer 2017-current), *Michael Bangs* (summer 2017-current).

5 – previous at Northern Arizona University: *Linnea Grear*, research assistant and independent study credit (spring 2015-summer 2017), *Ryan Bishop*, research assistant (spring 2015-spring 2017), *Hannah Russel*, research assistant (fall 2016-spring 2017), *Stacy Jeffreys*, research assistant (fall 2016-spring 2017), *Christian Weaghington*, research assistant and independent study credit (spring 2015)

15 – previous at Arizona State University: *Logan Monks*, research assistant and SOLUR participant (summer 2013-2015); *Abraham Cadmus*, research assistant and School of Life Sciences Undergraduate Research (SOLUR) participant (spring 2013-summer 2014); *Truman Combs*, research assistant/ volunteer (spring 2013-summer 2013): *Emily Alvarez*, research assistant (summer 2011-fall 2011, fall 2012-spring 2013); *Wendy Sanchez*, research credit (fall 2011); *Nicholas Glover*, research assistant (winter 2011-spring 2012); *Debra Groves*, research assistant (winter 2011-spring 2012); *Brett Ignatowski*, research assistant (summer 2012); *Forrest Pratt*, research experience for credit (fall 2012); *Clint Clarkson*, research assistant (summer 2012-spring 2013); *Ian Blackburn*, research assistant (summer 2012-spring 2013); *Efren Olivas*, volunteer research assistant (summer 2013), *Brian Lopez*, volunteer research assistant (fall 2014), *Samantha Daily*, volunteer research assistant (fall 2014), *Sam Teegarden*, research assistant and SOLUR participant (fall 2014-fall 2015)

11 – previous at the University of Wyoming: *Cassie Hurley*, lab tech (spring 2007); *Jessica Strickert*, lab tech (fall 2007); *Jacob Arvizu*, internship and lab tech (summer 2007-spring 2008); *Patrick Juancorena*, lab tech (spring 2008); *Brenda Thompson*, independent study in Statistics (spring 2008); *Corbin Haugen*, work-study lab tech (spring 2008-fall 2008); *Nikalous Tolman*, work-study lab tech (fall 2008-spring 2009); *Levi Davis*, independent study/research project in statistical ecology (spring 2009-summer 2009); *Christine Bell*, field/lab tech (summer 2010), *Matthew Schreiner*, field/lab tech (fall 2008-summer 2010); *Lana MacDonald* (summer 2010-fall 2010)

Graduate Students

Current advisees (4)

Ph.D. students, Northern Arizona University: *Jessica Guo* (Biology, expected fall 2018); *Drew Peltier* (Biology, expected fall 2018); *Abraham Cadmus* (Biology, expected spring 2021; co-advised with Dr. Whitham); *Emily Palmquist* (Biology, expected 2022; co-advised with Dr. Whitham)

Past advisees (4)

Masters student, University of Wyoming: *Kimberly Garvie* (Botany, 2011)

Ph.D. students, University of Wyoming: *Colin Tucker* (Ecology, May 2013), *Darren Gemoets* (co-advisor, Statistics, May 2013)

Ph.D. students, Arizona State University: *Heather Kropp* (Environmental Life Sciences, December 2015), *Michal Fell* (Biology, May 2017)

Current Graduate Committee Memberships (excluding those chaired) (2)

Ph.D. students, Arizona State University: *Adam Leighton* (Statistics, expected May 2017), *Davis Blasini* (Biology, expected May 2020)

Ph.D. students, Northern Arizona University: *Elaine Pegoraro* (Biology, expected May 2020)

M.S. students, Northern Arizona University: *Melissa Enright* (Biology, expected May 2018)

Past Graduate Committee Memberships (excluding those chaired) (4)

Ph.D. students, University of Wyoming: *Wei Sun* (Renewable Resources), *Victor Resco de Dios* (Renewable Resources), *Arunendu Chatterjee* (Statistics), *Yao Liu* (Ecology & Botany)

Ph.D. students, Arizona State University: *Tara Furstenau* (Molecular & Cellular Biology, resigned from committee after moving to NAU in 2015)

Masters students, Arizona State University: *Tara Gancos Crawford* (Biology, May 2013), *Jinhyun Gwak* (Statistics, 2013)

Current visiting students (1)

Ph.D. students, Northern Arizona University: *Laura Marqués López* (PhD student from University of Alcala, Spain, visiting on a 3-month Spanish scholarship) (Fall 2017)

Postdoctoral Students/Researchers

Current

Kimberly (Kym) Samuels-Crow (Ph.D. University of New Mexico): Northern Arizona University, funded by NAU start-up

Yao Liu (Ph.D. University of Wyoming): Northern Arizona University, funded by an NSF ABI grant

Past

Larissa Yocom-Kent (Ph.D. Northern Arizona University): Northern Arizona University, funded by an NSF ABI grant and NAU start-up; currently tenure-track assistant professor in the Department of Wildland Resources, Utah State University, Logan, UT.

Ed Ryan (Ph.D. University of Sheffield): Arizona State University; funded by DOE grant (lead PI = Pendall, Univ. Wyoming), currently a post-doc at Lancaster University in the UK, Lancaster, UK.

Sarah Evans (Ph.D. Colorado State University): Arizona State University (secondary institution), primary sponsor & institution = Steve Allison, University of California, Irvine; funded by an NSF Biology Post-doctoral Fellowship (2012-2013), currently Assistant Professor, Kellogg Biological, Michigan State University, Hickory Corners, Michigan.

Sharmila Pathikonda (Ph.D. University of Louisiana): University of Wyoming & Arizona State University; funded by NSF Advanced in Biological Informatics grant (August 2009-August 2012), currently Research Support Staff at Texas A&M, College Station, TX.

Greg Barron-Gafford (Ph.D. University of Arizona), Arizona State University, supported as Research Scientist by 2nd DOE-NICCR grant (June-July 2011), currently Associate Professor, School of Geography & Development, University of Arizona, Tucson, AZ.

Lisa Patrick Bentley (Ph.D. Texas Tech), University of Wyoming & University of Arizona, Visiting PhD student (2007-2008), Post-doc (2009), and NSF Post-doc fellow (2010-2011); funded by DOE NICCR grant (PI); currently Assistant Professor, Department of Biology, Sonoma State University, Rohnert Park, CA.

Jessica Young (formerly, *Cable*) (Ph.D. University of Arizona), University of Wyoming & Arizona State University, Post-doc (2006-2008) & NSF Post-doc fellow (2009-2011); funded by UW start-up and 2nd DOE NICCR grant (PI); currently research professional in the School of Natural Resource, University of Alaska, Fairbanks.

Richard Lucas (Ph.D. University of Pennsylvania), University of Wyoming, Postdoc (2008-2010); funded by DOE NICCR grant (PI); currently research staff at the Southwest Environmental Institute, Phoenix, AZ.

Derek Sonderegger (Ph.D. Colorado State University): University of Wyoming & Washington State University (2010-2011); funded by DOE grant (lead PI = Nowak, Univ. Nevada, Reno); currently Assistant Professor, Department of Mathematics and Statistics, Northern Arizona University, Flagstaff.

Past – informal mentoring

Jeanne DeNoyer Osnas (Ph.D. Princeton University): post-doc with Jeff Dukes, Purdue University; funded by Purdue post-doc fellowship.

Brad Oberle (Ph.D. University of Missouri): frequent visiting post-doc in Ogle Lab; primary post-doc with Amy Zanne, University of Missouri and George Washington University; funded by CAREER grant to Zanne. Currently assistant professor in the Department of Biology, New College of Florida, Sarasota, FL.

Research Associates/Technicians

Current

Michael Fell (Ph.D. ASU), Northern Arizona University (2016-present)

Past

Logan Monks (B.S. ASU), Arizona State University (2015)

Joshua Uebelherr (M.S. Duke University), University of Wyoming (2010) & Arizona State University, research scientist (2011-2013)

Nicholas Glover (B.S. Arizona State University): Arizona State University, part-time research assistant (summer 2012-summer 2013)

Levi Davis (M.S. University of Wyoming), Arizona State University, research associate (2011-2012)
Debra Groves (B.S. Arizona State University): Arizona State University, part-time research assistant (summer 2012)
Karla Sartor (M.S. Montana State University), University of Wyoming & Princeton University, research associate (2005-2010)
Brenda Thompson (B.S. University of Wyoming), University of Wyoming, research associate (2009)
Sarah Bachman (M.S. University of Wyoming), University of Wyoming, temporary research associate (2008)
Kimberly Garvie (M.S. University of Wyoming), University of Wyoming, research associate (2008)
Darren Gemoets (M.S. Montana State University), University of Wyoming, research associate (2007)
William Cable (B.S. University of Arizona), University of Wyoming, research associate (2006)
Ekaterina (Katya) Belykh (M.S.), Princeton University, research associate (2003)

UNIVERSITY SERVICE ACTIVITIES

University of Wyoming

Program in Ecology: Vision Committee
Program in Ecology: Seminar Committee
Department of Mathematics, Department of Zoology and Physiology, and Program in Ecology: search committee for faculty position in Mathematical Biology
University of Wyoming EPSCoR: Steering Committee
Stable Isotope Facility: Advisory Committee
Department of Botany: Curriculum Committee, Publicity Committee, Web Site Committee

Arizona State University

University Undergraduate Standards Committee (fall 2011-fall 2013, fall 2014-spring 2015)
College of Arts & Sciences: Curriculum Committee (fall 2014-spring 2015)
School of Life Sciences: Lisa Dent Scholarship Selection Committee (spring 2012, spring 2013, spring 2015)

Northern Arizona University

Informatics & Computing Program (ICP):

- Annual Review Committee (ARC) and Faculty Status Committee (FSC) (fall 2015-spring 2016)
- Search Committee for multiple (3-4) tenure/tenure-track faculty positions in ecological, environmental, and health informatics (fall 2015-spring 2016).

School of Informatics, Computing, and Cyber Systems (SICCS):

- Conditions of Faculty Service (COFS) committee (spring 2016-present)
- Annual Review Committee (ARC) and Faculty Status Committee (FSC) (fall 2016-present)
- Search committee for Dr. Goetz's post-doc position (fall 2016)
- Administrative Staff Search Committee (spring 2017)