

# KRISTINA J. ANDERSON-TEIXEIRA

legal name: Kristina Anderson Teixeira

## SMITHSONIAN INSTITUTION

Ecologist | Leader of CTFS-ForestGEO Ecosystems & Climate Program

### EDUCATION

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**Ph.D. Biology** (with distinction); University of New Mexico. (Aug. 2002-Jan. 2007).

Dissertation: *Rates of change in ecosystem and community properties during succession*

Committee: James H. Brown (chair), Scott L. Collins, Bruce T. Milne, Peter M. Vitousek

**B.S. Biology** (H) *cum laude*; Wheaton College, Wheaton, IL. (Aug. 1998-May 2002).

Minor: Chemistry

### PROFESSIONAL EXPERIENCE

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**Ecologist, Leader of CTFS-ForestGEO Ecosystems & Climate Program**, Smithsonian Conservation Biology Institute & Smithsonian Tropical Research Institute (Sept. 2012-present)

**Affiliate Faculty**, Smithsonian Mason School of Conservation at George Mason University (May 2017-present).

**Senior Research Scientist**, Global Change Solutions, LLC. ([www.globalchangesolutionsllc.com](http://www.globalchangesolutionsllc.com)) (August 2010-Sept. 2012)

**Postdoctoral Research Associate**, Energy Biosciences Institute, University of Illinois at Urbana-Champaign. Sponsor: Evan H. DeLucia (Feb. 2008- Sept. 2012)

**Postdoctoral Research Associate**, Biology, University of New Mexico. Sponsor: Marcy E. Litvak (Feb. 2007-Jan. 2008)

**Research/ Teaching Assistant**, University of New Mexico. (Aug. 2002 – Jan. 2007)

**Biological Field Technician**, USFS (GS-05), Humboldt-Toiyabe National Forest (Summer 2002)

**Editorial Assistant**, Dr. Fred Van Dyke, Wheaton College (Fall 2001). (Textbook: Van Dyke, F. 2002. *Conservation Biology: Foundations, Concepts, Applications*. WCB/ McGraw Hill Publishers, Dubuque, Iowa.)

### PUBLICATIONS

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\* indicates advisee

#### *Journal Publications*

Requena Suarez, D., ... **Anderson-Teixeira, K. J.**, ... Wang, M. M. H.\*... (accepted). Estimating aboveground net biomass change for tropical and subtropical forests: refinement of IPCC default rates using forest plot data. *Global Change Biology*.

Helcoski, R.\*, Tepley, A. J.\*, Pederson, N., McGarvey, J. C.\*, Meakem, V.\*, Herrmann, V.\*, Thompson, J. R., & **Anderson-Teixeira, K. J.** (2019). Growing season moisture drives inter-annual variation in woody productivity of a temperate deciduous forest. *New Phytologist*, in press. DOI: 10.1111/nph.15906.

Helcoski, R.\*, Tepley, A. J.\*, McGarvey, J. C.\*, Gonzalez-Akre, E.\*, Meakem, V.\*, Thompson, J. R., & **Anderson-Teixeira, K. J.** (2019). No significant increase in tree mortality following coring

- in a temperate hardwood forest. *Tree-Ring Research*, 75(1), 67. <https://doi.org/10.3959/1536-1098-75.1.67>
- Chu, Chengjin; Lutz, James A.; Král, Kamil; Vrška, Tomáš; Yin, Xue; Myers, Jonathan A.; Abiem, Iveren; Alonso, Alfonso; Bourg, Norm; Burslem, David F.R.P.; Cao, Min; Chapman, Hazel; Condit, Richard; Fang, Suqin; Fischer, Gunter A.; Gao, Lianming; Hao, Zhanqin; Hau, Billy C.H.; He, Qing; Hector, Andrew; Hubbell, Stephen P.; Jiang, Mingxi; Jin, Guangze; Kenfack, David; Lai, Jiangshan; Li, Buhang; Li, Xiankun; Li, Yide; Lian, Juyi; Lin, Luxiang; Liu, Yankun; Liu, Yu; Luo, Yahuang; Ma, Keping; McShea, William; Memiaghe, Hervé; Mi, Xiangcheng; Ni, Ming; O'Brien, Michael J.; de Oliveira, Alexandre A.; Orwig, David A.; Parker, Geoffrey G.; Qiao, Xiujuan; Ren, Haibao; Reynolds, Glen; Sang, Weiguang; Shen, Guochun; Su, Zhiyao; Sui, Xinghua; Sun, I-Fang; Tian, Songyan; Wang, Bin; Wang, Xihua; Wang, Xugao; Wang, Youshi; Weiblen, George D.; Wen, Shujun; Xi, Nianxun; Xiang, Wusheng; Xu, Han; Xu, Kun; Ye, Wanhui; Zhang, Bingwei; Zhang, Jiabin; Zhang, Xiaotong; Zhang, Yingming; Zhu, Kai; Zimmerman, Jess; Storch, David; Baltzer, Jennifer L.; **Anderson-Teixeira, Kristina J.**; Mittelbach, Gary G.; He, Fangliang. 2019. Direct and indirect effects of climate on richness drive the latitudinal diversity gradient in forest trees. *Ecology Letters*, 22:245-255. DOI:10.1111/ele.13175.
- Johnson, D. J., J. Needham, C. Xu, E. C. Massoud, S. J. Davies, **K. J. Anderson-Teixeira**, S. Bunyavejchewin, J. Q. Chambers, C.-H. Chang-Yang, J.-M. Chiang, G. B. Chuyong, R. Condit, S. Cordell, C. Fletcher, C. P. Giardina, T. W. Giambelluca, N. Gunatilleke, S. Gunatilleke, C.-F. Hsieh, S. Hubbell, F. Inman-Narahari, A. R. Kassim, M. Katabuchi, D. Kenfack, C. M. Litton, S. Lum, M. Mohamad, M. Nasardin, P. S. Ong, R. Ostertag, L. Sack, N. G. Swenson, I. F. Sun, S. Tan, D. W. Thomas, J. Thompson, M. N. Umaña, M. Uriarte, R. Valencia, S. Yap, J. Zimmerman, N. G. McDowell, and S. M. McMahon. 2018. Climate sensitive size-dependent survival in tropical trees. *Nature Ecology & Evolution*: 2, 1436–1442. DOI: 10.1038/s41559-018-0626-z.
- Miller, A. D.\*, J. R. Thompson, A. J. Tepley\*, and **K. J. Anderson-Teixeira**. (2019). Alternative stable equilibria and critical thresholds created by fire regimes and plant responses in a fire-prone community. *Ecography* 42 (1):55-66. DOI: 10.1111/ecog.03491.
- Anderson-Teixeira, K. J.** 2018. Prioritizing biodiversity and carbon. *Nature Climate Change*: 8, 667–668. DOI: 10.1038/s41558-018-0242-6.
- Stovall, A. E. L\*., **K. J. Anderson-Teixeira**, and H. H. Shugart. 2018b. Assessing terrestrial laser scanning for developing non-destructive biomass allometry. *Forest Ecology and Management* 427:217–229.
- Lutz J A, Furniss T J, Johnson D J, Davies S J, Allen D, Alonso A, **Anderson-Teixeira K J**, Andrade A, Baltzer J, Becker K M L, Blomdahl E M, Bourg N A, Bunyavejchewin S, Burslem D F R P, Cansler C A, Cao K, Cao M, Cárdenas D, Chang L-W, Chao K-J, Chao W-C, Chiang J-M, Chu C, Chuyong G B, Clay K, Condit R, Cordell S, Dattaraja H S, Duque A, Ewango C E N, Fischer G A, Fletcher C, Freund J A, Giardina C, Germain S J, Gilbert G S, Hao Z, Hart T, Hau B C H, He F, Hector A, Howe R W, Hsieh C-F, Hu Y-H, Hubbell S P, Inman-Narahari F M, Itoh A, Janík D, Kassim A R, Kenfack D, Korte L, Král K, Larson A J, Li Y, Lin Y, Liu S, Lum S, Ma K, Makana J-R, Malhi Y, McMahon S M, McShea W J, Memiaghe H R, Mi X, Morecroft M, Musili P M, Myers J A, Novotny V, Oliveira A de, Ong P, Orwig D A, Ostertag R, Parker G G, Patankar R, Phillips R P, Reynolds G, Sack L, Song G-Z M, Su S-H, Sukumar R, Sun I-F, Suresh H S, Swanson M E, Tan S, Thomas D W, Thompson J, Uriarte M, Valencia R, Vicentini A, Vrška T, Wang X, Weiblen G D, Wolf A, Wu S-H, Xu H,

- Yamakura T, Yap S and Zimmerman J K. 2018. Global importance of large-diameter trees *Glob. Ecol. Biogeogr.* 27 (7) 849-864. DOI: 10.1111/geb.12747.
- Riemer, K., **K. J. Anderson-Teixeira**, F. A. Smith, D. J. Harris, and S. K. M. Ernest. 2018. Body size shifts influence effects of increasing temperatures on ectotherm metabolism. *Global Ecology and Biogeography* 27:958–967. DOI: 10.1111/geb.12757.
- Serra-Diaz, J. M., C. Maxwell, M. S. Lucash, R. M. Scheller, D. M. Laflower, A. D. Miller\*, A. J. Tepley\*, H. E. Epstein, **K. J. Anderson-Teixeira**, and J. R. Thompson. 2018. Disequilibrium of fire-prone forests sets the stage for a rapid decline in conifer dominance during the 21st century. *Scientific Reports* 8. DOI: 10.1038/s41598-018-24642-2.
- Anderson-Teixeira, K. J.**, M. M. H. Wang\*, J. C. McGarvey\*, V. Herrmann\*, A. J. Tepley\*, B. P. Bond-Lamberty, and D. S. LeBauer. 2018. ForC: a global database of forest carbon stocks and fluxes. *Ecology* 99(6), 1507-1507. DOI: 10.1002/ecy.2229.
- Tepley, A.J.\*, Thomann, E., Veblen, T.T., Perry, G. L. W., Holz, A., Paritsis, J., Kitzberger, T., **Anderson-Teixeira, K.J.** (2018) Influences of fire–vegetation feedbacks and post-fire recovery rates on forest landscape vulnerability to altered fire regimes. *Journal of Ecology* 106(5) 1925-1940. DOI: 10.1111/1365-2745.12950.
- McDowell, N., C. Allen, **K. Anderson-Teixeira**, P. Brando, R. Brienen, J. Chambers, B. Christoffersen, S. Davies, C. Doughty, A. Duque, F. D. B. Espirito-Santo, R. Fisher, C. G. Fontes, D. Galbraith, D. Goodsman, C. Grossiord, D. Johnson, H. Hartmann, J. Holm, A. R. Kassim, M. Keller, C. Koven, L. Kueppers, T. Kumagai, H. C. Muller-Landau, Y. Malhi, S. McMahan, M. Mencuccini, P. Meir, P. Moorcroft, O. L. Phillips, T. Powell, C. A. Sierra, J. Sperry, J. M. Warren, C. Xu, and X. Xu. (2018) Drivers and mechanisms of tree mortality in moist tropical forests. *New Phytologist* 219:851–869.
- Meakem, V\*, Tepley, AJ\*, Gonzalez-Akre, EB\*, Herrmann V\*, Muller-Landau, HC, Wright, SJ, Hubbell, SP, Condit, R, **Anderson-Teixeira, KJ.** (2018) Role of tree size in moist tropical forest carbon cycling and water deficit responses. *New Phytologist* 219:947–958. DOI: 10.1111/nph.14633.
- Wang, X. T. Wiegand, **K. J. Anderson-Teixeira**, N. A. Bourg, Z. Hao, R. Howe, G. Jin, D. A. Orwig, M. J. Spasojevic, S. Wang, A. Wolf, J. A. Myers (2018). Ecological drivers of spatial community dissimilarity, species replacement, and species nestedness across temperate forests. *Global Ecology and Biogeography* 27(5) 581-592.
- Black, C.K., Masters, M.D., LeBauer, D.S., **Anderson-Teixeira, K.J.**, DeLucia, E.H. (2017) Root volume distribution of maturing perennial grasses revealed by correcting for minirhizotron surface effects. *Plant & Soil* 419(1-2)391-404. DOI 10.1007/s11104-017-3333-7.
- Ramage, B.S., Johnson, D.J., Gonzalez-Akre, E.\*, McShea, W.J., **Anderson-Teixeira, K.J.**, Bourg, N.A., Clay, K. (2017) Sapling growth rates reveal conspecific negative density dependence in a temperate forest. *Ecology and Evolution* 7(19) 7661-7671. DOI: 10.1002/ece3.3298.
- Tepley, A. J.\*, Thompson, J. R., Epstein, H. E. & **Anderson-Teixeira, K. J.** (2017) Vulnerability to forest loss through altered post-fire recovery dynamics in a warming climate in the Klamath Mountains. *Glob. Change Biol.* 23(10) 4117-4132. DOI: 10.1111/gcb.13704.
- Herrmann V\*, McMahan SM, Detto M, Lutz JA, Davies SJ, Chang-Yang C-H, **Anderson-Teixeira KJ.** (2016) Tree Circumference Dynamics in Four Forests Characterized Using Automated Dendrometer Bands. *PLoS ONE* 11(12): e0169020. doi:10.1371/journal.pone.0169020
- Gonzalez-Akre, E. B.\*, Meakem, V.\*, Eng, C.Y.\*, Tepley, A. J.\*, Bourg, N. A., McShea, W. J., Davies, S. J. and **Anderson-Teixeira, K. J.** 2016. Patterns of tree mortality in a temperate deciduous forest derived from a large forest dynamics plot. *Ecosphere* 7(12): e01595. doi: 10.1002/ecs2.1595

- Lin, Dunmei, **Anderson-Teixeira, Kristina**, Lai, Jiangshan, Mi, Xiangcheng, Ren, Haibao and Ma, Keping. 2016. Traits of dominant tree species predict local scale variation in forest aboveground and topsoil carbon stocks. *Plant and Soil* 409: 435, doi:10.1007/s11104-016-2976-0
- Anderson-Teixeira, K.J.**, Wang, M. M. H.\*, McGarvey, J.C.\*, and LeBauer, D.S. 2016. Carbon dynamics of mature and regrowth tropical forests derived from a pantropical database (TropForC-db). *Global Change Biology* 22(5) 1690-1709. doi: 10.1111/gcb.13226
- Bennett, A.C.\*, McDowell, N.G., Allen, C.D., **Anderson-Teixeira, K.J.** 2015. Larger trees suffer most during drought in forests worldwide. *Nature Plants*, 1(10), 15139. doi: 10.1038/nplants.2015.139
- Miller, A.D.\*, Dietze, M.D., DeLucia, E.H., **Anderson-Teixeira, K.J.** 2016. Alteration of forest succession and carbon cycling under elevated CO<sub>2</sub>. *Global Change Biology* 22(1) 351-363. doi: 10.1111/gcb.13077
- Anderson-Teixeira, K. J.**, J. C. McGarvey\*, H. C. Muller-Landau, J. Park\*, E. B. Gonzalez-Akre\*, V. Herrmann\*, A. C. Bennett\*, C. V. So\*, N. A. Bourg, J. Thompson, S. McMahon, and W. McShea. (2015) Size-related scaling of tree form and function in a mixed-age forest. *Functional Ecology* 29(12) 1587–1602. doi: 10.1111/1365-2435.12470.
- Anderson-Teixeira KJ**, Davies, SJ; Bennett, AC\*; Gonzalez-Akre, EB\*; Muller-Landau, HC; Wright, SJ; Abu Salim, K; Almeyda Zambrano\*, AM; Alonso,A; Baltzer, JL; Basset, Y; Bourg, NA; Broadbent\*, EN ; Brockelman, WY; Bunyavejchewin, S; Burslem, DFRP; Butt, N; Cao, M; Cardenas, D; Chuyong, GB; Clay, K; Cordell, S; Dattaraja, HS; Deng, X; Detto, D; Du, X; Duque, A; Erikson, DL; Ewango, CEN; Fischer, GA; Fletcher, C; Foster, RB; Giardina, CP; Gilbert, GS; Gunatilleke, N; Gunatilleke, S; Hao, Z; Hargrove, WW; Hart, TB; Hau, BCH; He, F; Hoffman, FM; Howe, RW; Hubbell, SP; Inman-Narahari, FM; Jansen, PA; Jiang, M; Johnson, DJ; Kanzaki, M; Kassim, AR; Kenfack, D; Kibet, S; Kinnaid, MF; Korte, L; Kral, K; Kumar, J; Larson, AJ; Li, Y; Li, X; Liu, S; Lum, SKY; Lutz, JA; Ma, K; Maddalena, DM; Makana, JR; Malhi, Y; Marthews, T; Mat Serudin, R; McMahon, SM; McShea, WJ; Memiaghe, HR; Mi, X; Mizuno, T; Morecroft, M; Myers, JA; Novotny, V; Oliveira, AA de; Ong, PS; Orwig, DA; Ostertag, R; Ouden, J d; Parker, GG; Phillips, RP; Sack, L; Sainge, MN; Sang,W; Sri-ngernyuang, K; Sukumar, R; Sun, IF; Sungpalee,W; Suresh, HS; Tan, S; Thomas, SC; Thomas, DW; Thompson, J; Turner, BL; Uriarte, M; Valencia, R; Vallejo, MI; Vicentini, V; Vrška, T; Wang, X; Wang, X; Weiblen, G; Wolf, A; Xu, H; Yap, S; Zimmerman, J (2015) CTFs-ForestGEO: A worldwide network monitoring forests in an era of global change. *Global Change Biology*, 21 (2), 528-549. doi: 10.1111/gcb.12712
- Duval BD, **Anderson-Teixeira KJ**, Davis SC, Keogh C, Long SP, Parton WJ, DeLucia EH (2013). Predicting greenhouse gas emissions and soil carbon from changing pasture to an energy crop. *PLoS ONE* 8(8): e72019. doi:10.1371/journal.pone.0072019
- Zeri M, Hussain M, **Anderson-Teixeira KJ**, DeLucia EH, Bernacchi CB. (2013) Water use efficiency of perennial and annual bioenergy crops in central Illinois. *JGR Biogeosciences*, 18(2), 581-589. DOI: 10.1002/jgrg.20052
- Anderson-Teixeira, KJ**, Miller, AD\*, Mohan, JE, Hudiburg, T, Duval, BD, DeLucia, EH (2013). Altered dynamics of forest recovery under a changing climate. *Global Change Biology*, 19, 2001-2021. DOI: 10.1111/gcb.12194
- Gomez-Casanovas N., **Anderson-Teixeira K.J.**, Zeri M., Bernacchi C. & DeLucia E. (2013) Gap filling strategies and error in estimating annual soil respiration. *Global Change Biology*, 19, 1941-1952. DOI: 10.1111/gcb.12127

- Zangerl, A.R., Miresmailli, S., Nabity, P., Lawrance, A., Yanahan, A., Mitchell, C.A., **Anderson-Teixeira, K.J.**, David, M.B., Berenbaum, M.R., DeLucia, E.H. (2013) Role of arthropod communities in bioenergy crop litter decomposition. *Insect Science* 20 (5), 671-678.
- Anderson-Teixeira KJ**, Masters MD, Black CK, Zeri M, Hussain MZ, Bernacchi CJ, DeLucia EH (2013) Altered Belowground Carbon Cycling Following Land-Use Change to Perennial Bioenergy Crops. *Ecosystems*, 16, 508–520.
- Smith, C.M., David, M.B., Mitchell, C.A., Masters, M.D., **Anderson-Teixeira, K.J.**, Bernacchi, C.J., et al. (2013). Reduced Nitrogen Losses after Conversion of Row Crop Agriculture to Perennial Biofuel Crops. *Journal of Environment Quality*, 42, 219.
- Anderson-Teixeira K.J.**, Duval B.D., Long S.P., DeLucia, E.H. (2012) Biofuels on the landscape: Is “land sharing” preferable to “land sparing”? *Ecological Applications*, 22, 2035-2048.
- Anderson-Teixeira K.J.**, Snyder P.K., Twine, T.E., Cuadra, S, Costa, MH, & DeLucia E.H. (2012) Climate regulation services of natural and agricultural ecoregions of the Americas. *Nature Climate Change*, 2, 177-181.
- Buckeridge M, De Souza A.P., Arundale R.A., **Anderson-Teixeira K.J.**, & DeLucia E.H. (2012). Ethanol from sugarcane in Brazil: a “midway” strategy for increasing ethanol production while maximizing environmental benefits. *Global Change Biology Bioenergy*, 4, 119-126. (recommended on Faculty of 1000, among top 15 most downloaded in 2012)
- Zeri, M., **Anderson-Teixeira, K.J.**, Masters, M.D., Hickman, G., DeLucia, E.H., Bernacchi, C. (2011) Carbon exchange by establishing biofuel crops in Central Illinois. *Agriculture, Ecosystems and the Environment*, 144, 319-329.
- Anderson-Teixeira K.J.**, Snyder P.K. & DeLucia E.H. (2011). Do Biofuels Life Cycle Analyses Accurately Quantify the Climate Impacts of Biofuels-Related Land Use Change? *Illinois Law Review*. 2011, 589-622.
- Anderson-Teixeira K.J.** & DeLucia E.H. (2011). The greenhouse gas value of ecosystems. *Global Change Biology*, 17, 425-438.
- Anderson-Teixeira K.J.**, Delong J.P., Fox A.M., Brese D.A. & Litvak M.E. (2011). Differential responses of production and respiration to temperature and moisture drive the carbon balance across a climatic gradient in New Mexico. *Global Change Biology*, 17, 410-424.
- Anderson-Teixeira K.J.**, Davis S.C., Masters M.D. & DeLucia E.H. (2009). Changes in soil organic carbon under biofuel crops. *GCB Bioenergy*, 1, 75-96.
- Davis S.C., **Anderson-Teixeira K.J.** & DeLucia E.H. (2009). Life-cycle analysis and the ecology of biofuels. *Trends in Plant Science*, 14, 140-146.
- Anderson-Teixeira, K.J.**, Vitousek, P.M., and Brown, J.H. (2008). Amplified temperature dependence in ecosystems developing on the lava flows of Mauna Loa, Hawaii. *PNAS*, 105(1), 228-233.
- Anderson, K.J.** (2007). Temporal patterns in rates of community change during succession. *The American Naturalist*, 169, 780-793.
- Anderson, K.J.**, Allen, AP, Gillooly, J.F., and Brown, J.H. (2006). Temperature-dependence of biomass accumulation rates during secondary succession. *Ecology Letters*, 9, 673-682.
- Anderson, K.J.** and Jetz W. (2005). The broad scale ecology of energy expenditure of endotherms. *Ecology Letters*, 8, 310-318.

### **Book Chapters & Encyclopedia Articles**

- Anderson-Teixeira, K.J.**, Smith, F.A. & Ernest, M. (2012). Ch. 23. Climate Change. In: *Metabolic Ecology: A Scaling Approach* (eds. Sibley, R.M., Brown, J.H. & Kodric-Brown, A.). Wiley-Blackwell, pp. 280–292.

**Anderson-Teixeira, K.J.** & Vitousek, P.M. (2012). Ch. 9. Ecosystems. In: *Metabolic Ecology: A Scaling Approach* (eds. Sibley, R.M., Brown, J.H. & Kodric-Brown, A.). Wiley-Blackwell, pp. 99–111.

**Anderson-Teixeira K.J.**, Savage V.M., Allen A.P. & Gillooly J. (2009). Allometry and metabolic scaling in ecology. In: *Encyclopedia of Life Sciences (ELS)*, John Wiley & Sons, Ltd: Chichester.

### **Data Products**

Stovall, A. E. L.\*, **K. J. Anderson-Teixeira**, and H. H. Shugart. 2018b. Assessing terrestrial laser scanning for developing non-destructive biomass allometry. *Forest Ecology and Management* 427:217–229.

Herrmann V\*, McMahon SM, Detto M, Lutz JA, Davies SJ, Chang-Yang C-H, **Anderson-Teixeira KJ.** (2016) Data from: Tree Circumference Dynamics in Four Forests Characterized Using Automated Dendrometer Bands. Dryad Digital Repository: <http://dx.doi.org/10.5061/dryad.b327c>.

Gonzalez-Akre, E. B.\*, Meakem, V.\*, Eng, C.Y.\*, Tepley, A. J.\*, Bourg, N. A., McShea, W. J., Davies, S. J. and **Anderson-Teixeira, K. J.** in press. Data from: Patterns of tree mortality in a temperate deciduous forest derived from a large forest dynamics plot. Dryad Digital Repository: <http://dx.doi.org/10.5061/dryad.v5h24>.

**Anderson-Teixeira, K.J.**, Wang, M. M. H., McGarvey, J.C., and LeBauer, D.S. 2016. Data from: Carbon dynamics of mature and regrowth tropical forests derived from a pantropical database (TropForC-db). Dryad Digital Repository. <http://dx.doi.org/10.5061/dryad.t516f>

Gonzalez-Akre EB, McShea WJ, Bourg NA, **Anderson-Teixeira KJ.** (2015). Leaf traits (SLA) for 56 woody species at the Smithsonian Conservation Biology Institute-ForestGEO Forest Dynamic Plot. Front Royal, Virginia. USA. [Data set]. Version 1.0. Plant Trait Global Dataset ([www.try-db.org](http://www.try-db.org)).

Bennett AC\*, McDowell NG, Allen CD, **Anderson-Teixeira KJ** (2015) Data from: Larger trees suffer most during drought in forests worldwide. Dryad Digital Repository. <http://dx.doi.org/10.5061/dryad.2v8p8>

**K. J. Anderson-Teixeira**, J. C. McGarvey\*, H. C. Muller-Landau, J. Y. Park\*, E. B. Gonzalez-Akre\*, V. Herrmann\*, A. C. Bennett\*, C. V. So\*, N. A. Bourg, J. R. Thompson, S. M. McMahon, W. J. McShea (2015). Data from: Size-related scaling of tree form and function in a mixed-age forest. Dryad Digital Repository <http://doi:10.5061/dryad.6nc8c>.

### **Web Resources**

**Kristina J. Anderson-Teixeira**, Chris Shauer\*, Xiuli Shen\*, Evan H. DeLucia (2011). Greenhouse Gas Value Calculator: A publicly accessible web-based tool for calculating the greenhouse gas value of ecosystems. [www.globalchangesolutionsllc.com/GHGValc.html](http://www.globalchangesolutionsllc.com/GHGValc.html). *Global Change Solutions*, LLC.

## **GRANTS**

Alyssa Terrell\*, **Kristina Anderson-Teixeira**. Drivers of tree mortality in Virginia's Blue Ridge Ecoregion. Virginia Native Plants Society. \$5000. 2019.

**Kristina Anderson-Teixeira** & Helene Muller-Landau. Analysis and Development of Smithsonian's global forest carbon database (ForC). Smithsonian Scholarly Studies. \$75,000. January 1- December 31, 2018.

**Kristina Anderson-Teixeira**, Alan Tepley\*, Iara Larcher. Forest resilience to imminent ash die-off in Shenandoah National Park. Shenandoah National Park Trust. \$15,000. January 1- December 31, 2018.

- Kristina Anderson-Teixeira**, Alan Tepley\*. Biotic Disturbances and Tree Mortality in Virginia's Blue Ridge Ecoregion. Virginia Native Plants Society. \$5000. 2017.
- Kristina Anderson-Teixeira**. Ecological determinants of tropical-temperate trends in insect diversity. Subcontract from Czech Academy of Sciences on European Research Council grant. \$63,252. 2017.
- Davies, Comita, Jones, Muller-Landau, and Swenson (senior personnel include **K.J. Anderson-Teixeira**); Dimensions US-China: Integrating functional, phylogenetic and genetic components of diversity for an improved understanding of forest structure, dynamics, and change; \$296,240. 2016-2017.
- Kristina Anderson-Teixeira**, Erika Gonzalez-Akre; Smithsonian Women's Committee; Debuting an online ecosystem climate regulation services calculator. \$15,850. 2015-2016.
- Kristina Anderson-Teixeira**, Helene Muller-Landau, Sean McMahon; Smithsonian Competitive Grants for Science Program; In forests globally, are large trees more sensitive to aridity? \$100,000. 2015-2016.
- Kristina Anderson-Teixeira**, Sean McMahon, Matteo Detto, Evan DeLucia, James Lutz, Ty Lindburg; Smithsonian Grand Challenges; Using automated dendrometer bands to link tree stem size changes to ecosystem-atmosphere exchange at CTFS-ForestGEO sites. \$75,000. 2015-2016.
- Jonathan Thompson, **Kristina Anderson-Teixeira**, Adam Miller\*, Howard Epstein, Robert Scheller, Thomas Spies, Mellissa Lucash; NSF DEB; Understanding the potential for a climate change-driven critical transition from forest to chaparral. \$964,975 (\$183, 274 to Smithsonian); 2014-2017.
- Helene Muller-Landau, **Kristina Anderson-Teixeira**, Stephanie Bohlman, Richard Condit, Stuart Davies, Matteo Detto, Jefferson Hall, Patrick Jansen, Stefan Schnitzer, Edmund Tanner, and S. Joseph Wright; Smithsonian Competitive Grants for Science Program; Measuring the seasonal rhythms of leafing, flowering, and fruiting in tropical landscapes using unmanned aerial vehicles and computer vision. \$100,000. 2014-2015
- Kristina J. Anderson-Teixeira**, Sean McMahon, Geoffrey Parker; Smithsonian Competitive Grants for Science Program; Linking Forest Community Dynamics to Ecosystem-Climate Interactions; \$97,200. 2013-2015.
- Kristina J. Anderson-Teixeira**, Evan H. DeLucia, Benjamin D. Duval; DOE Terrestrial Ecosystem Science; Carbon Dynamics of Forest Recovery under a Changing Climate: Forcings, Feedbacks, and Implications for Earth System Modeling; \$314,913. 2012-2014.
- Evan H. DeLucia, **Kristina J. Anderson-Teixeira**, Steven P. Long. BP Energy Sustainability Challenge; Constructing a Second-Generation Decision-Support Tool for Calculating Comprehensive Climate Regulation Value of Ecosystems; \$60,000. 2012-2013.
- Evan H. DeLucia, **Kristina J. Anderson-Teixeira**, Mark B. David, Madhu Khanna, Stephen P. Long, William J. Parton, Thomas B. Voigt; SunGrant Initiative; Using second-generation biofuel feedstocks to improve the carbon economy of US agriculture; \$644,517. 2011-2013.
- Evan H. DeLucia, **Kristina J. Anderson-Teixeira**, Steven P. Long. BP Energy Sustainability Challenge; The interaction between emerging renewable energy industries and ecosystem health: synthesis, theoretical framework and predictions; \$190,000. 2010-2012.
- Kristina J. Anderson-Teixeira**; Grove Summer Scholarship, University of New Mexico Biology Department; \$3000. 2006.

## **AWARDS, HONORS, & INVITED TALKS**

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### *Awards & Honors*

Presidential Early Career Award for Scientists and Engineers (PECASE), 2019.  
Smithsonian Conservation Biology Institute nominee for Presidential Early Career Award for Scientists and Engineers (PECASE), 2014, 2016.  
Invited participant, White House Leadership Summit on Women, Climate, and Energy (2013)  
Honorable mention, Ecological Society of America Biogeosciences Junior Scientist Outstanding Publication (Elizabeth Sulzman) Award (2008)  
Student Award for Innovation in Informatics, University of New Mexico (2007; \$250)  
Fellowship, Graduate Research Program in Ecological Complexity, University of New Mexico (Aug. 2002- July 2003, Jan. 2004- July 2006)  
NSF Graduate Research Fellowship honorable mention (2003)

### *Invited Talks*

George Washington University, Department of Biological Sciences (November 2018)  
Smithsonian Sustainability Progress Briefing; Washington, DC (November 2016)  
University of Virginia, Department of Environmental Sciences (September 2015)  
Future Earth symposium on Global Biodiversity monitoring, Yale University (May 2015)  
George Mason University (February 2015)  
American Geophysical Union Fall Meeting, San Francisco (December 2014)  
Harvard Forest; Petersham, MA (September 2014)  
Smithsonian Castle Lecture Series (Living in the Anthropocene); Washington, DC (January 2014).  
Online at <http://www.si.edu/consortia/castlelectureseriesjanuary232014/>.  
Beijer-Gothenburg Interdisciplinary Research Program in Developing Countries Proposal Design Workshop; Cape Town, S. Africa (Oct. 2014)  
University of Virginia- Blandy Experimental Farm (June 2013)  
University of Oklahoma (April 2013)  
Smithsonian Tropical Research Institute, Panama –Tupper seminar (October 2012)  
Gordon Research Conference: Metabolic Basis of Ecology (July 2012)  
University of Montana, Missoula (June 2012)  
Smithsonian Institution, Washington, DC (May 2012)  
Indiana University, Bloomington (February 2012)  
University of Massachusetts, Boston (February 2012)  
University of Georgia, Athens (June 2011)  
Columbia University, Lamont-Doherty Earth Observatory (February 2011)  
University of California, Irvine (February 2011)  
University of Texas, Arlington (January 2011)  
American Geophysical Union Fall Meeting, San Francisco (December 2010)  
Wellesley College (December 2010)  
Penn State University (November 2010)  
Smithsonian Institution; Washington, DC (November 2010)  
University of Maryland Appalachian Lab (October 2010)  
Second Annual Biofuels Law and Regulation Conference (The Renewable Energy Legislation Puzzle: Putting the Pieces Together), Urbana, IL (April 2010).  
University of Illinois at Urbana-Champaign Plant Biology Departmental Colloquium (March 2010).  
University of Wisconsin, Madison (February 2010)  
Biosciences Institute Seminar Series (February 2010)



BIOEN Workshop on the Impact of Land Use Change and Biofuel Crops on Soils and the Environment, São Paulo, BRAZIL (June 2009).

Gonzaga University (December 2008)

Workshop- The Metabolic Theory of Ecology and Stream Ecosystems: The Role of Resources (May 2007)

Workshop on Biocomputing, University of New Mexico, Albuquerque (March 2007)

## **TRAINING & TEACHING**

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### ***Mentees***

Postdocs: Norbert Kunert (February 2018- present); Alan Tepley (March 2015-September 2017); Adam Miller (Aug. 2012-present; UIUC/Smithsonian); Visiting Postdocs: Gregg Lamarre (April 2016-Dec. 2017); Eben Broadbent (fall 2013-spring 2014); Angélica M. Almeyda Zambrano (fall 2013-spring 2014)

Professionals: Erika Gonzalez-Akre (2013-present); Valentine Herrmann (Dec. 2015- present)

Research Assistants: Alyssa Terrell (); Ian McGregor (); Rebacca Banbury Morgan (); Ryan Helcoski (May 2017- present); Aaron Goodman (April 2017-Aug 2017), Thomas Blair (April 2017-Sept. 2017), Maria Losada (April 2016- Oct. 2017); Geoffrey Nichols (June-Aug. 2016, April-Oct. 2017); Grace Carscallen (April 2016-Oct 2016); Kate Aldrich (April 2016-Oct 2016); Victoria Meakem (June 2015-present); Cheng-Yin Eng (May 2015-Sept. 2015); Maria Wang (July 2014-Jan. 2016); Valentine Herrmann (June 2014-Nov. 2015); Amy Bennett (Oct. 2013-July 2014); Jennifer McGarvey (July 2013-July 2014); Janice Park (May-Aug. 2013); Mohammad Moein Z. Azimi (May 2012-June 2014; UIUC)

Visiting Graduate Students: Martin Volf (April 2016- Dec. 2017); Carlo Seifert (April 2016- Dec. 2017); Atticus Stovall (June 2014-June 2016)

Smithsonian-Mason Practicum Students (Conservation in Practice; CONS 320): Caroline Kittle (Spring 2017); Thomas Blair (Spring 2016); Christopher Fernández (fall 2015); Olivia Christopher (Fall 2015); Jade Pearce (Spring 2015); Maryam Sedaghatpour (Fall 2014); Haley Overstreet (Fall 2014); Avery Wolfe (Fall 2014); Romaric Moncrieffe (Fall 2014); Emily Bowman (Spring 2014); John Probert (Spring 2014); Christopher So (Fall 2013)

Volunteers: Kate Aldrich (Oct 2016-present); Cecilia Stanos (September 2015-present); Mary McCabe (September 2015-present); Gabriela Reyes (August 2015); Christopher So (Nov. 2014- April 2015); Brian Kettl (July-Aug 2013)

### ***Courses Taught & Assisted***

Biology for Health-Related Sciences and Non-Majors Lab (BIOL 123L), University of New Mexico (Fall 2006)

Introduction to Biology Lab (BIOL 121L), University of New Mexico (Fall 2003)

Molecular Genetics (BIOL 353), Wheaton College, teaching assistant (Spring 2002)

Eukaryotic Genetics (BIOL 354), Wheaton College, teaching assistant (Spring 2002)

College Biology I Lab (BIOL 231), Wheaton College, teaching assistant (Fall 2001)

### ***Guest Lectures***

“Terrestrial ecosystem-climate interactions in an era of global change” Applied Climate Change (CONS 697); Smithsonian-Mason School of Conservation (Fall 2013, Fall 2014)

“Pollution”; Ecosystem Ecology (IB 452/NRES 462); University of Illinois (2011)

“Biodiversity”; Ecosystem Ecology (IB 452/NRES 462); University of Illinois (2011)

- “Can biofuels reduce fossil fuel dependence and slow climate change?”; Wellesley College; Wellesley, MA (2010)
- “Using vegetation modeling to understand the effects of perturbations on ecosystems”; Penn State University; State College, PA (2010)
- “Body Size and the pace of life”; Gonzaga University, Spokane, WA (2008)
- “Plant Hormones & Regulation, part 1”, Plant & Animal Form & Function (BIOL 204); University of New Mexico (2007)
- “Plant Hormones & Regulation, part 2”, Plant & Animal Form & Function (BIOL 204); University of New Mexico (2007)
- “Community Change”, Biogeography (BIOL 494); University of New Mexico (2006)
- “Succession, part 1”, Community Ecology (BIOL 511); University of New Mexico (2005)
- “Succession, part 2”, Community Ecology (BIOL 511); University of New Mexico (2005)
- “Biogeography”, Ecology (BIOL 310); University of New Mexico (2005)

### ***Training in Supervising & Teaching***

Fundamentals for Supervisors, Smithsonian Institution, April 2014.

Certificate in Foundations of Teaching, University of Illinois (completed March 2011)

Teaching workshops attended at UIUC: 16 1-3 hour workshops from 2009-2011:

UIUC School of Integrated Biology Faculty Teaching Retreat 2009: “Scientific Teaching”.

UIUC Center for Teaching Excellence Workshops: “Service-Learning Course Design Clinic”; “Fundamentals of Service-Learning Course Design”; “Developing Campus-Community Partnerships for Service-Learning”; “Strategies for Service-Learning Reflection”; “Using Service Learning to Teach Professional Skills”; “Perspectives on Engaged Scholarship”; “Test construction”; “Mentoring & Advising Students”; “Do Students Really Learn Science and Engineering Concepts or Are They Just Studying for the Test?”; “Managing Your Course: Anticipating and Overcoming Classroom Problems”; “Interpreting ICES Results”; “How are You Doing? Using Informal Early Feedback (IEF)”; “How are you and your students doing? Using Classroom Assessment Techniques”; “Leading Effective and Interesting Discussions”; “Effective PowerPoint Presentations”

## **CONFERENCES, WORKSHOPS, & SYMPOSIA**

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### ***Workshop & Symposia Organization***

"Alteration of Disturbance-Driven Forest Dynamics under a Changing Climate"; American Geophysical Union Fall Meeting (Dec. 2016) (co-organizer)

"Global forest dynamics and interactions with a changing climate"; American Geophysical Union Fall Meeting (Dec. 2015) (lead organizer)

"Global forest dynamics and interactions with a changing climate"; American Geophysical Union Fall Meeting (Dec. 2014) (lead organizer)

"Dynamics of global forests under a changing climate"; American Geophysical Union Fall Meeting (Dec. 2013) (lead organizer)

"Forest dynamics under a changing climate and their long-term context"; American Geophysical Union Fall Meeting (Dec. 2012) (lead organizer)

“Ecological Dimensions of Biofuel Production”; Ecological Society of America Meeting (August 2010) (co-organizer)

### ***Workshop & Symposia Participation***

Integrating CO<sub>2</sub> Fertilisation Evidence Streams and Theory: Global Terrestrial Carbon Sink. Tucson, AZ (Oct. 19-21, 2018). (remote participation)

2018 Environmental System Science (ESS) PI Meeting. Potomac, MD (May 1-2, 2018).

Ecological Knowledge and Predictions: Integrating across networks and national observatories; Tucson, AZ (Feb. 19-21, 2018)

Center for Tropical Forest Science- ForestGEO-2017 Workshop; Rio Grande, Puerto Rico (July 17-31, 2017)

Smithsonian Sustainability Progress Briefing; Washington, DC (November 2016)

NEON workshop; Front Royal, VA (April 2016)

Center for Tropical Forest Science- ForestGEO-2015 Workshop; Gamboa, Panama (June-July 2015)

Future Earth symposium on Global Biodiversity Monitoring; Yale University (May 2015)

Center for Tropical Forest Science- ForestGEO-2014 Workshop; Xishuangbanna, China (July-Aug. 2014)

Beijer-Gothenburg Interdisciplinary Research Program in Developing Countries Proposal Design Workshop; Cape Town, S. Africa (Oct. 2014)

Center for Tropical Forest Science -2013 Workshop; Front Royal, VA (July-Aug. 2013)

National Center for Ecological Analysis and Synthesis (NCEAS) working group: Synthesizing top-down and bottom-up approaches to ecological energetics; Santa Barbara, CA (July 2013)

White House Leadership Summit on Women, Climate, and Energy; Washington, DC; May 23, 2013

Smithsonian National Zoo Palm Oil Workshop; Washington, DC; Jan. 8, 2013

SilvaCarbon LiDAR Workshop; Washington, DC; Nov. 28-29 2012

Smithsonian Institution Global Earth Observatory (SIGEO) – Center for Tropical Forest Science (CTFS) Genomics Working Group; National Museum of Natural History; November 9-10 2012

Center for Tropical Forest Science -2012 Workshop; Seattle, WA (July-Aug. 2012)

Energy Sustainability Challenge Workshop, London, UK (December 2010)

Second Annual Biofuels Law and Regulation Conference (The Renewable Energy Legislation Puzzle: Putting the Pieces Together), Urbana, IL, USA (April 2010).

BIOEN Workshop on the Impact of Land Use Change and Biofuel Crops on Soils and the Environment, São Paulo, BRAZIL (June 2009).

Energy Biosciences Workshop on Bioenergy Crop Modeling and Land Use. (Oct. 2008). U.C. Berkeley, CA.

Workshop on The Metabolic Theory of Ecology and Stream Ecosystems: The Role of Resources, Sevilleta LTER, NM, USA (May 2007).

Workshop on Biocomputing, University of New Mexico, Albuquerque, NM, USA (March 2007).

***Selected Talks & Posters*** (\* indicates advisee)

**Anderson-Teixeira, K.J.**, V Herrmann, J McGarvey, M Wang, N Kunert, B Bond-Lamberty, H Muller-Landau. ForC: a global database characterizing carbon cycling in mature and regrowth forests. ForestSAT; College Park, MD (October 2018).

**Anderson-Teixeira, K.J.** and many collaborators. Role of Tree Size in Forest Carbon Cycling and Moisture Stress Responses. CTFS-ForestGEO workshop; Puerto Rico (July 2017)

Tepley, A.J.\*, J.R. Thompson, H. Epstein, **KJ Anderson-Teixeira**. Potential for Extensive Forest Loss in the Klamath Mountains due to Increased Fire Activity and Altered Post-Fire Forest Recovery Dynamics in a Warming Climate; American Geophysical Union Fall Meeting; San Francisco, CA (Dec. 2016)

- Tepley, A.J.\*, T.T. Veblen, GLW Perry, **KJ Anderson-Teixeira**. Vulnerability & Resilience of Temperate Forest Landscapes to Changing Fire Regimes and Altered Post-Fire Vegetation Dynamics. UVA-NFWF Workshop: “The Science and Practice of Human-Natural System Resilience”; Charlottesville, VA (March 2016).
- Tepley, AJ\*, T Veblen, G Perry, **KJ Anderson-Teixeira**. Vulnerability and Resilience of Temperate Forest Landscapes to Broad-Scale Deforestation in Response to Changing Fire Regimes and Altered Post-Fire Vegetation Dynamics; American Geophysical Union Fall Meeting; San Francisco, CA (Dec. 2015)
- Anderson-Teixeira, KJ**, Adam D. Miller\*, Alan J. Tepley, Amy C. Bennett\*, Maria M. H. Wang\*. Interactions of forest disturbance-recovery dynamics with a changing climate; American Geophysical Union Fall Meeting; San Francisco, CA (Dec. 2015)
- Anderson-Teixeira, KJ**, Maria M. H. Wang\*, Jennifer C. McGarvey\*, David L. LeBauer. Carbon dynamics of mature and regrowth tropical forests derived from a pantropical database (TropForC-db); American Geophysical Union Fall Meeting; San Francisco, CA (Dec. 2015)
- Anderson-Teixeira, KJ**, Stuart J. Davies; Amy C. Bennett\*, Erika B. Gonzalez-Akre\* (presenter). CTFS-ForestGEO: a worldwide network monitoring forests in an era of global change. BIOCON Peru 2015: Andes Amazon Biodiversity Conservation; Lima, Peru (October 2015)
- Anderson-Teixeira KJ**, Davies, SJ; Bennett, AC\*; Gonzalez-Akre, EB\*; Muller-Landau, HC; Wright, SJ; Abu Salim, K; Almeyda Zambrano\*, AM; Alonso, A; Baltzer, JL; Basset, Y; Bourg, NA; Broadbent\*, EN; Brockelman, WY; Bunyavejchewin, S; Burslem, DFRP; Butt, N; Cao, M; Cardenas, D; Chuyong, GB; Clay, K; Cordell, S; Dattaraja, HS; Deng, X; Detto, D; Du, X; Duque, A; Erikson, DL; Ewango, CEN; Fischer, GA; Fletcher, C; Foster, RB; Giardina, CP; Gilbert, GS; Gunatilleke, N; Gunatilleke, S; Hao, Z; Hargrove, WW; Hart, TB; Hau, BCH; He, F; Hoffman, FM; Howe, RW; Hubbell, SP; Inman-Narahari, FM; Jansen, PA; Jiang, M; Johnson, DJ; Kanzaki, M; Kassim, AR; Kenfack, D; Kibet, S; Kinnaird, MF; Korte, L; Kral, K; Kumar, J; Larson, AJ; Li, Y; Li, X; Liu, S; Lum, SKY; Lutz, JA; Ma, K; Maddalena, DM; Makana, JR; Malhi, Y; Marthens, T; Mat Serudin, R; McMahan, SM; McShea, WJ; Memiaghe, HR; Mi, X; Mizuno, T; Morecroft, M; Myers, JA; Novotny, V; Oliveira, AA de; Ong, PS; Orwig, DA; Ostertag, R; Ouden, J d; Parker, GG; Phillips, RP; Sack, L; Sainge, MN; Sang, W; Sri-ngernyuang, K; Sukumar, R; Sun, IF; Sungpalee, W; Suresh, HS; Tan, S; Thomas, SC; Thomas, DW; Thompson, J; Turner, BL; Uriarte, M; Valencia, R; Vallejo, MI; Vicentini, V; Vrška, T; Wang, X; Wang, X; Weiblen, G; Wolf, A; Xu, H; Yap, S; Zimmerman, J (August 2015) CTFS-ForestGEO: A worldwide network monitoring forests in an era of global change. Ecological Society of America meeting, Baltimore, MD, USA
- Wang, Maria\*, **K.J. Anderson-Teixeira**. (August 2015) ForC-db - A Global Forest Carbon Database. Smithsonian Conservation Biology Institute Student Research Symposium, Washington, D.C.
- Eng, Cheng-Yin\*, E. B. Gonzalez-Akre\*, A.J. Tepley\*, **K.J. Anderson-Teixeira** (August 2015). Patterns of Tree Mortality in a Temperate Deciduous Forest Smithsonian Conservation Biology Institute Student Research Symposium, Washington, D.C.
- Anderson-Teixeira, K.J.**, Miller, A.D.\*, Wang, M.\*, McGarvey, J.\*, Dietze, M, LeBauer, D, Duval, B.D., DeLucia, E.H. (April 2015) Carbon Dynamics of Forest Recovery under a Changing Climate: Forcings, Feedbacks, and Implications for Earth System Modeling. TES/SBR Joint Investigators Meeting, Potomac, MD.
- Bennett, A.C.\*, McDowell, N.G., Allen, C.D., **Anderson-Teixeira, K.J.** (Dec 2014). In forests globally, large trees suffer most during drought. American Geophysical Union Fall Meeting, San Francisco, CA.

- DeLucia, E.H., Mies, T., **Anderson-Teixeira, K.J.**, Bohleber, A., Herrmann, V.\* (Dec. 2014). TreeHuggers: Wireless Sensor Networks for Automated Measurement and Reporting of Changes in Tree Diameter. American Geophysical Union Fall Meeting, San Francisco, CA.
- Anderson-Teixeira, K.J.**, Miller, A.D.\*, McGarvey, J.\*, Dietze, M, LeBauer, D, Duval, B.D., DeLucia, E.H. (May 2014) Carbon Dynamics of Forest Recovery under a Changing Climate: Forcings, Feedbacks, and Implications for Earth System Modeling. TES/SBR Joint Investigators Meeting, Potomac, MD.
- Anderson-Teixeira, K.J.**, Muller-Landau, H., McMahon, S., Davies, S.J. (Dec 2013). CTFS-ForestGEO: A global network to monitor forest interactions with a changing climate. American Geophysical Union Fall Meeting, San Francisco, CA.
- Miller, A.D.\*, Dietz, M., DeLucia, E., **Anderson-Teixeira, K.J.** (Dec 2013). American Geophysical Union Fall Meeting, San Francisco, CA.
- Anderson-Teixeira, K.J.**, Miller, A.D.\*, Duval, B.D., DeLucia, E.H. (May 2013) Carbon Dynamics of Forest Recovery under a Changing Climate: Forcings, Feedbacks, and Implications for Earth System Modeling. TES/SBR Joint Investigators Meeting, Potomac, MD.
- Anderson-Teixeira, K.J.**, Miller\*, A.D., Mohan, J.E., Hudiburg, T., Duval, B.D., DeLucia, E.H. (Feb 2013) Altered dynamics of forest recovery under a changing climate. North American Carbon Program Meeting, Albuquerque, NM.
- Anderson-Teixeira K.J.**, Duval B.D., Long S.P., DeLucia, E.H. (December 2012) Biofuels on the landscape: Is “land sharing” preferable to “land sparing”?, American Geophysical Union Fall Meeting, San Francisco (December 2012)
- Anderson-Teixeira K.J.**, Duval B.D., Long S.P., DeLucia, E.H. (August 2012) Biofuels on the landscape: Is “land sharing” preferable to “land sparing”?, Ecological Society of America’s Annual Meeting, Portland, OR, USA.
- DeLucia, E.H., **Anderson-Teixeira, K.J.**, Duval, B.D., Davis, S.C., Bernacchi, C.J., Parton, W.J. (August 2012) Impacts of growing perennial grasses for biofuel in the U.S. corn belt, Ecological Society of America’s Annual Meeting, Portland, OR, USA.
- Gomez-Casanovas N., **Anderson-Teixeira K.J.**, Zeri M., Bernacchi C. & DeLucia E. (August 2012) Gap filling strategies for annual estimates of soil respiration, Ecological Society of America’s Annual Meeting, Portland, OR, USA.
- Ernest, S.K.M., **Anderson-Teixeira, K.J.**, Smith, F.A. (July 2012). Size-temperature responses of organisms and metabolic response to climate change. Gordon Research Conference: Metabolic Basis of Ecology, University of New England, ME.
- Anderson-Teixeira K.J.**, Masters M., Black C. , Zeri M., Bernacchi C., & DeLucia E.H. (July 2012) Altered belowground C cycling following land use change. Pan American Congress on Plants and Bioenergy, Urbana, IL.
- Anderson-Teixeira K.J.**, Duval B.D., Long S.P., DeLucia, E.H. (July 2012) Biofuels on the landscape: Is “land sharing” preferable to “land sparing”? Pan American Congress on Plants and Bioenergy, Urbana, IL.
- Anderson-Teixeira K.J.**, Snyder P.K., Twine, T.E., Cuadra, S, Costa, MH, & DeLucia E.H. Climate regulation services of natural and agricultural ecoregions of the Americas. American Geophysical Union Fall Meeting, San Francisco (December 2011)
- Anderson-Teixeira K.J.**, Masters M., Zeri M., Black C. & DeLucia E.H. (August 2011). Enhanced belowground carbon cycling in perennial bioenergy crops, Ecological Society of America’s Annual Meeting, Austin, TX, USA.
- Anderson-Teixeira K.J.**, Masters M., Zeri M., Black C. & DeLucia E.H. (August 2011). Enhanced belowground carbon cycling in perennial bioenergy crops, Energy Biosciences Retreat, Berkeley, CA, USA. (2<sup>nd</sup> prize in poster competition)

- Anderson-Teixeira, K.J.**, Snyder, P.M., & DeLucia, E.H. (August 2010). Quantifying the climate impacts of land use change, Ecological Society of America's Annual Meeting, Pittsburgh, PA, USA.
- Anderson-Teixeira, K.J.** (August 2009). Quantifying the full greenhouse gas effects of biofuels-related land use change, Ecological Society of America's Annual Meeting, Albuquerque, NM.
- Litvak, M.E., **Anderson-Teixeira, K.J.**, DeLong, J.P. (August 2009). Measurements of Ecosystem Function Across an Elevation Gradient in New Mexico: Determining the sensitivity of NM biomes to climate change, Ecological Society of America's Annual Meeting, Albuquerque, NM.
- Anderson-Teixeira, K.J.**, Davis, S.C., Masters, M.D., DeLucia, E.H. (December 2008). Changes in soil organic carbon storage under potential biofuel crops, American Geophysical Union Fall Meeting, San Francisco, CA.
- Anderson-Teixeira, K.J.**, Davis, S.C., Masters, M.D., DeLucia, E.H. (June 2008). Changes in soil organic carbon storage under potential biofuel crops. Pan American Congress on Plants and Bioenergy, Mérida, MEXICO.
- Anderson, K.J.** (August 2006). Temporal patterns in rates of community change during succession. Ecological Society of America's Annual Meeting, Memphis, TN.
- Anderson, K.J.** (July 2006). Temperature dependence of forest turnover rates. Gordon Research Conference: Metabolic Basis of Ecology. Lewiston, ME.
- Anderson, K.J.** (July 2005). Temperature-dependence of ecosystem processes during primary succession. Hawaii Ecosystems Project Meeting. Kea'au, HI.
- Anderson, K.J.** and Jetz W. (June 2005). The broad scale ecology of energy expenditure of endotherms. Physiological Ecology Meeting, Bishop, CA.
- Anderson, K.J.** and Jetz W. (Jan 2005). The broad scale ecology of energy expenditure of endotherms. International Biogeography Society Meeting, Shepherdston, WV.
- Anderson, K.J.** (August 2004). Metabolic control on succession rate. Ecological Society of America's Annual Meeting, Portland, OR.
- Anderson, K.J.** (July 2004). Metabolic control on succession rate. Gordon Research Conference: Metabolic Basis of Ecology. Lewiston, ME.
- Anderson, K.J.** (August 2003). Latitudinal trends in energy expenditure of endotherms. Ecological Society of America's Annual Meeting, Savannah, GA.
- Anderson, K.J.**, Page, L.K. (April 2002). Effect of the presence of seed upon granivore visitation to raccoon latrines and similar structures. National Conference on Undergraduate Research, Whitewater, WI.

### ***Other Participation***

AGU Outstanding Student Paper Award judge (2011, 2012)

Volunteer Judge for UIUC Plant Biology Fall Research Symposium (2009, 2011)

## **PROFESSIONAL SERVICE**

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### ***Grant Proposal Review***

CTFS-ForestGEO Research Grants Program panel (2014, 2016); Smithsonian Biodiversity Consortium Review Panel (2014); NERC Large Grant Scheme (2017); DOE GOAmazon panel (2013); Netherlands Open Programme for Earth and Life Sciences (2018); University of Wisconsin Water Resources Institute (2013); NSF Geobiology and Low-Temperature Geochemistry program (2011); DOE National Institute for Climate Change Research (2009)

### ***Manuscript Review***

[Review profile on Publons](#) (maintained starting 2018)

Reviews for >27 journals including *Nature Climate Change*; *Nature Communications*; *Nature Ecology & Evolution*; *Proceedings of the National Academy of Science*; PLOS ONE; *Ecology Letters*; *Global Change Biology*; *Ecology*; *Ecological Monographs*; *Ecological Applications*; *Journal of Ecology*; *New Phytologist*; *Oecologia*; *JGR Biogeosciences*; *Ecography*; *Ecology & Evolution*; *Frontiers in Ecology & Evolution*; *Environmental Research Letters*; *Forest Ecology & Management*; *Physiological and Biochemical Zoology*; *Plant Biology*; *Journal of Plant Ecology*; *Plant, Cell & Environment*; *Annals of Botany*; *Applied Vegetation Science*; *GCB Bioenergy*; *Environmental Science & Technology*; *Environmental Management*; *Agriculture & Food Security*

### ***Committee Service***

IDA Science and Technology Policy Institute's Earth Observations Assessment Ecosystems Societal Benefit Area Team (2014-2016)

Smithsonian Living in the Anthropocene Committee (2013- 2014)

Committee for Public Affairs & Communications, International Biogeography Society (2006-2007)

## **OUTREACH & COMMUNITY SERVICE**

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### ***Community Outreach***

Public lecture at Smithsonian Conservation Biology Institute's Conservation Discovery Day (October 2018)

Booth at Smithsonian Conservation Biology Institute's Conservation Discovery Day (October 2017)

Booth at Smithsonian Conservation Biology Institute's 40<sup>th</sup> Anniversary Event (Nov 2015)

Booth at Smithsonian Conservation Biology Institute's Summer Safari (May 2014, 2015, 2016, 2017, 2018)

Booth at Smithsonian Conservation Biology Institute's Autumn Conservation Festival (October 2014, October 2016)

Participant in Flooded Lecture Series "Waste", Washington, DC (September 2014)

Panel Member at DC Environmental Film Festival: "The Last Call", National Museum of Natural History (March 2014)

Lecture to Virginia Native Plants Society: "Forest-climate interactions in an era of global change".

Virginia Native Plants Society 2014 Workshop: *Taking the heat: A look at Plants and Climate Change*; March 1, 2014.

Public lecture at Smithsonian Conservation Biology Institute: "Forest-climate interactions in an era of global change". (April 22, 2013).

Anderson-Teixeira K.J., Mao Y., Smith C., Zeri Z., David M., Berenbaum M., Bernacchi C., Mackie R., DeLucia E.H. Environmental Impact and Sustainability of Feedstock Production. *Energy Farm Tour* (Energy Bioscience Institute).

### ***Research in the News***

SciDevNet (July 14, 2017) "El Niño puede dañar resiliencia de bosques tropicales" [El Niño can damage tropical forest resilience]. <http://www.scidev.net/america-latina/agropecuaria/noticias/el-nino-puede-danar-resiliencia-de-bosques-tropicales.html>

Mongabay (June 15, 2017) "The 'interval squeeze': Climate change makes it less likely conifer forests will regenerate after wildfires" <https://news.mongabay.com/2017/06/the-interval-squeeze-climate-change-makes-it-less-likely-conifer-forests-will-regenerate-after-wildfires/>

- Harvard University. (April 27, 2017) "Scientists examine impact of high-severity fires on conifer forests: Study finds that wildfire in a warming climate could relegate portions of forested landscapes to shrubland." Picked up by ScienceDaily, many others.
- Smithsonian National Zoo & Conservation Biology Institute. (April 27, 2017) Smithsonian Scientists Examine Impact of High-Severity Fires on Conifer Forests. <https://nationalzoo.si.edu/news/smithsonian-scientists-examine-impact-high-severity-fires-conifer-forests>
- Smithsonian National Zoo & Conservation Biology Institute. (October 13, 2016) A Beetle Invasion. <https://nationalzoo.si.edu/conservation-ecology-center/news/beetle-invasion>
- Lieberman, Bruce (January 5, 2016) Big Trees at Most Risk From Warming. *Yale Climate Connections*. [www.yaleclimateconnections.org/2016/01/big-trees-at-most-risk-from-warming/](http://www.yaleclimateconnections.org/2016/01/big-trees-at-most-risk-from-warming/)
- Ryan, Michael G. (2015) News & Views: Tree mortality: Large trees losing out to drought. *Nature Plants* 1(10).
- Patterson, Brittany and ClimateWire (October 1, 2015). The big, iconic trees are the first to die in severe drought. *ClimateWire*. Published by *Scientific American*.
- DOE/Los Alamos National Laboratory (September 29, 2015). Large trees—key climate influencers—die first in drought. Picked up by *ScienceDaily*, *EurekAlert!*, *PhysOrg.com*, many others
- Smithsonian National Zoo (September 28, 2015). Smithsonian Conservation Biology Institute Study Finds Forest Giants Suffer Worst During Droughts. Picked up by *World News Network*.
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### ***Educational Outreach***

Anderson-Teixeira lab hosted tree mortality research experience for CONS 440/540: Ecology Field Skills; Smithsonian-Mason School of Conservation, Front Royal, VA (June 2018)

Anderson-Teixeira lab hosted forest ecology research experience for high school students participating in FONZ (Friends of the National Zoo) Nature Camp; Smithsonian Conservation Biology Institute, Front Royal, VA (2017)

Anderson-Teixeira lab hosted forest ecology research experience for students participating in UCSB-Smithsonian Scholars program (2015, 2016, 2017, 2018).

Volunteer Judge for Science Research Expo, Menaul School; Albuquerque, NM (2006)

## **CONTACT INFORMATION**

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