

DAVID J.P. MOORE

Associate Professor
School of Natural Resources and the Environment
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CHRONOLOGY OF EDUCATION

- B.Sc. (Botany, 1999) National University of Ireland, Dublin
- Ph.D. (2005) Tree Growth and Carbon Balance in a Temperate Forest Exposed to Elevated Carbon Dioxide for Eight Years, Program in Ecology & Evolutionary Biology University of Illinois, Urbana Champaign
- Postgraduate Certificate in Academic Practice (PGCAP) (2010), King's Learning Institute, King's College London

CHRONOLOGY OF EMPLOYMENT

- 2011 – Associate Professor, School of Natural Resources and the Environment, University of Arizona, Tucson, AZ, USA.
- 2010 –11 Visiting Scientist, National Ecological Observatory Network, Boulder, CO, USA
- 2007 –11 Lecturer (Assistant Professor Equivalent), Environmental Monitoring and Modelling, Department of Geography, King's College London, UK
- 2006 –07 Postdoctoral Researcher, Ecosystem modelling and data assimilation – integration of the SIPNET model with flux measurements, Co-operative Institute for Research in Environmental Science, University of Colorado and the National Center for Atmospheric Research (NCAR), Boulder, CO, USA
- 2000 –01 Teaching Assistant, Introductory Biology, University of Illinois, Urbana Champaign, IL, USA
1999. Ecologist, Dúchas, Irish National Parks and Wildlife Service, Botanical inventory and conservation assessment of shingle beaches in Ireland.

GRANTS AND CONTRACTS

I have helped secure over \$7M dollars in research funding from Federal Agencies, including two different phase 1 & 2 NSF Macrosystems Biology projects

Federal Grants Awarded

- 2017 **NASA Jet Propulsion Lab:** Carbon and Ecosystems Data Assimilation for the ISS Instrument Suite. Lead PI with Andrew Fox 1 year (\$91,287) [*prototyping a data assimilation system for upcoming NASA missions*]
- 2016 **United States Department of Agriculture:** Ecosystem Water and Carbon Cycling Across Southwestern Ecosystems Sole PI: David JP Moore 09/01/2016 3 years (\$105,773) 0 mos. Summer [*Sole PI and coordinator, fusing flux and remote sensing data*]
- 2015 **National Science Foundation (NSF) Macrosystems Biology RAPID:** COLLABORATIVE RESEARCH: EAGER-NEON: Prototyping Assessment of Ecoclimate Teleconnections Affecting NEON Domains (Co-I) 12/01/2015 2 years (\$113,929) [*Co-I integration with NEON Design*]
- 2013 **Department of Energy (DOE) Office of Biological and Environmental Research,** Estimating carbon flux and storage: constraint of the Community Land Model using observations at different temporal scales (Lead PI), 09/01/2013, 3 years (\$970,020) Commitment (person months): 0.5 mos. Summer. [*Lead PI and coordinator, lead of data assimilation and modeling team*]
- National Science Foundation (NSF) Macrosystems Biology Category 2,** Collaborative Research and NEON: PalEON - a PaleoEcological Observatory Network to assess terrestrial ecosystem models (CO-PI), 05/01/2013, 5 years (\$5,113,060) Commitment (person months): 0.3 mos. Summer. [*Coordinate all Modeling activities (with Co-PI Mike Dietze, Boston University) and lead the modeling and assimilation activities within the Site-Scale Data-Model Assimilation project. Project Lead PI is Jason McLachlan, University of Notre Dame*]
- 2012 **National Science Foundation (NSF) RAPID,** Modification of the impact of insect disturbance on carbon cycling by fire. (Lead PI), 11/01/2012 – 2 years (\$199,684) Commitment (person-months): 0.5 mos. Summer. [*Lead PI and co-ordinator of the grant; mentored postdoc, grad students and technician*]
- 2011 **National Science Foundation (NSF) Macrosystem Biology Category 1,** Collaborative Research and NEON: PalEON - a PaleoEcological Observatory Network to assess terrestrial ecosystem models (1065732, Co-investigator/collaborator), May 2011 – Aug 2013.
- 2010 **US Department of Energy (DOE) Terrestrial Carbon Program,** Carbon cycling dynamics in response to pine beetle infection and climate variation (Res Co-investigator/collaborator), (\$1,047,830)
- 2007 **National Science Foundation (NSF),** Comparative ecosystem analysis using inverse parameter estimation (0743251; Res Co-I), March 1, 2008, 3 years, (\$398,000.00)
- 2011 – Present

Approximately \$150,000 in various state and local grants on a variety of topics.

International (UK & Ireland)

- 2009 **Natural Environment Research Council (NERC)**, The response of soil respiration to insect induced tree mortality: fusing eco-physiological measurements with ecosystem models (Sole PI), March 1, 2010, 18 months, (£56,850)
- 2008 **Central Research Fund, University of London**, Predicting forest ecosystem responses to climate change. (Sole PI), March 1, 2009, 18 Months (£2,800)

Refereed journal articles (published or accepted in final form)

1. Fox, A.M, Hoar, T.J., Anderson, J.L., Arellano, A.F., Smith, W.K., Litvak, M.E., MacBean, N., Schimel, D.S., Moore D.J.P. (2018) Evaluation of a Data Assimilation System for Land Surface Models using CLM4.5 *Journal of Advances in Modeling Earth Systems*
2. Swann, A.L., Laguë, M.M., Garcia, E.S., Field, J.P., Breshears, D.D., Moore, D.J.P., Saleska, S.R., Stark, S.C., Villegas, J.C., Law, D.J. and Minor, D.M., 2018. Continental-scale consequences of tree die-offs in North America: identifying where forest loss matters most. *Environmental Research Letters*, 13(5), p.055014.
3. Babst, F., Bodesheim, P., Charney, N., Friend, A., Girardin, M., Klesse, S., Moore, D.J.P., Seftigen, K., Björklund, J., Bouriaud, O., Dawson, A., DeRose, R., Dietze, M.C., Eckes, A., Enquist, B., Frank, D.C., Mahecha, M.D., Poulter, B., Record, S., Trouet, V., Turton, R., Zhang, Z., Evans, M.E.K. (2018). When tree rings go global: Challenges and opportunities for retro-and prospective insight. *Quaternary Science Reviews*, 197, pp.1-20.
4. Alexander, M. R., Rollinson, C. R., Moore, D. J. P., Speer, J.H., Rubino, D.L. (2018) Determination of Death Dates of Coarse Woody Debris of Multiple Species in the Central Hardwood Region (Indiana, USA). *Tree-Ring Research*, in press
5. Swann, A, Laguë, M., Garcia, E., Field, J., Breshears, D., Moore, D.J.P., Saleska, S., Stark, S., Villegas, J., Law, D., Minor, D., (2018) Continental-scale consequences of tree die-offs in North America: identifying where forest loss matters most, *Environmental Research Letters* ERL-104782.R1
6. Lybrand, R. A., Gallery, R. E., Trahan, N. A., & Moore, D. J. (2018). Disturbance Alters the Relative Importance of Topographic and Biogeochemical Controls on Microbial Activity in Temperate Montane Forests. *Forests*, 9(2), 97.
7. Smith, W. K., Biederman, J. A., Scott, R. L., Moore, D. J. P., He, M., Kimball, J. S., Yan, D., Hudson, A., Barnes, M.L., MacBean, N., Fox, A. M. (2018). Chlorophyll fluorescence better captures seasonal and interannual gross primary productivity dynamics across dryland ecosystems of southwestern North America. *Geophysical Research Letters*. 45(2), 748-757.
8. Barnes, M. L., Breshears, D. D., Law, D. J., van Leeuwen, W. J., Monson, R. K., Fojtik, A. C., Barron-Gafford, G.A. & Moore, D. J. (2017). Beyond greenness: Detecting temporal changes in photosynthetic capacity with hyperspectral reflectance data. *PLoS one*, 12(12), e0189539.

9. Alexander, M. R., Rollinson, C. R., Babst, F., Trouet, V., & **Moore**, D. J. (2017). Relative influences of multiple sources of uncertainty on cumulative and incremental tree-ring-derived aboveground biomass estimates. *Trees*, 1-12.
10. Novick, K. A., Biederman, J. A., Desai, A. R., Litvak, M. E., **Moore**, D. J. P., Scott, R. L., & Torn, M. S. (2017). The AmeriFlux network: A coalition of the willing. *Agricultural and Forest Meteorology*. <https://doi.org/10.1016/j.agrformet.2017.10.009>
11. Marlon, J. R., Pederson, N., Connor, N., Goring, S., Shuman, B., Robertson, A., Booth, R., Bartlein, P.J., Berke, M.A., Clifford, M., Cook, E., Dieffenbacher-Krall, A., Dietze, M.C., Hessler, A., Hubeny, B., Jackson, S.T., Marsicek, J., McLachlan, J., Mock, C.J., **Moore**, D.J.P., Nichols, J., Peteet, D., Schaefer, K., Trouet, V., Umbanhowar, C., Williams, J.W., Yu, Z., Cook, E. (2017). Climatic history of the northeastern United States during the past 3000 years. *Climate of the Past*, 13(10), 1355.
12. Montané, F., Fox, A. M., Arellano, A. F., MacBean, N., Alexander, M. R., Dye, A., Bishop, D. A., Trouet, V., Babst, F., Hessler, A. E., Pederson, N., Blanken, P. D., Bohrer, G., Gough, C. M., Litvak, M. E., Novick, K. A., Phillips, R. P., Wood, J. D., and **Moore**, D.J.P., P. (2017) Evaluating the effect of alternative carbon allocation schemes in a land surface model (CLM4.5) on carbon fluxes, pools and turnover in temperate forests, *Geosci. Model Dev. Discuss.*, <https://doi.org/10.5194/gmd-2017-74>, revised, 2017.
13. Rollinson, C.R., Liu, Y., Raiho, A., **Moore**, D.J.P., McLachlan, J., Bishop, D.A., Dye, A., Matthes, J.H., Hessler, A., Hickler, T. and Pederson, N., (2017). Emergent climate and CO₂ sensitivities of net primary productivity in ecosystem models do not agree with empirical data in temperate forests of eastern North America. *Global Change Biology*, 23(7), pp.2755-2767.
14. Monson, R.K., Neice, A.A., Trahan, N.A., Shiach, I., McCorkel, J.T. and **Moore**, D.J. (2016). Interactions between temperature and intercellular CO₂ concentration in controlling leaf isoprene emission rates. *Plant, Cell & Environment*, 39(11), pp.2404-2413.
15. Barnes, M.L., Moran, M.S., Scott, R.L., Kolb, T.E., Ponce-Campos, G.E., **Moore**, D.J., Ross, M.A., Mitra, B. and Dore, S., (2016). Vegetation productivity responds to sub-annual climate conditions across semiarid biomes. *Ecosphere*, 7(5).
16. Elmendorf, S.C., Jones, K.D., Cook, B.I., Diez, J.M., Enquist, C.A., Hufft, R.A., Jones, M.O., Mazer, S.J., Miller-Rushing, A.J., **Moore**, D.J.P and Schwartz, M.D., (2016) The plant phenology monitoring design for the national ecological observatory network. *Ecosphere*, 7(4).
17. Maurer GE, Chan AM, Trahan NA, **Moore** DJP, Bowling DR. (2016) Carbon isotopic composition of forest soil respiration in the decade following bark beetle and stem girdling disturbances in the Rocky Mountains. *Plant, Cell & Environment* 39(7) 1513-1523.
18. Brown, T.B., Hultine, K.R., Steltzer, H., Denny, E.G., Denslow, M.W., Granados, J., Henderson, S., **Moore**, DJP., Nagai, S., SanClements, M. and Sánchez-Azofeifa, A., (2016). Using phenocams to monitor our changing Earth: toward a global phenocam network. *Frontiers in Ecology and the Environment*, 14(2), pp.84-93.

19. Trahan, NA, Dynes EL, Pugh, E, **Moore**, DJP, & Monson, R. K. (2015). Changes in soil biogeochemistry following disturbance by girdling and mountain pine beetles in subalpine forests. *Oecologia* 177(4), 981-995.
20. Babst F, Alexander MR, Szejner P, Bouriaud O, Klesse S, Roden J, Ciais P, Poulter B, Frank D, **Moore** DJP, Trouet V (2014) A tree-ring perspective on the terrestrial carbon cycle *Oecologia* OEKO-D-14-00512
21. Zobitz JM, **Moore** DJ, Quaife T, Braswell BH, Bergeson A, Anthony JA, & Monson RK (2014) Joint data assimilation of satellite reflectance and net ecosystem exchange data constrains ecosystem carbon fluxes at a high-elevation subalpine forest. *Agricultural and Forest Meteorology*, 195, 73-88.
22. Ault TR, Henebry GM, de Beurs KM, Schwartz MD, Betancourt JL, & **Moore** DJP (2013) The False Spring of 2012, Earliest in North American Record. *Eos, Transactions American Geophysical Union*, 94(20), 181-182.
23. **Moore**, DJP, Trahan NA, Wilkes P, Stephens B, Quaife T, Elder K, Desai A, Negron J, Monson RK (2013) Persistent reduced ecosystem respiration after insect disturbance in high elevation forests. *Ecology Letters Volume 16, Issue 6, pages 731–737*
DOI: 10.1111/ele.12097
24. Ren X, He H, **Moore** DJP, Zhang L, Liu M, Li F, Yu G, Wang H (2013) Uncertainty analysis of modeled carbon and water fluxes in a subtropical coniferous plantation *Journal of Geophysical Research – Biogeosciences* 118, 1674–1688, doi:10.1002/2013JG002402.
25. Scott-Denton L, **Moore** DJP, Rosenbloom N, Kittel T, Burns SP, Schimel DS, Monson RK (2013) Forecasting net ecosystem CO₂ exchange in a subalpine forest using model-data assimilation combined with simulated climate and weather generation *Journal of Geophysical Research – Biogeosciences Volume 118, Issue 2, pages 549–565*
DOI: 10.1002/jgrg.20039
26. Shao P, Zeng X, **Moore** DJP, Zeng X (2013) Soil microbial respiration from observations and Earth System Models. *Environmental Research Letters*, 8(3), 034034.
27. Hicke J, Allen CD, Desai AR, Dietze M, Hall R, Hogg ET, Kashian, D, **Moore** DJP, Raffa K, Sturrock R, Vogelmann J (2012) The Effects of Insect and Pathogen Outbreaks on the Carbon Cycle: A Review, *Global Change Biology* 18, 7–34, doi: 10.1111/j.1365-2486.2011.02543.x
28. Desai AR, **Moore** DJP, Ahue WK, Wilkes PJ, deWekker SFJ, , Campos SFJ, Stephens BB, Brookes BG, Monson RK, Quaife T, French J, Aulenbach SM, Schimel DS (2011) Seasonal pattern of regional carbon balance from the Airborne Carbon in the Mountains Experiment 2007. *Journal of Geophysical Research* VOL. 116, G04009, doi:10.1029/2011JG001655
29. Zobitz JM, Desai AR, **Moore** DJP, Chadwick M. (2011) A primer in ecological data assimilation using MCMC. *Oecologia* 167(3):599-611 DOI 10.1007/s00442-011-2107-9
30. Drake JE, Gallet-Budynek A, Hofmockel KS, Bernhardt ES, Billings SA, Jacksom RB, Johnsen KS, Lichter J, McCarthy HR, McCormack ML, **Moore** DJP, Oren R, Palmroth S, Phillips RP, Pippen JS, Pritchard SG, Treseder KT, Schlesinger WH, DeLucia EH Finzi AC (2011) Increases in the Flux of Carbon Belowground Stimulates Nitrogen Uptake and Sustains

- the Long-Term Enhancement of Forest Productivity under Elevated CO₂. *Ecology Letters* 14: 4, 349–357.
31. Gallery RE, Moore DJP, Dalling JW (2010). Interspecific variation in susceptibility to fungal pathogens in seeds of 10 tree species in the neotropical genus *Cecropia*. *Journal of Ecology*, 98(1), 147-155.
 32. Richardson AD, Williams M, Hollinger D, **Moore** DJP, Dail B, Davidson EA, Scott NA, Evans, RS, Hughes H, Lee JT, Rodrigues C, Savage K (2010) Estimating parameters of a forest ecosystem C model with measurements of stocks and fluxes as joint constraints *Oecologia* 164:25-40
 33. Sun J, Oncley SP, Burns SP, Stephens BB, Lenschow DH, Campos T, Monson RK, Schimel, DS, Sacks WJ, DeWekker SFJ, Lai, CT, Lamb B, Ojima D, Ellsworth PZ, Sternberg LSL, Zhong S, Clements C, **Moore** DJP, Anderson DE, Watt AS, Hu J, Tschudi M, Aulenbach S, Allwine E, Coons TA, (2010) Multi-scale, Multi-disciplinary Investigation of Ecosystem-Atmosphere CO₂ exchange over the Rocky Mountains of Colorado. *Bulletin of the American Meteorological Society* 91: 209-230
 34. Hu J, **Moore** DJP, Riveros-Iregui DA, Monson RK (2010a) Modeling whole-tree carbon assimilation rate using observed transpiration rates and needle sugar carbon isotope ratios *New Phytologist* 185(4) 1000-1015
 35. Hu J, **Moore** DJP, Monson RK (2010b) Climate controls over the seasonal carbon isotope dynamics of subalpine forest trees *Plant Cell and Environment*, 33(1) 35-47
 36. Hu J, **Moore** DJP, Burns SP, Monson RK (2010c) Longer growing seasons lead to less carbon sequestration by a subalpine forest. *Global Change Biology* 16(2) 771-783
 37. Turnipseed AA, Burns SP, **Moore** DJP, Hu J, Guenther AB Monson RK (2009) Controls over ozone deposition to a high elevation subalpine forest *Agricultural and Forest Meteorology* 149, 1447-1459.
 38. **Moore** DJP, Taneva L, Gonzalez-Meler MA, Phippen JS, Kim HS, DeLucia EH. (2008) The effect of carbon dioxide enrichment on apparent stem respiration from *Pinus taeda* L. is confounded by high levels of soil carbon dioxide. *Oecologia*, 158, 1-10.
 39. **Moore** DJP, Hu J, Sacks WJ, Schimel DS, Monson RK (2008) Estimating transpiration and the sensitivity of carbon uptake to water availability in a subalpine forest using a simple ecosystem process model informed by measured net CO₂ and H₂O fluxes. *Agricultural and Forest Meteorology*, 148, 1467-1477.
 40. Zobitz JM, **Moore** DJP, Sacks WJ, Monson RK, Bowling DR, Schimel DS (2008) Integration of process-based soil respiration models with whole-ecosystem CO₂ measurements. *Ecosystems*, 11, 250-269
 41. Monson RK, Trahan N, Rosenstiel TN, Veres P, **Moore** DJP, Wilkinson M, Norby RJ, Tjoelker MG, Briske DD, Karnosky DF, Fall R. (2007) Isoprene emission from terrestrial ecosystems in response to global change. *Philosophical Transactions of The Royal Society A-Mathematical Physical and Engineering Sciences* 365 (1856): 1677-1695

42. **Moore** DJP, Aref S, Ho RM, Phippen JS, Hamilton J, DeLucia EH. (2006). Inter-annual variation in the response of *Pinus taeda* tree growth to long term Free Air Carbon dioxide Enrichment (FACE). *Global Change Biology* **12**:1367-1377
43. Finzi AC, **Moore** DJP, DeLucia EH, Kim HS, Jackson RL, Lichter J, McCarthy H, Oren R, Phippen JS, Schlesinger WH. (2006). Progressive nitrogen limitation of ecosystem processes under elevated CO₂ in a warm-temperate forest. *Ecology* **87**:15-25.
44. Norby RJ, DeLucia EH, Gielen B, Calfapietra C, Giardina CP, King JS, Ledford J, McCarthy HR, **Moore** DJP, Ceulemans R, De Angelis P, Finzi AC, Karnosky DF, Kubiske ME, Lukac M, Pregitzer KS, Scarascia-Mugnozza GE, Schlesinger WH, Oren R. (2005). Forest response to elevated CO₂ is conserved across a broad range of productivity. *Proceedings of the National Academy of Sciences* **102**:18052-18056.
45. DeLucia EH, **Moore** DJP, and Norby RJ. (2005). Contrasting responses of forest ecosystems to rising atmospheric CO₂: implications for the global C cycle. (*Global Biogeochemical Cycles* **19**: GB3006, doi:10.1029/2004GB002346.)
46. Ainsworth EA, Davey PA, Bernacchi CJ, Dermody OC, Heaton EA, **Moore** DJP, Morgan PB, Naidu SL, Yoo H, Zhu X, Curtis PS, Long SP (2002). A meta-analysis of elevated [CO₂] effects on soybean (*Glycine max*) physiology, growth and yield. *Global Change Biology* **8**:695-709.

Scientific report (peer-reviewed by scientific panel)

47. Schimel DS, Keller M, Berukoff S, Kao R, Loescher H, Powell H, Kampe T, **Moore** DJP, Gram W 2011 Science Strategy: Enabling Continental-Scale Ecological Forecasting. National Ecological Observatory Network Inc. [Available online http://www.neonscience.org/sites/default/files/basic-page-files/NEON_Strategy_2011u2.pdf Last accessed Jan 2017]
48. **Moore** DJP, Wilson F (1999). The Shingle beaches of Ireland: An inventory and proposed classification for the National Parks and Wildlife Service, Ireland (*public report National Parks and Wildlife Service, Dublin, Ireland*).

Scholarly books and monographs (distinguish scholarly works vs. textbooks)

Chapters in scholarly books and monographs

1. Schlesinger WH, Bernhardt ES, DeLucia EH, Ellsworth DS, Finzi AC, Hendrey GR, Hofmockel KS, Lichter J, Matamala R, **Moore** DJP, Oren R, Phippen JS, Thomas RB (2006) The Duke Forest FACE experiment: CO₂ enrichment of a loblolly pine forest Managed Ecosystems and CO₂ pp:197-212 *Springer Berlin Heidelberg [review, contributed data and analysis]* *
2. DeLucia EH, **Moore** DJP, Hamilton JG, Thomas RB, Springer CJ, Norby RJ (2005) The changing role of forests in the global carbon cycle: responding to elevated carbon dioxide in the atmosphere *Climate Change and Global Food Security*, 179-214 [*review, contributed data and analysis*] *

SERVICE/OUTREACH (last 5 years. hyphen [-] indicates ongoing)

National/international service/outreach

- 2017- Chair: Physiological Ecology Section – Ecological Society of America
- 2017- Associate Editor: Journal of Geophysical Research - Biogeosciences
- 2016-2018 Chapter co-lead: 2nd State of the Carbon Cycle Report (SOCCR2) – Ch 17
Chapter co-author: 2nd State of the Carbon Cycle Report (SOCCR2) – Ch 19
- 2015 Faculty Project Leader – Organization for Tropical Studies, Field Ecology: Skills for Science and Beyond Jan 1 - 10
- 2013 - 15 Member: Working group – National Ecological Observatory Network Airborne flux measurement
- 2012 - 2017 Member: Working group – National Ecological Observatory Network - Phenology
- 2012 - 2017 Member: Working group – USA National Phenology Network Data Products
- 2011 – 15 Member: Advisory Committee – USA National Phenology Network
- 2011 – 12 Member: Steering Committee – NASA/NEON Scaling workshop (Spatial and Temporal Scaling in Continental-Scale Ecology Workshop 11-12 June 2012, Boulder, CO USA)
- 2010 – 13 Member: Working group – NASA TE-Modelling
- 2007 – Co-organizer: Annual Flux Course in Flux Measurement and Advanced Modelling (www.fluxcourse.org)

Local/state

- 2014 Instructor - Honors College High School Summer Program – Plant responses to heat and drought: using infra-red to study the environment (July 2nd & 3rd)
- 2013 Instructor & Tour Lead - Tree-Ring and Fire Ecology Teacher Workshop (June 26th). 13 teachers total from the following school districts: Amphitheater, Baboquivari, Catalina Foothills, Griffin Foundation, Marana, Sunnyside and Tucson Unified School District

Academic conference sessions

- 2018 Session co-convener (2 sessions) Biogeochemical and Functional Consequences of Vegetation Changes in the Anthropocene II *American Geophysical Union Fall Meeting, San Francisco, CA*
- Session co-convener - Organized Oral Session Integrating Diverse Evidence Streams on the Effects of Rising CO₂ on Terrestrial Ecosystems, Ecological Society of America, August 5-10, New Orleans, LA
- Wednesday, August 08, 2018 08:00 AM - 11:30 AM New Orleans Ernest N. Morial Convention Center - 348-349
- 2017 Session co-convener (4 sessions) Remote Sensing in Terrestrial Ecosystems: Cross-Scale Approaches to Understanding Structure, Function, and process I-IV *American Geophysical Union Fall Meeting, San Francisco, CA*

- 2016 Session co-convener (2 sessions) Constraining Ecosystem Carbon Uptake and Long-Term Storage with Integrated Modeling, Experiment, and Observation. *American Geophysical Union Fall Meeting, San Francisco, CA*
- 2015 Session co-convener (4 sessions) Constraining Ecosystem Carbon Uptake and Long-Term Storage with Integrated Modeling, Experiment, and Observation. *American Geophysical Union Fall Meeting, San Francisco, CA*
- Session co-convener (2 sessions) Integrating Remote Sensing Observations & Eddy Covariance Observations. *American Geophysical Union Fall Meeting, San Francisco, CA*
- Session co-convener (3 sessions) Microbial Controls of Biogeochemical Cycling. *American Geophysical Union Fall Meeting, San Francisco, CA*
- 2014 Session co-convener. Ecological Disturbance: Observing and predicting disturbance impacts *American Geophysical Union Fall Meeting, San Francisco, CA*
- Session co-convener. Constraining ecosystem carbon uptake and long term storage using models and data *American Geophysical Union Fall Meeting, San Francisco, CA*
- Session co-convener. Vegetation phenology in terrestrial ecosystems: observations, modeling and implications on climate change *American Geophysical Union Fall Meeting, San Francisco, CA*
- 2013 Session chair. Constraining Terrestrial Ecosystem Carbon Uptake and Storage Using Models and Data I (Oral Session) *American Geophysical Union Fall Meeting, San Francisco, CA*
- Session chair. Constraining Terrestrial Ecosystem Carbon Uptake and Storage Using Models and Data II (Posters) *American Geophysical Union Fall Meeting, San Francisco, CA*
- Session chair. Ecological Disturbance: Observing and Predicting the Impacts of Landscape Disturbance I (posters) *American Geophysical Union Fall Meeting, San Francisco, CA*
- Session chair. Ecological Disturbance: Observing and Predicting the Impacts of Landscape Disturbance II (Oral Session) *American Geophysical Union Fall Meeting, San Francisco, CA*
- Session chair. Ecological Disturbance: Observing and Predicting the Impacts of Landscape Disturbance III (Oral Session) *American Geophysical Union Fall Meeting, San Francisco, CA*
- 2012 Session chair. Phenology Responses and Feedbacks to Biogeophysics, Disturbance, and Climate Change I *American Geophysical Union Fall Meeting, San Francisco, CA, Fall Meeting, San Francisco 2012*
- Session chair. Phenology Responses and Feedbacks to Biogeophysics, Disturbance, and Climate Change II *American Geophysical Union Fall Meeting, San Francisco, CA, Fall Meeting, San Francisco 2012*

Session chair. Phenology Responses and Feedbacks to Biogeophysics, Disturbance, and Climate Change III *American Geophysical Union Fall Meeting, San Francisco, CA, Fall Meeting, San Francisco 2012*

2011 Session chair AGU: Network Enabled Science American Geophysical Union Fall Meeting, San Francisco, CA, 2011 Fall Meeting, San Francisco 2011.

University Committees(s)

Member: UA Research Computing Governance Committee (RCGC) 2011--17

Member: UA Data Management Subcommittee of the RCGC 2013-17

Member: UA Ecosystem Genomics Cluster Hire Steering Committee 2014-17

College committee(s)

Member, CALS Faculty Council 2015/16

Member, CALS21, Visioning Session for Mid-career Faculty 2012

Departmental committee(s)

Member: Professor of Practice Search Committee, 2017/18

Chair: Ecohydrology Search Committee, SNRE Awards Committee 2016/17

Chair: Earth Systems Genomics Search Committee 2015/16

Member: School of Natural Resources Curriculum Committee (current)

Other committees (internal/external)

King's College London

School Social Science & Public Policy

2008/10 *Member: Schools of Humanities, Law and Social Science & Public Policy Research Ethics Sub Committee*

Department of Geography

2008-10 *Chair: Research Ethics Panel Geography, Gerontology & Social Care Workforce Research Unit*

2009-10 *Member: Postgraduate Research Committee*

2009-10 *Member: Postgraduate Research Staff-Student Committee*

Journal Reviewer

Reviewed manuscripts for PLOS one, Biology Letters, Environmental Research Letters, Oecologia, Nature Climate Change, Nature Geosciences, Ecology Letters. New Phytologist, Ecological Applications, Journal of Geophysical Research – Biogeosciences, Agricultural and Forest Meteorology, Environmental Research Letters, Oecologia, Plant Cell and Environment, Trees Structure and Function, Physiologia Plantarum, Journal of Experimental Botany, Forest Ecology and Management, The Geographical Journal, International Journal of Biometeorology,

Editor

Journal of Geophysical Research (Associate Editor 2017-)

Ecological Applications (occasional guest 2007-present)

Grant proposal panel service

NSF, NASA, DOE, Czech Science Foundation

Societies

American Geophysical Union (AGU)

Ecological Society of America (ESA)

RESEARCH ADVISING

Graduate students and postdoctoral researchers, research scientists advised. 5 total postdocs and 26 total graduate students

Ongoing (University of Arizona) Andrew Fox, Matt Roby, Amy Hudson, Blake Steiner

Prior

UA: Natasha McBean, Mallory Barnes, Francesc Montané, M. Ross Alexander, Ian Shiach, Yao Liu, Nicole Trahan, Emily Dynes, Gabe Moreno, Diana Stovern, Gouri Prabhakar.

NEON: William Sacks, Andrew Fox (data products team)

King's College London: Astuti R, Beardmore S, Baccur A., Sorrin C., Rix L., Wilkes PJ, Golub M, Armbrust M, Barber H, Green L, Yong D., Leighton L, Hobhouse N, Piltsi A, Dywer J, Stepanen K

PUBLICATIONS/CREATIVE ACTIVITY (PUBLISHED OR ACCEPTED)

*Note: My name is identified in **bold**. The names of the lab members who are co-authors are identified by an underline*

PhD Advisor

Evan DeLucia, University of Illinois

Postdoctoral Advisors

David Schimel, NASA Jet Propulsion Lab

Russell Monson, University of Arizona