CHRISTINA L. STAUDHAMMER
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EDUCATION

University of California, Davis	Applied Mathematics	BS (with honors) 1990
University of British Columbia	Forest Biometrics	MS 1999
University of British Columbia	Forest Biometrics	PhD 2004

PROFESSIONAL EXPERIENCE

2019-present   Graduate Program Director, Department of Biological Sciences, University of Alabama
2017-present   Professor of Biometrics, Department of Biological Sciences, University of Alabama
2010-2017   Associate Professor of Biometrics, Department of Biological Sciences, University of Alabama
2010-2011   Associate Professor of Forest Biometrics, School of Forest Resources and Conservation, University of Florida
2005-2010   Assistant Professor of Forest Biometrics, School of Forest Resources and Conservation, University of Florida
2002, 2004   Lecturer in Forest Biometrics, Department of Forest Resources, University of British Columbia (Canada)
1999-2001   Consulting Forest Biometrician, J.S. Thrower & Assoc., Vancouver, BC

RESEARCH INTERESTS

- Statistical modeling and forest biometrics
- Urban and community forestry
- Analysis of carbon dynamics collected via eddy covariance methods
- Brazil nut (*Bertholletia excelsa*) population dynamics

EXTERNAL PROFESSIONAL ACTIVITIES

Peer Review
- Chair, Central Arizona–Phoenix LTER Program Review Committee, National Science Foundation (2020)
- Panel member, National Science Foundation – Ecosystems (2019)
- Applied Research Associate Editor, *Forest Science* (2011 - present)
- Journal article reviewer: *Landscape and Urban Planning, Urban Forestry and Urban Greening, Agricultural and Forest Meteorology, Ecology, J. of Ecology, Canadian J. of Forest Research, Forest Ecology and Management, J. of Agroforestry, J. of Theoretical Biology, Environmental and Ecological Statistics, J. of Applied Ecology, Forests*
- Ad-hoc proposal reviewer, National Science Foundation - Division of Environmental Biology (2013-2016), Chemical, Bioengineering, Environmental, and Transport Systems (2017), Ecosystems (2018, 2019, 2020, 2021, 2022)
- Proposal reviewer, ETH Zurich Research Commission (2015, 2016)

- Technical reviewer, USDA Forest Service Research Work Unit SRS-4952: Human and Natural Systems Research (2014), Northern Research Station (2015)
- Proposal reviewer, New University Researchers Start-up Program of *Fonds de recherche du Québec - Nature et technologies* (2013)
- Book proposal reviewer: Taylor and Francis, CRC Press (2009)

Advisory committees and leadership
- Coordinator, International Union of Forest Research Organizations 4.01.01 Working Group: Design, performance and evaluation of experiments (2020-present)
- Member, Committee of Visitors for the National Science Foundation's Division of Environmental Biology (DEB), charged to assess quality and integrity of operations (2019)
- Member, USDA Forest Service Urban to Rural Analysis Team (2016-present)
- Collaborator, Florida Coastal Everglades LTER (2016-present)
- Member, National Science Foundation Macrosystems Biology All-PI Meeting Organizing Committee (2014)
- Member, National Ecological Observatory Network (NEON) Technical Working Groups (TWGs) for the Fundamental Instrument Unit (2011-2019)
- Deputy, International Union of Forest Research Organizations 4.01.01 Working Group: Design, performance and evaluation of experiments (2004-2014)
- Chairman and co-chairman of Southern Mensurationists Meetings (2008, 2007)
- Chairman of the Forest Products Society Quality Control, Process Control, and Production Management Group (2004-2005)
- Member, Forest Management Training Project Review Team, responsible for critical review of the "Encyclopedia of Southern Bioenergy" (2005)

Other Academic Service
- Tenure and promotion review, Michigan Technical University (2020)
- External host for student Yuan Gong, for Priority Academic Program Development of Jiangsu Higher Education Institutions (PAPD – China, 2020)
- Workshop participant, "Urban and Wildland-Urban Interface Forests and Rangelands Under Changing Conditions", USDA Forest Service, June 25-27, 2019, Denver CO
- Visiting Researcher, ECOSYS group, *Institut national de la recherche agronomique*, Versailles-Grignon, France (2018-2019)
- External host for student Flora Magdalene Benitez Romero, for Programa de Doutorado Sanduíche No Exterior - Coordenação de Aperfeiçoamento de Pessoal de Educação (CAPES – Brazil, 2017)
- Workshop participant, "Optimizing NEON Science". NEON-Battelle, Boulder CO (2017)
- Workshop participant, "Growing the Urban Forest". The National Socio-Environmental Synthesis Center, Annapolis, MD (2016)
- Courtesy Faculty, University of Florida School of Natural Resources and the Environment (2011-2014)
- External member, PhD examination committee, Programa de Pós Graduação em Engenharia de Florestal, Universidade Federal de Santa Maria, Brazil (2013)

Consultations outside the University
- Statistical advisor on agronomy and forestry experiments for Department of Natural Resources, Kingdom of Bhutan (2007-present)
- Instructor for Uncertainty Workshop, International Long-term Ecological Research Open Science Meeting, Kruger National Park, South Africa (2017)

- Instructor for short course on Experimental Design and Analysis for Programa de Mestrado em Ecologia e Manejo de Recursos Naturais, Universidade Federal do Acre, Rio Branco, Brazil (2016)
- Instructor for scientific publication workshop for Programa de Mestrado em Ecologia e Manejo de Recursos Naturais, Universidade Federal do Acre, Rio Branco, Brazil (2015)
- Instructor for ICOS-NEON Carbon Workshop 2015, Observatoire de Haute-Provence, France (2015)
- Statistical advisor on forestry experimental designs and analyses for graduate students in Programa de Pós Graduação em Engenharia de Florestal, Universidade Federal de Santa Maria, Rio Grande do Sul, Brazil (2013)
- Statistical advisor on grade threshold optimization algorithms for Calibre Equipment, Ltd., Tasmania (2012)
- Short course instructor in experimental designs and analysis for Department of Natural Resources, Kingdom of Bhutan (2007, 2011)

K-12 Outreach
- "The Brazilian Amazon", Magicfest, Tuscaloosa Magnet Elementary School, Tuscaloosa AL (2019, 2020-canceled)
- "The Brazilian Amazon: a keystone of conservation", International Day, Rock Quarry Elementary School, Tuscaloosa AL (2017, 2019)
- "How old is a tree?", Capitol School K-1, Tuscaloosa AL (2015)
- "Fruits and seeds of the Amazon", Capitol School pre-school, Tuscaloosa AL (2013, 2014)

Foreign Languages
- Portuguese: intermediate level speaking and writing, advanced reading
- French: intermediate level speaking and writing, advanced reading

MAJOR INTERNAL PROFESSIONAL ACTIVITIES

University of Alabama
- Member, University International Education Committee (2019-present)
- Member, Tanglewood-Arboretum Committee (2019-present)
- Chair, Tanglewood-Arboretum Committee (2018-2019)
- Co-mentor, Mentoring Committee for Asst. Professor Nate Jones (2020-present)
- Co-mentor, Mentoring Committee for Asst. Professor Paige Ferguson (2016-present)
- Member, College of Arts and Sciences J. Nicholene Bishop Biological Station Advisory Board (2010-present)
- Member, University Institutional Biological Safety Committee (2012-2019)
- Member, Assessment Committee (2018-2019)
- Member, Academic Program Review Committee for Department of Geography (2018)
- Member, Search Committee for Ecohydrologist (2016-17)
- Member, Search Committee for Cell/Molecular Immunology (2015-16)
- Member, Search Committee for University of Alabama Arboretum Caretaker (2015)
- Member, Search Committee for Assistant Professor of Computational Biology (2014)
- Chair, Search Committee for University of Alabama Arboretum Director (2013)
- Academic Advisor, Department of Biological Sciences, assisting ~50 undergraduates per term to select appropriate coursework

- Statistical Advisor, College of Arts and Sciences, meeting with graduate students not under my supervision to advise on statistical issues associated with their projects (not part of official committee duties or teaching responsibilities; >180 students, 2010-present)

University of Florida
- Member, College of Agricultural and Life Sciences Curriculum Enhancement committee, (2008-2010)
- Member, Undergraduate Programs Committee, School of Forest Resources and Conservation (SFRC) (2005-2010)
- Member, Search Committee for Assistant Professor of Statistics, IFAS Statistics (2008)
- Member, Committee for Peer Review of Teaching, SFRC (2006 and 2008)
- Member, Undergraduate Scholarship Committee, SFRC (2005-2007)
- Member, Search Committee for Asst. Professor of Forest Hydrology, SFRC-UF (2005)
- Member, Search Committee for Assistant Professor of Forest Geomatics, SFRC (2006)
- Statistical Advisor, Institute of Food and Agricultural Sciences, meeting with graduate students not under my supervision to advise on statistical issues (not part of official committee duties or teaching responsibilities; 100+ students, 2005-2010)

PROFESSIONAL SOCIETIES
- International Union of Forest Research Organizations (2020-present)
- American Geophysical Union (2018-present)
- Ecological Society of America (2009-present)
- American Statistical Association (2004- present)
- Society of American Foresters (2005-present)

PUBLICATIONS TO DATE (*graduate student or post-doctoral authors under my supervision)

Books (4)

Kozak, A., R.A. Kozak, **C.L. Staudhammer**, S. Watts. 2019. *Introductory Probability and Statistics: Applications for Forestry and Natural Sciences, 2nd edition.* CABI, Wallingford, UK.

Brandeis, T.J., F.J. Escobedo, **C.L. Staudhammer**, D.J. Nowak, W.C. Zipperer. 2014. San Juan Bay Estuary Watershed Urban Forest Inventory. Gen.Tech. Rep. SRS-190. Asheville, NC: USDA, Forest Service, Southern Research Station. 52 Pp.

Staudhammer, C.L., L.A. Hermansen-Baez, D.R. Carter, E.A. Macie (editors). 2011. Wood to energy: using southern interface fuels for bioenergy. Gen.Tech. Rep. SRS-132. Asheville, NC: USDA, Forest Service, Southern Research Station. 90 Pp.

Kozak, A., R.A. Kozak, **C.L. Staudhammer**, S. Watts. 2008. *Introductory Probability and Statistics: Applications for Forestry and Natural Sciences.* CABI, Wallingford, UK.

Refereed Journal Articles (96)

*Lambert, C. S. Landry, A. Koeser, M. Andreu, G. Starr, C.L. Staudhammer. Impact of model choice in predicting urban forest storm damage when data is uncertain. *Landscape and Urban Planning.* In press.

Ruzol, R., S. Younger, D. Aubrey, H. Loescher, G. Starr, C. Staudhammer, C.R. Jackson. Water use from a young loblolly pine bioenergy plantation: effects of intensive management on stand evapotranspiration. *Ecosphere.* In press.

*Gong, Y., **C.L. Staudhammer**, S. Wiesner, Y. Zhang, J. Cannon, G. Starr. 2022. Uncertainty in parameterizing a flux-based phenological model with ecosystem respiration. *Ecosphere.* https://doi.org/10.1002/ecs2.4101

Staudhammer, C.L., S.L. Malone, J. Zhao, Z. Yu, G. Starr, S.F. Oberbauer. 2022. Methane emissions from subtropical wetlands: An evaluation of the role of data filtering on annual methane budgets. *Agricultural and Forest Meteorology* 321: 108972. https://doi.org/10.1016/j.agrformet.2022.108972

Kenney, G., C.L. Staudhammer, S. Wiesner, S. Brantley, S. Bigelow, G. Starr. 2021. Hurricane Michael altered the structure and function of longleaf pine woodlands. *JGR – Biogeosciences*, 126, e2021JG006452. https://doi.org/10.1029/2021JG006452.

Zhao, J., S.L. Malone, **C.L. Staudhammer,** G. Starr, H. Hartmann, S.F. Oberbauer. 2021. Freshwater wetland plants respond nonlinearly to inundation over a sustained period. *American Journal of Botany* 108(10): 1-15. https://doi.org/10.1002/ajb2.1746.

Malone, S.L., P. Olivas, J. Zhao, J. Kominoski, **C.L. Staudhammer,** J.A. Cummings, S.F. Oberbauer, G. Starr. 2021. Integrating aquatic metabolism and net ecosystem CO_2 balance in calcareous short- and long-hydroperiod subtropical freshwater wetlands. *Ecosystems* https://doi.org/10.1007/s10021-021-00672-2.

*Romero, F., L. Jacovine, C.M.M.E. Torres, **C.L. Staudhammer**, S. Ribeiro, S.J.S. Soares da Rocha, T.N.O. Novais, R.A.B. Romero, R.O. Gaspar, S.I.S. Velasquez, L.F. da Silva, E. Vidal, P. Fearnside. 2021. Forest management with reduced-impact logging in amazonia: Estimated aboveground volume and carbon in commercial tree species in managed forest in Brazil's state of Acre. *Forests* 12(4):481.

Landry, S., A. Koeser, B. Kane, D. Hilbert, D. McLean, M. Andreu, **C.L. Staudhammer**. 2021. Urban forest response to Hurricane Irma: The role of landscape configuration and sociodemographic context. *Urban Forestry & Urban Greening* 61: 127093. https://doi.org/10.1016/j.ufug.2021.127093

Staudhammer, C.L., L.H.O. Wadt, K.A. Kainer, T.A. da Cunha. 2021. Comparative models disentangle drivers of fruit production variability of an economically and ecologically important long-lived Amazonian tree. 2021. *Nature Scientific Reports* 1, 2563. https://doi.org/10.1038/s41598-021-81948-4

*Gong, Y., **C.L. Staudhammer**, G. Kenney, S. Wiesner, Y. Zhang, G. Starr. 2021. Vegetation structure drives forest phenological recovery after hurricane. *Science of the Total Environment* 774, 145651. https://doi.org/10.1016/j.scitotenv.2021.145651.

*Gong, Y., **C.L. Staudhammer**, S. Wiesner, G. Starr, Y. Zhang. 2021. Characterizing growing season length of subtropical coniferous forests with a phenological model. *Forests* 12, 95. https://doi.org/10.3390/f12010095.

Wiesner, S., G. Starr, L. Boring, J. A. Cherry, P.C. Stoy, **C.L. Staudhammer**. 2020. Forest structure and composition drive differences in metabolic energy and entropy dynamics during temperature extremes in longleaf pine savannas. *Agricultural and Forest Meteorology* 297, 108252 https://doi.org/10.1016/j.agrformet.2020.108252.

*Caruso, N., **C.L. Staudhammer,** L.J. Rissler. 2020. A demographic approach to understanding the effects of climate on population growth. *Oecologia*. 193, 889–901 https://doi.org/10.1007/s00442-020-04731-8.

Bongiolo, E., K.A. Kainer, W. Cropper, **C.L. Staudhammer,** L.H.O. Wadt. 2020. Swidden fallow management to increase landscape-level Brazil nut productivity. *Forest Ecology and Management* 464: 118019. doi.org/10.1016/j.foreco.2020.118019.

Wiesner, S., P. Stoy, **C.L. Staudhammer**, G. Starr. 2020. Using metabolic energy density metrics to understand differences in ecosystem function during drought. *JGR-Biogeosciences* 125(94). doi.org/10.1029/2019JG005335.

*Romero, F., L. Jacovine, S. Ribeiro, J.A.F. Neto, L. Ferrante, S.J.S. Soares da Rocha, C.M.M.E. Torres, V.T. Machado de Morais Jr., R.O. Gaspar, S.I.S. Velasquez, E. Vidal, **C.L. Staudhammer**, P. Fearnside. 2020. Stocks of carbon in logs and timber products from forest management in the southwestern Amazon. *Forests* 1(10), 1113; https://doi.org/10.3390/f11101113.

*Romero, F., L. Jacovine, S. Ribeiro, C.M.M.E. Torres, L.F. da Silva, R. Gaspar, S.J.S. Soares da Rocha, **C.L. Staudhammer**, P. Fearnside. 2020. Allometric equations for volume, biomass and carbon in commercial stems harvested in a managed forest in the southwestern Amazon: A case study. *Forests* 11(8), 874; https://doi.org/10.3390/f11080874.

Zhao, J., S.A. Malone, S.F. Oberbauer, P.C. Olivas, J.L. Schedlbauer, **C.L. Staudhammer**, G. Starr. 2019. Intensified inundation shifts a freshwater marsh from a CO_2 sink to a source. *Global Change Biology* 25(10): 3319-3333. DOI: 10.1111/gcb.14718.

Hiers, J.K., **C.L. Staudhammer**, J. Hom, J.J. O'Brien, H.L. Gholz, T.A. Martin, G. Starr. 2019. Fine dead fuel moisture shows complex lagged responses to environmental conditions in a palmetto (*Serenoa repens*) flatwoods. *Agricultural & Forest Meteorology* 266-267: 20-28. DOI: 10.1016/j.agrformet.2018.11.038.

Wiesner, S., **C.L. Staudhammer**, P. Stoy, L. Boring, G. Starr. 2019. Quantifying energy use efficiency via maximum entropy production: A case study from longleaf pine ecosystems. *Biogeosciences* 16: 1845-1863. https://doi.org/10.5194/bg-16-1845-2019.

Wiesner, S., **C.L. Staudhammer**, C. Javaheri, J.K. Hiers, L. Boring, G. Starr. 2019. The role of understory phenology and productivity in the carbon dynamics of longleaf pine savannas. *Ecosphere* 10(4):e02675. 10.1002/ecs2.2675.

Staudhammer, C.L., F.E. Escobedo, A. Blood*. 2018. Assessing statistical methods for comparing species diversity from disparate data sources: the case of urban and peri-urban forests. *Ecosphere* 9(10):e02450. 10.1002/ecs2.2450.

Escobedo, F.J., N. Clerici, **C.L. Staudhammer**, A. Feged-Rivadeneira, J.C. Bohorquez, G. Tovar. 2018. Trees and Crime in Bogota, Colombia: Is the link an ecosystem disservice or service? *Land Use Planning* 78: 583-592. DOI: 10.1016/J.LANDUSEPOL.2018.07.029.

Bigelow, S.W., N. Jansen, S.B. Jack, R.J, Mitchell, **C.L. Staudhammer**. 2018. Influence of selection method on skidder-trail soil compaction in longleaf pine forest. *Forest Science* 64: 641-652, https://doi.org/10.1093/forsci/fxy023.

Kleindl, W., P. Stoy, M. Binford, A. Desai, M. Dietze, C. Schultz, G. Starr, **C.L. Staudhammer**, D.J.A. Wood. 2018. Toward a Social-ecological theory of forest macrosystem ecology. *Forests* 9(4): 200: 1-23; doi:10.3390/f9040200.

Kainer, K.A., L.H.O. Wadt, and **C.L. Staudhammer**. 2018. The evolving role of *Bertholletia excelsa* in Amazonia: contributing to local livelihoods and forest conservation. *Revista*

Desenvolvimento e Meio Ambiente 48 (Edição especial: 30 Anos do Legado de Chico Mendes): 477-497. DOI: 10.5380/dma.v48i0.58972.

Zhao, J., S.F. Oberbauer, P.C. Olivas, J.L. Schedlbauer, J.L. May, J.G. Moser, S. Malone, **C.L. Staudhammer**, G. Starr. 2018. Contrasting photosynthetic responses of two dominant macrophyte species to seasonal inundation in an Everglades freshwater prairie. *Wetlands* 38(5): 893-903, https://doi.org/10.1007/s13157-018-1038-1.

Zhao, J., P. Olivas, S. Kunwor*, S. Malone, **C.L. Staudhammer**, G. Starr, S.F. Oberbauer. 2018. Comparison of sensible heat flux measured by large aperture scintillometer and eddy covariance in a seasonally-inundated wetland. *Agriculture & Forest Meteorology* 259: 345-354. doi.org/10.1016/j.agrformet.2018.05.026.

Wiesner, S., H.W. Loescher, **C.L. Staudhammer**, A. Baron, L. Boring, R.J. Mitchell, G. Starr. 2018. Interactions among abiotic drivers, disturbance and net ecosystem exchange of carbon on the soil respiration of subtropical savannas. *Ecosystems* doi.org/10.1007/s10021-018-0246-0.

Wadt, L.H.O., C. Faustino, **C.L. Staudhammer**, K.A. Kainer, J.S. Evangelista. 2018. Primary and secondary dispersal of *Bertholletia excelsa*: Implications for sustainable harvests. *Forest Ecology and Management* 415-416: 98-105. DOI: 10.1016/j.foreco.2018.02.014.

Starr, G., J.R. Jarnigan, **C.L. Staudhammer**, J.A. Cherry. 2018. Variation in ecosystem carbon dynamics of saltwater marshes in the northern Gulf of Mexico. *Wetland Ecology and Management* doi.org/10.1007/s11273-018-9593-z.

Bertwell, T.D., K.A. Kainer, W.P. Cropper, **C.L. Staudhammer**, L.H.O. Wadt. 2018. Are Brazil nut populations threatened by fruit harvest? *Biotropica* 50(1): 50–59. DOI: 10.1111/btp.12505.

Roman, L., H. Pearsall, T. Eisenman, T. Conway, R. Fahey, S. Landry, J. Vogt, N. van Doorn, M. Grove, D. Locke, A. Bardekjian, J. Battles, Cadenasso, C. Konijnendijk van den Bosch, M. Avolio, M. A. Berland, D. Jenerette, S.K. Mincey, D.E. Pataki, **C. L. Staudhammer**. 2018. Human and biophysical legacies shape contemporary urban forests: A literature synthesis. *Urban Forestry and Urban Greening* 31: 157-168. doi.org/10.1016/j.ufug.2018.03.004.

Wangdi, N., K. Om, C. Thinley, D. Drukpa, T. Dorji, A. Darabant, P.B. Chhetri, I.U. Ahmed, **C.L. Staudhammer**, R. Jandl, A. Schindlbacher, P. Hietz, K. Katzensteiner, D. Godbold, G. Gratzer. 2017. Climate Change in Remote Mountain Regions: A Throughfall-Exclusion Experiment to Simulate Monsoon Failure in the Himalayas. *Mountain Research* 37: 294-309. DOI: 10.1659/MRD-JOURNAL-D-16-00097.1.

*Londres, M., M. Schulze, **C.L. Staudhammer**, K. Kainer. 2017. Population structure and fruit production of Andiroba (*Carapa guianensis*, Meliaceae) in Amazonian várzea floodplain forests: implications for community-based management. *Tropical Cons. Science* 10: 1–13. DOI: 10.1177/1940082917718835.

*Kunwor, S., G. Starr, H.W. Loescher, **C.L. Staudhammer**. 2017. Preserving the variance in imputed eddy-covariance measurements: Alternative methods for defensible gap filling. *Agricultural and Forest Meteorology* 232: 635–649. DOI: 10.1016/j.agrformet.2016.10.018.

*Malone, S.L., J. Barr, J. Fuentes, S.F. Oberbauer, **C.L. Staudhammer**, E.E. Gaiser, G. Starr. 2016. Sensitivity to low temperature events: implications for CO_2 dynamics in subtropical coastal ecosystems. *Wetlands* 36:957–967. DOI: 10.1007/s13157-016-0810-3.

Darabant, A., T. Dorji, **C.L. Staudhammer**, P.B. Rai, G. Gratzer. 2016. Burning for enhanced non-timber forest product yield may jeopardize the resource base through interactive effects. *Journal of Applied Ecology* 53: 1613–1622. doi:10.1111/1365-2664.12746.

*Blood, A., G. Starr, F. Escobedo, A. Chappelka, E. Wiseman, R. Sivakumar, **C.L. Staudhammer**. 2016. Resolving uncertainties in predicted crown relationships for urban trees of the Southeastern United States: local and general equations for widespread species. *Urban Forestry and Urban Greening* 20: 282 - 294. DOI: 10.1016/j.ufug.2016.09.009.

Darabant, A, P.B. Rai, **C.L. Staudhammer**, T. Dorji. 2016. Designing and evaluating bamboo harvesting methods for local needs: integrating Local Ecological Knowledge and science. *Environmental Management* 58(2):312-22. doi: 10.1007/s00267-016-0702-6.

Kirkman, L.K., L.M. Giencke, R.S. Taylor, L.R. Boring, **C.L Staudhammer**, R.J. Mitchell. 2016. Productivity and species richness in a longleaf pine woodlands: resource and disturbance influence across edaphic gradient. *Ecology.* 97: 2259–2271. doi:10.1002/ecy.1456.

*Blood, A., G. Starr, F. Escobedo, A. Chappelka, **C.L. Staudhammer**. 2016. How do urban forests compare? A study of within urban versus peri-urban tree diversity in forests of the Southeastern US. *Forests* 7(6), 120; doi:10.3390/f7060120.

Starr, G., **C.L. Staudhammer**, S. Wiesner, S. Kunwor*, H.W. Loescher, A. Baron-Lopes, A. Whelan, R. Mitchell, L. Boring. 2016. Carbon dynamics of *Pinus palustris* ecosystems following drought. *Forests* 7(98); doi:10.3390/f7050098.

Mortazavi, B. A.C. Ortmann, L. Wang, R. Bernard, **C.L. Staudhammer**, J.D. Dalrymple, R.H. Carmichael, A. Kleinhuizen. 2015. Evaluating the impact of oyster (*Crassostrea virginica*) gardening on sediment nitrogen cycling in a subtropical estuary. *Bulletin of Marine Science* 91(3). DOI: 10.5343/bms.2014.1060.

Escobedo, F.J., N. Clerici, **C.L. Staudhammer**, G.T. Corzo. 2015. Socio-ecological dynamics and inequality in Bogotá, Colombia's public urban forests and their ecosystem services. *Urban Forestry & Urban Greening* 14: 1040-1053. DOI:10.1016/j.ufug.2015.09.011.

Whelan, A., G. Starr, **C.L. Staudhammer**, H. Loescher, R. Mitchell. 2015. Effects of drought and prescribed fire on energy exchange in longleaf pine ecosystems. *Ecosphere* 6(7): 128. DOI: http://dx.doi.org/10.1890/ES15-00111.1.

*Becknell, J.M., A. Desai, M. Dietze, C. Schultz, G. Starr, J. Franklin, J. Hall, A. Pourmokhtarian, P. Stoy, P. Duffy, M. Binford, **C.L. Staudhammer**. 2015. Assessing interactions among changing climate, management, and disturbance in forests: A macrosystems approach. *Bioscience* 65 (3): 263–274. DOI: 10.1093/biosci/biu234.

Staudhammer, C.L., F.J. Escobedo, N. Holt, L.J. Young, T.J. Brandeis, W. Zipperer. 2015. Predictors, spatial distribution, and occurrence of woody invasive plants in subtropical urban ecosystems. *Journal of Ecological Management* 155: 97-105. DOI: 10.1016/j.jenvman.2015.03.012.

*Malone, S.L., C. Keough, **C.L. Staudhammer**, M.G. Ryan, W.J. Parton, G. Starr. 2015. Ecosystem resistance in the face of climate change: A case study from the freshwater marshes of the Florida Everglades. *Ecosphere* 6(4): Article 57. DOI: 10.1890/ES14-00404.1.

*Malone, S.L., **C.L. Staudhammer,** H.W. Loescher, P. Olivas, S.F. Oberbauer, M.G. Ryan, J. Schedlbauer, G. Starr. 2014. Seasonal patterns in energy partitioning of two freshwater marsh ecosystems in the Florida Everglades. *JGR Biogeosciences.* DOI: 10.1002/2014JG002700.

*Malone, S.L., **C.L. Staudhammer**, S.F. Oberbauer, P. Olivas, M.G. Ryan, J. Schedlbauer, H.W. Loescher, G. Starr. 2014. El Niño Southern Oscillation (ENSO) enhances CO_2 exchange rates in freshwater marsh ecosystems in the Florida Everglades. *PlosOne.* DOI: 10.1371/journal.pone.0115058.

Starr, G., **C.L. Staudhammer**, H.W. Loescher, R. Mitchell, A. Whelan, J. McGee, J.K. Hiers, J.J. O'Brien. 2014. Time series analysis of forest carbon dynamics: Recovery of *Pinus palustris* following a prescribed fire. *New Forest.* DOI 10.1007/s11056-014-9447-3.

*Timilsina, N., F.J. Escobedo, **C.L. Staudhammer**, T.J. Brandeis. 2014. Analyzing the causal factors of carbon stores in a subtropical urban forest. *Ecological Complexity* 20:23-32. DOI: 10.1016/j.ecocom.2014.07.001.

*Timilsina, N., **C.L. Staudhammer**, F.J. Escobedo, A.B. Lawrence*. 2014. Tree biomass, wood waste yield, and carbon storage changes in an urban forest. *Landscape and Urban Planning* 127:18-27. DOI: 10.1016/j.landurbplan.2014.04.003.

Kainer, K.A., L.H.O. Wadt, **C.L. Staudhammer**. 2014. Testing a silvicultural recommendation: Brazil nut responses 10 years after liana cutting. *Journal of Applied Ecology* 51(3): 655-663. DOI: 10.1111/1365-2664.12231.

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Refereed Extension Publications (5)

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Soriano, M., K.A. Kainer, **C.L. Staudhammer**, E. Soriano. 2013. Implementación del manejo múltiple en bosques comunitarios ricos en castaña: Efectos del aprovechamiento de madera en la regeneración natural. *In* Guariguata, M.R. (Ed.), *Avances y perspectivas del manejo forestal para uso múltiple en el trópico húmedo:* 205-232. The Center for International Forestry Research, Bogor, Indonesia.

Escobedo, F.J., A. Chappelka, **C.L. Staudhammer**, H. Mayer. 2013. Evaluating the use of i-Tree ECO in the Southeastern US. *Florida Arborist* 16(3) Fall 2013. http://www.floridaisa.org/pdf/2013Fall.pdf.

Escobedo, F.J., S. Vareal, **C.L. Staudhammer**. 2010. Southern Escambia County Florida's urban forests. EDIS Publication #FOR231. http://edis.ifas.ufl.edu/fr293.

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Refereed Proceedings (last five years; 6)

Wadt, L.H.O., C.L. Faustino, **C.L. Staudhammer**, K.A. Kainer, J.S. Evangelista. 2019. Sustainable collection of *Bertholletia excelsa*: coexistence between humans and dispersers. *Pesquisa Florestal Brasileira [Brazilian Journal of Forestry Research]* 39(e201902043): 112.

Bongiolo, E., K. Kainer, W. Cropper, C.L. Staudhammer, L.H.O. Wadt. 2019. Evaluation of swidden fallow potential to increase landscape-level Brazil nut (*Bertholletia excelsa*) productivity in the western amazon. *Pesquisa Florestal Brasileira [Brazilian Journal of Forestry Research]* 39(e201902043): 160.

Staudhammer, C.L. K. Kainer, T. da Cunha, L.H.O. Wadt. 2019. Disentangling the drivers of fruit production in a long-lived tropical tree: What drives Brazil nut (*Bertholletia excelsa*) production? *Pesquisa Florestal Brasileira [Brazilian Journal of Forestry Research]* 39(e201902043): 160.

Kainer, K.A., L.H.O. Wadt, **C.L. Staudhammer**. 2019. From exploitation to management: A review of the context, life history and potential pathways to sustain and increase Brazil nut production. *Pesquisa Florestal Brasileira [Brazilian Journal of Forestry Research]* 39(e201902043): 80.

Staudhammer, C.L., W. Kleindl, C. S. Fu, A. Desai, M. Dietze, P. Duffy, M. Marsik, C. Rollinson, C. Schultz, G. Starr, P. Stoy. 2018. The future of US forest function under changing

environment, disturbance, and forest management. *Geophysical Research Abstracts* Vol. 20, EGU2018-8857. European Geosciences Union General Assembly.

Wiesner, S., P.C. Stoy, **C.L. Staudhammer**, G. Starr. 2018. Metabolic energy density reveals biodiversity-related differences in resilience to disturbances in longleaf pine ecosystems. *Geophysical Research Abstracts* Vol. 20, EGU2018-3716. European Geosciences Union General Assembly.

Publications in progress (5)

*Yu, Z, C.L. **Staudhammer**, S.L. Malone, S.F. Oberbauer, J. Zhao, G. Starr. Biophysical Factors and Water Dynamics Impact Methane Fluxes in Everglades Freshwater Marshes. *Ecosystems.* In review.

van Doorn, N., L. Brandt, L. Roman, R. Riemann, M. Reeves, B. Hanberry, **C.L. Staudhammer**, R. Fahey, M. Coppoletta, J. De Graff, A. Eschtruth, L. Haavik, J. Halofsky, R. Hallett, L. Iverson, L. Rustad, R. Tompkins, J. Vose, W. Zipperer. Vegetation. *In "Wildland Urban Interface Forests and Rangelands Under Changing Conditions"* (T. Patel-Weynand, A. Marsh, P. Rodbell, Eds). USDA Forest Service General Technical Report. In review.

*Romero, F., L. Jacovine, C.M.M.E. Torres, S. Ribeiro, S.J.S. Soares da Rocha, T.N.O. Novais, R.O. Gaspar, L.F. da Silva, E. Vidal, H.G. Leite, **C.L. Staudhammer**, P. Fearnside. Biomass and carbon in southwestern Amazonia: A non-destructive laboratory approach to large trees. *Trees, Forests and People*. In review.

Malone,S.L., J. Zhao, C.L. Staudhammer, G. Starr, S.F. Oberbauer. Hurricane Irma and the development of respiration hotspots in Everglades freshwater wetlands: the loss of carbon uptake potential was substantial. To be submitted to *Global Change Biology.*

Starr, G., S. George, C.L. Staudhammer, H. Loescher, S. Wiesner, R. Ruzol. Understanding the carbon, water, ad energy exchange of a young biofuel feedstock stand of *Pinus taeda.* To be submitted to *GCB-Bioenergy.*

RESEARCH GRANTS AND CONTRACTS

Current External Funding

Staudhammer, C.L., A. Desai. 2022-2023 ($125,706). Supplement to: Collaborative Research: The future of US forest function under changing climate, disturbance, and forest management. National Science Foundation - Emerging Frontiers, Macrosystems Biology.

Staudhammer, C.L., P. Duffy, M. Binford, A. Desai, M. Dietze, W. Kleindl, C. Rollinson, P. Stoy, C. Schultz. 2017-2022 ($1,590,377, UA portion $762,230). Collaborative Research: The future of US forest function under changing climate, disturbance, and forest management. National Science Foundation - Emerging Frontiers, Macrosystems Biology.

Starr, G., **C. L. Staudhammer**. 2022-2023 ($31,724). Supplement to: RAPID: Understanding the resilience of longleaf pine savannas following Hurricane Michael. National Science Foundation - Ecosystems.

Starr, G., **C. L. Staudhammer**, S. Bigelow, S. Brantley. 2019-2022 ($197,083). RAPID: Understanding the resilience of longleaf pine savannas following Hurricane Michael. National Science Foundation - Ecosystems.

Staudhammer, C.L. 2018-2022 ($32,000). Regional Urban FIA Support, Outreach, and Analysis. USDA Forest Service: Urban & Community Forestry.

Starr, G., **C.L. Staudhammer**, S.L. Malone, S.F. Oberbauer. 2016-2021 ($834,043, UA portion $433,116). Collaborative Research: Understanding the effects of increased freshwater inputs and salt water intrusion on the current and future greenhouse carbon balance of Everglade wetlands. NSF Division of Atmospheric and Geospace Sciences.

Previous External Funding

Staudhammer, C.L., S. Landry, A. Koeser, M. Andreu. 2018-2020 ($184,102, UA portion $22,739). RAPID Collaborative Research: Resilient and resistant urban forests: the role of landscape configuration and socio-economic legacy in understanding tree response to hurricanes. National Science Foundation -Ecosystems.

Starr, G., **C. L. Staudhammer**, S. L. Malone, S. F. Oberbauer. 2017-2019 ($197,375, UA portion $71,612). RAPID: Tipping the Greenhouse C Balance: Hurricane Irma's Role in Increasing the Global Warming Potential in Everglades Ecosystems. National Science Foundation Atmospheric Chemistry Program.

Starr, G., **C. L. Staudhammer**, S. L. Malone, S. F. Oberbauer. 2017-2018 ($58,521 to UA). Supplemental: Understanding the effects of increased freshwater inputs and saltwater intrusion on the current and future greenhouse carbon balance of Everglade wetlands. National Science Foundation - Atmospheric Chemistry Program.

Staudhammer, C.L. 2016-2018 ($26,000). Modification to: Regional Urban Forest i-Tree Eco Inventory Study. USDA Forest Service: Urban & Community Forestry.

Staudhammer, C.L., G. Starr, P. Duffy, M. Binford, R. Mitchell, L. Boring, A. Desai, M. Dietze, P. Stoy, J. Franklin. 2013-2017 ($1,668,827, UA portion $939,143). Collaborative Research: Building forest management into Earth system modeling: Scaling from stand to continent. National Science Foundation - Emerging Frontiers, Macrosystems Biology.

Staudhammer, C.L. 2015-2016 ($29,228). Collaborative Research: Building forest management into Earth system modeling: Scaling from stand to continent. Supplement to: National Science Foundation - Emerging Frontiers, Macrosystems Biology.

Staudhammer, C.L. 2014-2016 ($68,656). Regional Urban Forest i-Tree Eco Inventory Study. USDA Forest Service: Urban & Community Forestry.

Staudhammer, C.L. 2013-2014 ($23,937). Regional Urban Forest i-Tree Eco Inventory Study. USDA Forest Service: Urban & Community Forestry.

Staudhammer, C.L. 2012-2013 ($1,584). Statistical analysis of skidder traffic. Joseph W. Jones Ecological Research Center.

Staudhammer, C.L., F.J. Escobedo, L.J. Young, W. Zipperer. 2009-2011 (U. Florida $117,520). Spatial distribution of invasive horticultural woody plants in urban landscapes. USDA CSREES TSTAR Program.

Staudhammer, C.L., L.N. Kobziar, K. Bohn, H. Ober, T. Stein, D. Carter. 2009-2011 (U. Florida $236,000). Developing Adaptive Management Strategies for Ecosystems in Transition. USDA CSREES National Needs Graduate Fellowship Grants Program.

Bannister, M., Y. Jung, H. Beck, W. Cropper, **C.L. Staudhammer**. 2009-2011 (U. Florida $138,099). Virtual Learning Forests: Enhancing Undergraduate Education for Natural Resource Students with Virtual World Environments. USDA CSREES Higher Education Challenge Grants Program.

Pine, W.E. III, T.K. Frazer, **C.L. Staudhammer**. 2008-2009 (U. Florida $268,146). Fish-habitat relationships in Florida springs: Do submersed plants and filamentous algae influence the population structure and production of small-bodied fishes? Florida FWC - State Wildlife Grants.

Escobedo, F.J., S. Smith, M. Duryea, **C.L. Staudhammer**, B. Dewitt. 2007-2009 (U. Florida $99,960). Urban Forestry Rapid Damage Assessment (Phase 1). Florida Department of Agriculture and Consumer Services - Division of Forestry.

Escobedo, F.J., S. Smith, M. Duryea, **C.L. Staudhammer**, B. Dewitt. 2007-2009 (U. Florida $99,956). Rapid Assessment of the Urban Forest Following a Hurricane (Phase 2). USDA Forest Service.

Monroe, M., A. Hermansen-Baez, E. Macie, D.R. Carter, **C.L. Staudhammer**. 2005-2009 (U. Florida $663,031). Wood to Energy: a Training Program to Utilize Interface Fuels for Bioenergy. USDA Forest Service.

Previous Internal Funding

Broadbent, E.N., **Staudhammer, C.L.**, A.Z. Almeyda. 2014-2016 ($4,350). Establishment of a long-term ecosystem plot and remote sensing based monitoring network to understand and mitigate impacts of invasive species and climate change at Tanglewood Biological Station natural area. College Academy of Research, Scholarship, and Creative Activity.

Staudhammer, C.L. 2011-2013 ($4,985). Tree regeneration: A new approach to study design and analysis. University of Alabama RGC Program.

Staudhammer, C.L. 2006-2007 (U. Florida $1,000). University of Florida IFAS International Programs Travel Award.

Pending External Funding

Starr, G., **C.L. Staudhammer**, P. Stoy, S. Wiesner, J. Cannon. 2022-2026 (UA portion $896,014). Collaborative Research: Understanding longleaf pine forest response to disturbance regimes using metabolic energy density theory. NSF – Ecosystems.

Starr, G., **C.L. Staudhammer**, S.F. Oberbauer, J. May. 2022-2026 ($1,094,367). Evaluating changes in the structure and function of Arctic Ecosystems to winter heat pulse events. NSF - OPP - Arctic Natural Sciences.

Starr, G., **C.L. Staudhammer**, S.F. Oberbauer, S. Malone. 2022-2026 ($980,868). Saltwater flooding leads to mangrove expansion and changes in biogeochemical cycles. DOE - BER.

INVITED TALKS

Staudhammer, C.L., J.K. Hiers, J.J. O'Brien, H.L. Gholz, T.A. Martin, G. Starr. 2021. Modeling fine dead fuel moisture in a saw palmetto (*Serenoa repens*) dominated understory: statistical adventures in cross-correlations. 9th International Fire Ecology and Management Congress, November 30-December 3, 2021. Virtual.

Staudhammer, C.L. 2021. Resilient and resistant urban forests: the role of statistical models in understanding forest structure and response to disturbance. Mississippi State University, College of Forestry, November 19, Starkville, MS.

Starr, G., **C.L. Staudhammer**, M. Binford, P. Stoy, H.W. Loescher. 2020. Land-Atmosphere Interactions in the Southeastern United States: Challenges and Opportunities for Research. Department of Energy ARM/ARS Faculty and PI Meeting. June 22-26. Virtual Meeting.

Staudhammer, C.L. 2019. Urban versus non-urban forest: Methods for comparing apples and oranges? University of British Columbia, Faculty of Forestry, July 15. Vancouver, BC.

Brandt, L., R. Fahey, **C.L. Staudhammer**, N. Van Doorn. 2019. Urban and WUI vegetation under changing conditions. Urban and Wildland-Urban Interface Forests and Rangelands Under Changing Conditions, USDA Forest Service, June 25-27, Denver, CO.

Staudhammer, C.L. 2019. Fire, drought, and statistics. Annual Advisory Committee Meeting, Joseph W. Jones Ecological Research Center, June 7. Newton, GA.

Staudhammer, C.L., A. Desai, M. Dietze, P. Duffy, C.-S. Fu, W. Kleindl, M. Marsik, C. Schultz, C. Rollinson, G. Starr, P. Stoy. 2018. The future of us forest function under changing climate, disturbance, and forest management. American Geophysical Union Fall Meeting, December 10-14, Washington DC.

Starr, G., **C. L. Staudhammer**, S. Wiesner, A. Whelan. 2018. The biogeochemical cycles of a subtropical savanna ecosystem. French National Institution of Agricultural Research (INRA), June 22. Lusignan, France.

Starr, G., **C. L. Staudhammer**, S. Wiesner, A. Whelan. 2018. Understanding the biogeochemical cycles of a subtropical savanna ecosystem. AgroParisTech, April 27. Grignon, France.

Staudhammer, C.L. 2018. What makes urban forests different? Comparing urban and non-urban forests: a case study in the Southeast US. Sorbonne Université - Faculté de Sciences - iEES Seminar. March 30, Paris, France.

Staudhammer, C.L. 2017. Applied statistics in ecology: Advancing our understanding of natural systems through statistical models. Florida International University Department of Biology Seminar. January 23, Miami, FL.

Oberbauer, S.F., S. Malone, **C.L. Staudhammer**, S. Kunwor*, E. Gaiser, G. Starr. 2016. Understanding the pace and patterns of ecosystem carbon, water and energy exchange for freshwater marshes of the Everglades. USDA Florida C-Cycling Meeting, September 29. Ft Lauderdale, FL.

Starr, G., **C.L. Staudhammer**, H. Loescher, S. Wiesner, S. Kunwor*, A. Whelan, A. Baron, M. William, L. Boring, R. Mitchell. 2016. Understanding the patterns and processes in Longleaf Pine Ecosystems carbon dynamics across an edaphic gradient. Joseph W. Jones Ecological Research Center, June 9. Newton, GA.

Staudhammer, C.L. 2015. Building forest management into Earth system modeling: Preliminary results and future directions. National Science Foundation - Macrosystems Biology Annual PI Meeting. August 6-7, Arlington, VA.

Staudhammer, C.L. 2015. Separating the wheat from the chaff in frequently recorded, long-term data: a case study of longleaf pine forest carbon dynamics and resiliency. The University of Mississippi Department of Biology Seminar. April 10, Oxford, MS.

Starr, G., S. Malone*, **C.L. Staudhammer**, H. Loescher. 2015. The development of techniques for continuous measurements of methane fluxes using eddy covariance techniques. National Ecological Observation Network (NEON), February 10, Boulder, CO.

Starr , G., **C.L. Staudhammer**, S. Wiesner, H.W. Loescher, A. Baron, A. Whelan, R.J. Mitchell. 2014. The cyclic role of fire in the movement of carbon through longleaf pine ecosystems. 99th ESA Annual Meeting. August 10-15, Sacramento, CA.

Hall, J., J. Becknell*, **C.L. Staudhammer**. 2014. Building forest management into Earth system modeling: Scaling from stand to continent. National Science Foundation - Macrosystems Biology Annual PI Meeting. June 4-5, Arlington, VA.

Staudhammer, C.L. 2013. Scaling Managed Forests from Stand to Continent: A macrosystems biology approach and its linkage to the NEON observatory platform. National Ecological Observation Network Board of Directors' Meeting, October 1-2, Gainesville, FL.

Kainer, K.A., L.H.O. Wadt, **C.L. Staudhammer**. 2013. Brazil nut growth, production, and regeneration 2002-2012. Community meeting of Reserva Extrativista Chico Mendes. Colocação Filipinas, May 17, Seringal Filipinas, Acre, Brazil.

Staudhammer, C.L. 2013. Mixed models of forest dynamics: an overview and application to data repeated over time and space. Centro de Pesquisa Agroflorestal do Acre (Embrapa Acre), May 21, Rio Branco, Acre, Brazil.

*Malone, S., G. Starr, **C.L. Staudhammer**, M.G. Ryan. 2013. Ecosystem Responses to Simulated Drought in Everglades Short Hydroperiod Freshwater Marshes. Florida Coastal Everglades LTER All Scientists Meeting, March 11-12, Miami, FL.

Staudhammer, C.L. 2013. Design and analysis for ecological data with an application to data repeated over time and space. Programa de Pós Graduação em Engenharia de Florestal, February 26, Universidade Federal de Santa Maria, Rio Grande do Sul, Brazil.

Staudhammer, C.L. 2012. Separating the signal from the noise in frequently recorded, long-term data: a case study characterizing the drivers of carbon flux in longleaf pine ecosystems. University of Alabama Biological Sciences Departmental Seminar Series, October 18, Tuscaloosa, AL.

Staudhammer, C.L. 2012. Estimating and accounting for data-related uncertainty. Ecological Society of America Workshop - Estimating Uncertainty and Detecting Trends in Ecological Data: Challenges for Developing the National Ecological Observatory Network, August 4, Portland, OR.

Staudhammer, C.L. 2009. Modeling data repeated over time and space: investigations of autocorrelation structures, response variables, and trigonometric random regression. Joseph W. Jones Ecological Research Center, November 12, Newton, GA.

Staudhammer, C.L., F.J. Escobedo, C. Luley, J. Bond. 2009. Urban forest debris and damage assessment: the Florida 2004-2005 hurricane seasons. Society of American Foresters' National Convention, Sep. 30-Oct. 4, Orlando FL.

Staudhammer, C.L. 2008. Statistical Design for Research in Ecology and Natural Resources. Programa de Mestrado em Ecologia e Manejo de Recursos Naturais, Universidade Federal do Acre, June 24, Rio Branco, Brazil.

Staudhammer, C.L. 2007. Sampling and Experimental Design for Natural Resources Professionals. Centro de Pesquisa Agroflorestal do Acre (Embrapa Acre), June 26, Rio Branco, Acre, Brazil.

Kainer, K.A., L.H.O. Wadt, **C.L. Staudhammer**. 2007. Brazil nut growth, production, and regeneration 2002-2007. Community meeting of Reserva Extrativista Chico Mendes. Colocação Rio de Janeiro, June 20, Seringal Filipinas, Acre, Brazil.

Staudhammer, C.L., K.A. Kainer, L.H.O. Wadt. 2007. Modelling Brazil nut demography and fruit fate in three Western Amazonian extractive areas. Seminar at the Program for Environmental Statistics, March 20, University of Florida, Gainesville, FL.

Staudhammer, C.L. 2007. Update on PPINES Eastern Series: Spacing by cultural interactions of elite Southern pine genotypes. Presented report at the annual meeting of the Forest Biology Research Cooperative, September 13, University of Florida, Gainesville, FL.

Staudhammer, C.L., B.E. Roth, L.F. Osorio. 2006. Predicting pure plot performance of elite full-sib genotypes from mixed plots. Presented report at the annual meeting of the Forest Biology Research Cooperative, October 1, University of Florida, Gainesville FL.

MEETING/SYMPOSIA ABSTRACTS AND ORAL PRESENTATIONS (*last five years*)

*Yu, Z., G. Starr, **C.L. Staudhammer**, S. Malone, S.F. Oberbauer. 2021. A Comparison of Methane Fluxes in Short- Versus Long-hydroperiod Freshwater Marsh in the Florida Everglades. American Geophysical Union Fall Meeting, December 13-17, New Orleans, LA.

Shockey, M., C.N. Jones, C. Atkinson, **C.L. Staudhammer**, L. Davis. 2021. Hydrologic connectivity, species distribution , and restoration in a Coastal Plain bottomland hardwood forest. American Geophysical Union Fall Meeting, December 13-17, New Orleans, LA.

Starr, G., R. Ruzol, D. Aubrey, **C.L. Staudhammer**, S. Younger, H. Loescher, C. Jackson. 2021. Water use from an intensively managed loblolly pine plantation: implications of silviculturally-enhanced tree growth on stand evapotranspiration. American Geophysical Union Fall Meeting, December 13-17, New Orleans, LA.

Shockey, M., C.N. Jones, C. Atkinson, **C.L. Staudhammer**, L. Davis. 2021. Drivers of tree biodiversity in Alabama's bottomland hardwood forests. Alabama Water Resources Conference, September 8-10, Orange Beach, AL.

*Yu, Z., **C.L. Staudhammer**, G. Starr, S. Malone, S.F. Oberbauer. 2021. Identifying environmental drivers of methane fluxes in freshwater wetlands of the Florida Everglades. 106th ESA Annual Meeting, August 2-6, Virtual.

*Lambert, C., G. Starr, **C.L. Staudhammer**, S. Landry, M. Andreu, P. Ferguson. 2021. Comparing methods of addressing uncertainty in urban forestry damage assessments following Hurricane Irma using random forest and k-nearest neighbors. 106th ESA Annual Meeting, August 2-6, Virtual.

Staudhammer, **C.L.**, M. Binford, C.-S. Fu, M. Marsik, A. Desai, M. Dietze, P. Duffy, W. Kleindl, C. Rollinson , C. Schultz, N. vonHedemann, P. Stoy. 2021. Does forest management matter? The future of US forest function under changing climate, disturbance, and management. 106th ESA Annual Meeting, August 2-6, Virtual.

Ruzol, R., **C.L. Staudhammer**, D. Aubrey, H. Loescher, G. Starr. 2021. Genetically improved Loblolly Pine: current understanding of carbon-water tradeoffs and future trajectories for bioenergy crops. North American Carbon Program 7th Open Science Meeting. March, Virtual.

vonHedemann, N., C. Schultz, C.-S. Fu, C. Rollinson, Kleindl, W., **C.L. Staudhammer**, M. Binford, A. Desai, M. Dietze, P. Duffy, M. Marsik, P. Stoy. 2021. The future of US forest function under changing environment, disturbance, and forest management. National Science Foundation - Macrosystems Biology Annual PI Meeting. January 13-14, Virtual.

Malone, S., S. Oberbauer, J. Zhao, G. Starr, **C.L. Staudhammer**. 2020. Carbon uptake efficiency across wetland ecosystems in the Florida Everglades. American Geophysical Union Fall Meeting, December 1-17, Virtual.

Staudhammer, C.L., C. Lambert, G. Starr. 2020. Relationships Between Tree Diversity, Development, Socioeconomics and Eco-Climatic Characteristics in Urban Forests. Society of American Foresters National Convention, October 29-31. Virtual.

*Lambert, C., G. Starr, P. Ferguson, S. Landry, M. Andreu, A. Koeser, **C.L. Staudhammer**. 2020. Addressing Uncertainty in Urban Forestry Damage Assessments following Hurricane Irma. Society of American Foresters National Convention, October 29-31. Virtual.

Kenney, G., **C.L. Staudhammer**, S. Brantley, S.W. Bigelow, S. Wiesner, G. Starr. 2020. Understanding the structure and function of longleaf pine savanna affected by Hurricane Michael. 105th ESA Annual Meeting, August 3-6, Virtual.

*Yu, Z., **C.L. Staudhammer**, S. Malone, S.F. Oberbauer, G. Starr. 2020. Drivers of methane emissions in freshwater marshes of the Florida Everglades. 105th ESA Annual Meeting, August 3-6, Virtual.

*Gong, Y. G. Starr, S. Wiesner, **C.L. Staudhammer**. 2020. Characterization of subtropical coniferous forests and their response to prescribed fire using a photosynthesis-based phenology model. 105th ESA Annual Meeting, August 3-6, Virtual.

Bigelow, S., A. Whelan, S. Brantley, G. Kenney, **C.L. Staudhammer**, G. Starr, J. Cannon. 2020. Planted longleaf pine stands in the face of a tropical cyclone: Allée effects? 105th ESA Annual Meeting, August 3-6, Virtual.

Malone, S., S. Oberbauer, P. Olivas, J. Schedlbauer, J. Zhao, G. Starr, **C.L. Staudhammer**, S. Charles. 2020. Carbon uptake efficiency across Everglades wetland ecosystems. 105th ESA Annual Meeting, August 3-6, Virtual.

*Lambert, C., G. Starr, S. Landry, M. Andreu, A. Koeser, **C.L. Staudhammer**. 2020. Resilient and resistant urban forests: the role of landscape configuration and socio-economic legacy in understanding tree response to hurricanes. HurriCon, February 27-28, Greenville, NC.

Kenney, G., **C.L Staudhammer**, S. Brantley, S. Bigelow, S. Wiesner, G. Starr. 2020. Understanding changes in the structure and function of longleaf pine ecosystems following Hurricane Michael. HurriCon, February 27-28, Greenville, NC.

Malone, S., S.F. Oberbauer, P.C. Olivas, J. Zhao, G. Starr, **C.L. Staudhammer.** 2019. Extreme events alter C dynamics across the Florida Everglades. American Geophysical Union Fall Meeting, December 8-13, San Francisco, CA.

Starr, G., S. George, **C.L. Staudhammer**, H.W. Loescher, S. Wiesner, R. Ruzol. 2019. Improved tree selection leads to greater carbon capture in a young pine cellulosic biofuel stand. American Geophysical Union Fall Meeting, December 8-13, San Francisco, CA.

Malone, S., S.F. Oberbauer, P.C. Olivas, J. Zhao, G. Starr, **C.L. Staudhammer.** 2019. Extreme events alter C dynamics across the Florida Everglades. Florida International University, Biology Seminar, November 18, Miami, FL.

Wadt, L.H.O., C.L. Faustino, **C.L. Staudhammer**, K.A. Kainer, J.S.Evangelista. 2019. Sustainable collection of *Bertholletia excelsa*: coexistence between humans and dispersers. XXV IUFRO World Congress. September 29-October 5, Curitiba, Brazil.

Bongiolo, E., K. Kainer, W. Cropper, C.L. Staudhammer, L.H.O. Wadt. 2019. Evaluation of swidden fallow potential to increase landscape-level Brazil nut (*Bertholletia excelsa*) productivity in the western amazon. XXV IUFRO World Congress. September 29-October 5, Curitiba, Brazil.

Staudhammer, C.L. K. Kainer, T. da Cunha, L.H.O. Wadt. 2019. Disentangling the drivers of fruit production in a long-lived tropical tree: What drives Brazil nut (*Bertholletia excelsa*) production? XXV IUFRO World Congress. September 29-October 5, Curitiba, Brazil.

Kainer, K.A., L.H.O. Wadt, **C.L. Staudhammer**. 2019. From exploitation to management: A review of the context, life history and potential pathways to sustain and increase Brazil nut production. XXV IUFRO World Congress. September 29-October 5, Curitiba, Brazil.

*Lambert, C., **C.L. Staudhammer**, S. Landry, M. Andreu, A. Koeser. 2019. Understanding Associated Factors of Hurricane Caused Tree Damage in Central Florida. Biofest (Biology Research Colloquium), Dept. of Biological Sciences, University of Alabama, September 27, Tuscaloosa, AL.

Malone, S., S.F. Oberbauer, P.C. Olivas, J. Zhao, G. Starr, **C.L. Staudhammer.** 2019. Atmospheric Fluxes Working Group Summary. Florida Coastal Everglades Longterm Ecological Research All Scientist Meeting, May 9, Miami, FL.

Starr, G., **C.L. Staudhammer**, G. Kenney, S. Brantley, S. Bigelow. 2019. Response of Longleaf Pine Ecosystems to Hurricane Michael. NSF Ecosystem Responses to Hurricanes Synthesis Workshop. April 28-May 1, Corpus Christie, TX.

Starr, G., **C.L. Staudhammer**, J. Zhao, S. Malone, S. Oberbauer. 2019. Response of everglades freshwater marshes to hurricane Irma. NSF Ecosystem Responses to Hurricanes Synthesis Workshop. April 28-May 1, Corpus Christie, TX.

Landry, S., M. Andreu, A. Koeser, **C.L. Staudhammer**, Q. Yu. 2019. Hurricane Caused Tree Damage and the Role of Landscape Configuration and Socioeconomic Legacy. American Association of Geographers Annual meeting, April 3-7, Washington DC.

Wiesner, S., **Staudhammer, C.L.**, P. Stoy, L. Boring, G. Starr. 2018. Maximum entropy production reveals differences in resilience to drought from variations in energy use efficiency across sites in a longleaf pine savanna. American Geophysical Union Fall Meeting, December 10-14, Washington DC.

Malone, S.L., S.F. Oberbauer, P. Olivas, J. Zhao, G. Starrr, **C.L. Staudhammer**. 2018. Extreme events alter C dynamics across the Everglades. 103rd ESA Annual Meeting, August 5-10, New Orleans LA.

Malone, S.L., S.F. Oberbauer, P. Olivas, J. Schedlbauer, J. Zhao, G. Starr, **C.L. Staudhammer**. 2018. Patterns in ecosystem C dynamics in Everglades Freshwater Marsh. 103rd ESA Annual Meeting, August 5-10, New Orleans LA.

Zhao, J., S.L. Malone, S.F. Oberbauer, G. Starr, **C.L. Staudhammer**. 2018. Prolonged inundation turns a short-hydroperiod freshwater marsh from a CO2 sink to a source. 103rd ESA Annual Meeting, August 5-10, New Orleans LA.

Desai, A.R., M. C. Dietze, C. Rollinson, **C.L. Staudhammer**, W. Kleindl, C. S. Fu, P. Duffy, M. Marsik, C. Schultz, G. Starr, P. Stoy, C. Deshmukh. 2018. Bringing Forest Management into Earth System Models: Insights from Observations and Theory. American Meteorological Society 33rd Conference on Agricultural and Forest Meteorology, May 14, Boise, ID.

Staudhammer, C.L., W. Kleindl, C.-S. Fu, A. Desai, M. Dietze, P. Duffy, M. Marsik, C. Schultz, C. Rollinson, G. Starr, P. Stoy. 2018. The future of US forest function under changing environment, disturbance, and forest management. European Geosciences Union General Assembly, April 8-13, Vienna, Austria.

Wiesner, S., P.C. Stoy, **C.L. Staudhammer**, G. Starr. 2018. Metabolic energy density reveals biodiversity-related differences in resilience to disturbances in longleaf pine ecosystems. European Geosciences Union General Assembly, April 8-13, Vienna, Austria.

Kleindl, W., C.-S. Fu, C. Rollinson, A. Desai, **C.L. Staudhammer**, M. Dietze, P. Duffy, M. Marsik, C. Schultz, G. Starr, P. Stoy. 2018. The future of US forest function under changing environment, disturbance, and forest management. National Science Foundation - Macrosystems Biology Annual PI Meeting. January 8-10, Fairfax, VA.

Staudhammer, C.L. 2017. Urban to peri-urban gradients of diversity: Applications and defensible methods for combining FIA and i-tree/eco data. 2017 Forest Inventory and Analysis Stakeholder Science Meeting, October 24-26, Park City, Utah.

*Deb, S.K., **C.L. Staudhammer**, G. Starr. 2017. Effects of drought on isoprene emission of trees along an urban-rural gradient in the southeastern US. Biofest (Biology Research Colloquium), Dept. of Biological Sciences, University of Alabama, September 29, Tuscaloosa, AL.

Staudhammer, C.L., G. Starr. 2017. Incorporating uncertainty into models of sparse and overdispersed count data: a case study in longleaf pine. Western Mensurationists Meeting, June 18-20, Vancouver, BC Canada.

*Kunwor, S., J. Zhao, S.F. Oberbauer, **C.L. Staudhammer**, S.L. Malone, G. Starr. 2017. Methane and carbon dioxide emission patterns at two freshwater marshes in Everglades National Park. Florida Coastal Everglades LTER All Scientists Meeting, May 8-9, Miami, FL.

Zhao, J., P.C. Olivas, S. Kunwor*, S.L. Malone, **C.L. Staudhammer**, G. Starr, S.F. Oberbauer 2017. How the seasonal inundation in short-hydroperiod marsh influences the sensible heat flux measured by large aperture scintillometer compared to eddy covariance technique? Florida Coastal Everglades LTER All Scientists Meeting, May 8-9, Miami, FL.

*Kunwor, S., J. Zhao, S.F. Oberbauer, **C.L. Staudhammer**, S.L. Malone, G. Starr. 2017. Methane and carbon dioxide emission patterns at two freshwater marshes in Everglades National Park. Biofest (Biology Research Colloquium), Department of Biological Sciences, University of Alabama, September 29, Tuscaloosa, AL.

Malone, S.L., J. Zhao, **C.L. Staudhammer**, S.F. Oberbauer, G. Starr. 2017. Seasonal patterns in energy partitioning of Everglades freshwater marshes. Greater Everglades Ecosystem Restoration (GEER) annual meeting, April 17-20, Coral Springs, Florida.

Zhao, J., S.F. Oberbauer, P. Olivas, J.L. Schedlbauer, J.G. Moser, S. Malone, **C.L. Staudhammer**, G. Starr. 2017. Photosynthetic activity of C3 and C4 graminoids in response to water table change in a short-hydroperiod wetland of Florida Everglades. Plant Biologists of South Florida meeting. March 18, Miami, FL.

HONORS AND AWARDS
- Nominated for 2021-22 University of Alabama Outstanding Advisor Award (2021)
- Featured in University of Alabama Desktop News: https://as.ua.edu/2021/02/22/ua-researcher-publishes-article-in-nature-scientific-reports/ (2021)
- Agricultural and Forest Meteorology Editors' choice papers of December 2020 (Wiesner et al: "Forest structure and composition drive differences in metabolic energy and entropy dynamics during temperature extremes in longleaf pine savannas")
- Received 2018 President's Faculty Research award, recognizing outstanding faculty researchers from across the University of Alabama's Colleges and Schools

- Featured on University of Alabama homepage:https://www.ua.edu/news/2017/08/ua-professor-to-lead-study-of-nations-forests/ (2017)
- Featured in story in the online magazine *Environmental Monitoring:* www.fondriest.com/news/everglades-restoration-effects-greenhouse-gases-study.htm (2016)
- Awarded Excellence in Academic Advising award, University of Alabama Office for Academic Affairs (2016)
- Featured on UA homepage "UA Researchers Receive NSF Grant to Study Everglades' Greenhouse Gases": http://uanews.ua.edu/2016/06/ua-researchers-receive-nsf-grant-to-study-everglades-greenhouse-gases/
- Featured in the Florida Coastal Everglades Long-Term Ecological Research Newsletter "FCE Spotlight: New Collaborator", Volume 6(1): spring 2016.
- Awarded Excellence in Academic Advising award, University of Alabama Office for Academic Affairs (2015)
- Featured on Universidade Federal do Acre homepage (March 18, 2015): http://www.ufac.br/portal/news/pesquisadores-estudam-comportamento-produtivo-de-castanheiras-no-acre
- Awarded $1000 to attend the 2014 NSF-sponsored Workshop on Bayesian Modeling for Practicing Ecologists (Colorado State University, May 21-30, 2014).
- Awarded R$98000 from CAPES (Coordenação de Aperfeiçoamento de Pessoal de Educação, Brazil) - Programa Pesquisador Visitante Especial (Special Visiting Researcher Program) to participate as a visiting researcher at Universidade Federal do Acre, Rio Branco, Brazil (PI: Dr. Thiago Augusto da Cunha; 2014-2017)
- Awarded R$6500 from CNPq (Conselho Nacional de Desenvolvimento Científico e Tecnológico, Brazil) to travel to Acre, Brazil as a visiting researcher (PI: Dr. Lucia Wadt, Embrapa Acre, Rio Branco, Acre Brazil) (2013)
- Featured *JGR-Biogeosciences* article in *EOS*, the Newsletter of the American Geophysical Union (November 2012)
- Runner-up, Brumbaugh Award (American Society for Quality award for journal article that made the largest contribution to the development of quality control).(2007)
- Finalist, Marra Award (Society of Wood Science and Technology award for the best paper in *Wood and Fiber Science*) (2006)

STUDENT MENTORSHIP

Graduate students in progress:

Karimi, Hazhir (expected completion date: fall 2025) – Chair (PhD) Dissertation: TBA
Arellano, Karina (expected completion date: fall 2023) – Co-chair (MS) Thesis: TBA
Yannick, David (expected completion date: fall 2023) – Co-chair (MS) Thesis: TBA

Graduate students completed:

Lambert, Casey (fall 2021) – Chair (MS) Thesis: "In consideration of uncertainty: accounting for imperfect detection in urban forest storm damage models"
Yu, Zhuoran (fall 2021) – Co-chair (MS) Thesis: "Determining the Environmental Drivers of Methane Emissions for Freshwater Marshes of the Florida Everglades"
Caruso, Nick (fall 2017) – Co-chair (PhD) Dissertation: "Range Dynamics and Range Limits of a Montane Endemic Salamander"
Blood, Amy (spring 2016) – Chair (MS) Thesis: "Regional models of urban tree crown characteristics."

Kunwor, Sujit (spring 2016) – Chair (MS) Thesis: "Preserving variance structure in gap-filling methods for carbon flux data"

Malone, Sparkle (spring 2014) – Co-Chair (PhD) Dissertation: "Changes in the greenhouse carbon balance of Everglades freshwater marshes in response to natural and anthropogenic alterations in hydrological conditions."

Hyman, Michael (fall 2013) – Co-chair (PhD, University of Florida) Dissertation: "Estimation of Confidence Intervals for Ripley's K-function of Spatial Point Processes"

Timilsina, Nilesh (fall 2010) – Chair (PhD, University of Florida) Dissertation: "Stand structure of slash pine (*Pinus elliottii*) under different management regimes and conversion of even-aged slash pine stands into uneven-aged management"

Bush, Todd (summer 2010) – Co-chair (MS, University of Florida) Thesis: "Self heating of wood pellets made from southern yellow pine: causes and prevention"

Lawrence, Alicia (summer 2010) – Co-chair (MS, University of Florida) Thesis: "Development of urban tree growth, mortality, and carbon sequestration rates in the Southeastern US"

Malone, Sparkle (summer 2010) – Co-chair (MS, University of Florida) Thesis: "Effect of fire size and severity on subsequent fires using difference normalized burn ratios in Florida pine dominated flatwood forests"

Thompson, Benjamin (fall 2009) – Co-chair (MS, University of Florida) Thesis: "Modeling hurricane-caused tree debris in Houston, Texas"

Londres, Marina (spring 2009) – Co-chair (MS, University of Florida) Thesis: "Population structure and fruit production variation of Andiroba (*Carapa guianensis* Aubl.) in tidal floodplain forest of the Amazon estuary"

Valle, Denis (spring 2008) – Chair (MS, University of Florida) Thesis: "Assessing uncertainty in forest dynamic models"

Tohver, Ingrid Marisa (summer 2006) – Co-chair (MS, University of Florida) Thesis: "Understory tree response to throughfall precipitation exclusion in the Eastern Amazon"

POSTDOCTORAL FELLOWS MENTORED

Dr. Justin Becknell (funded under NSF Macrosystems grant: 2013-2015)

THESIS/DISSERTATION COMMITTEE MEMBER

Graduate students in progress:

Dybiec, Jacob (expected completion date: spring 2025) – Member (PhD) Dissertation: "Evaluating biotic contributions to vertical and horizontal stability in Northern Gulf of Mexico tidal marshes"

Shaw, Kevin (expected completion date: spring 2025) – Member (PhD) Dissertation: TBA

Shockey, Matthew (expected completion date: summer 2022) – Member (MS) Thesis: "Using hydrogeomorphic characteristics to predict tree species distribution and resulting ecosystem functions in bottomland hardwood forests"

Sieg, Lauren (expected completion date: spring 2023) – Member (MS) Thesis: TBA

Motley, M'Kayla (expected completion date: fall 2022) – Member (MS) Thesis: TBA

Franzem, Thomas (expected completion date: fall 2022) – Member (PhD) Dissertation: TBA

Graduate students completed:

Kenney, Gavin (completion date: spring 2021) – Member (MS) Thesis: "The effects of Hurricane Michael on the carbon, water, and energy exchange of Longleaf Pine Savanna"

Ruzol, Roel (completion date: summer 2021) – Member (MS) Dissertation: "Determining the carbon trajectory and emissions of *Pinus taeda* plantations as influenced by management goals and progeny selection, stand development, and climate change"

Oza, Vishal (spring 2020) – Member (PhD) Dissertation: "Constructing a graphical model of the Drosophila melanogaster metabolome"

Bongiolo, Eduardo (spring 2019) – Member (MS, University of Florida) Thesis: "Swidden fallow management to increase landscape-level Brazil nut productivity"

Benitez Romero, Flora Magdaline (fall 2018) – Member (PhD, Universidade Federal de Viçosa) Dissertation: "Avaliação da contribuição do manejo sustentável em floresta do bioma amazônico para minimização da concentração de gases de efeito estufa na atmosfera"

Wiesner, Susanne (summer 2018) – Member (PhD) Dissertation: "Maximum Entropy in Longleaf Pine Ecosystems"

Nugent, Mollie (summer 2018) – Member (MS) Thesis: "Interactive effects of sediment and nitrate subsidies on surface elevation dynamics in a brackish marsh"

Brown, Emily (spring 2018) – Member (MS) Thesis: "Conserving the red-cockaded woodpecker: identifying population limiting factors and future management directions"

Gilbert, Neil (spring 2018) – Member (MS) Thesis: "Modeling habitat associations of early successional birds in human-dominated landscapes of the southeast"

George, Satyra (summer 2017) – Member (MS) Thesis: "Carbon, water, and Energy Fluxes within a Loblolly Pine Forest Selected and Managed as a Cellulosic Bioenergy Crop"

Davis, Kelsi (summer 2017) – Member (MS) Thesis: "Biotic and Abiotic Controls over Tropical Rainforest Aboveground Biomass on the Osa Peninsula, Costa Rica"

Marson, Kristy (spring 2017) – Member (MS) Thesis: "Factors Influencing Phenotypic Variation and Fitness at the Population and Regional Scales in Mangrove Rivulus Fish (*Kryptolebias marmoratus*)"

Wilmot, Oliver (summer 2016) – Member (MS) Thesis: "Temperature dependence of leaf litter breakdown in nine forest streams along a regional thermal gradient"

Bertwell, Todd (spring 2016) – Member (MS, University of Florida) Thesis: "Modeling sustainability of Brazil nut (*Bertholletia excelsa*) harvests"

Jarnigan, Julie (spring 2013) – Member (MS) Thesis: "Carbon Dynamics in Saltwater Marsh Ecosystems along a Productivity Gradient."

Zeidemann, Vivian (fall 2011) – Member (PhD, University of Florida) Dissertation: "The role of institutional arrangements for Brazil nut sustainable use and management"

Rockwell, Cara (fall 2011) – Member (PhD, University of Florida) Dissertation: "Enhancing smallholder-based development options: timber management in bamboo-dominated forests"

Carvalho, Eric (spring 2011) – Member (MS, University of Florida) Thesis: "Persistence after disturbances: the importance of sprouting for species survival and biomass recovery in shrub-tree patches in the Chapada Diamantina, Brazil"

Soriano, Marlene (summer 2010) – Member (MS, University of Florida) Thesis: "Compatibility of conventional logging with Brazil nut extraction in the Bolivian Amazon"

Camp, Edward (spring 2010) – Member (MS, University of Florida) Thesis: "Fish-habitat relationships in Florida springs: Do submersed plants and filamentous algae influence the population structure and production of small-bodied fishes?"

Klimas, Christie (spring 2010) – Member (PhD, University of Florida) Dissertation: "Deforestation alternatives: economic revenue from sustainable forest use"

Biedenweg, Kelly (spring 2010) – Member (PhD, University of Florida) Dissertation: "Social learning in response to community forest management workshops"

Tamang, Bijay (fall 2009) – Member (PhD, University of Florida) Dissertation: "Performance, root distribution and carbon sequestration potential of living windbreaks in Florida"

Lee, Hanna (spring 2009) – Member (PhD, University of Florida) Dissertation: "Factors affecting thermokarst formation in tussock tundra"

Coggins, Lewis (spring 2008) – Member (PhD, University of Florida) Dissertation: "Factors influencing native fish population dynamics in Grand Canyon"

MacPherson, Alexander (spring 2007) – Member (PhD, University of Florida) Dissertation: "Economics of logging concessions in Brazilian public lands"

UNDERGRADUATE STUDENTS MENTORED

Work Study/Research Experience for Undergraduates

Shay, Kathryn (2016-2017) – "Relationships between forest structure and carbon dynamics in natural forested systems"

Shay, Kathryn (2015) – "Establishment of a long-term ecosystem plot and remote sensing based monitoring network to understand and mitigate the impacts of invasive species and climate change at the UA's Tanglewood Biological Station natural area"

Leder, Natalie (2014) "Regional Urban Forest i-Tree Eco Inventory Study"

Venkatesan, Anjana (2013-2014) "Building forest management into Earth system modeling: Scaling from stand to continent", University of Alabama grant from NSF.

Leonard, Jennifer (2011) "Tree regeneration: A new approach to study design and analysis", Joseph Jones Ecological Research Center.

Independent Research

Ringold, Sydney (2022) "Drivers of invasive tree species in three urban areas in Texas"

Stansbury, Austin (2021) "Indicators of invasive tree species in three urban areas in Texas"

Perrera, Nicholas (2020) "Differences in tree allometry across three urban areas in Texas"

Hooper, Amelia (2019) "Relationship between forest environment and Brazil nut regeneration in abandoned fallows"

Kovach, Daniel (2018-2019) "Drivers of urban forest damage from Hurricane Irma"

Yang, Samuel (2016) "Quantifying the relationship between urban forest cover and mental human health"

Barham, William G. (2015) "University of Alabama i-Tree Inventory: Phase 1"

Young, Ronald (2013) "University of Alabama Arboretum Tree Inventory: Phase 1"

Cobia, Ethan (2013) "University of Alabama Arboretum Tree Inventory: Phase 1"

Hodges, Christine (2013) "University of Alabama Arboretum Tree Inventory: Phase 1"

MAJOR ADVISOR (DEGREE AWARDED)

MS: Dr. Valerie LeMay (Department of Forest Resources Management, The University of British Columbia, Vancouver, Canada) – Quantifying forest stand diversity using stand structure

PhD: Dr. Robert Kozak (Department of Wood Science, Faculty of Forestry, The University of British Columbia, Vancouver, Canada) and Dr. Thomas Maness (Deceased) – Statistical Procedures for Development of Real-Time Statistical Process Control (SPC) in Lumber Manufacturing

TEACHING

Term	Year	Course No.	Course Title	No. Students Enrolled
University of Alabama				
Spring	2022	BSC 380	Introduction to Probability and Statistics for Biologists	70
		BSC 398	Undergraduate Research	1
		BSC 698	Non-thesis Research	1
Fall	2021	BSC 485	Foundations in Forest Resources Conservation	17

Term	Year	Course No.	Course Title	No. Students Enrolled
		BSC 695	Foundations in Forest Resources Conservation	2
		BSC 598	Non-thesis Research	1
Spring	2021	BSC 380	Introduction to Probability and Statistics for Biologists	61
		BSC 598	Non-thesis Research	1
Fall	2020	BSC 581	Foundations in Advanced Biostatistics	21
		BSC 607	Advanced Research Techniques	1
Summer	2020	BSC 398	Undergraduate Research	1
Spring	2020	BSC 380	Introduction to Probability and Statistics for Biologists	60
		BSC 695	Advanced Topics in Terrestrial Ecology	4
		BSC 598	Non-thesis Research	1
Fall	2019	BSC 485	Foundations in Forest Resources Conservation	13
		BSC 398	Undergraduate Research	1
Spring	2019	BSC 698	Research not Related to Dissertation	1
		BSC 398	Undergraduate Research	1
Fall	2018	BSC 698	Research not Related to Dissertation	1
		BSC 380	Introduction to Probability and Statistics for Biologists	69
		BSC 695	Experimental Design and Analysis	20
		BSC 398	Undergraduate Research	1
Spring	2018	BSC 698	Research not Related to Dissertation	1
Fall	2017	BSC 380	Introduction to Probability and Statistics for Biologists	77
		BSC 403	Introduction to Biological Sciences Instruction	1
Fall	2017	BSC 698	Research not Related to Dissertation	1
		BSC 699	Dissertation Research	1
Spring	2017	BSC 380	Introduction to Probability and Statistics for Biologists	59
		BSC 607	Advanced Research Techniques in Biology	1
		BSC 698	Research not Related to Dissertation	1
		BSC 699	Dissertation Research	1
Fall	2016	BSC 695	Experimental Design and Analysis	11
		BSC 699	Dissertation Research	1
Spring	2016	BSC 598	Non-thesis Research	2
		BSC 380	Introduction to Probability and Statistics for Biologists	75
		BSC 607	Advanced Research Techniques in Biology	2
		BSC 699	Dissertation Research	1
Fall	2015	BSC 598	Non-thesis Research	1
		BSC 497	Foundations in Forest Resources Conservation	13
		BSC 607	Advanced Research Techniques in Biology	2
		BSC 695	Greenhouse Gas Data Training	4
		BSC 695	Pine Ecology, Management, and Restoration	2
		BSC 699	Dissertation Research	1
Summer	2015	BSC 398	Undergraduate Research	1
Spring	2015	BSC 380	Introduction to Probability and Statistics for Biologists	53
		BSC 598	Non-thesis Research	1
Fall	2014	BSC 497	Foundations in Advanced Biostatistics	5
		BSC 695	Foundations in Advanced Biostatistics	5
		BSC 598	Non-thesis Research	1
Spring	2014	BSC 497	Foundations in Forest Resources Conservation	11

Term	Year	Course No.	Course Title	No. Students Enrolled
		BSC 598	Non-thesis Research	1
		BSC 695	Experimental Design and Analysis	7
		BSC 699	Dissertation Research	1
Fall	2013	BSC 380	Introduction to Probability and Statistics for Biologists	38
		BSC 699	Dissertation Research	1
Spring	2013	BSC 398	Undergraduate Research	3
		BSC 497	Foundations in Advanced Biostatistics	1
		BSC 695	Foundations in Advanced Biostatistics	10
		BSC 507	Research Techniques in Biology	1
		BSC 598	Non-thesis Research	1
		BSC 699	Dissertation Research	1
Fall	2012	BSC 507	Research Techniques in Biology	1
		BSC 380	Introduction to Probability and Statistics for Biologists	32
		BSC 599	Thesis Research	1
Spring	2012	BSC 497	Experimental Design and Analysis	1
		BSC 695	Experimental Design and Analysis	12
		BSC 507	Research Techniques in Biology	1
Fall	2011	BSC 497	Introduction to Probability and Statistics for Biologists	7
		BSC 507	Research Techniques in Biology	1
		BSC 699	Dissertation Research	1
Spring	2011	BSC 507	Research Techniques in Biology	1
		BSC 497	Forestry in the Private Sector	21
		BSC 497	Experimental Design and Analysis	5
		BSC 695	Experimental Design and Analysis	10
Spring	2011	BSC 699	Dissertation Research	1
University of Florida				
Fall	2009	FOR 6934	Advanced Topics in Forest Biometrics	9
		FNR 3410C	Natural Resources Sampling	27
		FOR 6905	Supervised individual studies: Advanced Methods in Natural Resources Sampling	2
Summer	2009	FOR 3200	Foundations in Forest Resources Conservation	13
Spring	2009	FOR 6905	Supervised individual studies: Statistical Process Control in Wood Products Manufacturing	1
Fall	2008	FNR 3410C	Natural Resources Sampling	21
		FOR 6934	Ecological Statistics	29
Summer	2008	FOR 3200	Foundations in Forest Resources Conservation	18
Spring	2008	FOR 6905	Supervised individual studies: Sampling Protocols	1
Fall	2007	FOR 6934	Advanced Topics in Forest Biometrics	8
		FNR 3410C	Natural Resources Sampling	33
Spring	2007	FOR 6905	Supervised individual studies: Statistical Meth. in Ecology	1
Fall	2006	FNR 3410C	Natural Resources Sampling	23
		FOR 6934	Ecological Statistics	33
Spring	2006	FOR 6933	Graduate Seminar in Forest Resources Conservation	9
Fall	2005	FNR 3410C	Natural Resources Sampling	29
		FOR 6933	Graduate Seminar in Forest Resources Conservation	6