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LIZA S. COMITA

Yale School of Forestry & Environmental Studies

195 Prospect Street, New Haven, CT 06511

E-mail: liza.comita@yale.edu • Website: <https://comitalab.yale.edu/>

EDUCATION

- 2006 Ph.D. Department of Plant Biology, University of Georgia, Athens, GA
1999 M.A. Conservation Biology Program, University of Pennsylvania, Philadelphia, PA
1999 B.A. Department of Biology, University of Pennsylvania, Philadelphia, PA
Graduated *magna cum laude* with Distinction (Honors) in Biology

PROFESSIONAL EXPERIENCE

- 2019 – present *Associate Professor of Tropical Forest Ecology (on term)*, School of Forestry and Environmental Studies, Yale University, New Haven, CT
2014 – 2019 *Assistant Professor of Tropical Forest Ecology*, School of Forestry and Environmental Studies, Yale University, New Haven, CT
2015 – present *Assistant Professor (secondary appointment)*, Department of Ecology and Evolutionary Biology, Yale University, New Haven, CT
2010 – present *Research Associate*, Smithsonian Tropical Research Institute, Panama
2014 – 2016 *Adjunct Assistant Professor*, Department of Evolution, Ecology, and Organismal Biology, The Ohio State University, Columbus, OH
2011 – 2014 *Assistant Professor*, Department of Evolution, Ecology, and Organismal Biology, The Ohio State University, Columbus, OH
2010 – 2011 *Postdoctoral Research Fellow*, National Center for Ecological Analysis and Synthesis, Santa Barbara, CA.
2008 – 2010 *Postdoctoral Research Fellow*, Earth Institute, Columbia University, New York, NY
2007 – 2008 *Postdoctoral Research Associate*, University of Minnesota, St. Paul, MN

HONORS & AWARDS

- F&ES Outstanding Teaching Award, Yale School of Forestry & Environmental Studies, 2019
Founders' Prize (for outstanding contributions by early career researcher), British Ecological Society, 2017
Early Career Fellow of the Ecological Society of America, 2015 – 2019
Yale University Postdoctoral Mentoring Prize, 2016
National Science Foundation Graduate Research Fellowship, 2001 – 2004
Presidential Graduate Fellowship, University of Georgia, 2000 – 2006
Golden Key National Honor Society, University of Pennsylvania, 2001
Palfrey Enrichment Award, University of Georgia Botany Department, 2000
Phi Beta Kappa Society, University of Pennsylvania, 2000

SCIENTIFIC PUBLICATIONS

Publications with advisees: *graduate students, +undergraduates, ^postdocs; **Comita** as last author denotes senior authorship
Google Scholar page: <https://scholar.google.com/citations?user=Sm5a15gAAAAJ&hl=en>

JOURNAL ARTICLES

68. Marchand, P., **L. S. Comita**, S. J. Wright, R. Condit, S. P. Hubbell, and N. G. Beckman. *In press*. Seed-to-seedling transitions exhibit distance-dependent mortality but no strong spacing effects in a Neotropical forest. **Ecology**.
67. ^Umaña, M. N., E. Manzano, and **L. S. Comita**. *In press*. Long-term dynamics of liana seedlings suggest decelerating increases in liana relative abundance over time. **Journal of Ecology**.
66. *^Eck, J. L., S. M. Stump, C. S. Delavaux, S. A. Mangan, and **L. S. Comita**. 2019. Evidence of within-species specialization by soil microbes and the implications for plant community diversity. **Proceedings of the National Academy of Sciences** 116: 7371-7376 [Featured in a *PNAS Commentary* and *The Atlantic*]
65. *Krishnadas, M., A. Kumar, and **L. S. Comita**. 2019. Edge effects reduce α -diversity but not β -diversity during community assembly in a human-modified tropical forest. **Ecological Applications** 29: e01996.
64. Crawford, K., J. Bauer, **L. S. Comita**, M. Eppinga, D. Johnson, S. Mangan, S. Queenborough, A. Strand, K. Suding, J. Umbanhowar, and J. Bever. 2019. When and where plant-soil feedback may promote plant coexistence: a meta-analysis. **Ecology Letters** 22: 1274–1284.
63. *Krishnadas, M. and **L. S. Comita**. 2019. Edge effects on seedling diversity are mediated by natural enemy impacts on seedling recruitment but not survival. **Frontiers in Forests & Global Change** 2: 76.
62. *^Krishnadas, M., N. Beckman, Noelle, J. Penagos-Zuluaga, Y. Zhu, J. Whitacre, J. Wenzel, S. A. Queenborough, and **L. S. Comita**. 2018. Environment and past land-use together predict functional diversity in a temperate forest. **Ecological Applications** 28: 2142-2152.
61. *Krishnadas, M., R. Bagchi, S. Sridhara, and **L. S. Comita**. 2018. Weaker plant-enemy interactions decrease tree seedling diversity with edge-effects in a fragmented tropical forest. **Nature Communications** 9: 4523. [Featured on *Mongabay*]
60. ^Sugiyama, A., **L. S. Comita**, T. Masaki, R. Condit, and S. Hubbell. 2018. Resolving the paradox of clumped seed dispersal: positive density and distance dependence in a bat-dispersed species. **Ecology** 99: 2583-2591.
59. ^Stump, S. M. and **L. S. Comita**. 2018. Interspecific variation in conspecific negative density dependence can make species less likely to coexist. **Ecology Letters** 21: 1541-1551.
58. ^**Comita, L. S.**, M. Uriarte, J. Forero-Montaña, W. J. Kress, N. Swenson, J. Thompson, M. N. Umaña, and J. K. Zimmerman. 2018. Changes in phylogenetic community structure of the seedling layer following hurricane disturbance in a human-impacted tropical forest. **Forests** 9: 556.
57. Rüger, N., **L. S. Comita**, R. Condit, D. Purves, B. Rosenbaum, M. Visser, S. J. Wright, and C. Wirth. 2018. Beyond the fast-slow continuum: Demographic dimensions structuring a tropical tree community. **Ecology Letters** 21: 1075–1084.

56. Chen, L., **L. S. Comita**, S. J. Wright, N. G. Swenson, J. K. Zimmerman, X. Mi, Z. Hao, W. Ye, S. P. Hubbell, W. J. Kress, M. Uriarte, J. Thompson, C. J. Nytch, X. Wang, J. Lian, and K. Ma. 2018. Forest tree neighborhoods are structured more by negative conspecific density dependence than by interactions among closely related species. **Ecography** 41: 1114–1123.
55. Weissflog, A., L. Markesteijn, O. T. Lewis, **L. S. Comita**, and B. M. J. Engelbrecht. 2018. Contrasting patterns of insect herbivory and predation pressure across a tropical rainfall gradient. **Biotropica** 50: 302–311.
54. ^Zhu, Y., S. A. Queenborough, R. Condit, S. P. Hubbell, K. Ma, and **L. S. Comita**. 2018. Density-dependent survival varies with species life-history strategy in a tropical forest. **Ecology Letters** 21: 506–515.
53. *Fotis, A. T., S. J. Murphy, R. D. Ricart, M. Krishnadas, J. Whitacre, J. W. Wenzel, S. A. Queenborough, and **L. S. Comita**. 2018. Aboveground biomass is driven by mass-ratio effects and stand structural attributes in a temperate deciduous forest. **Journal of Ecology** 106: 561–570.
52. Visser, M. D., S. Schnitzer, H. C. Muller-Landau, E. Jongejans, H. de Kroon, **L. S. Comita**, S. P. Hubbell, and S. J. Wright. 2018. Tree species vary widely in their tolerance for liana infestation: a case study of differential host response to generalist parasites. **Journal of Ecology** 106: 781–794.
51. *Krishnadas, M. and **L. S. Comita**. 2018. Influence of soil pathogens on early regeneration success of tropical trees varies between forest edge and interior. **Oecologia** 186: 259–268.
50. **Comita, L. S.** 2017. How latitude affects biotic interactions. **Science** 356: 1328–1329.
49. *Murphy, S. J., T. Wiegand, and **L. S. Comita**. 2017. Distance-dependent seedling mortality and long-term spacing dynamics in a neotropical forest community. **Ecology Letters** 20: 1469–1478.
48. ^Johnson, D. J., R. Condit, S. P. Hubbell, and **L. S. Comita**. 2017. Abiotic niche partitioning and negative density dependence drive tree seedling survival in a tropical forest. **Proceedings of the Royal Society B** 284: 20172210.
47. *Audino, L., S. Murphy, L. Zambaldi, J. Louzada, and **L. S. Comita**. 2017. Drivers of community assembly in tropical forest restoration sites: role of local environment, landscape and space. **Ecological Applications** 27: 1731–1745.
46. Du, Y., S. A. Queenborough, L. Chen, W. Yunquan, X. Mi, K. Ma, and **L. S. Comita**. 2017. Intraspecific and phylogenetic density-dependent seedling recruitment in a subtropical evergreen forest. **Oecologia** 184: 193–203.
45. Marden, J. H., S. A. Mangan, M. Peterson, E. Wafula, H. W. Fescemyer, J. Der, C. W. dePamphilis, and **L. S. Comita**. 2017. Ecological genomics of tropical trees: how local population size and allelic diversity of resistance genes relate to immune responses, co-susceptibility to pathogens, and negative density dependence. **Molecular Ecology** 26: 2498–2513. [Featured in *Molecular Ecology News & Views*]
44. Bruijning, M., M. D. Visser, H. C. Muller-Landau, S. J. Wright, **L. S. Comita**, S. P. Hubbell, H. de Kroon, and E. Jongejans. 2017. Surviving in a cosexual world: a cost-benefit analysis of dioecy in tropical trees. **American Naturalist** 189: 297–314.
43. Lin, Y. C., **L. S. Comita**, D. J. Johnson, M. R. Chen, and S. H. Wu. 2017. Biotic vs. abiotic drivers of seedling persistence in a tropical karst forest. **Journal of Vegetation Science** 28: 206–217

42. *Murphy, S. J., K. Salpeter, and **L. S. Comita**. 2016. Higher β -diversity observed for herbs over woody plants is driven by stronger habitat filtering in a tropical understory. **Ecology** 97: 2074–2084.
41. Visser, M., M. Bruijning, S. J. Wright, H. C. Muller-Landau, E. Jongejans, **L. S. Comita**, and H. de Kroon. 2016. Functional traits as predictors of vital rates across the life-cycle of tropical trees. **Functional Ecology** 30: 168–180.
40. *Murphy, S. J., K. Xu, and **L. S. Comita**. 2016. Tree seedling richness, but not neighborhood composition, influences insect herbivory in a temperate deciduous forest community. **Ecology and Evolution** 6: 6310–6319.
39. *Krishnadas, M., A. Kumar, and **L. S. Comita**. 2016. Environmental gradients structure tropical tree assemblages at the regional scale. **Journal of Vegetation Science** 27: 1117–1128.
38. ^Zhu, Y., **L. S. Comita**, S. P. Hubbell, and K. Ma. 2015. Conspecific and phylogenetic density-dependent survival differs across life stages in a tropical forest. **Journal of Ecology** 103: 957–966.
37. *Murphy, S. J., L. D. Audino, J. Whitacre, J. L. Eck, J. W. Wenzel, S. A. Queenborough, and **L. S. Comita**. 2015. Species associations structured by environment and land-use history promote beta-diversity in a temperate forest. **Ecology** 96:705–715.
36. *Calinger, K. M., E. A. Calhoun, H. Chang, J. Whitacre, J. Wenzel, **L. S. Comita**, and S. A. Queenborough. 2015. Historic mining and agriculture as indicators of occurrence and abundance of widespread invasive plant species. **PLOS One** 10: e012816.
35. ***Comita, L. S.**, S. A. Queenborough, S. Murphy, J. L. Eck, K. Xu, M. Krishnadas, N. Beckman, and Y. Zhu. 2014. Testing predictions of the Janzen–Connell hypothesis: a meta-analysis of experimental evidence for distance and density-dependent seed and seedling survival. **Journal of Ecology** 102: 845–856.
34. *Lin, F., **L. S. Comita**, X. Wang, X. Bai, Z. Yuan, D. Xing, and Z. Hao. 2014. The contribution of understory light availability and biotic neighborhood to seedling survival in secondary versus old-growth temperate forest. **Plant Ecology** 215: 795–807.
33. *Audino, L. D., J. Louzada, and **L. Comita**. 2014. Dung beetles as indicators of tropical forest restoration success: Is it possible to recover species and functional diversity? **Biological Conservation** 169: 248–257.
32. Bolker, B. M., B. Gardner, M. Maunder, C. W. Berg, M. Brooks, **L. Comita**, E. Crone, S. Cubaynes, T. Davies, P. de Valpine, J. Ford, O. Gimenez, M. Kéry, E. J. Kim, C. Lennert-Cody, A. Magnusson, S. Martell, J. Nash, A. Nielsen, J. Regetz, H. Skaug, and E. Zipkin. 2013. Strategies for fitting nonlinear ecological models in R, AD Model Builder, and BUGS. **Methods in Ecology and Evolution** 4: 501–512.
31. Piao, T., **L. S. Comita**, G. Jin, and J. H. Kim. 2013. Density dependence across multiple life stages in a temperate old-growth forest of northeast China. **Oecologia** 172: 207–217.
30. Stegen, J. C. , A. L. Freestone, T. O. Crist, M. J. Anderson, J. M. Chase, **L. S. Comita**, H. V. Cornell, K. F. Davies, S. P. Harrison, A. H. Hurlbert, B. D. Inouye, N. J. B. Kraft, J. A. Myers, N. J. Sanders, N. G. Swenson, and M. Vellend. 2013. Stochastic and deterministic drivers of spatial and temporal turnover in breeding bird communities. **Global Ecology and Biogeography** 22: 202–212.

29. Muscarella, R., M. Uriarte, J. Forero-Montana, **L. S. Comita**, N. G. Swenson, J. Thompson, C. Nyctch, I. Jonckheere, and J. K. Zimmerman. 2013. Life-history trade-offs during the seed-to-seedling transition in a subtropical wet forest community. **Journal of Ecology** 101: 171–182.
28. Lin, L., **L. S. Comita**, Z. Zheng, and M. Cao. 2012. Seasonal differentiation in density-dependent seedling survival in a tropical rainforest. **Journal of Ecology** 100: 905–914.
27. Kraft, N. J. B., N. J. Sanders, J. C. Stegen, M. J. Anderson, T. O. Crist, H. V. Cornell, M. Vellend, J. M. Chase, **L. S. Comita**, K. F. Davies, A. L. Freestone, S. P. Harrison, B. D. Inouye, J. A. Myers and N. G. Swenson. 2012. Response to comments on ‘Disentangling the drivers of β diversity along latitudinal and elevational gradients’. **Science** 335: 1573.
26. Wang, X., **L. S. Comita**, Z. Hao, S. J. Davies, J. Ye, F. Lin, and Z. Yuan. 2012. Local-scale drivers of tree survival in a temperate forest. **PLoS ONE** 7(2): e29469. doi:10.1371/journal.pone.0029469
25. Uriarte, M., J. S. Clark, J. K. Zimmerman, **L. S. Comita**, J. Forero-Montaña, and J. Thompson. 2012. Multi-dimensional tradeoffs in species responses to disturbance: implications for diversity in a subtropical forest. **Ecology** 93:191–205.
24. Kraft, N. J. B., **L. S. Comita**, J. M. Chase, N. J. Sanders, N. G. Swenson, T. O. Crist, J. C. Stegen, M. Vellend, B. Boyle, M. J. Anderson, H. V. Cornell, K. F. Davies, A. L. Freestone, B. D. Inouye, S. P. Harrison, and J. A. Myers. 2011. Disentangling the drivers of beta-diversity along latitudinal and elevational gradients. **Science** 333:1755–1758.
23. Anderson M. J., T. O. Crist, J. M. Chase, M. Vellend, B. D. Inouye, A. L. Freestone, N. J. Sanders, H. V. Cornell, **L. S. Comita**, K. F. Davies, S. P. Harrison, N. J. B. Kraft, J. C. Stegen, and N. G. Swenson. 2011. Navigating the multiple meanings of β diversity: a roadmap for the practicing ecologist. **Ecology Letters** 14: 19–28. [*Selected as a recommended article by [Faculty of 1000](#)*]
22. Winowiecki, L., S. Smukler, K. Shirley, R. Remans, G. Peltier, E. Lothes, E. King, **L. Comita**, S. Baptista, and L. Alkema. 2011. Tools for enhancing interdisciplinary communication. **Sustainability: Science, Practice, & Policy** 7: 74–80.
21. Kanagaraj, R., T. Wiegand, **L. S. Comita**, and A. Huth. 2011. Tropical tree species assemblages in topographical habitats change in time and with life stage. **Journal of Ecology** 99: 1441–1452.
20. +Goldsmith, G. R., **L. S. Comita**, and S. C. Chua. 2011. Evidence for arrested succession within a tropical forest fragment in Singapore. **Journal of Tropical Ecology** 27: 323–326.
19. Chuyong, G. B., D. Kenfack, K. E. Harms, D. W. Thomas, R. Condit, and **L. S. Comita**. 2011. Habitat specificity and diversity of tree species in an African wet tropical forest. **Plant Ecology** 212:1363–1374.
18. **Comita, L. S.**, H. C. Muller-Landau, S. Aguilar and S. P. Hubbell. 2010. Asymmetric density dependence shapes species abundance in a tropical tree community. **Science** 329: 330–332. [*Featured in [Nature News and Views](#) and [Science News](#)*]
17. **Comita, L. S.**, J. Thompson, M. Uriarte, I. Jonckheere, C. D. Canham, and J. Zimmerman. 2010. Interactive effects of land use history and natural disturbance on seedling dynamics in a subtropical forest. **Ecological Applications** 20: 1270–1284.
16. Uriarte, M., N. G. Swenson, R. L. Chazdon, **L. S. Comita**, W. J. Kress, D. Erickson, J. Forero-Montaña, J. K. Zimmerman, and J. Thompson. 2010. Trait similarity, shared ancestry and the structure

of neighbourhood interactions in a subtropical wet forest: implications for community assembly. **Ecology Letters** 13: 1503–1514.

15. Jones, F. A. and **L. S. Comita**. 2010. Density dependent pre-dispersal seed predation and fruit set in a tropical tree. **Oikos** 119: 1841–1847.
14. Zimmerman, J., **L. S. Comita**, M. Uriarte, N. Brokaw, and J. Thompson. 2010. Patch dynamics and community metastability of a tropical forest: Compound effects of natural disturbance and human land use. **Landscape Ecology** 25: 1099–1111.
13. Chen, L., X. Mi, **L. S. Comita**, L. Zhang, H. Ren and K. Ma. 2010. Community-level consequences of density dependence and habitat association in a subtropical broad-leaved forest. **Ecology Letters** 13: 695–704. [*Selected as a recommended article by [Faculty of 1000](#)*]
12. **Comita, L. S.**, M. Uriarte, J. Thompson, I. Jonckheere, C. D. Canham, and J. Zimmerman. 2009. Abiotic and biotic neighborhood determinants of seedling survival in a hurricane-impacted forest. **Journal of Ecology** 97: 1346–1359.
11. **Comita, L. S.** and B. M. J. Engelbrecht. 2009. Seasonal and spatial variation in water availability drive habitat associations in a tropical forest. **Ecology** 90: 2755–2765.
10. **Comita, L. S.** and S. P. Hubbell. 2009. Local neighborhood and species' shade tolerance influence survival in a diverse seedling bank. **Ecology** 90: 328–334.
9. **Comita, L. S.**, ⁺G. R. Goldsmith, and S. P. Hubbell. 2009. Intensive research activity alters short-term seedling dynamics in a tropical forest. **Ecological Research** 24: 225–230.
8. Jones, F. A. and **L. S. Comita**. 2008. Neighborhood density and genetic relatedness interact to determine fruit set and abortion rates in a tropical tree. **Proceedings of the Royal Society B** 275: 2759–2767.
7. ⁺**Comita, L. S.** and G. R. Goldsmith. 2008. Impact of research trails on seedling dynamics in a tropical forest. **Biotropica** 40: 251–254.
6. Metz, M. R., **L. S. Comita**, Y. Chen, N. Norden, R. Condit, S. P. Hubbell, I-F. Sun, N. S. Md. Noor, and S. J. Wright. 2008. Temporal and spatial variability in seedling dynamics: a cross-site comparison in four lowland tropical forests. **Journal of Tropical Ecology** 24: 9–18.
5. **Comita, L. S.**, R. Condit, and S. P. Hubbell. 2007. Developmental changes in habitat associations of tropical trees. **Journal of Ecology** 95: 482–492.
4. Engelbrecht, B. M. J., **L. S. Comita**, R. Condit, S. P. Hubbell, T. Kursar, and M. Tyree. 2007. Drought sensitivity shapes species distribution patterns in tropical forests. **Nature** 447: 80–82.
3. **Comita, L. S.**, S. Aguilar, R. Perez, S. Lao, and S. P. Hubbell. 2007. Patterns of woody plant species abundance and diversity in the seedling layer of a tropical forest. **Journal of Vegetation Science** 18: 163–174.
2. ⁺Goldsmith, G. R., **L. S. Comita**, L. Morefield, R. Condit, and S. P. Hubbell. 2006. Researcher impacts on seedling community structure in a permanent study plot. **Forest Ecology and Management** 234: 34–39.
1. Wills, C., K. Harms, R. Condit, D. King, J. Thompson, F. He, H. Muller-Landau, P. Ashton, E. Losos, **L. S. Comita** et al. 2006. Nonrandom processes maintain diversity in tropical forests. **Science** 27: 527–531.

BOOK CHAPTERS

1. **Comita, L. S.** and B. M. J. Engelbrecht. 2014. Drought as a driver of tropical tree species regeneration dynamics and distribution patterns. Pp 261–308 in *Forests and Global Change*, D. A. Coomes, D. R. F. P. Burslem and W. D. Simonson, eds. Cambridge University Press, Cambridge, UK.

RESEARCH GRANTS

EXTERNAL AWARDS

- National Science Foundation, Faculty Early Career Development Program, 2019 – 2024, *CAREER: Drivers of tropical tree seedling dynamics and species coexistence along environmental gradients* (sole PI; project total - \$619,999)
- National Science Foundation, Division of Environmental Biology, 2015 – 2019, *Collaborative Research: Genetic diversity, resistance genes, and negative density dependence in tropical tree seedling dynamics* (PI; \$158,545; project total - \$840,457)
- National Science Foundation, Division of Environmental Biology, 2013 – 2018, *Collaborative Research: Intraspecific variation in drought responses of tropical tree seedlings - consequences for species distributions under climate change* (PI; \$466,025; project total - \$708,023)
- National Science Foundation, Long Term Research in Environmental Biology, 2012 – 2018, *LTREB Renewal: Long-Term Studies of Seedling and Small Sapling Community Dynamics in a Neotropical Forest* (PI; \$449,841)
- National Science Foundation, Division of Environmental Biology, 2016 – 2018, *RAPID: The effect of an extreme El Niño event on tropical forest seedling regeneration* (co-PI; project total - \$165,000 to Oregon State University and Smithsonian)
- National Science Foundation, Division of Environmental Biology, 2016 – 2018, *Dissertation Research: Does genetic similarity of trees explain beta diversity of soil microbes and the strength of negative plant-soil feedbacks in a tropical tree population?* (PI, with PhD student Jenalle Eck; \$19,960 to Ohio State University)
- National Science Foundation, Dimensions of Biodiversity, 2016 – 2017, *International Research Coordination Network: Integrating functional, phylogenetic and genetic components of diversity for an improved understanding of forest structure, dynamics, and change* (co-PI; project total - \$296,240 to Smithsonian)
- National Science Foundation, Division of Environmental Biology, 2011 – 2013, *Collaborative Research: Genetic diversity, resistance genes, and negative density dependence in tropical tree seedling dynamics* (PI; \$50,000; project total - \$200,000)
- National Science Foundation, Research Experience for Undergraduates (REU), 2013, Supplement to *LTREB Renewal: Long-Term Studies of Seedling and Small Sapling Community Dynamics in a Neotropical Forest* (PI; \$7500)
- National Science Foundation, Research Experience for Undergraduates (REU), 2013, Supplement to *Genetic diversity, resistance genes, and negative density dependence in tropical tree seedling dynamics* (PI; \$7500)
- National Science Foundation, Dimensions of Biodiversity, 2010 – 2015, *International Research Coordination Network: Diversity and Forest Change: Characterizing functional, phylogenetic and*

genetic contributions to diversity gradients and dynamics in tree communities (Senior personnel & co-author; project total - \$631,640 to Smithsonian)

National Science Foundation, Long Term Research in Environmental Biology, 2007 – 2012, *Long-term studies of seedling community dynamics in a Neotropical forest* (Co-author with PI Dr. S. P. Hubbell; project total - \$446,000)

Smithsonian Center for Tropical Forest Science Research Grant, 2007 – 2009, *Quantifying seedling responses to key resources as a basis for understanding tropical tree distributions and reforestation* (co-PI with Drs. B. M. J. Engelbrecht, J. Dalling and B. Turner; \$15,000)

Smithsonian Center for Tropical Forest Science Research Grant, 2002 – 2004, *Linking species drought resistance with habitat associations* (co-PI with Dr. B. M. J. Engelbrecht; \$11,000)

INTERNAL AWARDS

Forest B. H. and Elizabeth D. W. Brown Fund, Yale-endowed postdoctoral fellow funding, 2019 (PI; \$50,004)

Yale-Smithsonian Partnerships, graduate student internship funding, Summer 2019, *Monitoring New England forests in a changing world - establishment of a Smithsonian ForestGEO plot at the Yale-Myers Forest* (PI, with Drs. Duguid, Queenborough, Bradford, Ashton, Davies, McMahon; \$6,800)

University of Georgia Botany Department Grant, 2001, *The influence of understory light levels on tropical tree seedling distribution and demography* (PI; \$1000)

INVITED SEMINARS AND TALKS

2020 Keynote speaker, Association for Tropical Biology & Conservation annual meeting, Cartagena, Colombia (*scheduled for July 2020*)

2020 Stanford University, Department of Biology (*scheduled for April 2020*)

2019 Missouri Botanical Garden, '66th Annual Fall Symposium: *The Origins and Maintenance of Neotropical Biodiversity*, St. Louis, Missouri

2019 Yale University, School of Forestry & Environmental Studies, *Faculty Up-Goer5 talks* (science talks restricted to only the 1000 most commonly used words), F&ES Annual Research Conference

2018 Yale University, School of Forestry & Environmental Studies, Research Seminar Series

2018 Bard College, Biology Seminar Series

2018 Symposium on '*Tropical tree life-history strategies: causes and consequences of demographic diversity*', Association for Tropical Biology and Conservation annual meeting, Kuching, Malaysia

2018 University of Montana, Organismal Biology, Ecology, and Evolution seminar, Division of Biological Sciences

2018 Yale University, Biological Anthropology 'Brown Beer' Colloquium

2016 Brown University, Department of Ecology and Evolutionary Biology

2016 Japan Society for the Promotion of Science, '*Biology of Biodiversity: Commemorative Symposium for the 32nd International Prize for Biology*', Tokyo, Japan

2016 National Centre for Biological Sciences, Bangalore, India

2016 Organized Oral Session on '*Contributions of Seasonal & Interannual Variability in Reproduction to Tropical Forest Diversity*', Ecological Society of America annual meeting, Fort Lauderdale

- 2016 Harvard University, Harvard Herbaria
- 2015 Yale Institute for Biospheric Studies
- 2014 Washington University - St. Louis, Department of Biology (*annual student-invited speaker*)
- 2013 University of Connecticut, Department of Ecology and Evolutionary Biology
- 2013 Michigan State University, Department of Forestry
- 2013 The Ohio State University, Department of Plant Pathology
- 2013 The Ohio State University, Environmental Sciences Graduate Program Seminar
- 2012 Yale University, School of Forestry and Environmental Studies
- 2012 Yale University, Department of Ecology and Evolutionary Biology
- 2012 Indiana University, Department of Biology, Evolution, Ecology & Behavior seminar series
- 2011 British Ecological Society Symposium on Forests and Climate Change, University of Cambridge, UK (*plenary speaker*)
- 2011 Climate Change and Forest Biodiversity Conservation symposium, Chinese Academy of Sciences
- 2011 University of Nottingham, School of Biology, UK
- 2011 Center for Tropical Forest Science symposium, Smithsonian Tropical Research Institute, Panama
- 2010 University of California, Los Angeles, Ecology and Evolutionary Biology Department
- 2010 Indian Institute of Sciences, Bangalore, Centre for Ecological Sciences
- 2010 University of Massachusetts, Boston, Department of Biology
- 2010 Case Western Reserve University, Department of Biology
- 2009 The Ohio State University, Department of Evolution, Ecology, and Organismal Biology
- 2009 Florida International University, Department of Biological Sciences
- 2009 Case Western Reserve University, Department of Biology
- 2008 Columbia University, Center for Environmental Research and Conservation
- 2008 Lamont-Doherty Earth Observatory, Division of Biology and Paleo Environment
- 2008 Queens College-City University of New York, Biology Department
- 2007 University of Minnesota, Department of Ecology, Evolution, and Behavior
- 2007 University of Wisconsin-Green Bay, Cofrin Center for Biodiversity
- 2007 Symposium on '*Ecological Theory and Tropical Ecology: Bridging the Gap for Mutual Gain*', Association for Tropical Biology and Conservation annual meeting, Morelia, Mexico
- 2006 Annual Science Symposium, Smithsonian Tropical Research Institute, Panama

CONTRIBUTED ORAL PRESENTATIONS (as presenter)

- Comita, L. S. 2018. Natural enemies and the maintenance of tropical tree diversity. Sussex Plant Biology Symposium, Connecticut Agricultural Experiment Station, New Haven, CT.
- Comita, L. S., B. M. J. Engelbrecht, L. Markesteijn, E. J. Manzano, S. J. Wright, and F. A. Jones. 2017. Effects of the 2015-2016 El Niño on seedling dynamics across a rainfall gradient in central Panama. Association for Tropical Biology and Conservation annual meeting, Merida, Mexico.

- Comita, L. S. and D. J. Johnson. 2015. Spatial and temporal variation in density-dependent seedling survival in a lowland Neotropical forest. Association for Tropical Biology and Conservation annual meeting, Honolulu, HI.
- Zhu, Y., L. S. Comita, S. P. Hubbell, K. Ma. 2015. Conspecific and phylogenetic density dependent survival differs across life stages in a tropical forest. Ecological Society of America annual meeting, Baltimore, MD.
- Comita, L. S. and the Center for Tropical Forest Science Working Group. 2012. Does variation in the strength of negative density dependence explain differences in species diversity among tropical forests? Ecological Society of America annual meeting, Portland, OR.
- Comita, L. S., M. Uriarte, N. Swenson, J. Kress, D. Erickson, J. Thompson, J. Forero-Montana, J. K. Zimmerman. 2012. Disturbance impacts phylogenetic community structure of the seedling layer in a tropical forest. British Ecological Society annual meeting, Birmingham, UK.
- Comita, L. S., H. C. Muller-Landau, S. Aguilar, S. P. Hubbell. 2010. Asymmetric density dependence shapes species abundance in a tropical tree community. Association for Tropical Biology and Conservation annual meeting, Bali, Indonesia.
- Comita, L. S., M. Uriarte, J. Thompson, I. Jonckheere, J. K. Zimmerman. 2009. Abiotic and biotic drivers of seedling survival in a hurricane-impacted tropical forest. Ecological Society of America annual meeting, Albuquerque, NM
- Comita, L. S. and B. Engelbrecht. 2009. Seasonal & spatial variation in water availability drive habitat associations in a tropical forest. Association for Tropical Biology and Conservation annual meeting, Marburg, Germany.
- Comita, L. S., M. Uriarte, H. Muller-Landau, J. Thompson, J. Zimmerman, S. Hubbell. 2008. Seeing the forest for the species: Cross-site comparisons of tropical forest dynamics using hierarchical Bayesian models. Association for Tropical Biology and Conservation annual meeting, Paramaribo, Suriname.
- Comita, L. S. and S. P. Hubbell. 2007. Biotic and abiotic neighborhood effects on seedling survival in a tropical forest. Ecological Society of America annual meeting, San Jose, CA.
- Comita, L. S. and S. P. Hubbell. 2005. Density dependent growth of established seedlings in a Panamanian forest. Association for Tropical Biology and Conservation annual meeting, Uberlandia, Brazil.
- Comita, L. S., R. Condit, S. P. Hubbell. 2004. Seedling and adult habitat associations in a Neotropical tree community. Association for Tropical Biology and Conservation annual meeting, Miami, FL.
- Comita, L. S. and S. P. Hubbell. 2003. Community level patterns of seedling mortality in a tropical tree community. Ecological Society of America annual meeting, Savannah, GA.
- Comita, L. S. and S. P. Hubbell. 2003. Density dependent juvenile mortality and recruitment in a Neotropical tree community. Association for Tropical Biology and Conservation annual meeting, Aberdeen, Scotland.

INVITED WORKING GROUP PARTICIPANT

Theory of plant-soil feedback: phenomenological, mechanistic and spatial models, 2013 – 2015, National Institute for Mathematical and Biological Synthesis, Knoxville, TN

Bridging the gap between theoretical community ecology and conservation, 2014, Tansley Working Group, Silwood Park, Imperial College, UK

Dance with neighbors: what have we learned about species coexistence in tree communities from the global stem-mapped forest plots, 2013, National Center for Ecological Analysis & Synthesis, Santa Barbara, CA

Evaluating and improving open source software for nonlinear statistical modeling in ecology, 2011, National Center for Ecological Analysis and Synthesis, Santa Barbara, CA

A synthesis of patterns, analyses, and mechanisms of beta-diversity along ecological gradients, 2010, National Center for Ecological Analysis and Synthesis, Santa Barbara, CA

TEACHING EXPERIENCE

COURSES TAUGHT AS LEAD INSTRUCTOR - YALE UNIVERSITY

Ecology & Conservation of Tropical Forests (F&ES 752), 3 credits, graduate lecture and discussion course, Fall semester 2015, 2017-2019

Tropical Field Ecology (F&ES 717), 3 credits, graduate field course, Spring semester 2015, 2016, 2018-2020

Pests, Pathogens, and Parasites in Natural and Managed Systems (F&ES 768), 2 credits, graduate seminar course, Fall 2015 & Spring 2018

Pests, Parasites, and Pathogens: An Ecological Perspective (EVST 251), 1 Yale College credit, undergraduate lecture & discussion (seminar) course, Spring 2019 [co-taught with doctoral student as part of the Associates in Teaching training program of the Porvu Center for Teaching and Learning]

COURSES TAUGHT AS LEAD INSTRUCTOR - OHIO STATE UNIVERSITY

Introduction to Ecology (undergraduate lecture & lab), Fall 2012 & 2013

Analysis of Plant Inventory Data (graduate seminar), Fall 2013

Ecological Methods I (upper-level undergraduate field course), Spring 2013

Species Coexistence in Plant Communities (graduate seminar), Fall 2012

Tropical Field Ecology (undergraduate study abroad course), Spring 2012

OTHER TEACHING

Faculty lecturer, videotaped lectures for the Online Certificate Program on 'Tropical Forest Landscapes - Conservation, Restoration & Sustainable Use', Yale F&ES and the Environmental Leadership & Training Initiative (ELTI), 2019

Faculty presenter, Amazon Fires Teach-in (student-organized event), Yale F&ES, September 2019

Guest panelist, Survival Skills for Doctoral Students (graduate seminar), Yale F&ES, Spring 2018 & 2019

Guest lecturer, Plant Ecology (undergraduate lecture), Yale University, Ecology and Evolutionary Biology Department, Spring 2018

Guest lecturer, General Ecology (undergraduate lecture), Yale University, Ecology and Evolutionary Biology Department, Fall 2015

Guest speaker, graduate seminar on Publishing in High Impact Journals, Ohio State University, Fall 2013

Guest lecturer (x2), Community and Ecosystem Ecology (undergraduate/graduate lecture), Ohio State University, Spring 2013

Instructor, Analysis of density dependent plant performance in R (short course), Chinese Academy of Sciences, Beijing, China, 2010

Instructor, Introduction to R (short course), Indian Institute of Science, Bangalore, India, 2010

Teaching assistant, Likelihood Methods in Ecology (short course), Cary Institute for Ecosystem Studies, Milbrook, NY, 2009

Guest Lecturer, Yale University, Tropical Forest Ecology, New Haven, CT, 2008

Guest Lecturer, University of Minnesota, Bayesian Statistics Seminar, St. Paul, MN, 2007

Guest Lecturer, University of Quebec, Graduate Tropical Forest Ecology, Panama, 2007

Guest Lecturer, School for International Training, Undergraduate Program, Panama, 2006, 2007

Field Problem Leader, University of Panama/STRI Field Ecology Course, Panama, 2006

Guest Lecturer, McGill University/STRI, Tropical Ecology Graduate Program, Panama, 2006

Teaching Assistant, University of Georgia, Tropical Ecology Study Abroad Program, Costa Rica, Fall 2004

Guest Lecturer, Michigan State University, Tropical Biodiversity Program, Panama, 2004

Teaching Assistant, Tropical Ecology and Conservation, University of Georgia, Athens, GA, Fall 2002

ACADEMIC ADVISING - CURRENT

DOCTORAL STUDENTS

Akshay Surendra
Megan Sullivan
Juan Carlos Penagos Zuluaga
Andrew Muehleisen
Harikrishnan Venugopalan Nair Radhamoni

POSTDOCTORAL RESEARCHERS

Luke Browne
Sergio Estrada-Villegas

GRADUATE COMMITTEES

Doctoral Dissertation Committee Member: Madelon Case (Yale EEB), Arielle Biro (Yale EEB), Valerie Milici (UConn), John Burley (Brown University)

Doctoral Qualifying Exam Committee Member: Jane Widness (Yale Biological Anthropology), Emily Briggs (Yale Joint Biological Anthropology-F&ES)

ACADEMIC ADVISING - PAST

FORMER GRADUATE STUDENTS

Meghna Krishnadas (PhD Yale, 2018; current position: Research faculty at Laboratory for Conservation of Endangered Species (LaCONES) at the Centre for Cellular and Molecular Biology (CCMB), India)
Jenalle Eck (PhD OSU, 2017; current position: Postdoctoral researcher at University of Zurich)
Stephen Murphy (PhD OSU, 2018; current position: Postdoctoral researcher at Missouri Botanical Garden)
Kara Salpeter (MS OSU, 2013; current position: practicing attorney, Nashville, TN)

FORMER POSTDOCTORAL RESEARCHERS

Maria Natalia Umaña (current position: Assistant Professor, University of Michigan)
Anna Sugiyama (current position: Assistant Professor, University of Hawaii)
Simon Stump (current position: postdoctoral associate, Yale University, EEB department)
Yan Zhu (current position: Assistant Professor, Institute of Botany, Chinese Academy of Sciences)
Eric Manzane (current position: Independent researcher and high school teacher in Panama)
Daniel Johnson (current position: Assistant Professor, University of Florida)
Noelle Beckman (current position: Assistant Professor, Utah State University)

FORMER DOCTORAL COMMITTEES

Benedicte Bachelot (PhD, Columbia University), Andrew Yoak (PhD, OSU), Corrie Pieterse (PhD, OSU), Cassie May (PhD, OSU)

FORMER MASTERS COMMITTEES

AJ Hudson (MEd, Yale F&ES)

FORMER UNDERGRADUATE RESEARCH ADVISEES

NSF REU Advisor: Megan Sullivan (OSU), Lisa Miller (OSU), Gregory Goldsmith (UGA/Bowdoin)
Senior Thesis Advisor: Kaiyang Xu (OSU), Megan Sullivan (OSU)
Senior Thesis Committee Member: Andrew Muehleisen (OSU)

FORMER VISITING SCHOLARS

Iveren Abiem (University of Jos, Nigeria & University of Canterbury, New Zealand), Zhu Yan (Chinese Academy of Sciences, Beijing), Yanjun Du (Chinese Academy of Sciences, Beijing), Livia Audino (Universidade Federal de Lavras, Brazil), Fei Lin (Chinese Academy of Sciences, Shenyang)

EXTERNAL DISSERTATION READER

Elaine Hooper (Yale F&ES), Kevin McClean (Yale F&ES), Sandeep Pulla (Indian Institute of Sciences, Bangalore), Stefan Kupers (University of Leipzig, Germany)

UNIVERSITY/SCHOOL SERVICE

YALE UNIVERSITY

- Governance committee, Yale School of Forestry & Environmental Studies. 2019 – present
- OneFES (community-building) committee co-chair, Yale School of Forestry & Environmental Studies, 2019 – present
- Faculty Mentor, Women in Science at Yale (WISAY) mentoring program, 2014 – present (career mentor to 20 female postdocs to date from multiple departments/schools at Yale; awarded the 2016 Yale Postdoctoral Mentoring Prize for this service)
- Faculty Affiliate, Yale Institute of Biospheric Studies (YIBS), Fall 2019 – present
- Advisory committee for Postdoctoral Affairs, Yale University, 2017 – present
- Board member, Tropical Resources Institute, Yale School of Forestry & Environmental Studies. 2015 – present
- Hiring Priorities committee, Yale School of Forestry & Environmental Studies, Summer 2019
- Review committee for reappointment of Senior Research Scientist, Yale School of Forestry & Environmental Studies, Fall 2019
- Panelist, *First Time in the Field* (advice for students starting field research), Yale School of Forestry & Environmental Studies, May 2019
- Panel Moderator, *Incorporating Environmental Justice into Teaching*, Yale School of Forestry & Environmental Studies, May 2019
- Judge and Session Chair, Research Day, Yale School of Forestry & Environmental Studies, April 2019
- Sabin Fellowship Selection committee, Yale School of Forestry & Environmental Studies, Spring 2019
- Discussion Moderator, International Society of Tropical Forestry annual meeting (student-organized), Yale School of Forestry & Environmental Studies, January 2019
- Review committee for reappointment of Associate Research Scientist, Yale School of Forestry & Environmental Studies, Fall 2018
- Masters' committee member, Yale School of Forestry & Environmental Studies, 2015 – 16 & 2017 – 18
- Diversity committee, Yale School of Forestry & Environmental Studies, 2016 – 2017
- Faculty Mentor to Pinchot Fellow, Yale School of Forestry & Environmental Studies, 2016 – 2017
- Panelist, *Mentoring and Inclusion Discussion*, New Faculty Orientation, Yale University, August 2016
- Search committee for Dean of Yale School of Forestry & Environmental Studies, 2015 – 2016
- Search committee, Pinchot Fellowship, Yale School of Forestry & Environmental Studies, 2015 – 2016
- Panelist, *Careers in Conservation Panel Discussion*, Society for Conservation Biology, Yale University Chapter, April 2015
- Panel Moderator, *Getting More Women in Science*, Yale School of Forestry & Environmental Studies, February 2015
- Judge, Yale International Society of Tropical Foresters Innovation Prize competition, December 2014

OHIO STATE UNIVERSITY

- Seminar Committee member, Department of Evolution, Ecology & Organismal Biology, The Ohio State University, 2013 – 2014

Graduate Admissions Committee member, Department of Evolution, Ecology & Organismal Biology, The Ohio State University, 2013 – 2014
Advisory Committee member (elected), Department of Evolution, Ecology & Organismal Biology, The Ohio State University, 2012 – 2013
Graduate Studies Committee member, Department of Evolution, Ecology & Organismal Biology, The Ohio State University, 2012 – 2013
Judge, Denman Undergraduate Research Forum, The Ohio State University, 2012

JOURNAL ACTIVITIES

EDITOR

Subject Editor, *Ecology Letters* (2015 – present)
Subject Editor, *Biotropica* (2014 – 2019)
Guest Editor, *Frontiers in Forests and Global Change*, special issue on *Tropical Plant-Pathogen Interactions in a Changing World* (2019)

JOURNAL REVIEWER (2006 – present)

Nature, *Science*, *Proceeding of the National Academy of Sciences*, *Nature Ecology and Evolution*, *Nature Plants*, *Proceedings of the Royal Society B*, *American Naturalist*, *Ecology Letters*, *Ecology*, *Journal of Ecology*, *Journal of Applied Ecology*, *Functional Ecology*, *Ecosystems*, *Frontiers in Ecology & the Environment*, *New Phytologist*, *Oikos*, *Oecologia*, *Global Change Biology*, *Frontiers in Biogeography*, *PloS ONE*, *Ecography*, *Methods in Ecology and Evolution*, *Forest Ecology and Management*, *Journal of Vegetation Science*, *American Journal of Botany*, *Basic and Applied Ecology*, *Plant Ecology*, *Biotropica*, *Journal of Tropical Ecology*, *Caribbean Journal of Science*, *Journal of Environmental Management*, *Plant and Soil*, *Journal of Forest Research*, *Perspectives in Ecology and Conservation*, *Communications Biology*

OTHER PROFESSIONAL SERVICE

Proposal Review Panel, National Science Foundation (Division of Environmental Biology), 2019
Council member (elected) & co-chair of Awards Committee, Association for Tropical Biology and Conservation, 2017 – 2020
Ad hoc proposal reviewer, National Science Foundation (Division of Environmental Biology), 2005, 2006, 2009, 2011 – 2013, 2018, 2019
Symposium co-organizer, *Tropical plant-pathogen interactions in a changing world*, Annual meeting of the Association for Tropical Biology and Conservation, Kuching, Malaysia, 2018
Ad hoc proposal reviewer, Natural Sciences & Engineering Research Council of Canada (NSERC), Discovery Grant competition, 2018
Ad hoc proposal reviewer, Czech Science Foundation, 2009, 2018
Proposal Review Panel, U.S. Department of Energy, Terrestrial Ecosystem Sciences program (Critical Ecosystems - Tropics), 2016
Symposium co-organizer, *Intraspecific variation in tropical trees – implications for tropical forest responses to global change*, Annual meeting of the Association for Tropical Biology and Conservation, Montpellier, France, 2016

Working Group Leader and Mentor, Center for Tropical Forest Science-Smithsonian Institute Forest Global Earth Observatories, Annual Analytical Workshops, 2009 – 2017

Preliminary Proposal Review Panel, National Science Foundation (Division of Environmental Biology), 2013

Associate Faculty Member, Faculty of 1000 Biology, 2009 – 2010

Symposium co-organizer, *Climate effects on tropical seedling regeneration – implications for vegetation under climate change*, Annual meeting of the Association for Tropical Biology and Conservation, Marburg, Germany, 2009

Symposium co-organizer, *Regeneration ecology across the tropics: cross-site comparisons of seed and seedling dynamics*, Association for Tropical Biology and Conservation annual meeting, Paramaribo, Suriname, 2008

Master's thesis external examiner, University of Canterbury, New Zealand, 2006

Abstract Reviewer and Session Chair, Annual symposium of the Center for Undergraduate Research Opportunities, University of Georgia, 2004

Vice-President, Botany Graduate Student Association, University of Georgia, 2002 – 2003

Coordinator, Plant Ecology Group, University of Georgia, 2001, 2003

PUBLIC OUTREACH

Television interview on the environmental impacts of the Amazon fires, *Good Morning Connecticut at Nine*, WTNH, New Haven, 2019

Tropical rainforest presentation, Worthington Hooker Elementary School, 1st grade (~50 students), New Haven, CT, 2018

Volunteer Scientist for 'Kids Do Ecology', a program that introduced 5th grade students to ecology and the scientific method using an inquiry-based approach, Santa Barbara, CA, 2011

Research mentor, Francis Lewis High School Science Research Program, Queens, NY, 2009

Invited speaker, Careers in Biology, International School of Panama High School, Panama, 2007

Speaker and guide for private and corporate donors, tour groups, and visiting scientists at the Smithsonian Tropical Research Institute, Panama, 2006 – 2007

Volunteer guide for elementary school classes at Sandy Creek Nature Center, Athens, GA, 2001

Volunteer Educator, Inner-City Environmental Education Program, Philadelphia, PA, 1997 – 1998

PROFESSIONAL AFFILIATIONS

Ecological Society of America, Association for Tropical Biology and Conservation, Smithsonian Tropical Research Institute, Center for Tropical Forest Science-Forest Global Earth Observatories (ForestGEO)

LANGUAGES

English – native language; Spanish – speak, read, and write with high proficiency