

Helene C. Muller-Landau

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EDUCATION

Princeton University

Ph.D. 2001, Ecology and Evolutionary Biology. Dissertation committee: Simon A. Levin, Stephen W. Pacala, Stephen P. Hubbell, Henry S. Horn, Burton Singer

M.A. 1997, Ecology and Evolutionary Biology.

Swarthmore College

B.A. 1995, Mathematics and Statistics, with a concentration in Environmental Studies. Graduated with Distinction. Phi Beta Kappa. Sigma Xi.

PROFESSIONAL EXPERIENCE

Assistant Professor, Department of Ecology, Evolution and Behavior, University of Minnesota, Twin Cities. 2004 to present.

Research Associate, Ecology and Evolutionary Biology, Princeton University. Jan – Jun 2004.

Post-doctoral Researcher, National Center for Ecological Analysis and Synthesis, University of California, Santa Barbara. 2002-2003.

Post-doctoral Researcher, Ecology and Evolutionary Biology, Princeton University. Fall 2001.

Graduate Research and Teaching Assistant, Ecology and Evolutionary Biology, Princeton University. Sep 1995 - Aug 2001.

Research Assistant, Organismic and Evolutionary Biology, Harvard University. Jan-Aug 1995.

Research Assistant, Mathematical Ecology, University of Tennessee, Knoxville. Jun-Aug 1994.

FELLOWSHIPS, GRANTS AND AWARDS

National Science Foundation. 2005-2006. REU Supplement to the grant “Collaborative Research: Seed dispersal by wind and plant recruitment in tropical forests – an interdisciplinary investigation across multiple scales.” (NSF DEB 0536893; \$7950) .

National Science Foundation. 2005-2008. “Collaborative Research: Seed dispersal by wind and plant recruitment in tropical forests – an interdisciplinary investigation across multiple scales.” (NSF DEB 0453445, 0453665, and 0453296; \$441,791 total) PI, collaborating with R. Nathan (lead PI) and S. J. Wright (co-PI) of the Smithsonian Tropical Research Institute, and R. Avissar (PI) of Duke University.

Center for Tropical Forest Science Research Grant. 2003-2004. “Seed Rain in Tropical Forests: Patterns, Causes, and Consequences for Forest Dynamics.” \$8,000.

National Center for Ecological Analysis and Synthesis Postdoctoral Fellowship. 2002-2003.

NSF-NATO Post-doctoral Fellowship (declined). 2001.

Organization for Tropical Studies Advanced Comparative Neotropical Ecology award. 2001.

Association of Princeton Graduate Alumni travel awards. 1997, 1998, 2000.
Princeton Environmental Institute Research Initiative in Science and Engineering Graduate Fellowship. 1998.
Smithsonian Institution Pre-Doctoral Fellowship. 1997.
Smithsonian Tropical Research Institute Short-Term Fellowship. 1997.
National Science Foundation Graduate Fellowship. 1995.
Brinkman Prize for the best undergraduate paper in mathematics at Swarthmore College. 1995.

REFEREED PUBLICATIONS

21. Wright, S. J. and **H. C. Muller-Landau**. In press. The future of tropical forest species. *Biotropica*.
20. **Muller-Landau, H. C.**, and Hardesty, B. D. 2005. Seed dispersal of woody plants in tropical forests: concepts, examples, and future directions. Pages 267-309 in *Biotic Interactions in the Tropics*. D. Burslem, M. Pinard, and S. Hartley, editors. Cambridge: Cambridge University Press.
19. Adler, F. R. and **H. C. Muller-Landau**. 2005. When do localized natural enemies increase species richness? *Ecology Letters* 8 (4):438-447.
18. Wright, S. J., **H. C. Muller-Landau**, O. Calderón, and A. Hernández. 2005. Annual and spatial variation in seedfall and seedling recruitment in a Neotropical forest. Putative mast seeding, seed fate, and El Niño climate fluctuation in a Neotropical forest. *Ecology* 86(4):848-860.
17. **Muller-Landau, H. C.**, J. W. Dalling, K. E. Harms, S. J. Wright, R. Condit, S. P. Hubbell and R. B. Foster. 2004. Seed dispersal and density-dependent seed and seedling mortality in *Trichilia tuberculata* and *Miconia argentea*. Pages 340-362 in *Forest Diversity and Dynamism: Findings from a Network of Large-Scale Tropical Forest Plots*. E. C. Losos and E. G. Leigh, editors. Chicago: University of Chicago Press.
16. **Muller-Landau, H. C.** 2004. Interspecific and intersite variation in wood specific gravity of tropical trees. *Biotropica* 36:20-32.
15. Wright, S. J., **H. C. Muller-Landau**, R. Condit, and S. P. Hubbell. 2003. Gap-dependent recruitment, realized vital rates, and size distributions of tropical trees. *Ecology* 84:3174-3185.
14. **Muller-Landau, H. C.**, S. A. Levin, and J. E. Keymer. 2003. Theoretical perspectives on the evolution of long-distance dispersal and the example of specialized pests. *Ecology* 84(8):1957-1967.
13. Levin, S., **H. C. Muller-Landau**, J. Chave, and R. Nathan. 2003. The ecology and evolution of dispersal: a theoretical perspective. *Annual Review of Ecology and Systematics* 34:575-604.
12. Plotkin, J. B., and **H. C. Muller-Landau**. 2002. Sampling the species composition of a landscape. *Ecology* 83(12):3344-3356.
11. Stoll, P., J. Weiner, **H. Muller-Landau**, E. Müller and T. Hara. 2002. Size symmetry of competition alters biomass-density relations. *Proceedings of the Royal Society Biological Sciences Series B* 269:2191-2195.
10. Dalling, J., **H. C. Muller-Landau**, S. J. Wright, and S. P. Hubbell. 2002. Role of dispersal in the recruitment limitation of Neotropical pioneer species. *Journal of Ecology* 90:714-727.

9. **Muller-Landau, H. C.**, S. J. Wright, O. Calderón, S. P. Hubbell, and R. B. Foster. 2002. Assessing recruitment limitation: concepts, methods and examples for tropical forest trees. Pages 35-53 in *Seed Dispersal and Frugivory: Ecology, Evolution and Conservation*. J. Levey, W. R. Silva and M. Galetti, editors. Oxfordshire, UK: CAB International.
8. Chave, J., **H. C. Muller-Landau**, R. Condit, N. Pitman, J. Terborgh, S. P. Hubbell, and E. G. Leigh. 2002. Beta-diversity in tropical forests - Response. *Science* 297: 1439a.
7. Condit, R., N. Pitman, E.G. Leigh, J. Chave, J. Terborgh, R. B. Foster, P. Núñez, S. Aguilar, R. Valencia, G. Villa, **H. C. Muller-Landau**, E. Losos, S. P. Hubbell. 2002. Beta-diversity in tropical forest trees. *Science* 295: 666-669.
6. Chave, J., **H. C. Muller-Landau**, and S. A. Levin. 2002. Comparing classical community models: Theoretical consequences for patterns of diversity. *American Naturalist* 159:1-23.
5. Weiner, J., P. Stoll, **H. C. Muller-Landau**, and A. Jasentuliyana. 2001. The effects of density, spatial pattern and competitive symmetry on size variation in simulated plant populations. *American Naturalist* 158:438-450.
4. Nathan, R. and **H. C. Muller-Landau**. 2000. Spatial patterns of seed dispersal, their determinants and consequences for recruitment. *Trends in Ecology and Evolution* 15:278-285.
3. Levin, S. A. and **H. C. Muller-Landau**. 2000. The evolution of dispersal and seed size in plant communities. *Evolutionary Ecology Research* 2:409-435.
2. Levin, S. A. and **H. C. Muller-Landau**. 2000. The emergence of diversity in plant communities. *Comptes Rendus de l'Académie des Sciences, Sciences de la Vie* 323:129-139.
1. Achleh, A. S., T. G. Hallam, and **H. C. Muller-Landau**. 1995. Estimation of sticking and contact efficiencies in aggregation of phytoplankton: the 1993 SIGMA tank experiment. *Deep Sea Research II* 42:185-201.

OTHER PUBLICATIONS

- Muller-Landau, H. C.**, S. J. Wright, J. K. Zimmerman, Y. Y. Chen, I. F. Sun, R. Condit, R. Foster, S. P. Hubbell, J. V. LaFrankie, S. J. Mazer, S. Noor, M. Silman, J. Thompson, R. Valencia, G. Villa. In press. Seed rain, seed production and seed dispersal in four tropical forests. *Inside CTFS*.
- Muller-Landau, H. C.** 2004. Book review: *Integrating Ecology and Evolution in a Spatial Context* (edited by Jonathan Silvertown and Janis Antonovics, 2001, 438 pp.). *Quarterly Review of Biology* 79(3):331.
- S. Joseph Wright and **H. C. Muller-Landau**. 2004. The future of tropical forests. *Tropinet* 15(4):1-2.
- Muller-Landau, H. C.**, Yu Yun Chen, I Fang Sun, S. J. Wright, S. P. Hubbell, N. Supardi Noor. 2003. Seed dispersal in a lowland dipterocarp forest during two masting events. Proceedings of the Seminar on Ecological Research in Tropical Forests, (CFFPR series 2003), 19-21 August 2003, FRIM Kuala Lumpur, Malaysia
- Muller-Landau, H. C.** 2003. Seeds of understanding of plant diversity. *Proceedings of the National Academy of Sciences, USA* 100(4):1469-1471.

- Muller-Landau, H. C.** 1998. Book review: *Tropical Forest Remnants: Ecology, Management, and Conservation of Fragmented Communities* (Laurance, William F., and Richard O. Bierregaard, Jr., 1997, 616 pp.). *Ecoscience* 5(2):281-282.
- Muller-Landau, H. C.** 2001. Seed dispersal in a tropical forest – empirical patterns, their origins and their consequences for forest dynamics. PhD Dissertation. Princeton University.

MANUSCRIPTS IN REVIEW AND REVISION

- Muller-Landau, H.C.** In revision. Competition-colonization tradeoffs in tropical forests and their role in the maintenance of plant species diversity. *Tropical Forest Community Ecology* (eds. W. P. Carson and S. A. Schnitzer). Blackwell Scientific.
- Gilbert, B.G., S.J. Wright, **H.C. Muller-Landau**, K. Kitajima, A. Hernandez. In revision. Life history trade-offs in tropical trees and lianas. *Ecology*.

INVITED SEMINARS

- Carleton College, Minnesota. Seed rain in tropical forests and its importance for forest dynamics. October 31, 2005.
- Kellogg Biological Station, Michigan State University. Seed rain in tropical forests and its importance for forest dynamics. October 21, 2005.
- University of Puerto Rico, Rio Piedras. Seed rain in tropical forests and its importance for forest dynamics. June 1, 2005.
- Ohio University. Seed rain in tropical forests and its importance for forest dynamics. April 21, 2005.
- University of Michigan, Ann Arbor. Tropical tree life history strategies and community structure. March 25, 2003.
- University of Colorado, Boulder. Tropical tree life history strategies and community structure. March 6, 2003.
- University of Minnesota. Tropical tree life history strategies and community structure. February 19, 2003.
- University of Tennessee, Knoxville. Tropical tree life history strategies and community structure. January 27, 2003.
- University of Ulm, Germany. Seed dispersal in a tropical forest: empirical patterns, their origins, and their consequences for forest dynamics. December 18, 2001.

INVITED CONFERENCE PRESENTATIONS

- Muller-Landau, H. C.** Integrating theory and data to predict long-term effects of hunting on plant species composition and diversity. Association for Tropical Biology and Conservation annual meeting. Symposium on Hunting and Implications for Plants. Überlandia, Brazil. July 28, 2005.
- Muller-Landau, H. C.** and S. Joseph Wright. Competition-colonization trade-offs and seed limitation in tropical forests. International Botanical Congress. Symposium on Integrating the Dispersal-assembly and Niche-assembly Paradigms in Plant Community Ecology. Vienna, Austria. July 19, 2005.

- S. Joseph Wright and **H. C. Muller-Landau**. Seed dispersal and species distributions in tropical forests today and in the future. International Botanical Congress. Symposium on The impact of plant dispersal on biogeography: Current understanding and prospect. Vienna, Austria. July 19, 2005.
- Muller-Landau, H. C.** and F. R. Adler. How dispersal affects interactions with natural enemies and their contribution to diversity maintenance. Plenary speaker. International Symposium/Workshop on Frugivores and Seed Dispersal. Brisbane, Australia. July 11, 2005.
- Muller-Landau, H. C.** Relating functional traits, demography, and size distributions of tropical tree species and communities. Association for Tropical Biology and Conservation annual meeting. Symposium on Morphology and Life History Relationships Among Neotropical Forest Trees. Miami, Florida. July 15, 2004.
- Muller-Landau, H. C.** Interspecific and intersite variation in wood density of tropical trees. Association for Tropical Biology annual meeting, Symposium on Four Neotropical Forests. Panama City, Panama. August 2, 2002.
- Muller-Landau, H. C.,** J. K. Zimmerman, S. J. Wright, and J. Giacalone. Intersite and interannual variation in seed production and seed dispersal. Association for Tropical Biology annual meeting, Symposium on Tropical Forest Dynamics. Panama City, Panama. August 2, 2002.
- Muller-Landau, H. C.,** S. J. Wright, S. P. Hubbell, R. Condit, R. B. Foster. What life history trade-offs do tropical trees face, and how do they contribute to tree diversity? Association for Tropical Biology annual meeting, Symposium on Tropical Tree Diversity. Panama City, Panama. July 31, 2002.
- Muller-Landau, H. C.,** S. A. Levin, J. E. Keymer, and S. W. Pacala. Theoretical explorations of the evolution of long-distance dispersal: the example of specialized pests. Ecological Society of American annual meeting. Symposium on Long-Distance Dispersal. Madison, Wisconsin. August 6, 2001.
- Muller-Landau, H. C.,** S. J. Wright, O. Calderón, A. Hernández, S. P. Hubbell, R. Condit, and R. B. Foster. Recruitment limitation in a seasonally wet tropical forest on Barro Colorado Island, Panama. Plenary speaker. Symposium-workshop on Frugivores and Seed Dispersal. Rio Quente, Brazil. August, 2000.

CONTRIBUTED CONFERENCE PRESENTATIONS

- Beckman, N. and **H. Muller-Landau**. Implications of hunting for tropical plant community composition: Differential effects on seed removal. Association for Tropical Biology and Conservation Annual Meeting. Überlandia, Brazil. July, 2005.
- Muller-Landau, H.C.,** R.S. Condit, K.E. Harms, J.W. Ahmad, P. Ashton, S.A. Bohlman, S. Buyavejchewin, G. Chuyong, L. Co, S. Davies, S. Esufali, R. Foster, C.V.S. Gunatilleke, I.A.U.N. Gunatilleke, P. Hall, T. Hart, F. He, S. Hebbalalu, C. Hernandez, S.P. Hubbell, A. Itol, R. John, D. Kenfack, S. Kiratiprayoon, J. V. LaFrankie, D. Lagunzad, E. Losos, J-R. Makana, S. Noor, T. Ohkubo, N. Pongpattananurak, C. Samper, L.H. Seng, D. Shivaramaiah, R. Sukumar, I-F. Sun, S. Tan, S. Thomas, D. Thomas, J. Thompson, M. Uriarte, R. Valencia, M.I. Vallejo, G. Villa, C. Wills, T. Yamakura. Scaling of demographic rates and tree size distributions in tropical forests. Center for Tropical Forest Science annual meeting. Panama City, Panama. June 5, 2005.

- Gilbert, B.G., S.J. Wright, K. Kitajima, **H.C. Muller-Landau**, A. Hernandez. Life history trade-offs in tropical trees and lianas. Ecological Society of American annual meeting. August 5, 2004.
- Muller-Landau, H. C.**, S. W. Pacala, S. P. Hubbell, R. Condit, R. B. Foster. Characterizing species regeneration strategies with respect to light availability in a wet tropical forest. Ecological Society of American annual meeting. August 4, 2004.
- Muller-Landau, H. C.**, Yu Yun Chen, I Fang Sun, S. J. Wright, S. P. Hubbell, N. Supardi Noor. Seed dispersal in a lowland dipterocarp forest. Seminar on Ecological Research in Tropical Forests. Forest Research Institute of Malaysia, Kuala Lumpur, Malaysia. August 19, 2003.
- Muller-Landau, H. C.** and S. J. Wright. Seed mass and the tradeoff between seed arrival and seed survival in central Panama. Association for Tropical Biology and Conservation annual meeting. July 9, 2003.
- Muller-Landau, H.** and J. Zimmerman. Seed dispersal and production in Luquillo. Luquillo LTER meeting. University of Puerto Rico. San Juan, Puerto Rico. January 18, 2003.
- Muller-Landau, H. C.**, R. Condit, S. J. Wright, S. P. Hubbell, R. B. Foster. Life history diversity of tropical tree species and its consequences for forest-wide patterns of growth, mortality and size distributions. Ecological Society of America annual meeting, Tucson, Arizona. August 8, 2002.
- Adler, F. R., and **H. C. Muller-Landau**. The potential of localized natural enemies to maintain species diversity. Ecological Society of America annual meeting, Tucson, Arizona. August, 2002.
- Muller-Landau, H. C.**, S. P. Hubbell, S. W. Pacala, S. J. Wright, R. Condit, R. B. Foster. Interspecific differences in life history strategies of trees in a Panamanian forest: empirical patterns, physiological causes, and implications for forest dynamics. Center for Tropical Forest Science meeting. Singapore. June, 2000.
- Muller-Landau, H. C.**, S. J. Wright, O. Calderon, A. Hernandez. Recruitment limitation of tree species on Barro Colorado Island, Panama. Workshop on biodiversity and ecosystem function. Centre for Population Biology at Silwood Park, Imperial College of London, UK. May 25, 2000.
- Muller-Landau, H. C.**, S. J. Wright, S. P. Hubbell, R. B. Foster, R. Condit. Interspecific variation in seed shadows and fecundity of trees in a Neotropical forest. Ecological Society of American annual meeting, Spokane, WA August, 1999.
- Muller-Landau, H. C.**, S. J. Wright, O. Calderón, R. Condit, S. P. Hubbell, R. B. Foster. Interspecific variation in seed shadows and fecundity of trees in a neotropical forest. Center for Tropical Forest Science first network meeting. Washington, DC. July 1998.
- Muller-Landau, H. C.**, B. S. Wechsler, R. Pérez, W. E. Pugh, E. A. Carlisle, S. P. Hubbell, R. Condit, and R. B. Foster. Abundance, distribution, growth and mortality patterns of seedlings and small saplings in a neotropical forest. Association for Tropical Biology annual meeting. San Jose, Costa Rica. June 1997.
- Muller-Landau, H.** and R. L. Boyce. WINWAT meets MTCLIM: coupling an input-intensive winter water relations model with an output-sparse mountain climate model. Poster. Ecological Society of America annual meeting. Snowbird, UT. August 1995.
- Muller-Landau, H. C.**, J. Weiner, and A. Jasentuliyana. Spatial pattern, competitive asymmetry and size variability in an individual-based plant population model. Southeastern Mathematical and Statistical Ecology Conference, Raleigh, NC. 1994.

OTHER SEMINARS

- Muller-Landau, H. C.** Spatial dynamics of plant species and their specialized natural enemies. Friday noon seminar series, Dept of Ecology, Evolution and Behavior, University of Minnesota. April 29, 2005.
- Muller-Landau, H. C.** Spatial dynamics of plant species and their specialized natural enemies. Saint Anthony Falls Laboratory, University of Minnesota. April 13, 2005.
- Muller-Landau, H.** Tree size distributions in tropical forests. Princeton University, Princeton, NJ. Carbon Mitigation Initiative meeting. April 12, 2004.
- Muller-Landau, H.** Sapling growth and light availability in tropical forests: analyzing general patterns and sources of variation. Princeton University, Princeton, NJ. Theoretical ecology lab tea. March 23, 2004.
- Muller-Landau, H.** Understanding tree size distributions in tropical forests. Princeton University, Princeton, NJ. Ecology and Evolutionary Biology postdoc forum. February 19, 2004.
- Muller-Landau, H.** Scaling of demographic rates and tree size distributions in tropical forests. National Center for Ecological Analysis and Synthesis. Tropical Tree Life History Strategies working group. Santa Barbara, CA. December 7, 2003.
- Muller-Landau, H.** Comparing tropical forests: tree size distributions, seed dispersal, and related life history traits. National Center for Ecological Analysis and Synthesis. Advisory Council meeting. Santa Barbara, CA. September 11, 2003.
- Muller-Landau, H.** Understanding size distributions in tropical forests. National Center for Ecological Analysis and Synthesis. Santa Barbara, CA. May 12, 2003.
- Muller-Landau, H.** Understanding size distributions in tropical forests. Smithsonian Tropical Research Institute, Panama City, Panama. April 15, 2003.
- Muller-Landau, H.** Community ecology of trees on BCI: How can ARTS help? Workshop on plant-animal interactions. Smithsonian Tropical Research Institute, Panama. April 13, 2003.
- Muller-Landau, H.** Seed dispersal in two tropical forests: empirical patterns, their origins, and their consequences for forest dynamics. University of Utah, Salt Lake City. December 6, 2002.
- Muller-Landau, H.** Tropical tree life history strategies and community structure. Laboratoire ECOFOG, French Guiana. Ecologie Comparative en Forêt Tropicale (Comparative Ecology in Tropical Forests). October 3, 2002.
- Muller-Landau, H., K. Harms, R. Condit, R. John, F. He and the CTFS working group.** Growth, mortality and the size distributions of tropical trees. Center for Tropical Forest Science workshop. Gamboa, Panama. July 25, 2002.
- Muller-Landau, H.** Seed production and dispersal in a tropical forest: empirical patterns, their origins, and their consequences for forest dynamics. National Center for Ecological Analysis and Synthesis. Santa Barbara, CA. February 7, 2002.
- Muller-Landau, H.** Interspecific and intersite variation in tree life history strategies: empirical patterns, their origins, and their consequences for forest dynamics. Cocha Cashu Biological Station, Peru. October 19, 2001.
- Muller-Landau, H. C.** Seed dispersal in a tropical forest: empirical patterns, their origins, and their consequences for forest dynamics. Princeton University, Princeton, NJ. Final public oral thesis defense. September 4, 2001.
- Muller-Landau, H. C., S. P. Hubbell, S. W. Pacala, S. J. Wright, R. Condit, R. B. Foster.** Interspecific differences in life history strategies of trees in a Panamanian forest: empirical

patterns, physiological causes, and implications for forest dynamics. Cambridge University, Cambridge, UK. May 22, 2000.

- Muller-Landau, H. C.**, J. Wright, O. Calderon, S. Hubbell, R. Condit, and R. Foster. Recruitment limitation of tree species on Barro Colorado Island. Princeton University, Princeton, NJ. Theoretical ecology lab tea. May 12, 2000.
- Muller-Landau, H.** Interspecific variation in strategies of trees in a Panamanian tropical forest. Princeton University, Princeton, NJ. Ecology and Evolutionary Biology annual retreat. Fall 1999.
- Kaplan, S. and **H. Muller-Landau**. Variation in light transmittance through crowns of different tree species: Empirical patterns, their theoretical roots, and their implications for forest dynamics. Bambi seminar. Smithsonian Tropical Research Institute. Barro Colorado Island, Panama. July 1999.
- Muller-Landau, H.** Interspecific variation in seed dispersal in a tropical forest. Theoretical Ecology lab tea. March 1999.
- Muller-Landau, H.**, S. J. Wright, O. Calderon, S. P. Hubbell, R. B. Foster, R. Condit. Interspecific variation in seed shadows and fecundity of trees in a neotropical forest. Smithsonian Tropical Research Institute. Bambi seminar. Smithsonian Tropical Research Institute. Barro Colorado Island, Panama. February 1999.
- Muller-Landau, H.**, J. Dalling, S. J. Wright, K. Harms. Disentangling the effects of dispersal patterns, density-dependent mortality, and habitat preferences. Princeton University, Princeton, NJ. Ecology and Evolutionary Biology annual retreat. Fall 1998.
- Muller-Landau, H.** Interspecific differences in seed dispersal curves of trees on Barro Colorado Island. Bambi seminar. Smithsonian Tropical Research Institute. Barro Colorado Island, Panama. May 1998.
- Muller-Landau, H.** Interspecific differences in mortality of tropical tree species on Barro Colorado Island. Princeton University, Princeton, NJ. Ecology and Evolutionary Biology annual retreat. Fall 1997.
- Muller-Landau H.** Interspecific differences in sapling growth as a function of light availability: A comparative study of tropical trees using fisheye photos. Princeton University, Princeton, NJ. Ecology and Evolutionary Biology annual retreat. Fall 1996.

TEACHING EXPERIENCE

- Ecology (BIOL 3407)**, University of Minnesota. Co-taught large (120 student) undergraduate lecture and lab course for biology majors with David Tilman. Fall 2004.
- Comparing Temperate and Tropical Plant Communities**, University of Minnesota. Co-led graduate seminar with David Tilman. Fall 2004.
- Methods for Studying Seed Dispersal Patterns and Their Consequences**, workshops presented to colleagues and students in Quito, Ecuador (April 29-30, 2003, Pontificia Universidad Católica del Ecuador, presented in Spanish) and in Pasoh, Malaysia (August 8, 2003, Pasoh Forest Reserve, Forest Research Institute, presented in English).
- Orientation and Introduction to Teaching**, McGraw Center for Teaching and Learning, Princeton University. Led workshops on teaching for new graduate teaching assistants. August 2000.
- Distribuciones, Pruebas de Normalidad y Transformaciones**. Guest lecture, student-organized statistics course. Smithsonian Tropical Research Institute. March 25, 2000.

ADVISING EXPERIENCE

Graduate students advised:

Noelle Beckman, started Fall 2004 in the Ecology, Evolution and Behavior Graduate Program at the University of Minnesota. Awarded an NSF Graduate Fellowship in spring 2005 for her planned research on “Implications of hunting for tropical plant community composition: Differential effects on seed dispersal, seed predation and seedling establishment.”

Marta Vargas (Panamanian), starting Fall 2005 in the Ecology, Evolution and Behavior Graduate Program at the University of Minnesota. Awarded a Fullbright fellowship.

Undergraduate students advised:

Josh Dumas, University of Minnesota, summer 2005.

Sarah Kaplan, Princeton University, summer 1999.

SERVICE AND OUTREACH

Member of the Editorial Board, *Ecological Research*. 2004-present.

Reviewer for the journals *Science*, *PNAS*, *American Naturalist*, *Ecology Letters*, *Ecology*, *Journal of Ecology*, *Oecologia*, *Journal of Theoretical Biology*, *Theoretical Population Biology*, *Bulletin of Mathematical Biology*, *Biotropica*, *Journal of Tropical Ecology*, *Ecological Applications*, *Ecoscience*, *New Forests*, and *Annales Botanici Fenici*, as well as for Princeton University Press, NSF, WOTRO (the Netherlands NSF equivalent), and the Swiss National Science Foundation.

Contributing member of the *Faculty of 1000*; one of 1400 biologists chosen to highlight important papers. <http://www.facultyof1000.com>

Outreach to Minnesota students through the Bell Museum of Natural History at the University of Minnesota as part of the 2003-04 JASON curriculum on “Rainforests at the Crossroads.”

PROFESSIONAL SOCIETIES

Ecological Society of America
American Society of Naturalists
Association for Tropical Biology and Conservation
Organization for Tropical Studies.

LANGUAGES

English, Spanish, German, French (reading)