

Carla Restrepo
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Expertise and research interests

My primary research interest centers in the study of tropical landscapes including processes underlying their large-scale dynamics. Throughout the years I developed an expertise on seed dispersal and disturbance, two processes that influence the functioning of tropical landscapes at large scales. Originally trained as a Community Ecologist I have shifted my interests to Landscape Ecology and Macroecology. Currently my work is at the intersection between these disciplines, and I seek to identify problems that can contribute to the conservation, management, and restoration of tropical landscapes.

Professional preparation

| <i>Position, Institution</i> | <i>Major/area</i> | <i>Degree, dates</i> |
|------------------------------------------------|-------------------|--------------------------|
| Undergraduate, Universidad del Valle, Colombia | Biology | B. Sc., January 1984 |
| Graduate, University of Florida | Zoology | M. Sc., May, 1990 |
| Graduate, University of Florida | Zoology | Ph. D., December, 1995 |
| <i>Postdoctoral Institution(s)</i> | | |
| University of Florida | Landscape Ecology | January 1996-May 1996 |
| Stanford University | Ecosystem Ecology | May 1996-Sep. 1997 |
| University of New Mexico | Landscape Ecology | September 1997-Dec. 1998 |

Appointments

Associate Professor, Department of Biology, University of Puerto Rico-RP, 2008 - present
Assistant Professor, Department of Biology, University of Puerto Rico-RP, 2001 - 2008
Research Assistant Professor, Department of Biology, University of New Mexico, 2000 – 2001
Postdoctoral fellow, Department of Biology, University of New Mexico, 1999
NSF Minority Postdoctoral Fellow, University of Florida, Stanford University, and University of New Mexico, 1996-1998
Research Associate, OSSO, Universidad del Valle, Colombia, 1996-2002
Graduate Teaching Assistant, University of Florida, 1990-1995
Graduate Research Assistant, University of Florida, 1988
Research Coordinator, Reserva Natural La Planada-FES, Colombia, 1992-1993
Ecologist, Heritage Program-Centro de Datos para la Conservación-CVC, Colombia, 1984-1986

Products

Sutton, L. and C. Restrepo. 2013. Natural disasters, diverse economy and livelihoods in the Sierra de Las Minas, Guatemala. *Journal of Latin American Geography* 12: 137-164.
Ramos-Scharron, C., E. Castellanos, and C. Restrepo. 2012. The role of shallow landslides in the downslope transfer of organic matter and its implications on the residence time of carbon in a tropical mountain system. *Journal of Geophysical Research - Biogeosciences* 117, G03016. doi:10.1029/2011JG001838
Restrepo, C. and N. Alvarez. 2006. Landslides and their impact on land-cover in the mountains of Mexico and Central America. *Biotropica* 38:446-457. DOI: 10.1111/j.1744-7429.2006.00178.x
Restrepo, C., P. Vitousek, and P. Neville. 2003. Landslides significantly alter land cover and the distribution of biomass: An example from the Ninole ridges of Hawai'i. *Plant Ecology* 166:131-143. DOI: 10.1023/A:1023225419111
Brown, J. H., V. K. Gupta, B-L. Li, B. T. Milne, C. Restrepo, and G. B. West. 2002. The fractal nature of nature: Power laws, ecological complexity, and biodiversity. *Philosophical Transactions of the Royal Society of London Series B-Biological Sciences* 357:619-629. doi: 10.1098/rstb.2001.0993
Restrepo, C. and P. Vitousek. 2001. Landslides, alien species, and the diversity of a Hawaiian montane mesic ecosystem. *Biotropica* 33:409-420. DOI: 10.1111/j.1744-7429.2001.tb00195.x

Other products

- Delgado, D., A. Galindo, M.E. Perez, T. Giray, and C. Restrepo. 2012. Forecasting the influence of climate change on agroecosystem services: Impacts on honey yields in a small-island developing state. *Psyche: A Journal of Entomology*, doi:10.1155/2012/951215
- Xu, L., T. Hanson, E. Bedrick, and C. Restrepo. 2010. Hypothesis tests on mixture model components with application to ecological and agricultural data. *Journal of Agricultural, Biological, and Environmental Statistics* 15:308–326. doi:10.1007/s13253-010-0020-z
- Allen, A., W. Pockman, C. Restrepo, and B. T. Milne. 2008. Allometry, growth, and population regulation of the desert shrub, *Larrea tridentata*. *Functional Ecology* 22:197-204. DOI: 10.1111/j.1365-2435.2007.01376.x
- Allen, C. R., A. S. Garmestani, T. D. Havlicek, P. A. Marquet, G. D. Peterson, C. Restrepo, C. A. Store, B. Weeks. 2006. Keystone processes and ecological organization: Evaluating alternative explanations for patterns in body size distribution. *Ecological Letters* 6:630-643. doi: 10.1111/j.1461-0248.2006.00902.x
- Restrepo, C., N. Gómez, and S. Heredia. 1999. Anthropogenic edges, treefall gaps, and fruit-frugivore interactions in a Neotropical montane forest. *Ecology* 80:668-685. doi: 10.1890/0012-9658(1999)080[0668:AETGAF]2.0.CO;2

Synergistic activities

- Planning Committee - Scaling UP - Future of Environmental Decisions Workshop, Ecological Society of North America, 2013.
- Faculty Mentor, Sociedad Ecoambiental one of three student organizations in the College of Natural Sciences of the University of Puerto Rico-Rio Piedras, Fall 2010. The group held bimonthly meetings during which I lectured about sustainability and water issues and designed together with the students a several research and outreach activities to bring awareness about water use.
- Organizer, Symposium-workshop on Landslide Ecology – A Perspective from Tropical Mountainscapes, Association for Tropical Biology and Conservation Annual Meeting, Kunming, China, July 2006. (1-day session of oral presentations, 18 speakers from 9 countries, 40 participants; 2-afternoon workshops examining the geologic and hydrologic factors underlying the formation of landslides and discussing major avenues for future research and a concept paper)
- Organizer, Symposium on Multimodality in Ecological Variables: A Theoretical Puzzle and a Statistical Challenge, University of Puerto Rico-Rio Piedras, San Juan, PR, March 2004 (3-day symposium, 10 speakers and 20 participants)
- Councilor, Association for Tropical Biology, 2002-2003
- Mentor, Women in Science and Engineering Program, University of New Mexico, NM, 1998

Thesis Advisees and Postgraduate-Scholars Sponsored

I am currently mentoring 1 Ph.D., 2 M.Sc., and 2 B.Sc. students at the University of Puerto Rico-RP.