

CURRICULUM VITAE

PERSONAL

Name: Gloriana Chaverri
Address: 4646 Alamedas, Golfito 60701, Costa Rica
Phone number: 2775-1249
E-mail: gchaverri@upacificosur.org

EDUCATION

2001-2006 Boston University, Boston, Massachusetts, U.S.A.
Ph.D., Biology

1990-1995 Universidad Nacional, Heredia, Costa Rica
B.S., Tropical Biology

POSTDOCTORAL TRAINING

2009-2012 Boston University, Boston, Massachusetts, U.S.A.
Postdoctoral Research Associate

2006-2008 Western Michigan University, Kalamazoo, Michigan, U.S.A.
Postdoctoral Researcher

APPOINTMENTS

2011- Professor, Universidad de Costa Rica, Golfito, Costa Rica

2001-2006 Teaching Fellow, Boston University, Boston, Massachusetts, U.S.A.

2000-2002 Adjunct Lecturer, Department of Biology, The University of Kansas

1998-2001 Administrative Assistant, Tropical Studies Institute, Golfito, Costa Rica

1998-2000 Tropical Biology Instructor, Tropical Studies Institute, Golfito, Costa Rica

1997-1999 Field Biology Course Assistant, Tropical Studies Institute, Golfito, Costa Rica

1995-1996 Research Assistant, Laboratory of Microbiology, Universidad Nacional, Costa Rica

AWARDS

1996 Best student of the Department of Biological Sciences, Universidad Nacional, Honored by the Rector

1995 Best student of the Department of Biological Sciences, Universidad Nacional, Honored by the Rector

AD HOC REFEREE FOR SCIENTIFIC JOURNALS

Acta Chiropterologica, Animal Behaviour, Behavioral Ecology, Behavioral Ecology and Sociobiology, Biotropica, Ceylon Journal of Science, Interciencia, Journal of Ethology, Journal of Comparative Physiology, Journal of Morphology, Journal of Zoology, Mammal Review, Mammalian Biology, Naturwissenschaften, New Zealand Journal of Ecology, PLoS ONE, Revista de Biología Tropical, Revista Mexicana de Biodiversidad UNAM, UNED Research Journal

AD HOC REFEREE FOR GRANTING INSTITUTIONS

Rumanian National Council for Research and Development
Graduate Women in Science
Czech Science Foundation

THESIS ADVISOR

Marcela Peña Acuña, M.Sc. in Sustainable Development, Universidad de Costa Rica (2011-). Project: Frugivorous bats as indicators of ecological disturbance and their role in habitat restoration.

Willy Pineda Lizano, Ph.D. Program in Natural Sciences for Development, Instituto Tecnológico de Costa Rica (2012-). Project: Diversity, seasonal, and altitudinal movements of neotropical bat communities, and its relation to climatic conditions, reproduction, and food availability in Costa Rica.

Guido Saborío, M.Sc. in Management of Protected Areas and Regional Development, Universidad para la Cooperación Internacional (2014-). Project: Terrestrial mammal monitoring in Corcovado National Park: protocol analysis and management recommendations.

MEMBERSHIP IN PROFESSIONAL SOCIETIES

Behavioral Ecology Society. Member since 2013.
Animal Behavior Society. Member since 2010.
American Society of Mammalogists. Member since 2014.

RESEARCH FUNDING

Research grants

- 2014 Universidad de Costa Rica. Project: Bats of the Osa Region: diversity and their function in forest regeneration. \$10,000.
- 2014 Animal Behavior Society. Project: The role of leaf acoustics on roost preference in Spix's disc-winged bat. Amount: \$800.
- 2013 Conservation, Food and Health Foundation. Project: Fruit-eating bats and endophytic fungi: an unexplored indirect mutualism. Amount: \$19,970.
- 2013 Rufford Small Grant for Nature Conservation. Project: Artificial bat roosts and tropical forest regeneration. Amount: £5,910.

- 2013 Greg Gund Memorial Fellowship, Osa Conservation. Project: Succession in bat colonization processes of artificial roosts and its effect on Neotropical forest regeneration. Amount: \$2,000.
- 2012 Natural Resource Defense Council. Project: Succession in bat colonization processes of artificial roosts and its effect on Neotropical forest regeneration. Amount: \$3,714.
- 2012 Waitt Grants Program, National Geographic Society. Project: Exploring bat diversity in the Osa Peninsula: local capacity building for research and long term monitoring. Amount: \$14,765.
- 2011 Committee for Research and Exploration, National Geographic Society. Project: Maintaining intra-group cohesion and extra-group segregation using individually recognized social calls. Amount: \$19,771.
- 2010 Grant providing field equipment, Idea Wild. Project: A comprehensive approach to understanding and protecting bat populations in a biodiversity hotspot. Amount: \$600.
- 2009 Scott Neotropic Fund, Cleveland Metroparks Zoo and Cleveland Zoological Society. Project: Understanding how bats cope with habitat loss. Amount: \$4,950.
- 2007 Rufford Small Grant for Nature Conservation, The Rufford Maurice Laing Foundation. Project: Understanding how bats cope with habitat degradation and destruction. Amount: £4,967.
- 2005 Grants-in-aid of Research, American Society of Mammalogists. Project: Genetic consequences of a variable fission-fusion social system. Amount: \$1,468.
- 2004 Conservation, Food and Health Foundation. Project: The relationship between feeding and roosting resources and the abundance of bats. Amount: \$8,700.
- 2004 Student Scholarship, Bat Conservation International. Project: The relationship between feeding and roosting resources and the abundance of bats. Amount: \$2,500.
- 2004 Scott Neotropic Fund, Cleveland Metroparks Zoo. Project: The relationship between feeding and roosting resources and the abundance of tent-roosting bats in southwestern Costa Rica. Amount: \$4,800.
- 2003 Grant providing field equipment, Idea Wild. Project: Mating behavior of tent-making bats. Amount: \$700.
- 2003 Latin American Student Field Research Award, American Society of Mammalogists. Project: Roost construction in New World tent-making bats. Amount: \$1,000.
- 2003 Financiamiento complementario a la comisión de incentivos para estudios de posgrado, Consejo Nacional para Investigaciones Científicas y Tecnológicas de Costa Rica

(CONICIT) y Ministerio de Ciencia y Tecnología (MICIT). Project: Ecological correlates of mating systems in tent-making bats. Amount: \$1,000.

Travel grants

- 2014 Travel award to attend the conference of the International Society for Behavioral Ecology. Amount: \$1000.
- 2011 Fondo de Incentivos para Asistencia a Eventos Científicos, Consejo Nacional para Investigaciones Científicas y Tecnológicas de Costa Rica (CONICIT) y Ministerio de Ciencia y Tecnología (MICIT). Amount: \$1,500.
- 2011 Emerging Nations Award for the Joint meeting of the Animal Behavior Society and the International Ethological Society. Amount: \$400.

TEACHING EXPERIENCE

Instructor, Fundación Saimiri

Field Techniques for Bat Research (2014)

Invited Resource Faculty, Organization for Tropical Studies

An Introduction to Tropical Ecology (2014)

Invited Instructor, Instituto de Biodiversidad Tropical

Lecture on Capturing and Handling Bats for International Wildlife Rescuers (2013, 2014)

Professor, Universidad de Costa Rica

Introductory Biology (2011)

Ecology (2011-2012)

Research Seminar (2012-2013)

Teaching Fellow, Boston University

Ecology (2001-2006)

Biology of Mammals (2002)

Adjunct lecturer, Department of Biology, The University of Kansas

Field Research on Behavior and Ecology of Bats (2002)

Introduction to the Ornithology of Costa Rica (2000-2001)

Tropical Ecology (2000-2001)

Mammals of the Neotropics (2000-2001)

People and the Forest (2000-2001)

Tropical Biology Instructor, Tropical Studies Institute, Golfito, Costa Rica

Introduction to the Ornithology of Costa Rica (1998-2000)

Tropical Ecology (1998-2000)

Mammals of the Neotropics (1998-2000)

Biodiversity of the Rainforest (1998-2000)

Ethnobotany of Costa Rica (1998-2000)

Field Biology Course Assistant, Tropical Studies Institute, Golfito, Costa Rica
Natural History of Costa Rica (1997-1999)
Ethnobotany of Costa Rica (1997-1999)
Socio-biology of Purruja Mangroves (1997-1999)

INVITED SEMINARS

- 2014 Ecology and behavior of Costa Rican bats, Instituto Tecnológico de Costa Rica.
- 2014 Osa bats, Talk on biodiversity and development in Península de Osa, Sistema Nacional de Áreas de Conservación.
- 2013 Artificial bat roosts and tropical forest regeneration, Universidad Nacional Autónoma de Nicaragua-León.
- 2013 Capture and handling of Chiroptera. Course International Wildlife Rescuers, Institut de Biodiversitat Tropical.
- 2011 Acoustic communication in bats. Course on the Biology of Tropical Bats. Freie Universität Berlin and University of Bristol
- 2011 Costa Rican Ecosystems. Course on the Biology of Tropical Bats. Freie Universität Berlin and University of Bristol
- 2008 Geographic variation in the social behavior of two foliage-roosting bats. Monteverde Institute
- 2006 Bats: cultural vision and their role in the ecosystem. Universidad Nacional
- 2005 Geographic variation in behavior. Universidad Latina de Costa Rica
- 2005 Bats: myth, reality and importance. Universidad Nacional
- 2002 Bat mating systems. Programa de Conservación de Murciélagos de Costa Rica, Museo Nacional de Costa Rica

CONFERENCE PRESENTATIONS

- 2014 G. Chaverri and E. H. Gillam. Roosts amplify social calls in Spix's disc-winged bat. Poster presented at the International Society for Behavioral Ecology meeting in New York city, New York.
- 2014 G. Chaverri and E. H. Gillam. Personalities in the communication system of Spix's disc-winged bat (*Thyroptera tricolor*). Paper presented at the Latin American Bat Conference in Quito, Ecuador.

- 2013 G. Chaverri. Artificial bat roosts and tropical forest regeneration. Paper presented at the Jornadas de Acción Social e Investigación, Universidad de Costa Rica, Recinto de Golfito.
- 2013 G. Chaverri and E. H. Gillam. Roosts amplify social calls in Spix's disc-winged bat. Paper presented at the International Bat Research Conference in San José, Costa Rica.
- 2012 G. Chaverri, E. H. Gillam, and T.H. Kunz. Social calls facilitate group cohesion in Spix's disc-winged bat. Paper presented in the Annual North American Symposium on Bat Research, San Juan, Puerto Rico.
- 2012 G. Chaverri, G. Saborío, and D. Kelm. Succession in the colonization of artificial roosts by bats and its effect on neotropical forest regeneration. Paper presented at the Jornadas de Acción Social e Investigación, Universidad de Costa Rica, Recinto de Golfito.
- 2012 G. Chaverri, E. H. Gillam, and T.H. Kunz. Cooperation during roost search and its role in the formation and maintenance of cohesive groups in the disc-winged bat, *Thyroptera tricolor*. Paper presented at the Jornadas de Acción Social e Investigación, Universidad de Costa Rica, Recinto de Golfito.
- 2011 G. Chaverri. The use of social calls during roost search in bats. Paper presented at the First Research Symposium in ACOSA, Osa Peninsula, Costa Rica.
- 2011 E.H. Gillam and G. Chaverri. Acoustic communication and group cohesion in neotropical tent-making bats. Paper presented in the Annual North American Symposium on Bat Research, Toronto, Canada.
- 2011 M. Buchalski, G. Chaverri, and M. Vonhof. Mark-recapture data reveals both age-structure and seasonal variation in survival in *Thyroptera tricolor*. Paper presented in the Annual North American Symposium on Bat Research, Toronto, Canada.
- 2011 G. Chaverri and E. H. Gillam. Acoustic signaling of roost location in tent-making bats. Paper presented in the Joint Meeting of the Animal Behavior Society and the International Ethological Society, Bloomington, Indiana.
- 2010 G. Chaverri, E. H. Gillam, and T.H. Kunz. Understanding cooperation in the Neotropical leaf-roosting bat *Thyroptera tricolor*. Paper presented in the International Bat Research Conference in Prague, Czech Republic.
- 2010 K. Montero and G. Chaverri. Dynamics of roost entrance in a leaf-roosting bat. Paper presented in the International Bat Research Conference in Prague, Czech Republic.
- 2010 E. H. Gillam and G. Chaverri. Marco! Polo! Social calls used by *Thyroptera tricolor* for locating roostmates. Paper presented in the International Bat Research Conference in Prague, Czech Republic.

- 2010 E. H. Gillam and G. Chaverri. Marco! Polo! Social calls used by leaf-roosting bats for locating roostmates. Paper presented in the Annual Meeting of the Animal Behavior Society, Williamsburg, Virginia.
- 2009 E. H. Gillam, G. Chaverri, and M.J. Vonhof. Marco! Polo! Social calls used by *Thyroptera tricolor* for locating roostmates. Paper presented in the Annual North American Symposium on Bat Research, Portland, Oregon.
- 2008 M.R. Buchalski, G. Chaverri, and M.J. Vonhof. Correlating roost habitat availability and local population densities: a first step toward determining carrying capacity for Spix's disk-winged bat, *Thyroptera tricolor*, in southern Costa Rica. Poster presented in the Annual North American Symposium on Bat Research, Scranton, Pennsylvania.
- 2007 G. Chaverri and M.J. Vonhof. Comparative social structure of Spix's disc-winged bat, *Thyroptera tricolor*. Paper presented in the International Bat Research Conference in Mérida, México.
- 2005 G. Chaverri, O.E. Quirós, and T.H. Kunz. Ecological correlates of home range size variation in the tent-making bat *Artibeus watsoni*. Paper presented in the Annual North American Symposium on Bat Research, Sacramento, California.
- 2004 G. Chaverri. Reproductive biology and behavior of the tent-making bat *Artibeus watsoni*. Paper presented in the Annual North American Symposium on Bat Research, Salt Lake City, Utah.
- 2002 G. Chaverri. Roost fidelity in the tent-making bat *Artibeus watsoni* (Chiroptera: Phyllostomidae). Poster presented in the Annual North American Symposium on Bat Research, Burlington, Vermont.

PUBLICATIONS

Book chapters:

Chaverri, G. and Kunz, T. H. 2010. Ecological determinants of social systems: perspectives on the functional role of roosting ecology in the social behavior of tent-roosting bats. In *Advances in the Study of Behavior*, vol. 42 (ed. R. Macedo), pp. 275-318. Burlington: Academic Press.

Research articles:

Buchalski, M. R., G. Chaverri, M.J. Vonhof. 2013. When genes move farther than offspring: Gene flow by male gamete dispersal in the highly philopatric bat species *Thyroptera tricolor*. *Molecular Ecology*. In press.

Chaverri, G. and E. H. Gillam. 2013. Sound amplification by means of a horn-like roosting structure in Spix's disc-winged bat. *Proceedings of the Royal Society of London*, 280.

Gillam, E.H., G. Chaverri, B.K. Montero, and M. Sagot. 2013. Social calls produced within and near the roost in two species of tent-making bats, *Dermanura watsoni* and *Ectophylla alba*. PLoS ONE, 8: e61731.

Chaverri, G., Gillam, E.H., and T.H. Kunz. 2013. A call-and-response system facilitates group cohesion among disc-winged bats. Behavioral Ecology, 24: 481-487.

Gillam, E.H. and G. Chaverri. 2012. Strong individual and weaker group signatures in the contact calls of Spix's disk-winged bat, *Thyroptera tricolor*. Animal Behaviour, 83: 269-276.

Chaverri, G. and T.H. Kunz. 2011. Response of a bat specialist to the loss of a critical resource. PLoS ONE, 6(12): e28821.

Chaverri, G. and T.H. Kunz. 2011. All-offspring natal philopatry in a neotropical bat. Animal Behaviour, 82: 1127-1133.

Chaverri, G. and M.J. Vonhof. 2011. Reproduction and growth in a neotropical insectivorous bat. Acta Chiropterologica, 13: 147-155.

Chaverri, G., and E.H. Gillam. 2010. Cooperative signaling behavior of roost location in a leaf-roosting bat. Communicative & Integrative Biology, 3: 1-4.

Chaverri, G. 2010. Comparative social network analysis in a leaf-roosting bat. Behavioral Ecology and Sociobiology, 64: 1619-1630.

Chaverri, G., E.H. Gillam and M.J. Vonhof. 2010. Social calls used by a leaf-roosting bat to signal location. Biology Letters, 6: 441-444.

Chaverri, G., C.J. Schneider and T.H. Kunz. 2008. Mating system of the tent-making bat *Artibeus watsoni* (Chiroptera: Phyllostomidae). Journal of Mammalogy, 89:1361-1371.

Chaverri, G., O. E. Quirós, M. Gamba-Ríos and T. H. Kunz. 2007. Ecological correlates of roost fidelity in the tent-making bat *Artibeus watsoni*. Ethology, 113:598-605.

Chaverri, G., O. E. Quirós, and T. H. Kunz. 2007. Ecological correlates of range size in the tent-making bat *Artibeus watsoni*. Journal of Mammalogy, 88:477-486.

Chaverri, G., M. Gamba-Ríos and T. H. Kunz. 2007. Range overlap and association patterns in the tent-making bat *Artibeus watsoni*. Animal Behaviour, 73:157-164.

Chaverri, G. and T. H. Kunz. 2006. Roosting ecology of the tent-roosting bat *Artibeus watsoni* (Chiroptera: Phyllostomidae) in southwestern Costa Rica. Biotropica, 38:77-84.

Chaverri, G. 2006. Flora bacteriana aeróbica del tracto digestivo del vampiro común, *Desmodus rotundus* (Chiroptera: Phyllostomidae). Revista de Biología Tropical, 54:717-724.

Chaverri, G. and T.H. Kunz. 2006. Reproductive biology and postnatal development in the tent-making bat *Artibeus watsoni* (Chiroptera: Phyllostomidae). *Journal of Zoology*, 270:650-656.

SELECTED PRESS COVERAGE

- 2013 **Nature**: <http://www.nature.com/news/bats-use-ear-trumpets-for-social-calls-1.13960>
Science: <http://news.sciencemag.org/plants-animals/2013/10/scienceshot-bats-use-megaphones-jungle>
National Geographic: <http://newswatch.nationalgeographic.com/2013/10/15/bats-use-rolled-up-leaves-as-trumpets/>
Discovery News: <http://news.discovery.com/animals/bat-rocks-out-in-speaker-like-roost-131015.htm>
LiveScience: <http://www.livescience.com/40429-speak-up-costa-rican-bats-use-leaves-as-hearing-aids.html>
Der Standard: <http://derstandard.at/1381368700478/Fledermaeuse-mit-Megafon>
National Geographic Weekend: <http://bit.ly/14GatQe>
- 2012 **Labor&More**: <http://www.laborundmore.de/research/5370,439818/Prof.-Dr.-Gloriana-Chaverri/Sozialrufe-und-Gruppenbildung-bei-Fledermaeusen.html>
- 2010 **Spiegel**: <http://www.spiegel.de/wissenschaft/natur/0,1518,671550,00.html>
Berliner Morgenpost: <http://mobil.morgenpost.de/web-wissen/article1237700/Fledermaeuse-rufen-sich-nette-Nistplaetze-zu.html?emvcc=-1>
Derwesten: <http://www.derwesten.de/panorama/fledermaeuse-informieren-sich-gegenseitig-id3305868.html>

OTHER ACTIVITIES

- 2012 Scientific advisor for the BBC Natural History Unit (Show: “The Dark”)
2010 Local radio appearance for La Voz de Osa (Show: “Despertar en Osa”)