# J. Angel (Angelo) Soto-Centeno

American Museum of Natural History Department of Mammalogy 200 Central Park West New York, NY 10024 asoto-centeno@amnh.org mormoops@gmail.com XXX-XXX-XXX www.mormoops.com @Mormoops

## **Current Appointment**

Jul 2024 – present	American Museum of Natural History, New York, NY
	Assistant Curator of Mammalogy; Division of Vertebrate Zoology
Jul 2024 – present	American Museum of Natural History, New York, NY
	Assistant Professor; Richard Gilder Graduate School

### **Other Appointments**

Sep 2021 – Jul 2024	Rutgers University, Newark, NJ
	Assistant Professor of Evolutionary Biology; Department of Earth & Environmental Sciences
Sep 2017 – Aug 2021	Rutgers University, Newark, NJ
	Assistant Professor of Evolutionary Biology; Department of Biological Sciences

### **Professional Museum Experience**

Dec 2013 – Dec 2016	American Museum of Natural History, New York, NY
	Theodore Roosevelt & Gerstner Postdoctoral Fellow; Department of Mammalogy
Jan 2015 – Dec 2015	American Museum of Natural History, New York, NY
	Content Advisor, Digital Tree of Life Project: Mammals; Department of Digital Media
Aug 2007 – Aug 2009	Florida Museum of Natural History, Gainesville, FL
	Curatorial Assistant; Genetic Resources Repository
Jun 2004 – Aug 2007	San Diego Natural History Museum, San Diego, CA
	Collections Manager; Department of Herpetology
Aug 2003 – Aug 2007	San Diego Natural History Museum, San Diego, CA
	Research Assistant; Department of Birds and Mammals

## Education

- Dec 2013 Ph.D. Biology University of Florida, Gainesville, FL
   Dissertation: Extinction and phylogeography of Caribbean bats during the late Quaternary Committee: David L. Reed, Susan Cameron, Michael Miyamoto, Gustav Paulay, David W. Steadman
   Jun 2004 M.S. Biology, emphasis in Ecosystems Biology
   Eastern Michigan University, Ypsilanti, MI
   Thesis: Diet of two endemic bats in the Antilles: The importance of protein
   Committee: Allen Kurta, Catherine Bach, Jamin Eisenbach
- Dec 2001 B.S. Biology, emphasis in Microbiology Inter-American University of Puerto Rico, Bayamón, PR Thesis: Temperature selection of tropical bats roosting in caves Advisor: Armando Rodríguez-Durán

### **Citation Index from Google Scholar**

Citations: 619 H-index: 14 i10-index: 17

#### **Publications** (\* = student/postdoc)

- 34. Soto-Centeno, J.A., R. Rodríguez-Ramos, P.I. Monico\*, C.A. Calderón-Acevedo, J.M. Bernstein\*, & L.W. Viñola\* (in review) A Holocene bat colony collapse highlights the importance of Caribbean hot caves. Biol. Lett.
- Soto-Centeno, J.A. J.M. Bernstein\*, & C.A. Calderon-Acevedo. (in review) Biogeography and validation of species limits in Caribbean Minor Red Bats (*Lasiurus minor*). Mol. Phylo. Evol. https://doi.org/10.1101/2022.02.11.479705.

- 32. Bernstein, J.M.\*, C.A. Calderon-Acevedo\*, P.I. Mônico, L.W. Viñola-López, & **J.A. Soto-Centeno** (accepted) A Rapid Inventory of Amphibians, Squamates, and Bats of Mata de Plátano Field Station and Nature Reserve, Arecibo, Puerto Rico. Ecol. Evol. Nat. Notes
- 31. da Silva Fonseca, B., J.A. Soto-Centeno, N.B Simmons, A.D. Ditchfield, & Y.L.R. Leite. (2024) A species complex in the iconic bat Trachops cirrhosus (Chiroptera, Phyllostomidae) with high variation in the heart of the Neotropics. Am Mus. Novit. 4021:27 pp. https://doi.org/10.1206/4021.1
- Bernstein, J.M.\*, H.K. Voris, B.L. Stuart, D.R. Karns, J.A. McGuire, C.A. Calderon-Acevedo\*, R.M. Brown, M. Gehara, J.A. Soto- Centeno, S. Ruane. (2024) Integrative Methods Reveal Multiple Drivers of Diversification in Rice Paddy Snakes. Sci. Rept. https://doi.org/10.21203/rs.3.rs-3143057/v1.
- 29. Mônico, P.I.\* & J.A. Soto-Centeno. (2024) Phylogenetic, morphological, and niche differentiation unveil new species limits for the big brown bat (*Eptesicus fuscus*). Roy. Soc. Open Sci. 11:231384. https://doi.org/10.1098/rsos.231384
- Crespo-Pérez, V., J.A. Soto-Centeno, C. M. Pinto, A. Avilés, W. Pruna, C. Terán, & Á. Barragán. (2023). Presence of the Eucalyptus snout beetle in Ecuador and potential invasion risk in South America. Ecol. Evol., 13, e10531. https://doi.org/10.1002/ece3.10531.
- 27. **Soto-Centeno**, **J.A.** & N.B. Simmons. (2022) Environmentally driven phenotypic convergence and niche conservatism accompany speciation in hoary bats. *Sci. Rep.*12: 21877. https://doi.org/10.1038/s41598-022-26453-y
- 26. **Soto-Centeno**, **J.A.**, N.S. Upham, C. Mancina, B. Lim, & R.M. Timm. (2022) Obituary: Gilberto Silva Taboada (1927–2022). *J. Mamm.* 103(3): 745–748.
- 25. Calderon-Acevedo, C.A., A. Rodriguez-Duran & J.A. Soto-Centeno. (2021) Effect of land use, habitat suitability, and hurricanes on the population connectivity of an endemic insular bat. Sci. Rept. 11:9115. https://doi.org/10.1038/s41598-021-88616-7
- Orihuela, J., L.W. Viñola\*, O. Hernández de Laraa, A. Mychajliw, O. Jiménez Vázquez, L. Lorenzo, & J.A. Soto-Centeno. (2020) The role of humans on Greater Antillean land vertebrate extinctions: new insights from Cuba. Quat. Sci. Rev. 249:106597. https://doi.org/10.1016/j.quascirev.2020.106597
- 23. Steadman, D.W., N.A. Albury, J.I. Mead, J.A. Soto-Centeno, & J. Franklin. (2018) Holocene vertebrates from a dry cave on Eleuthera Island, Commonwealth of The Bahamas. *The Holocene*. 28(5):806–813.
- 22. Barrow, L.N., J.A. Soto-Centeno, A.R. Warwick, A.R. Lemmon, & E.M. Lemmon. (2017) Evaluating suture zones and refugia through comparative phylogeography of amphibians in the Southern Coastal Plain. J. Biogeog. 44(12):2692–2705.
- Speer, K.A., B.J. Petronio<sup>\*</sup>, N.B. Simmons, R. Richey, K. Magrini<sup>\*</sup>, J.A. Soto-Centeno, and D.L. Reed. (2017) Population structure of a widespread bat (*Tadarida brasiliensis*) in an island system. Ecol. Evol. 7(19):7585– 7598.
- 20. Velazco P.M., J.A. Soto-Centeno, D.W. Fleck, R.S. Voss, & N.B Simmons. (2017) A New Species of Nectarfeeding Bat of the Genus Hsunycteris (Phyllostomidae: Lonchophyllinae) from Northeastern Peru. Am. Mus. Novitates 3881:1–26.
- 19. Soto-Centeno, J.A., N.B. Simmons, & D.W. Steadman. (2017) The bat community of Haiti and evidence for its long-term persistence at high elevations. *PLOS ONE*. 12 e0178066.
- Steadman, D.W., H.M Singleton, K.M Delancy, N.A. Albury, J.A. Soto-Centeno, H. Gough, N. Duncan, J. Franklin, & W.F. Keegan. (2017) Late Holocene Historical Ecology: The timing of vertebrate extirpation on Crooked Island, Commonwealth of the Bahamas. J. Is. Coastal Archaeo. 12:572–584.
- Pinto C.M., J.A. Soto-Centeno, A.M. Núñez Quiroz, N. Ferreyra, F. Delgado-Espinoza, P.W. Stahl, & D.G. Tirira. (2016) Archaeology, biogeography and mammalogy do not provide evidence for tarukas (Cervidae: Hippocamelus antisensis) in Ecuador. J. Mamm. 97:41–53.
- 16. **Soto-Centeno**, J.A., M. O'Brien<sup>\*</sup>, & N.B. Simmons. (2015) The importance of late Quaternary climate change and karst on distributions of Caribbean mormoopid bats. *Am. Mus. Novit.* 3847:1–32.
- 15. Steadman, D.W., N.A. Albury, B. Kakuk, J.I. Mead, **J.A. Soto-Centeno**, H.M. Singleton, & J. Franklin. (2015) The vertebrate community on an ice-age Caribbean island. *PNAS*. 112:E5963–5971.
- 14. Speer, K.A., J.A. Soto-Centeno, N. Albury, Z. Quicksall\*, M. Marte\*, & D.L. Reed. (2015) Bats of the Bahamas: natural history and conservation. Bull. Fl. Mus. Nat. Hist. 53:27–78.
- 13. Soto-Centeno, J.A. & D.W. Steadman. (2015) Fossils reject climate change as the cause of extinction of Caribbean bats. Sci. Rept. 5:7971.
- 12. Marte, M.G.\*, D.L. Reed, & **J.A. Soto-Centeno**. (2014) Identification of microbial diversity and potential pathogens in Bahamian caves. J. Undergrad. Res. 15(3):1–8.
- 11. Endara, L., J.A. Soto-Centeno, T.A. Lott, & P.S. Soltis. (2014) Preserving biodiversity for long-term research: the genetic resources repository of the Florida Museum of Natural History. *In* DNA banking for the 21<sup>st</sup> century:

Proceedings of the workshop on DNA banking. Applequist and Campbell eds. Pp. 49–58.

- 10. Soto-Centeno, J.A., D.L. Phillips, A. Kurta, & K.A. Hobson. (2014) Food resource partitioning in nectar feeding bats on Puerto Rico. J. Trop. Ecol. 30:359–369.
- Soto-Centeno, J.A., L.N. Barrow<sup>\*</sup>, J.M. Allen, & D.L. Reed. (2013) Re-evaluation of a classic phylogeographic barrier: New techniques reveal the influence of microgeographic climate variation on population divergence. *Ecol. Evol.* 3:1603–1613.
- 8. Gonzalez, S.G.\*, J.A. Soto-Centeno, & D.L. Reed. (2011) Population distribution models: Species distributions are better modeled using biologically relevant data partitions. *BMC Ecol.* 11:20.
- 7. Soto-Centeno, J.A. (2008) Neotropical tent-roosting bats Murciélagos tropicales que acampan en hojas. Bat Res. News. 49:203–204.
- 6. Kurta, A., J.O. Whitaker, W.J. Wrenn, & **J.A. Soto-Centeno**. (2007) Ectoparasitic assemblages on Mormoopid bats (Chiroptera: Mormoopidae) from Puerto Rico. J. Med. Entomol. 44:953–958.
- 5. García-García, J.L., A. Santos-Moreno, A.M. Alfaro, & **J.A. Soto-Centeno**. (2007) Noteworthy records of Eptesicus brasiliensis (Vespertilionidae) from Oaxaca, México. Bat Res. News. 48:5–6.
- 4. Soto-Centeno, J.A., & A. Kurta. (2006) Diet of two nectarivorous bats, Erophylla sezekorni and Monophyllus redmani (Phyllostomidae) on Puerto Rico. J. Mamm. 87:19–26.
- Heim, C.D., B. Alexander, R.W. Hansen, J.H. Valez-Villavicencio, T.J. Devitt, B.D. Hollingsworth, J.A. Soto-Centeno, & C.R. Mahrdt. (2005) Ensatina eschsholtzii klauberi (Range Extension Notes). Herpetol. Rev. 36:330– 331.
- 2. Soto-Centeno, J.A., & A. Kurta. (2003) Description of fetal and newborn brown flower bats, Erophylla sezekorni (Chiroptera: Phyllostomidae). Carib. J. Sci. 39:233–234.
- 1. Rodríguez-Durán, A., & J.A. Soto-Centeno. (2003) Temperature selection by tropical bats roosting in caves. J. Therm. Biol. 28:465–468.

# **Book Chapters**

- 9. Soto-Centeno, J.A. (2023) Biogeography of Caribbean bats: the past, present, and future. In: Bats of the West Indies (A. Kurta and A. Rodríguez-Durán eds.) Cornell University Press. Ithaca, N.Y. <u>bit.ly/41KrJZF</u>
- 8. **Soto-Centeno**, J.A. & C.A. Calderón-Acevedo. (2023) Global change and the conservation of Caribbean bat communities. *In*: Bats of the West Indies (A. Kurta and A. Rodríguez-Durán eds.) Cornell University Press. Ithaca, N.Y. <u>bit.ly/41KrJZF</u>
- 7. Soto-Centeno, J.A. (2023) Brazilian Free-tailed Bat (Tadarida brasiliensis). In: Bats of the West Indies (A. Kurta and A. Rodríguez-Durán eds.) Cornell University Press. Ithaca, N.Y.
- 6. **Soto-Centeno**, J.A. (2023) Minor Red Bat (Lasiurus minor). In: Bats of the West Indies (A. Kurta and A. Rodríguez-Durán eds.) Cornell University Press. Ithaca, N.Y.
- 5. **Soto-Centeno**, **J.A.** (2023) Greater Bulldog Bat (Noctilio leporinus). In: Bats of the West Indies (A. Kurta and A. Rodríguez-Durán eds.) Cornell University Press. Ithaca, N.Y.
- 4. **Soto-Centeno**, **J.A.** (2023) Lesser Antillean Long-tongued Bat (Monophyllus plethodon). In: Bats of the West Indies (A. Kurta and A. Rodríguez-Durán eds.) Cornell University Press. Ithaca, N.Y.
- 3. Soto-Centeno, J.A. (2023) Hoary Bat (Lasiurus cinereus). In: Bats of the West Indies (A. Kurta and A. Rodríguez-Durán eds.) Cornell University Press. Ithaca, N.Y.
- 2. Calderón-Acevedo, C.A. & **J.A Soto-Centeno.** (2023) Waterhouse's Leaf-nosed Bat (Macrotus waterhousii). In: Bats of the West Indies (A. Kurta and A. Rodríguez-Durán eds.) Cornell University Press. Ithaca, N.Y.
- 1. Orihuela, J. & **J.A Soto-Centeno.** (2023) Koopman's Pallid Bat (Antrozous koopmani). In: Bats of the West Indies (A. Kurta and A. Rodríguez-Durán eds.) Cornell University Press. Ithaca, N.Y.

# Awards, Fellowships, and Grants

**Research Grants** 

- 2024 Co-phylogeography and historical demography of Caribbean bats over the Quaternary (in review) NSF Population & Community Ecology Cluster
- 2021 Chronological context of species loss in a Caribbean vertebrate community. NSF EAGER DEB-2135257 (\$199,839).
- 2019 Phenotypic species delimitation in Hoary Bats. Rutgers University Program for Early Career Excellence Mini-Grant (\$200, towards open access publication costs)
- 2019 The chronology of extinction of Caribbean vampire bats. Rutgers University Research Council Award (\$2,000)
- 2018 The death and life of biodiversity: Modeling extinction and resilience on islands (co-PI with S. Cooke, L. Dávalos, A. Mychajliw, & N. Upham). National Socio-Environmental Synthesis Center (SESYNC Pursuit),

National Science Foundation DBI-1639145 (\$45,000)

- 2015 Explore21 Research Expedition: Cuba; co-Pl (Lead Pl: S. Perkins). American Museum of Natural History (\$90,385)
- 2015 AMNH Student Research Mentoring Program. National Science Foundation (\$9,000)
- 2011 University of Florida Open-Access Publishing Fund, Office of Academic and Scholarly Outreach, University of Florida (\$1,622)
- 2010 Sigma Xi Grant-in-aid of Research, Sigma Xi, The Scientific Research Society (\$400)
- 2009 Theodore Roosevelt Memorial Fund, American Museum of Natural History (\$1,500)
- 2009 ASM Grant-in-aid of Research, American Society of Mammalogists (\$1,000)
- 2009 Riewald Memorial Fund Research Grant, Department of Zoology, University of Florida (\$300)
- 2008 Specimen tag replacement for the Herpetology collection at the San Diego Natural History Museum (co-Pl with B.D. Hollingsworth). Biological Research Collections Grant, National Science Foundation. DBI-0749533 (\$96,399)
- 2002 Sigma Xi Grant-in-aid of Research, Sigma Xi, The Scientific Research Society (\$250)

#### Fellowships

- 2013 Theodore Roosevelt & Gerstner Scholar Post-doctoral Fellowship, American Museum of Natural History (\$53,000 plus benefits and \$10,000 annual research budget x 2 years)
- 2007 Grinter Fellowship, Department of Zoology, University of Florida (\$6,000)
- 2007 McKnight Fellowship, Florida Education Fund (\$36,000 plus benefits x 2 years Declined)
- 2004 Meta Hellwig Graduate Fellowship, Department of Biology, Eastern Michigan University (\$4,000)

#### Honorary Awards

2004 Dean's Award for Research Excellence & Distinguished MS Thesis Award, Eastern Michigan University

2002 Best Presentation Award, Sigma Xi, The Scientific Research Society, Eastern Michigan University Chapter Travel Awards

- 2014 NSF BIO REU Mentor-Student Travel Scholarship, National Science Foundation (\$3000)
- 2013 Graduate Student Travel Award, College of Liberal Arts and Sciences, University of Florida (\$300 x 2)
- 2013 Graduate Student Travel Award, Department of Biology, University of Florida (\$300)
- 2013 Graduate Student Travel Award, Graduate Student Association, University of Florida (\$300)
- 2012 Graduate Student Travel Award, Department of Biology, University of Florida (\$150)
- 2011 Graduate Student Travel Award, Department of Biology, University of Florida (\$100)

### **Research Presentations**

#### Invited Keynote

- 2022 La diversidad chiropterológica de Puerto Rico a través del tiempo. Invited keynote. Interamerican University of Puerto Rico & Programa de Conservación de Murciélagos de Puerto Rico, Bayamón, PR
- 2020 Diversidad, paleoecologia, y filogeografía de murciélagos del Caribe. Invited virtual keynote. Museo de Historia Natural Prof. E. de Jesús Marcano, Santo Domingo, Dominican Republic

#### Invited Presentations & Seminars

- 2024 Spatial overview & systematics of Caribbean bats. University of the West Inidies, Kingston, Jamaica.
- 2023 Historical and contemporary drivers of Caribbean bat communities. International Symposium of Bat Biology and Conservation. Invited session plenary. Universidad de Costa Rica, San José, Costa Rica.
- 2022 Deconstructing extinction susceptibility in Insular Caribbean bats. SACNAS National Diversity in STEM. Invited session plenary. San Juan, PR
- 2022 Predictors of extinction & resilience in Caribbean bat communities. Field Museum of Natural History, Chicago, IL
- 2021 How environment and species traits shape Caribbean bat communities. Louisiana State University, Baton Rouge, LA
- 2021 How environment and species traits shape Caribbean bat communities. Rutgers University, New Brunswick, NJ
- 2021 Extinction and survival in the Caribbean. DUESS program. Rutgers University, Newark, NJ
- 2020 Extinction and survival in the Caribbean: Climate, humans, & the loss of vertebrate diversity. Rutgers University, New Brunswick, NJ
- 2020 Extinction and survival in the Caribbean: Climate, humans, & the loss of vertebrate diversity. Columbia University, New York, NY
- 2019 Extinction susceptibility in Caribbean bats. Florida Museum of Natural History, Gainesville, FL

- 2019 Everyday Data: Bioinformatics in extinction and speciation biology. Rutgers University, Newark, NJ
- 2019 Everyday Data: Modeling species distributions for conservation purposes. Rutgers University, Newark, NJ
- 2018 Trends in local extinction susceptibility in insular Caribbean bats. Stony Brook University, Stony Brook, NY
- 2018 Climate, humans, and the collapse of Caribbean bat biodiversity. The Brooklyn Bird Club. Central Library, Brooklyn, NY
- 2018 Caribbean extinction and survival: Climate, humans, and the loss of bat biodiversity. Biology Department and Center for Computational & Integrative Biology, Rutgers University, Camden, NJ
- 2017 Divergência, especiação, e extinção: Liçoes de dinâmica filogeográfica. Universidade Federal do Espírito Santo, Vitória, ES, Brasil
- 2017 Loss and survival of Caribbean bats during the Anthropocene. Symposium & Fundraiser for Puerto Rican Scientists in Need. Rutgers University, Newark, NJ
- 2017 Loss and survival of Caribbean bats during the Anthropocene. TRUST Teacher Program. American Museum of Natural History, New York, NY
- 2017 Diversidad críptica en murciélagos nectarívoros del Caribe. IX International Convention on Environment & Development, Academia de Ciencias, La Habana, Cuba
- 2017 Understanding extinction and speciation: Lessons from phylogeographic dynamics. Department of Biological Sciences, Rutgers University, Newark, NJ
- 2017 Changes in Caribbean bat communities over the late Quaternary. Department of Biological Sciences, Rutgers University, Newark, NJ
- 2016 Patterns of extinction and population loss in insular bats. School of Biological Sciences, Illinois State University, Normal, IL
- 2016 Explore 21: Cuba. SciCafe, American Museum of Natural History, New York, NY (https://goo.gl/CBbS7m)
- 2016 Changes in Caribbean bat communities over the late Quaternary. Richard Gilder Graduate School, American Museum of Natural History, New York, NY
- 2016 Island biogeography and extinctions in the Caribbean. Department of Biology, City College, City University of New York, NY
- 2015 Community changes and the history of extinction of Caribbean bats. Lawrence University, Appleton, WI
- 2015 Modelaje de Nicho Ecológico: métodos y práctica. Workshop at Museo Nacional de Historia Natural de Cuba, La Habana, Cuba
- 2015 The late Quaternary extinction of Caribbean bats. Theodore Roosevelt Meeting, American Museum of Natural History, New York, NY
- 2014 Late Quaternary climate change and the extinction of Caribbean bats. Gerstner Scholar Meeting, American Museum of Natural History, New York, NY
- 2014 Late Quaternary climate change and the extinction of Caribbean bats. Theodore Roosevelt Meeting, American Museum of Natural History, New York, NY
- 2014 Late Quaternary extinction of Caribbean bats. Department of Biology, Eastern Michigan University, Ypsilanti, MI
- 2011 Bats: Sky-prints in the night. Biodiversity Day, Florida Museum of Natural History, FL
- 2011 Biology and biogeography of Bahamian bats. Abaco Central High School, Marsh Harbour, Abaco, Bahamas
- 2004 Bats: Biology and misconceptions. Aquatic Adventures' Bahía Program, Bahía de los Angeles, Baja California, Mexico
- 2000 The use of the ANABAT detector for estimating species diversity on Puerto Rico. 20<sup>th</sup> Wildlife Symposium of Puerto Rico at the Puerto Rico Natural History Society Meeting, San Juan, PR

Contributed Presentations as 1<sup>st</sup> or senior author ( $\dagger$  = talk,  $\ddagger$  = poster, \* = student)

- 2023 51st North American Symposium on Bat Research, Winnipeg, Canada Species limits and taxonomic evaluation of Caribbean red bats
  J. Angel Soto-Centeno, Justin M. Bernstein, & Camilo A. Calderón Acevedo
- 2023 51<sup>st</sup> North American Symposium on Bat Research, Winnipeg, Canada Phylogenetic, morphological, and niche differentiation unveil new species limits for the big brown bat Pedro I. Mônico & **J. Angel Soto-Centeno**
- 2023 51<sup>st</sup> North American Symposium on Bat Research, Winnipeg, Canada Niche breadth through time and overlap in tailless tailed bats Camilo A. Calderón Acevedo & **J. Angel Soto-Centeno**
- 2023 51st North American Symposium on Bat Research, Winnipeg, Canada Landscape genetics and establishment of biological corridors of *Molossus molossus* in Puerto Rico

Edgardo J. López Morell, Armando Rodríguez-Durán, Camilo A. Calderón-Acevedo, & J. Angel Soto-Centeno 19th International Bat Research Conference & 50th North American Society of Bat Research Conference, 2022 Austin, TX (Invited speaker – Bat migration: new perspectives and synthesis symposium) Time-scaled interisland demographics of a Caribbean nectarivorous batt J. Angel Soto-Centeno 2022 19<sup>th</sup> International Bat Research Conference & 50<sup>th</sup> North American Society of Bat Research Conference, Austin, TX Niche tracking of dry conditions in the spotted bat (Euderma maculatum)<sup>†</sup> Camilo A. Calderón Acevedo, Xitlaly Franquez\*, & J. Angel Soto-Centeno 2022 19<sup>th</sup> International Bat Research Conference & 50<sup>th</sup> North American Society of Bat Research Conference, Austin, TX Climatic niche differentiation illuminates biogeographic patterns in Caribbean Eptesicus fuscust Pedro Ivo Monico\*, Camilo A. Calderón Acevedo, & J. Angel Soto-Centeno 2022 19<sup>th</sup> International Bat Research Conference & 50<sup>th</sup> North American Society of Bat Research Conference, Austin, TX Assessing species richness, abundance, and activity patterns of bats in New Jersey<sup>†</sup> Amani Abdelsalam\*, Camilo A. Calderón Acevedo, & J. Angel Soto-Centeno 19<sup>th</sup> International Bat Research Conference & 50<sup>th</sup> North American Society of Bat Research Conference, 2022 Austin, TX Comparing Chiroptera: Examining genetic structure in relation to environmental variation<sup>‡</sup> Abbi E. Green\*, Tara A. Pelletier, Camilo A. Calderón Acevedo, & J. Angel Soto-Centeno 2022 Evolution 2022, joint conference of the American Society of Naturalists, the Society for the Study of Evolution, & the Society of Systematic Biologists, Cleveland, OH Conserved niches and phenotypic convergence underscore speciation in hoary batst J. Angel Soto-Centeno & Nancy Simmons 2021 101st Meeting of the American Society of Mammalogists, Washington, DC [Virtual] Validation of species limits in Caribbean Minor Red Bats (Lasiurus minor)† J. Angel Soto-Centeno & Camilo A. Calderón Acevedo 2021 101st Meeting of the American Society of Mammalogists, Washington, DC Effects of land use and habitat suitability on population connectivity of Stenoderma rufum<sup>†</sup> Camilo A. Calderón Acevedo, Armando Rodríguez-Durán, & J. Angel Soto-Centeno 2021 12th Annual GSLSAMP [Virtual] Conference A revisionary alpha taxonomy of Caribbean bats<sup>‡</sup> Teresa Mendoza\*, Camilo A. Calderón-Acevedo, & J. Angel Soto-Centeno 2019 49<sup>th</sup> North American Symposium on Bat Research, Kalamazoo, Michigan Defining phenotypic species limits in Hoary Bats<sup>†</sup> J. Angel Soto-Centeno & Nancy Simmons 2019 49<sup>th</sup> North American Symposium on Bat Research, Kalamazoo, Michigan Anthropogenic effects on landscape connectivity in bat communities of Puerto Ricot Camilo A. Calderón Acevedo & J. Angel Soto-Centeno 2019 49<sup>th</sup> North American Symposium on Bat Research, Kalamazoo, Michigan Evidence of morphological divergence in the Minor Red Bat (Lasiurus minor) from mainland Red Batst Ian R. Hays\* & J. Angel Soto-Centeno 2019 100<sup>th</sup> Meeting of the American Society of Mammalogists, Washington, DC Extinction susceptibility in Caribbean batst J. Anael Soto-Centeno 2019 13<sup>th</sup> Undergraduate Research Symposium, Rutgers University, Newark Modeling hotspots of bat biodiversity<sup>‡</sup> Ashley Moraski\* & J. Angel Soto-Centeno 2019 13<sup>th</sup> Undergraduate Research Symposium, Rutgers University, Newark Ecological Niche Divergence in the Cuban Flower Bat<sup>‡</sup> Shahida Kamal\* & J. Angel Soto-Centeno 2019 13th Undergraduate Research Symposium, Rutgers University, Newark Examining hotspots of mortality in Australian Flying Foxes<sup>‡</sup> Katherine Vasquez\* & J. Angel Soto-Centeno

2015 95<sup>th</sup> Meeting of the American Society of Mammalogists, Jacksonville, FL (Invited)

Fossil assemblages of cave-dwelling bats: Tracking the evolution and extinction of Caribbean bats<sup>†</sup> J. Angel Soto-Centeno

- 2014 44<sup>th</sup> North American Symposium on Bat Research, Albany, New York The chronology of extinction of a late-Holocene bat community in Hispaniola<sup>†</sup> J. Angel Soto-Centeno, Aja C. Marcato, & Nancy B. Simmons
- 2014 44<sup>th</sup> North American Symposium on Bat Research, Albany, New York Hips don't lie: Using variation in pelvic osteology to inform bat relationships<sup>†</sup> Aja C. Marcato<sup>\*</sup>, William A. Schutt, Jr., Nancy B. Simmons, & **J. Angel Soto-Centeno**
- 2013 Joint 16<sup>th</sup> International Bat Research Conference and 43<sup>rd</sup> North American Symposium on Bat Research, San José, Costa Rica

Extinction and phylogeography of Caribbean bats during Quaternary climate changet

- J. Angel Soto-Centeno, David W. Steadman, & David L. Reed
  6<sup>th</sup> International Biogeography Society Conference, Miami, FL
  Re-evaluation of a classic phylogeographic barrier: New techniques reveal the influence of microgeographic climate variation on population divergence<sup>‡</sup>
  - J. Angel Soto-Centeno, Lisa N. Barrow<sup>\*</sup>, Julie M. Allen, & David L. Reed
- 2012 42<sup>nd</sup> North American Society for Bat Research Conference, San Juan, PR Paleo-ecological niche models of Macrotus waterhousii: Assessing climate change impact on an insular bat<sup>†</sup>

J. Angel Soto-Centeno, Susan Cameron Devitt, & David W. Steadman

- 2012 92<sup>nd</sup> Meeting of the American Society of Mammalogists, Reno, NV The influence of late Pleistocene climate on populations of Monophyllus redmani<sup>†</sup> J. Angel Soto-Centeno & David L. Reed
- 2011 41st North American Symposium on Bat Research, Toronto, Canada Assessing the effects of historical climate on Monophyllus redmanit
  - J. Angel Soto-Centeno & David L. Reed
- 2011 91st Meeting of the American Society of Mammalogists, Portland State University, Portland, OR Assessing the effects of Pleistocene climate change on populations of Greater Antillean long-tongued bats<sup>†</sup>

## J. Angel Soto-Centeno & David L. Reed

- 2010 7<sup>th</sup> International Conference on Applications of Stable Isotope Techniques to Ecological Studies Stable isotope investigation of insect and plant use in the diets of two Puerto Rican bat species<sup>‡</sup> J. Angel Soto-Centeno, Donald L. Phillips, Allen Kurta, & Keith Hobson
- 2009 10<sup>th</sup> International Mammalogical Congress, Mendoza, Argentina Using niche modeling to explore niche evolution on West Indian bats<sup>1</sup>

## J. Angel Soto-Centeno

- 2009 1<sup>er</sup> Simposio de la Biodiversidad, Universidad Interamericana, Bayamón, PR Phylogeography of the bat genus *Monophyllus* across the West Indies<sup>†</sup> J. Angel Soto-Centeno
- Joint Meeting of Ichthyologists and Herpetologists, Portland, OR.
  Specimen tag replacement for the Herpetology Collection at San Diego Natural History Museum<sup>‡</sup>
  Bradford D. Hollingsworth\*, Melissa A. Stepek, Laura E. Williams, Paisley Cato, and J. Angel Soto-Centeno
- 2008 International Society for Biological and Environmental Repositories, Bethesda, MD
  Database development for a centralized museum repository of genetic resources: First steps towards a portal to facilitate molecular-based research in biology<sup>†</sup>
  Lorena Endara, Andrés López, & J. Angel Soto-Centeno
- 2005 35<sup>th</sup> North American Symposium on Bat Research, Sacramento, CA Diet of Two Endemic Nectar-feeding Phyllostomids in Puerto Rico<sup>†</sup>

## J. Angel Soto-Centeno

- 2004 34th North American Symposium on Bat Research, Salt Lake City, UT Ectoparasites of mormoopid bats on Puerto Rico<sup>‡</sup>
- Allen Kurta, John O. Whitaker Jr., William J. Wrenn, & **J. Angel Soto-Centeno** 32<sup>nd</sup> North American Symposium on Bat Research, Burlington, VT
- Diet of Two Endemic Bats in the Antilles: The Importance of Proteint J. Angel Soto-Centeno
- 2001 31<sup>st</sup> North American Symposium on Bat Research, Victoria, British Columbia, Canada Erophylla sezekorni and Brachyphylla cavernarum: Diet of two phyllostomid bats in Puerto Rico<sup>‡</sup>

### J. Angel Soto-Centeno

2000 30<sup>th</sup> North American Symposium on Bat Research, Miami, FL Temperature selection of bats in a thermopreferendum chamber<sup>‡</sup>

J. Angel Soto-Centeno and Armando Rodríguez-Durán

- 2000 35<sup>th</sup> Puerto Rico Junior Technical Meeting, Rio Piedras, PR New records of the bat Lasiurus borealis in Puerto Rico revealed by the ANABAT System<sup>†</sup> J. Angel Soto-Centeno and Armando Rodríguez-Durán
- 1999 29<sup>th</sup> North American Symposium on Bat Research, Madison, WI Fungi related to bat guano<sup>‡</sup>

J. Angel Soto-Centeno and Armando Rodríguez-Durán

2004 - 2022

15 additional presentations as a co-author: 8 led by students, 7 different conferences, 2 presented in 2022.

# **Teaching Experience** (\* = full course development)

### Courses as lead Instructor only

Graduate level: Island Biogeography\*, Mammalogy, Phylogenetic Systematics\*, & Phylogeographic Inference\* Undergraduate level: Vertebrate Evolution\*, Conservation Biogeography\*, Evolution, Biodiversity & Extinctions\* Guest Lectures & Short Courses

- 2018 Spatio-temporal modeling of species distributions. 3-day workshop part of: National Socio-Environmental Synthesis Center (SESYNC Pursuit), National Science Foundation
- 2018 Echolocation in Mammals. Guest lecture for Senses lecture series. American Museum of Natural History
- 2016 Vertebrate Evolution. Guest instructor on a 6-day course for middle and high school students from New York City. LANG Education Program, American Museum of Natural History.
- 2013 Echolocation in mammals. Mammalogy Course. Department of Biology, University of Florida, Gainesville, FL (also taught in 2011 & 2008)
- 2011 Using climate-based models to assess Caribbean bat distributions. Seminar on Population Ecology, Universidad Interamericana, Bayamón, PR

# **Professional Service**

Departmental Service at Rutgers

- 2024 Prospective student interview committee, Department of Earth & Environmental Sciences, Rutgers – Newark
- 2024 Teaching Faculty Reappointment Committee, Department of Earth & Environmental Sciences, Rutgers – Newark
- 2021 Staff Hiring Committee, Department of Earth & Environmental Sciences, Rutgers Newark (2x)
- 2019 2020 Faculty Hiring Committee, Department of Biological Sciences, Rutgers Newark (2x)
- 2018 2020 Master's Graduate Program Coordinator, Department of Biological Sciences, Rutgers Newark Responsibilities: Updated graduate curriculum and guidelines, mentored first year students (18 total) on course selection, graduate program navigation, and finding a research laboratory.
- 2018 2020 Colloquium Committee Faculty Member, Department of Biological Sciences, Rutgers Newark Responsibilities: Assisted in search for speakers, sent invitations, coordinated weekly seminar for the department for 10–12 meetings per semester.

National Science Foundation Service (times served)

Ad-hoc Reviewer: Division of Environmental Biology, Evolutionary Processes, National Science Foundation (1x) Ad-hoc Reviewer: Natural Environment Research Council, National Science Foundation (1x) Panel Reviewer: Physiology, Organismal, and Developmental Biology, GRFP, National Science Foundation (2x) Panel Reviewer: EDGE Program, National Science Foundation (1x)

Scientific Society Service

2023 – present Editorial Board Member, Nature Scientific Reports

- 2023 present Editorial Board Member, Journal of North American Bat Research
- 2023 present Coordinator for the Caribbean & Latin America, Global South Bats
- 2022 present Board Member, Awards Committee Chair, North American Society for Bat Research
- 2020 present Grants-in-Aid Committee Member, American Society of Mammalogists
- 2020 Simposium Organizer: "Pasado, Presente, y Futuro de la Quiropterología del Caribe, 3er Congreso Latinoamericano de Murciélagos, Mérida MX
- 2019 present Advisory Committee Member, Programa de Conservación de Murciélagos de Puerto Rico

2018 - present Grant Reviewer: Graduate Student Research Awards, Society of Systematic Biologists

2013 – present Editorial Board Member, Caribbean Naturalist

2011 – 2013 Student Representative, Board of Directors of North American Society for Bat Research

#### Service at other institutions

2023 – present Taxonomy Expert, International Union for the Conservation of Nature (IUCN) bat specialist group

- 2016 present Research Associate, Department of Mammalogy, American Museum of Natural History
- 2008 Seminar Committee: Department of Biology, University of Florida
- 2008 Student Seminar Coordinator, Florida Museum of Natural History
- 2007 2016 Herpetology Department Associate, San Diego Natural History Museum
- 2006 2008 Collections Committee, American Society of Ichthyologists and Herpetologists
- 2006 2007 Collections Security and Emergency Committee, San Diego Natural History Museum

### Editorial work and Journal Referee (number of articles since 2017)

Editorial: Handled manuscripts for Caribbean Naturalist (13), Journal of North American Bat Research (1), Nature Scientific Reports (8)

Referee: Acta Chiropterologica (3), American Museum Scientific Publications (1), Animals (1), Biotropica (1), BMC Ecology and Evolution (1), Check List (1), Conservation Biology (1), Diversity (7), Ecology and Evolution (2), Ecosphere (1), Frontiers in Biogeography (1), Genes (1), Genetica (1), The Holocene (1), Journal of Mammalogy (2), Mammalian Species (1), Mastozoología Neotropical (1), Molecular Ecology (1), Molecular Phylogenetics and Evolution (3), Nature Ecology and Evolution (1), Novitates Caribbea (1), PeerJ (1), Royal Society Open (1), Scientific Reports (8), Western North American Naturalist (1)

### Students Mentored in Research (\* = published work)

Postdoctoral Scholars (2)

Dr. Karen Olson\* (RU–N NIH IRACDA program: Ecology & Evolution, 2020–2024) Dr. Camilo Andrés Calderón Acevedo\* (RU–N. DEES: Ecology & Evolution, 2019–2022)

### Graduate Students (6 as main/co- advisor)

Edgardo López-Morrel (Interamerican University, Biology MS. Grad Committee co-chair, 2022–present) Pedro Ivo Mônico\* (RU–N. Biological Sciences PhD. Grad Committee chair, 2021–present) Amani Abdelsalam (RU–N. Biological Sciences MS. Grad Committee chair, 2020–2022: Graduated) Justin Bernstein\* (RU–N. Biological Sciences PhD. Grad Committee co-chair, 2019–2022: Graduated) Ian Hays (RU–N. Biological Sciences PhD. Grad Committee chair, 2018–2020) Erin McHale (RU–N. Biological Sciences PhD. Grad Committee chair, 2018–2019)

#### Graduate Students (11 as committee member)

Wren Logan (RU–N. Earth & Environmental Sciences PhD. Grad Committee member, 2024–present) Felipe Coelho (RU–N. Earth & Environmental Sciences PhD. Grad Committee member, 2023–present)

Gianpiero Fiorentino (NJIT, Biological Sciences PhD, Grad Committee member, 2023–present) Wilson Guillory (RU–N. Biological Sciences PhD. Grad Committee member, 2022–present) Marina Polak Yofe (NJIT. Biological Sciences PhD. Grad Committee member, 2019–2024) Marivette Pastoriza (Interamerican University of Puerto Rico. Grad Committee member, 2020–2022) Christine Sosiak (NJIT. Biological Sciences PhD. Grad Committee member, 2019–2023) Stephanita Mafla-Mills (RU–N. Biological Sciences PhD. Grad Committee member, 2019–2022) Lauren Hammer (University of Florida. Biology PhD. Grad Committee member, 2019–2021) Andrea Calderón (City University of New York. Biology PhD. Grad Committee member, 2019–2021) Malgorzata Wisniewska (NJIT. Biological Sciences PhD. Grad Committee member, 2019–2021)

### Undergraduate Students (25 total, 13 at Rutgers)

Dhruv Desai (RU–N. Biological Sciences BS. Undergraduate Research Mentor, Fall 2023–present) Kamil Kozlowski (RU–N. Earth & Environmental Sci., Undergraduate Research Mentor, Fall 2022–present) Asyra Simon (RU–N, Earth & Environmental Sci., Undergraduate Research Mentor, Spring 2023–Fall 2023) Xitlaly Franquez (Pitzer College. EES: Urban Ecology Summer REU 2021, 2021) Brianna Rosania (RU–N. Biological Sciences BS. Undergraduate Research Mentor, Spring 2020–Fall 2020) Teresa Mendoza (RU–N. Biological Sciences BS. LSAMP Research Mentor, Spring 2020–Fall 2020) Abhishek Salunia (RU–N. Biological Sciences BS. Undergraduate Research Mentor, Spring 2020–Spring 2021) Coral Caceres (RU–N. Biological Sciences BS. Undergraduate Research Mentor, Spring 2020–Spring 2021) Alejandra Urbano (RU–N. Biological Sciences BS. LSAMP Research Mentor, Spring 2019–Spring 2020) Ashley Moraski (RU–N. Biological Sciences BS. Undergraduate Research Mentor, Fall 2018–Spring 2020) Shahida Kamal (RU–N. Biological Sciences BS. Undergraduate Research Mentor, Spring 2019) Katherine Vazquez (RU–N. Biological Sciences BS. LSAMP Research Mentor, 2018–2019) Kendall Sweeney (RU–N. Biological Sciences BS. Undergraduate Research Mentor, 2018–2019) Brianna Thai (AMNH. NSF SRMP, Brooklyn Technical High School, 2015–2016) Cherena Bradley (AMNH. NSF SRMP, Health Professions High School, 2015–2016) Aja C. Marcato (AMNH. MS Long Island University, LIU Post, 2014) Maggie O'Brien\* (AMNH. NSF REU, Manhattan College, 2014–2015) Lauren Frankel (AMNH. High School Intern, Bergen County Academies, 2014–2015) Tali Magori (AMNH. Tel Aviv University PhD visiting scientist, Fall 2014) Isabel Gomez (AMNH. Undergraduate Intern, Harvard University, 2014) Melina G. Marte\* (FLMNH. BS University of Florida, 2010–2013) Brandi Jo Petronio (FLMNH. BS University of Florida, 2012) Kristin C. Magrini (FLMNH. BS University of Florida, 2011–2012) Sergio C. Gonzalez\* (FLMNH. BS University of Florida, 2009) Lisa N. Barrow\* (FLMNH. BS University of Florida, 2009)

# Media, Public Outreach, and Informal Education (\* = in Spanish)

- 2023 National Hispanic heritage month spotlight: https://bit.ly/475cxb7
- 2021 Faculty selfies Rutgers faculty share stories about returning to campus: https://bit.ly/3tl8i96
- 2021 Using predictive modeling to examine bat endangerment in Puerto Rico: https://bit.ly/35v908x
- 2020 AMNH Bats Q&A with Mammalogists livestream: https://youtu.be/6N8Kbn0rYwl
- 2020 \*Diversidad, paleoecología, y filogeografía. DR bat week: https://youtu.be/M2GKpMKkX7A
- 2020 From bats to people? The origin of covid-19. Freedom Center for Wildlife, NJ https://bit.ly/3nQutpj
- 2020 Rutgers Today: Bronx Zoo tiger contracts covid-19: https://bit.ly/3e7sylT
- 2020 Skype a Scientist speaker (x4)
- 2019 FLMNH Research News: Alumni Q&A profile: https://bit.ly/2YAzr8W
- 2019 A journey of sensory perception in bats. Freedom Center for Wildlife, NJ
- 2018 Rutgers Today: Top Stories of 2018, second "most clicked-on" story of the year: https://bit.ly/2YAzr8W
- 2018 Out in the dark: why we should look after our bats? Freedom Center for Wildlife, NJ https://bit.ly/44TbEIN
- 2018 The Daily Targum: Rutgers professor bats eyes at these nocturnal creatures: https://bit.ly/2BcYI13
- 2018 Rutgers Today: ASC researches Caribbean bats and their fossilized ancestors: https://bit.ly/30Tzlfc
- 2017 Gothamist: What to do if you see a bat in NYC: https://bit.ly/3d59iUX
- 2017 AMNH Research Blog: Two "hidden" bat species revealed in Haiti: https://bit.ly/2Y5XQUP
- 2017 AMNH Shelf Life Blog: Research, Repeat: https://bit.ly/2BeplwS
- 2017 AMNH Shelf Life Episode 14, Into the Island of Bats: https://youtu.be/bIYPKIjj7cY
- 2017 AMNH Pack Your Bags for bats in Cuba: https://youtu.be/J7LEvauo1tg
- 2016 AMNH SciCafe Explore 21 Cuba: https://youtu.be/c6KsQRZUe3w
- 2016 AMNH ¡Cuba! Natural history content advisor and bilingual translator for exhibit
- 2016 \*Biología Boricua Episode 24: https://biologiaboricua.com/episodio24/
- 2016 Mongbay Field Notes, Expedition to Cuba: https://bit.ly/2N53tMN
- 2015 \*Cuba Expedition in Granma: https://bit.ly/2BcLlOe
- 2015 Vertebrate extinction research covered by 13 media outlets: Washington Post https://wapo.st/2Y3KV5U
- 2015 Bat extinction research covered by six media outlets (bilingual): Popular Science https://bit.ly/3d8oVul
- 2012 Research video on Caribbean bats: University of Florida https://youtu.be/BhxQwxAF9Gw
- 2011 Bat conservation in Puerto Rico: https://bit.ly/3htNExf, https://bit.ly/2zC59u5, https://bit.ly/2UOPhM0

### Selected Field Work & Expedition Experience

- 2019-present Jamaica: Expedition leader in Mammalogy (2 expeditions). Rutgers University
- 2018-present Brazil: Expedition leader in Mammalogy (3 expeditions). Rutgers University.
- 2015 Cuba: Expedition leader in Mammalogy. American Museum of Natural History
- 2014-present Belize: Expedition leader in Mammalogy (7 expeditions). American Museum of Natural History
- 2010–present Dominican Republic: Expedition leader in Mammalogy (4 expeditions). Rutgers University, Florida Museum of Natural History
- 2010 Mona Island: Expedition leader in Mammalogy. Florida Museum of Natural History

2009–present Puerto Rico: Expedition leader in Mammalogy (14 expeditions). Rutgers University, American Museum of Natural History, & Florida Museum of Natural History.

2008–present Bahamas: Expedition leader in Mammalogy (15 expeditions). Rutgers University, American Museum of Natural History, & Florida Museum of Natural History.

- 2008 Turks and Caicos Islands: Expedition leader in Mammalogy. Florida Museum of Natural History
- 2006 Sierra San Pedro Martir, Baja California, MX. Field Assistant in Mammalogy and Herpetology. San Diego Natural History Museum
- 1998–present Extensive field and natural history experience throughout the Caribbean, North America (especially southwest USA, northwest & southeast MX), and the mainland Neotropics

### **Professional Society Memberships**

American Association for the Advancement of Science, American Society of Mammalogists (Life Member), North American Society for Bat Research, Society of Systematic Biologists

## Languages

Spanish: understand, read, speak, and write (native) English: understand, read, speak, and write (fluent) Portuguese: understand, read, and speak (advanced)

### **Professional References**

References at American Museum of Natural History

Nancy B. Simmons, PhD – simmons@amnh.org / 212-769-5483

(Postdoctoral advisor and collaborator. Specific areas: research, field expeditions, & student mentoring) Jessica Ware, PhD – jware@amnh.org / 212-769-5494

(Research collaborator. Specific areas: research, field expeditions, grant proposals, diversity and inclusion)

#### Reference at Field Museum of Natural History

Sara Ruane, PhD – sruane@fieldmuseum.org (Research collaborator. Specific areas: research, field expeditions, mentoring & teaching)

Reference at Universidad Autónoma de Mexico

Rodrigo A. Medellín Legorreta, PhD – medellin@iecologia.unam.mx (Research collaborator. Specific areas: research, international collaborations, diversity and inclusion)

### Reference at Bat Conservation International

Jon Flanders, PhD – jflanders@batcon.org / 626-646-9734 (Research collaborator. Specific areas: research, field expeditions, endangered species management, international outreach)