

ANDREA BERNAL-RIVERA

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EDUCATION

Bachelor of Science. Universidad del Valle, Cali, Colombia. Biologist **2021**
 Thesis: Assimilation of different carbohydrates present in the diet of Neotropical bats
 Advisor: Dr. Oscar E. Murillo-García

RESEARCH AND FIELDWORK EXPERIENCE

Tropico Foundation (Colombia) **Jan-Apr 2023**
Mammalogist, Biological coordinator Johnatan Granobles
Establishing a new protected area in a KBA Calima El Darién, Colombia

Stowers Institute for Medical Research (SIMR; Kansas City, MO – USA) **2021 – 2022**
Research Scholar, Rohner Lab. *The insatiable sweet tooth:*
Discovering molecular adaptations to increased sugar consumption in mammals.
 Mentors: Dr. Jasmin Camacho, Dr. Nicolas Rohner

- **Lamanai- Belize and SIMR Collaborative Research** (fieldwork) **Nov 2021**
Researcher, Jasmin Camacho, Nancy Simmons & Brock Fenton

- **TriniBats (Trinidad & Tobago) and SIMR Research** (fieldwork) **Apr 2022**
Researcher, Jasmin Camacho, Alexa Sadier, Darshan Narang

- **Collaborative Research Costa Rica, SIMR** (fieldwork) **Jul 2022**
Researcher, Jasmin Camacho, Jerrica Jamison, Fiona Reid

Pontificia Universidad Javeriana (Cali, Colombia) **Apr-Oct 2021**
Mammalogist, Main researcher Dr. Danny Rojas-Martín .
An Island in the Clouds: Establishing a Baseline for Monitoring an Isolated Paramo Against Climate Change. (fieldwork)

INCIVA (Cali, Colombia) **2019 – 2021**
Research assistant, Project coordinator Alejandro Castaño-Naranjo.
Contribution to the conservation of the Tropical Dry Forest of Valle del Cauca (fieldwork and labwork)

Universidad del Valle (Cali-Colombia) **2018 – 2020**
Mammal collection manager assistant, Museum curator Dr. Oscar E. Murillo-García.
 Department of Biology

Universidad del Valle - CVC (Cali-Colombia) **Feb-Jul 2018**

Mammal research assistant, Main researcher Dr. W. Bolivar-García.
*Biological integrity analysis in prioritized protected areas to assess
their current conservation status* (fieldwork)

PUBLICATIONS

Bernal-Rivera, A. Camacho, J., Robb, S., Russell, J., Yi, K., Tsuchiya, D., Murillo-García, O. E., Rohner, N. 2023. Sugar assimilation underlying dietary evolution of Neotropical bats. In *Revision Nature Ecology and Evolution*.

Bernal-Rivera, A., Cuellar-Valencia, O.M., Calvache-Sánchez, C., and Murillo-García, O.E. 2022. Morphological, anatomical, and physiological signs of senescence in the Great Fruit-eating Bat (*Artibeus lituratus*). *Acta Chiropterologica*, 24(2): 405–413.

Tatiana Velásquez-Roa, Cristian Calvache-Sánchez, **Andrea Bernal-Rivera**, Sara Medina-Benavides, Pamela Carvajal-Nieto. 2022. Interaction between bats and plants in the Tropical Dry Forest of Valle del Cauca, Colombia. *Biota Colombiana*, 24(1):e1078.

Pamela Carvajal-Nieto, Sara Medina-Benavides, **Andrea Bernal-Rivera**, Cristian Calvache-Sánchez, Tatiana Velásquez-Roa. 2022. Bat-flower interactions in Tropical Dry Forest of Valle del Cauca, Colombia. *Biota Colombiana*, 24(1):e1079.

Bernal-Rivera, A., Velásquez-Roa, T., and Murillo-García, O. E. 2022. Mammal Collection of Universidad del Valle, Cali, Colombia. *Mammalogy Notes*, 8(1): 318.

Bernal-Rivera, A., Perea- Vásquez, A., Riascos, J- A., Calvache-Sánchez, C., Muñoz-López, V., and Gómez-Castillo, D. 2021. BAT’S MONTH. Know to conserve: Clarifying myths and disseminating the importance of bats in ecosystems. *Bol. Red. Latin. Car. Cons. Murc.*, 12(3): 23-26.

Cuellar-Valencia, O.M., and **Bernal-Rivera, A.** 2020. *Pristimantis kelephus* (Lynch 1998). *Catálogo de Anfibios y Reptiles de Colombia*, 6(1): 51–56.

SELECTED CONFERENCE PRESENTATIONS AND INVITED TALKS

Talks

Conference – Bernal-Rivera, A., Camacho, J., Yi, K., Malloy, S., Wilson, H., Frangello, M., and Rohner, N. 2022. Bat’s intestine reflects dietary specialization and determines high blood glucose levels. Crossroads Research Conference 2022, SIMR.

Conference – Bernal-Rivera, A., Camacho, J., Jamison, J., Sandoval-Herrera, N., Rohner, N., and Welch, K. 2022. The sweet physiology of bats. 19th International Bat Research Conference & 50th North American Symposium for Bat Research. Austin, Texas, USA 2022.

Conference – Bernal-Rivera, A. Cuellar-Valencia, O.M., Calvache-Sánchez, C., and Murillo-García, O.E. 2021. Aging in bats: the case of an *Artibeus lituratus* (Olfers, 1818) in its natural habitat. IV Congreso Colombiano de Mastozoología (IVCCM) 2021.

Media presentation – Bernal-Rivera, A. and Murillo-García, O.E. 2021. Assimilation of carbohydrates present in the diet of neotropical bats. 2nd World Bat Twitter Conference 2021.

Representative Speaker – Study groups Therios, Hartii, Nycteris, and Public environmental organizations DAGMA, CVC. 2021. Title: “Bats,” Booklet launch: Bats from Cali, Colombia.

Invited Speaker –Berchmans School, Cali, Colombia. 2021. Title: Bats appreciation month.

Invited Speaker – Organización de grupos estudiantiles Universidad Autónoma de Occidente, Cali, Colombia. 2020. Title: Debunking myths about bats.

Posters

Bernal-Rivera, A., Camacho, J., Rohner, R., and Murillo-García, O. E. 2022. Sugar assimilation and the evolution of diet in Neotropical bats. Euro Evo Devo, Italy.

Chito, A., **Bernal-Rivera, A.**, Perea- Vásquez, A., Calvache-Sánchez, C., Tabares, S., and Murillo-García, O.E. 2020. Study of an introduced population of *Aotus lemurinus* at the Universidad del Valle. I Simposio Estudiantil de la SCMas.

Bernal-Rivera, A., Soto, D. Ramos, N. García, S., and Murillo-García, O.E. 2020. Response of terrestrial mammals present in La Dorada (Caldas, Colombia) to different types of baits. I Simposio Estudiantil de la SCMas.

Perea-Vásquez, A., Tabares, S., Medina, S., Calvache, C., **Bernal-Rivera, A.**, and Murillo-García, O.E. 2018. Bats’ assemblage from the Universidad del Valle. Proceedings of V Congreso Colombiano de Zoología, pp. 427-428. ISSN-2665-2994.

Bernal-Rivera, A., Calvache, C., Burbano, D., and Murillo-García, O. E. 2018. Glycemia in different trophic guilds of tropical bats. Proceedings of V Congreso Colombiano de Zoología, pp. 418. ISSN-2665-2994.

HONORS AND AWARDS

Best undergraduate/recent graduate student talk, IVCCM	2021
\$200 (Awarded) + Mammalogy books	

Academic Stimulus, Universidad del Valle	2015 to 2019
<i>A distinction of academic excellence</i>	

PROFESSIONAL TRAINING

DNA damage response, immunity and aging workshop EMBO, online workshop	2022
Introduction to occupation models course Colombian Society of Mammalogy, online course	2022
Photo trapping and its implications in ecological studies Colombian Society of Mammalogy, online course	2020
Analysis and measurement of biodiversity workshop Universidad Veracruzana-Universidad del Valle, Cali-Colombia, course	2019

PROFESSIONAL AFFILIATIONS

North American Society for Bat Research	Associate member, 2022-present
Calima Foundation	Research member, 2021-present
European Evolutionary Developmental Biology Society	Associate member, 2022-2023
Colombian Society of Mammalogy (SCMas)	Associate member, 2018-present
Research group of Animal Ecology, Universidad del Valle	Research member, 2019-2021

PROFESSIONAL SERVICE

Student Representative Student committee, Colombian Society of Mammalogy, Colombia.	2021-present
Study group coordinator THERIOS Mammal study group, Universidad del Valle, Cali, Colombia.	2018-2021
Symposium Co-organizer I-II Student symposium of the Colombian Society of Mammalogy.	2020

OUTREACH ACTIVITIES

Bats' Month. Annual celebration of bats in October. Citizen science in public places of the city, schools, and malls. Photography exposition, art, games, and Booklet "Bats from Cali, Colombia" distribution. (Coordinator Cali-Colombia, 2020-2022).

Melquiades Tent. Universidad del Valle Science show for universities, schools and families. Exhibitor of the mammals' stand. (Cali-Colombia, 2019).

LANGUAGES

English: Advanced Listener, Advanced Speaker, Advanced Reading and Writing.

French: Intermediate Listener, Novice Speaker, Advanced Reading and Writing.

Spanish: Native Language.