

ANAID CÁRDENAS-NAVARRETE

University of California, Berkeley

Department of Integrative Biology & Museum of Vertebrate Zoology

anaid.cardenas@berkeley.edu

EDUCATION

- 2021-present **Ph. D. Candidate in Integrative Biology**
 Department of Integrative Biology, University of California, Berkeley, USA
- 2018-2020 **M. Sc. in Ecology**
 Institute of Biology, National Autonomous University of Mexico, Mexico
- 2011-2015 **B. Sc. in Biology**
 Department of Science and Technology, Universidad Simón Bolívar, Mexico

PEER-REVIEWED PUBLICATIONS

1. Mateus-Aguilar, B., Díaz-Salazar, A. F., Batista, N., Andrade-Rivas, F., **Cárdenas-Navarrete, A.**, Dávila Arenas, A., Hernandez, K. V., Herrera-R, G., Langhans, K. E., Levey, D., Neill, A., Nguyen, O., Ocampo-Peñuela, N., Suárez-Castro, A. F., Zapata, F., & Echeverri, A. (2025). Relationships between biodiversity and cultural diversity are scale-dependent. *Ecological Indicators*, 176. <https://doi.org/10.1016/j.ecolind.2025.113616>
2. Pozo-Montuy, G., Aguilar-Cucurachi, M., Aureli, F., Briseño-Jaramillo, M., Canales-Espinosa, D., **Cárdenas-Navarrete, A.**, Cortés-Ortiz, L., Coyohua-Fuentes, A., Espinosa-Gómez, F. C., Franquesa-Soler, M., García-Duran, C., García-Ojeda, Y., González-Acosta, M. R., Hermida-Lagunes, J., Hernández-Salazar, L. T., Jasso-del-Toro, C., Lizama-Hernández, J. A., Martínez-Ramos, I. Z., Montejo-Zetina, E. J., ... Dias, P. A. D. (2024). Howler monkey die-off in southern Mexico. *American Journal of Primatology*, 86: e23684 <https://doi.org/10.1002/ajp.23684>
3. Echeverri, A., Batista, N. M., Wolny, S., Herrera-R, G. A., Andrade-Rivas, F., Bailey, A., **Cardenas-Navarrete, A.**, Dávila Arenas, A., Díaz-Salazar, A. F., Hernandez, K. V., Langhans, K. E., Mateus-Aguilar, B. E., Levey, D., Neill, A., Nguyen, O., Suárez-Castro, A. F., Zapata, F., & Ocampo-Peñuela, N. (2024). Toward sustainable biocultural ecotourism: An integrated spatial analysis of cultural and biodiversity richness in Colombia. *People and Nature*. <https://doi.org/10.1002/pan3.10755>
4. Hernandez, K. V., Andrade-Rivas, F., Zapata, F., Batista, N., **Cárdenas-Navarrete, A.**, Dávila Arenas, A., Herrera-R, G. A., Langhans, K. E., Levey, D., Neill, A., Nguyen, O., Ocampo-Peñuela, N., Sánchez Lopez, S., & Echeverri, A. (2024). Nearly half of Colombian artisan craft plant species lack national and international vulnerability assessments. *Ecosystems and People*, 20(1). <https://doi.org/10.1080/26395916.2024.2420080>
5. **Cárdenas-Navarrete, A.**, & Van Belle, S. (2023). Birth of a wild black howler monkey (*Alouatta pigra*) at an anthropogenic site. *Primates*, 64, 17–23. <https://doi.org/10.1007/s10329-022-01022-z>
6. Estrada, A., Garber, P. A., Gouveia, S., Fernández-Llamazares, Á., Ascensão, F., Fuentes, A., Garnett, S. T., Shaffer, C., Bicca-Marques, J., Fa, J. E., Hockings, K., Shantee, S., Johnson, S., Shepard, G. H., Shantee, N., Golden, C. D., **Cárdenas-Navarrete, A.**, Levey, D. R., Boonratana, R., ... Volampeno, S. (2022). Global importance of Indigenous Peoples, their lands, and knowledge systems for saving the world's primates from extinction. *Science Advances*, 8(32), eabn2927. <https://doi.org/10.1126/sciadv.abn2927>

TEACHING & ADVISING

- Spring 2025 **Mentor, Undergraduate Research Apprentice Program (URAP)**
Department of Integrative Biology, University of California, Berkeley
 Mentored two IB students who assisted with data management and analysis for my doctoral research on dispersal services provided by black howler monkeys in an anthropogenic landscape.
- Spring 2025 **Teaching Assistant, Biology of Human Reproduction – 90 students**
 Led weekly discussion sessions, attended lectures, and guided students through key course material.
- 2019 – present **Mentor in primate research methodologies**
 Mentored and trained 11 early-career Mexican biologists in field-based primate research methodologies. Several mentees have since transitioned to graduate studies or secured industry roles, demonstrating the positive impact of this mentorship on their career development.
- Fall 2024 **Teaching Assistant, Plant-Animal Interactions – 35 students**
Department of Integrative Biology, University of California, Berkeley
 Led weekly discussion sessions, attended lectures, and guided students through key course material. Designed hands-on activities, including the creation of a natural history journal and a research proposal, to introduce students to research methods and enhance critical thinking.
- Spring 2023 **Graduate Student Instructor, Ecology – 75 students**
Department of Environmental Science, Policy, and Management, University of California, Berkeley
 Led two weekly discussion sessions, attended lectures, and delivered a guest lecture on Conservation Biology. Facilitated interactive discussions analyzing current literature and provided review sessions to support student learning.
- Fall 2022 **Graduate Student Instructor, Mammalogy with Lab – 30 students**
Department of Integrative Biology, University of California, Berkeley
 Prepared lab specimens, developed lab activities, attended lectures, and organized field trips to UC research stations for small mammal data collection. Supported students in both field and lab work.
- Spring 2022 **Mentor, Breaking Language Barriers in Ecology and Evolution**
Department of Integrative Biology, University of California, Berkeley
 Guided a group of first-generation students in translating science into Spanish. This initiative aimed to broaden accessibility to scientific knowledge by ensuring that a more diverse audience could engage with science.
- Fall 2021 – Spring 2022 **Graduate Student Instructor, General Biology Lab – 30 students per semester**
Department of Integrative Biology, University of California, Berkeley
 Prepared lab materials, attended lectures, and worked closely with students to teach laboratory techniques and biological experiments over two semesters.

RESEARCH EXPERIENCE

- 2024-present **Researcher at Miku Conservación, NGO**
 Design and development of projects focused on conserving Mexican primates and tropical forests in collaboration with local communities and stakeholders.

2021-present	Ph.D. Research under Dr. Onja Razafindratsima (University of California, Berkeley). Resilience, movement, and the role of an endangered primate in a human-modified landscape.
2018-2020	M.Sc. Research under Dr. Alejandro Estrada (National Autonomous University of Mexico). Habitat navigation patterns associated with food resource use by black howler monkeys (<i>Alouatta pigra</i>) in forest fragments in Palenque, Chiapas, Mexico.
2017	Head Field Research Assistant under Keren Klass (PhD candidate at the University of Toronto). Led the assessment of ~20 forest fragments around Palenque National Park in Chiapas, Mexico for the presence of black howler monkey groups, collecting individual fecal samples and behavioral data during the survey. Additionally, I managed the process of obtaining permission from landowners for fieldwork activities and translated documents to communicate research findings and land-use recommendations to them effectively.
2016	Field Research Assistant under Dr. Sarie Van Belle (University of Texas). Collected behavioral data by reliably identifying approximately 30 individual black howler monkeys, alongside collecting geospatial and feeding data. I processed the collected data and conducted spatial data analyses.
2015	Research Assistant under Dr. Rosa Icela Ojeda (National Autonomous University of Mexico). Analyzed videos of spider monkeys and contributed to the development of a facial recognition program for individual ID. Additionally, I conducted literature reviews on the social and communication behavior of spider monkeys and engaged in science communication by writing weekly blog posts on primate conservation.

SCHOLARSHIPS & AWARDS

2025	Philomathia Graduate Fellowship in the Environmental Sciences, The Philomathia Foundation
2025	Alden H. Miller Fellowship, Museum of Vertebrate Biology, UC Berkeley
2024	Outstanding Graduate Student Instructor Award, UC Berkeley
2024	International Peace Scholarship (2 nd year), Philanthropic Educational Organization
2024	Research Fellowship (1 semester), Department of Integrative Biology, UC Berkeley
2023	Training program “Empowering conservation of the Maya Rainforest in Calakmul, Mexico”, The Rufford Foundation
2023	Training Program for Conservation in Bako National Park, Malaysia. International Primatological Society
2022	International Peace Scholarship (1 st year), Philanthropic Educational Organization
2021	Rafael Rodriguez/Golden Age Foreign Student Fellowship, UC Berkeley (<i>Diverted due to logistical conflict</i>).
2018	Master studies scholarship, Consejo Nacional de Humanidades, Ciencias y Tecnologías, Mexico.

RESEARCH GRANTS

2024	Graduate Division Conference Travel Grant, UC Berkeley	US\$1,500
2024	Department of Integrative Biology, UC Berkeley	US\$3,000
2023	RE:Wild	US\$5,000
2023	Department of Integrative Biology, UC Berkeley	US\$3,000
2023	The Rufford Foundation	GB£6,000
2023	IdeaWild	US\$1,500

2022	American Society of Mammalogists	US\$1,500
2022	Primate Conservation, Inc.	US\$3,500
2022	Tinker Field Research Award, UC Berkeley	US\$2,500

THESES

- 2020 **Cárdenas-Navarrete, A.** Patrones de navegación en el hábitat asociados al uso de recursos alimenticios por monos aulladores negros (*Alouatta pigra*) en fragmentos de selva en Palenque, Chiapas, México. [M.Sc. Thesis]. National Autonomous University of Mexico.
- 2017 **Cárdenas-Navarrete, A.** Navegación del hábitat y la dispersión espacial de árboles usados como fuente de alimento por un grupo de monos aulladores negros (*Alouatta pigra*) en el Parque Nacional Palenque, Chiapas: un estudio preliminar. [B.Sc. Thesis]. Universidad Simón Bolívar.

PARTICIPATION IN SCIENTIFIC MEETINGS

Oral Presentations

- 2025 **International Primatological Society.** Antananarivo, Madagascar.
Cárdenas-Navarrete A, Van Belle S, Lara-García U, Guzmán-Aguilar M, Razafindratsima OH. The influence of forest degradation on the movement of the endangered black howler monkey (*Alouatta pigra*).
MVZ Symposium. UC, Berkeley. California, USA.
Cárdenas-Navarrete A, Van Belle S, Lara-García U, Guzmán-Aguilar M, Razafindratsima OH. The influence of forest degradation on the movement of an endangered Mexican primate. *Annie M. Alexander Adventurous Spirit Award*.
- 2024 **8th Frugivores and Seed Dispersal Symposium.** Ilhéus, Brazil.
Cárdenas-Navarrete A, Van Belle S & Razafindratsima O. Movement and role of an endangered primate in a human-modified landscape in the Neotropics. *Invited speaker* at the Symposium: Linking movement to frugivory and seed dispersal.
UC Berkeley's IB Symposium 2024. UC, Berkeley. California, USA.
Cárdenas-Navarrete A. The story of how the howlers have guided my path through science.
- 2023 **Tinker Field, Center for Latin American Studies. UC, Berkeley.** California, USA.
Cárdenas-Navarrete A. Ecosystem services provided by black howlers to human-modified habitats.
- 2021 **Invited Speaker: Jornadas de Trabajo, Ciencias Químico-Biológicas.** Universidad Simón Bolívar. Mexico City, Mexico.
Cárdenas-Navarrete A. Ecología del forrajeo de monos aulladores negros (*Alouatta pigra*) bajo presión antropogénica.
- 2020 **Símposio de Estudiantes del IB. Instituto de Biología, UNAM.** Mexico City, Mexico.
Cárdenas-Navarrete A & Estrada A. Uso del hábitat y recursos alimenticios por monos aulladores negros (*Alouatta pigra*) en fragmentos de selva en Palenque, Chiapas. *Best Oral Presentation*.
- 2016 **Primer Congreso Internacional de Análisis Criminológico.** Jalisco, Mexico.
Vázquez-Santacruz E, **Cárdenas-Navarrete A,** Becerril N, Ojeda RI, Valencia L & Vargas-Guadarrama LA. Desarrollo de herramientas para la identificación de monos araña (*Ateles geoffroyi*) de Calakmul, Campeche, para el análisis antropológico basado en sus habilidades cognitivas.

Poster Presentations

- 2025 **Gordon Research Conference: Movement ecology of Animals.** California, USA.
Cárdenas-Navarrete A, Van Belle S, Lara-García U, Guzmán-Aguilar M, Razafindratsima OH. Movement ecology of the endangered Black Howler Monkey in the Anthropocene
- 2023 **International Primatological Society.** Kuching, Malaysia.
Cárdenas-Navarrete A, Van Belle S & Estrada A. What's left to eat? Assessment of tree communities and black howler monkey diets in forest fragments under different land-management scenarios.
- 2022 **International Primatological Society.** Quito, Ecuador.
Cárdenas-Navarrete A, Van Belle S, Campos A & Estrada A. Habitat navigation and use of feeding resources by black howler monkeys (*Alouatta pigra*) in forest fragments.
- 2017 **III Congreso Latinoamericano de Primatología.** Veracruz, Mexico.
Cárdenas-Navarrete A, Van Belle S, Campos A, de Guinea M, Barrios E, Levey D, Esparza Z & Estrada A. Navegación del hábitat y la dispersión espacial de árboles usados como fuente de alimento por monos aulladores negros (*Alouatta pigra*) en el Parque Nacional Palenque: un estudio preliminar. Poster presentation.
- 2014 **Noveno Congreso de Estudiantes de Ciencia y Tecnología. Universidad Simón Bolívar.** Mexico City, Mexico.
Cárdenas-Navarrete A, Cerón G, Herrera F & Morales M. Caracterización molecular de un microorganismo asociado a la pudrición de cactáceas (*Neobuxbaumia tetetzo*) en el valle de Tehuacán-Cuicatlán, Puebla.

LEADERSHIP & SERVICE

- Summer 2025 **Mentor at the IB SURE field retreat**
Mentored undergraduate students during a field retreat at UC Hastings Reserve as part of the IBSURE program. Taught vegetation survey techniques, including transect setup and phenology monitoring, and provided guidance and support for the students.
- Spring 2023 **Bilingual Science Communicator**
Spanish-English actor in an interactive science communication activity organized by the Museum of Paleontology of the University of California, Berkeley. The result was displayed at venues including the California Academy of Sciences, Berkeley Public Library, and Yale-Peabody Museum, helping to make complex biological concepts accessible to diverse audiences and enhancing the university's outreach efforts.
- Spring 2023 **Volunteer Organizer, Department Interview Weekend**
Organized and coordinated interview schedules for prospective graduate students during the department's interview weekend. Collaborated with faculty, students, and staff to ensure a welcoming experience for the candidates.
- 2022–2023 **Integrative Biology Graduate Student Association – Committee Director**
Led key committees within the Graduate Student Association, organizing activities to support graduate student well-being and professional development. Engaged with faculty and administration to advocate for graduate student interests.
- 2021 – 2023 **Society for Conservation Biology, Berkeley Chapter – Co-President**
Led the Berkeley chapter of the Society for Conservation Biology, managing the organization's operations, coordinating events, and encouraging interdisciplinary collaboration. Oversaw strategic initiatives that enhanced student engagement in conservation biology, contributing to the university's broader goals of scientific outreach.

COURSES

- 2024 *Introduction to Agent-Based Modeling* – Santa Fe Institute (online course)
- 2023 *Wilderness First Aid* - Sierra Rescue International
 American CPR Training - Sierra Rescue International
- 2021 *Wildlife Research* - CITI Program
 Working with Non-Human Primates in Research Settings - CITI Program
 Working with the IACUC - CITI Program
- 2015 *Open Water Diver* - SSI Scuba Schools International

PROFESSIONAL SOCIETIES

International Primatological Society – *Member*
American Society of Primatologists – *Member*
American Society of Mammalogists – *Member*