

## EDUCATION

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<b>Doctorate of Philosophy (PhD)</b> Conservation Biology	<b>University of California</b> • Berkeley, CA Department of Environmental Science, Policy, and Management (ESPM)	August 2022
<b>Master of Science (MSc)</b> Animal Behavior	<b>Cornell University</b> • Ithaca, NY Department of Neurobiology and Behavior	August 2016
<b>Master of Public Administration (MPA)</b> Environmental Policy	<b>Columbia University</b> • New York, NY School of International and Public Affairs (SIPA) & The Earth Institute	May 2011
<b>Bachelor of Arts (BA)</b> English & Ecology	<b>Cornell University</b> • Ithaca, NY College of Arts and Sciences	May 2009

## SELECTED ENVIRONMENTAL WORK EXPERIENCE

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<b>Amphibian Ark (AArk)   Program Director</b>	2023-present
Lead international workshops on the Conservation Needs Assessment process, often concurrently with IUCN Red List species assessments. Develop new initiatives to increase effectiveness of rescue projects. Manage global amphibian conservation programs funded by AArk, including grants and fellowship program.	
<b>Cornell Lab of Ornithology   Curriculum Developer &amp; Developmental Editor</b>	2012-2015
Developed the 'Galápagos Curriculum' for undergraduates, which teaches evolution and conservation to undergraduate students through the lens of the Galápagos Islands. Wrote and edited individual grants to cover travel for students from under-represented backgrounds. Served as the Developmental Editor on the Lab's Ornithology textbook, <i>The Handbook of Bird Biology</i> , Third Edition.	
<b>Coalition for Rainforest Nations (United Nations)   Policy Analyst &amp; Team Manager</b>	2010-2011
Facilitated agreements across government, academia, and industry regarding complex issues surrounding tropical rainforest sustainability. Our team developed a recommendations report for the social and environmental safeguards of the United Nations REDD+ policy. Identified aspects that posed serious threats to wildlife. Presented recommendations to Ministers of the Environment from over 40 nations.	

## FIELD RESEARCH EXPERIENCE

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<b>Amphibian Disease &amp; Communication in Tropical Working Landscapes   Ecuador</b>	2015-2022
Collected genetic and acoustic data across amphibian communities to assess characteristics that define species ranges. Discovered and described new glass frog species; described first instance of multi-modal signaling in <i>Centrolenidae</i>	
<b>Jaguar Conservation in Cacao   Honduras</b>	2017
Placed camera traps in cacao plots outside of protected areas to assess jaguar movement within working landscapes.	
<b>Assessment of Forest Fragment Health in Oil Palm   Malaysian Borneo</b>	2016
Assessed health of forest fragments in oil palm plantations; conducted biodiversity surveys in forest and agriculture.	
<b>Human Disease &amp; Ecosystem Services   Madagascar</b>	2015-2016
Performed mosquito surveys in agriculture and national parks to assess how forests may reduce local malaria rates.	
<b>Conservation Planning in the Wet Tropics   Australia</b>	2014
Analyzed long-term home range datasets for over 200 taxa, climate change model outputs, and behavioral data to identify the most important future corridors in the Australian Wet Tropics. Results presented to local management.	

Conducted bird biodiversity surveys; set up camera traps to monitor predation and incubation behavior; searched for nests, placed temperature sensors in eggs, in nests, and outside of nests. Lived in a tent for 5 months.

## PEER-REVIEWED PUBLICATIONS

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^ = undergraduate mentees

**Brunner, R.M.**, M.D.M. Moretta-Urdiales<sup>^</sup>, J.M. Tleimat<sup>^</sup>, R.M. Tyler<sup>^</sup>, J.M. Guayasamin, C. Kremen, & D. Rodriguez. 2024. Natural history traits are the strongest predictors of pathogen prevalence across working and natural landscapes: implications for amphibian conservation. In review, *Proceedings of the Royal Society B*.

Ginsberg, J.R. & **R.M. Brunner**. 2024. Biodiversity of Mammals. In: *Encyclopedia of Biodiversity, Third Edition*. Editor: Samuel M. Scheiner. Academic Press, pages 66-97. doi.org/10.1016/B978-0-12-822562-2.00392-3

Smart, U., S.F. McCracken, **R.M. Brunner**, C. Rivera<sup>^</sup>, & D. Rodriguez. 2024. Detection of the *Batrachochytrium dendrobatidis* global panzootic lineage in Ecuadorian anurans of the Amazonian lowlands. In Press, *Diseases of Aquatic Organisms*.

**Brunner, R.M.\***, J.M. Guayasamin\*, et al. 2022. Two new glassfrogs (Centrolenidae: *Hyalinobatrachium*) from Ecuador, with comments on the endangered biodiversity of the Andes. *PeerJ*. 10:e13109 \*co-first authors

Tleimat, J.M.<sup>^</sup>, S.R. Fritts, **R.M. Brunner**, D. Rodriguez, R.L. Lynch, & S.F. McCracken. 2022. Economic pressures of Covid-19 lockdowns result in increased timber extraction within a critically endangered region: A case study from the Pacific Forest of Ecuador. *Ecology and Evolution*, 12(11), e9550.

**Brunner, R.M.** and J. M. Guayasamin. 2020. Nocturnal visual displays and call description of the cascade specialist glassfrog *Sachatamia orejuela*. *Behaviour*. 57: 1257-1268.

Barve, S., A.S. Lahey, **R.M. Brunner**, W.D. Koenig, E.L. Walters. 2020. Woodpecker wars: tracking soldiers and spectators with telemetry. *Current Biology*. 30: R1-3.

Mason, N.A., **R.M. Brunner**, M. C. Ballen, I. Lovette. 2018. Cognitive and social benefits among underrepresented first-year biology students in a field course: a case study of experiential learning in the Galápagos. *Frontiers: The Interdisciplinary Journal of Study Abroad*. Vol. XXX, Issue 3, 1-19.

Scheffers, B.R., **R.M. Brunner**, S. D. Ramirez, L.P. Shoo, A. Diesmos, S.E. Williams. 2013. Thermal buffering of microhabitats is a critical factor mediating warming vulnerability of frogs in the Philippine biodiversity hotspot. *Biotropica*. 45: 628-635.

**Brunner, R.M.** et al. 2010. Back to its Roots: Reducing Emissions from Deforestation and Forest Degradation via the Copenhagen Accord. *Reconsidering Development* Vol.1, No. 1.

### In prep:

**Brunner, R.M.**, L. Greenstreet, M.D.M. Moretta-Urdiales<sup>^</sup>, J.M. Tleimat<sup>^</sup>, J.M. Guayasamin, & C. Kremen. Soundscapes of conservation: high-pitched calls rely on high-quality habitat.

**Brunner, R.M.**, R.L. Lynch, S. McCracken, & J.M. Guayasamin. Unique egg deposition site and tadpole development of the cascade specialist glass frog, *Sachatamia orejuela*.

Molis, T.<sup>^</sup>, **R.M. Brunner**, & D. Rodriguez. Mitochondrial rearrangements in *Pristimantis achatinus* may explain incongruent amplification sizes compared to other amphibians.

## SELECTED FELLOWSHIPS & GRANTS

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<b>Charles W. Woodworth Continuing Fellowship</b>   \$25,000	2021
<b>American Association of University Women (AAUW) Dissertation Fellowship</b>   \$20,000	2020
<b>Graduate Innovation Fellowship</b>   \$4,000	2020
<b>Cause for Conservation Award</b>   \$1,674	2020
<b>National Geographic Explorer Grant</b>   \$9,950	2019
<b>National Science Foundation Graduate Research Fellowship (GRFP)</b>   \$132,000	2014-2019
<b>Society for Conservation Biology Graduate Student Research Fellowship</b>   \$1,000	2019
<b>Edna &amp; Yoshinori Tanada Endowed Fellowship</b>   \$1,500	2019
<b>USAID Global Development Fellowship</b>   \$7,500	2017
<b>Walker Fund Grant</b>   \$2,400	2015-2016
<b>Hellman Graduate Award</b>   \$35,000	2015
<b>Kieckhefer Adirondack Fellowship</b>   \$5,000	2014
<b>Sigma Xi Scientific Research Society Grant</b>   \$800	2014
<b>Student Research Grant in Animal Behavior</b>   \$750	2014
<b>Cornell Lab of Ornithology Athena Fellowship</b>   \$6,457	2013
<b>Women's International Leadership Program Scholar</b>   \$2,000	2011

## TEACHING EXPERIENCE

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<b>Wildlife Management &amp; Policy in the 21<sup>st</sup> Century</b>   University of California, Berkeley <i>Graduate Student Instructor</i> • Designed and taught discussion sections; guest lectured	Fall 2021
<b>Culture &amp; Natural Resource Management</b>   University of California, Berkeley <i>Head Graduate Student Instructor</i> • Taught and designed sections for other GSIs	Summer 2020
<b>Ecology and Society</b>   St. Mary's College of California [ <i>Field Course, Indonesia</i> ] <i>Co-Instructor of Record</i> • Developed ecology content; guided student research projects	Winter 2019
<b>Advanced Topics in Conservation Biology</b>   University of California, Berkeley <i>Lecturer/Seminar Leader</i> • Lectured; supervised student projects with NGOs	Fall 2018
<b>Environmental Ethics</b>   University of California, Berkeley <i>Graduate Student Instructor</i> • Developed case studies; taught sections; guest lectured	Fall 2018
<b>Tropical Ecology and Conservation</b>   Texas State University [ <i>Field Course, Ecuador</i> ] <i>Teaching Assistant</i> • Taught field techniques; guided student research projects; lectured	Summer 2017
<b>Galápagos Curriculum</b>   Cornell University [ <i>Classroom-Field Hybrid Course</i> ] <i>Curriculum Developer/Instructor of Record</i> • Designed and taught an interdisciplinary freshman curriculum: 1) evolutionary biology course with a special discussion section focused on Galápagos, 2) writing seminar on the conservation and human history, and 3) 10-day spring break excursion to the Galápagos. Secured funding for student travel.	Spring 2013 & 2014

## TEACHING AWARDS & CERTIFICATES

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<b>Outstanding Graduate Student Instructor Award</b>   University of California, Berkeley [ <i>campus-wide</i> ]
<b>Certificate in Teaching and Learning in Higher Education</b>   University of California, Berkeley
<b>Innovation Fellow in Remote Instruction + Certificate</b>   University of California, Berkeley

## UNDERGRADUATE MENTORSHIP EXPERIENCE

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<b>Undergraduate Thesis Co-Advisor</b>   University of British Columbia, Vancouver	2020-2022
<b>Sponsored Projects for Undergraduate Research Advisor</b>   University of California, Berkeley	2018-2019
<b>Undergraduate Research Apprenticeship Advisor</b>   University of California, Berkeley	2018-2019
<b>Mentor to Field Research Assistants</b>   Jama-Coaque & Mashpi field stations, Ecuador	2018-2022
<b>Biology Scholars [First-generation] Program Leader</b>   Cornell University	2013-2015

## INVITED PRESENTATIONS

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<b>Conservation in the Tropics</b>   Texas A&M University	2021
<b>Bioacoustics &amp; Conservation</b>   Mashpi Field & Research Center, Ecuador	2021
<b>How to Describe a New Species</b>   Mashpi Field & Research Center, Ecuador	2021
<b>Soundscapes and Movement in the Matrix</b>   Texas State University	2019
<b>Amphibian Acoustic Space &amp; Behavior</b>   Mashpi Field & Research Center, Ecuador	2019
<b>The Science of Discovery</b>   Mashpi Field & Research Center, Ecuador	2019
<b>Functional Traits Along a Disturbance Gradient: Implications for Conservation</b>   Conference on Conservation Science, American Museum of Natural History, New York City	2018
<b>Resilience-Based Prioritization of Tropical Fauna</b>   International Congress for Conservation Biology, Society for Conservation Biology, Cartagena, Colombia	2017
<b>Resilience-Based Prioritization of Tropical Fauna</b>   Bay Area Conservation Biology Symposium, Stanford University	2016
<b>REDD+ Biodiversity &amp; Indigenous Rights Safeguard Recommendations</b>   United Nations Framework Convention on Climate Change (UNFCCC), Bangkok, Thailand	2011

## AFFILIATIONS & SERVICE

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<b>Third Millennium Alliance/Jama-Coaque Reserve, Ecuador</b>   Research Affiliate
<b>IUCN Species Survival Commission (SSC)</b>   Member
<b>IUCN Amphibian Specialist Group (ASG)</b>   Member
<b>Society for Conservation Biology (SCB)</b>   Member & Former President of Berkeley SCB Chapter
<b>Society for the Study of Amphibians and Reptiles (SSAR)</b>   Member
<b>Association for Tropical Biology and Conservation (ATBC)</b>   Member
<b>Frontiers for Young Minds—Understanding Biodiversity</b>   Review Editor