

Chauncey R. Gadek

Curriculum vitae

Department of Biology and Museum of Southwestern Biology
University of New Mexico, 156 Castetter Hall
Albuquerque, NM 87131
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Professional Preparation

PhD Evolutionary Biology,

University of New Mexico, Albuquerque, NM

August 2019 - December 2025 (Anticipated)

M.Sc. Evolutionary Biology, (Highest Honors, *Distinction*)

University of New Mexico, Albuquerque, NM

December 2019

B.S. Biology (Highest Honors, *summa cum laude*; minor in Chemistry)

University of New Mexico, Albuquerque, NM

May 2016

Research Experience

Research Assistant

January 2020 - present

Museum of Southwestern Biology UNM, Albuquerque, NM

- Data and analysis manager for crane vocal tract evolution project.

Field Assistant, Avian Malaria Diversity Project

June - July 2017

Museum of Southwestern Biology UNM, Albuquerque, NM

- Data collection and preparation of avian specimens for malaria survey project

Expedition Leader, Andean Marsh Bird Project

January - February 2017

Museum of Southwestern Biology UNM, Albuquerque, NM

- Managed national research permit process, two field technicians, and data collection Peru

Expedition Leader, High-Altitude Adaptation of Andean Marsh Bird Project

July 2016

Museum of Southwestern Biology UNM, Albuquerque, NM

Field Assistant, Small Mammal Community Dynamics Project

January 2014 - April 2016

University of New Mexico, Albuquerque, NM

- Blood collection, morphometrics, and Quantitative Magnetic Resonance scanning of small mammal communities on Sevilleta LTER

Curatorial Assistant,

August 2014 - April 2016

Museum of Southwestern Biology, Albuquerque, NM.

- Organization of tissues, processing of tissue acquisitions, tissue loans, and data management
- Prepared over 500 voucher specimens

Reviewer for:

BMC Evolutionary Biology (1), Heredity (1), PLOS Genetics (1), Proc. B (1), UNM BGSA GRAC (8)

Oral Presentations

2019 **Gadek, C. R.** & Witt C.C. Dynamics Of Avian Elevational Ranges Reveal Hidden Evolutionary Forces, UNM Brown Bag, Albuquerque NM.

2018 **Gadek, C. R.** & Witt C.C. Evolutionary Dynamics of Elevational Ranges in Andean Birds. New Mexico Ornithological Society Annual Meeting, Albuquerque NM.

2018 **Gadek, C. R.** & Witt C.C. Evolutionary Dynamics of Elevational Ranges in Andean Birds. University of New Mexico Biology Department Research Day, Albuquerque NM.

2016 **Gadek, C.R.** Broad elevational distributions: Why are mountain passes are lower for some species? North American Ornithological Conference, Washington D.C.

2016 **Gadek, C.R.** Why Are Elevational Generalists Rare? New Mexico Ornithological Society Annual Meeting, Albuquerque, NM.

2016 **Gadek, C.R.** Elevational migration and genetic divergence in songbird species in the Peruvian Andes. University of New Mexico Biology Department Research Day, Albuquerque NM.

Poster Presentations (* = presenter)

- 2018 **Gadek, C. R.** & Witt C.C. Evolutionary Dynamics of Elevational Ranges in Andean Birds. Genomics of Adaptation, Flathead Lake Biological Station, Polson, MT
- 2018 **Williamson, J.L.***, SM Bauernfeind, **CR Gadek**, N Ricote-Martinez, F Bozinovic and CC Witt. The paradoxical Giant Hummingbird: Comparison of Andean and coastal subspecies with respect to blood, migration, and genes. American Ornithological Society Conference, Tucson, AZ
- 2018 Barrow, L.N., Bauernfeind*, S.M., Witt, C.C., Baumann, M.J., Brady, S.S., Chavez, A.N., Cruz, P.A., Ford, J.E., **Gadek, C.R.**, Galen, S.C., Johnson, A.B., Mapel, X.M., and Williamson, J.L. Comparison among Sky-island Haemosporidian Communities Reveals Dynamics of Parasite-species Turnover and Host-switching. UNM Department Research Day, Albuquerque, NM

Publications

1. Adame, V., H. Chapapas, M. Cisneros, C. Deaton, S. Deichmann, **C. Gadek**, T. L. Lovato, M. B. Chechenova, P. Guerin, and M. Richard. 2017. An undergraduate laboratory class using CRISPR/Cas9 technology to mutate *Drosophila* genes. *Biochem. Mol. Biol. Educ.* 44:263–275.
2. Marroquin-Flores, R. A., J. L. Williamson, A. N. Chavez, S. M. Bauernfeind, M. J. Baumann, **C. R. Gadek**, A. B. Johnson, J. M. McCullough, C. C. Witt, and L. N. Barrow. 2017. Diversity, abundance, and host relationships of avian malaria and related haemosporidians in New Mexico pine forests. *PeerJ* 5:e3700.
3. **Gadek, C. R.**, S. D. Newsome, E. J. Beckman, A. N. Chavez, S. C. Galen, E. Bautista, and C. C. Witt. 2017. Why are tropical mountain passes “low” for some species? Genetic and stable-isotope tests for differentiation, migration and expansion in elevational generalist songbirds. *J. Anim. Ecol.*, doi: 10.1111/1365-2656.12779.
4. Barrow, L. N., S. M. Bauernfeind, P. A. Cruz, J. L. Williamson, D. L. Wiley, J. E. Ford, M. J. Baumann, S. S. Brady, A. N. Chavez, **C. R. Gadek**, S. C. Galen, A. B. Johnson, X. M. Mapel, R. A. Marroquin-Flores, T. E. Martinez, J. M. McCullough, J. E. McLaughlin, and C. C. Witt. 2021. Detecting turnover among complex communities using null models: a case study with sky-island haemosporidian parasites. *Oecologia*, doi: 10.1007/s00442-021-04854-6. Springer Berlin Heidelberg.

Scholarships and Grants

2016	Donald Caughren Endowed Memorial Scholarship , UNM Biology Department	\$3000
	Evolutionary consequences of elevational generalism	
2016	Maurice L. Hughes Scholarship , UNM Biology Department	\$2000
2016	NAOC Travel Award , American Ornithological Union	\$200
2016	Research Grant , UNM Biology Graduate Student Association	\$400
	Gene flow and divergence in isolated marsh bird populations	
2016	Chapman Research Grant , American Museum of Natural History,	\$1275
	Gene flow and divergence in isolated marsh bird populations	
2017	Lynne Hertel Memorial Scholarship , UNM Biology Department,	\$3000
	Gene flow and divergence in isolated marsh bird populations	
2017	Professional Development Grant , UNM Graduate and Professional Student Association	\$500
2017	Research Grant , UNM Graduate and Professional Student Association	\$500
	Gene flow and divergence in isolated marsh bird populations	
2018	Grove Scholarship , UNM Biology Department	\$2000
	Gene flow and divergence in isolated marsh bird populations	
2018	WOS Research Grant , Wilson Ornithological Society	\$2500
	Gene flow and divergence in isolated marsh bird populations	
2018	AOS Research Grant , American Ornithological Society	\$2500
	Gene flow and divergence in isolated marsh bird populations	
2018	Research Grant , UNM Biology Graduate Student Association	\$400
	Epigenetic divergence in isolated marsh bird populations	
2019	Professional Development Grant , UNM Graduate and Professional Student Association	\$500

Awards and Honors

Distinction , UNM Biology Department, master's thesis defense	2019
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Best Student Oral Presentation , UNM Biology Department Research Day	2018
Graduate Research Fellowship , National Science Foundation (Honorable Mention)	2017
<i>Summa cum laude</i> , UNM Biology Department Undergraduate Graduation	2016