CURRICULUM VITÆ ERIC STEVEN ABELSON

PROFESSIONAL PREPARATION

Research Scientist

UNIVERSITY OF TEXAS, AUSTIN

2020-PRESENT

Department of Integrative Biology, Austin, TX

Postdoctoral Scholar

PACIFIC SOUTHWEST RESEARCH STATION

& UNIVERSITY OF CALIFORNIA, DAVIS

2015-2020

United States Forest Service, Davis, CA & U.C. Davis, John Muir Institute of the Environment, Davis, CA

Wildlife movement ecology and linear barriers at a landscape scale; small-mammal genetic connectivity at the roadside; intraspecies movement modeling – lessons from movement behavior in migratory and non-migratory deer

Advisor: Dr. Patricia Manley

La Kretz Conservation Postdoctoral Fellow

UNIVERSITY OF CALIFORNIA, LOS ANGELES

2014-2015

U.C.L.A. La Kretz Center for California Conservation Science, Los Angeles, CA Wildlife behavior and movement ecology in anthropogenic landscapes.

Advisors: Drs. Daniel Blumstein (U.C.L.A.) and Seth Riley (National Park Service)

Ph.D. STANFORD UNIVERSITY

2013

Department of Biological Sciences, Palo Alto, CA

Wildlife behavior, relative encephalization and extinction.

Advisors: Dr. Rodolfo Dirzo. Committee: Drs. Gretchen Daily, Deborah Gordon & Lucia Jacobs

M.S. STANFORD UNIVERSITY

2008

Department of Biological Sciences, Palo Alto, CA

Systematic bias in camera-trap data caused by wildlife behavior.

Advisor: Dr. Rodolfo Dirzo.

GPA: 4.0/4.0

B.S. UNIVERSITY OF CALIFORNIA, BERKELEY

2005

Department of Environmental Science Policy and Management, Berkeley, CA Minor in Forestry and Natural Resources.

Honors Thesis: *Tracking as a wildlife survey technique; a comparative analysis of tracking, camera traps and direct observation.*

Advisor: Dr. Reginald Barrett.

GPA: 3.9/4.0

RESEARCH INTERESTS

Mammalian conservation, animal behavior, conservation biology, mammalian extinction, wildlife at urban/wildland boundaries and fragmented habitats, biogeography and climate-driven changes to species ranges, ecosystem functioning, remote detection/tracking of wildlife, minimally invasive techniques in wildlife biology, biological applications of computer science.

PUBLICATIONS and PATENTS

Abelson, E.S. Big Brains Reduce Extinction Risk in Carnivora. *Oecologia* (2019)

*Neco, L.C., **E.S. Abelson**, B. Natterson-Horowitz, D.T. Blumstein. The Evolution of Self-Medication Behaviour in Mammals. *Biol J Linn Soc* 128, 373-378 (2019)

Boyston, E.E., **E.S. Abelson**, *A. Kazanjian, D.T. Blumstein. Canid vs. canid: insights into coyote-dog encounters from social media. *Human Wildlife Interactions*. (2018) 12(2), 9

Abelson, E.S. Brain size is correlated with endangerment status in mammals. *Proc. R. Soc. B.* Vol. 283. No. 1825. The Royal Society, 2016.

Garcia-Molina, H., *S. Kandel, A. Paepcke, M. Theobald, and **E.S. Abelson**. 'Spreadsheet System and Method for Managing Photos,' Patent publication number: US 2010/0058163 A1 U.S. Classification: 715/220

Sundaresan, S., C. Riginos, **E.S. Abelson**. Storage and Analysis of Camera Trap Data: Alternative Approaches (Response to Harris *et al.* 2010). *The Bulletin of the Ecological Society of America* 92.2 (2011): 188-195.

Kandel, S., **E.S. Abelson**, H. Garcia-Molina, A. Paepcke & M. Theobald. 2008. PhotoSpread: A Spreadsheet for Managing Photos. *Computer/Human Interactions*, 2008 Proceedings 1749-1758 Available online at: http://dbpubs.stanford.edu:8090/pub/2007-28

* indicates undergraduate mentee & co-author

CURRENT and PENDING SUPPORT

USDA Forest Service: Exploring how wildlife movements are driven by ephemeral vegetation dynamics – applying remote sensing to better understand wildlife movement at broad spatiotemporal scales. (\$25,000). 2019-2024.

SELECTED RESEARCH PRESENTATIONS

Jacobson S., S. Crossen, **Abelson**, **E.S.** Carcass data: when fewer carcasses are not better. International Conference on Ecology & Transportation, September 24, 2019, Sacramento, CA. (poster presentation)

Abelson, E.S., S.A. Cushman. Modeling wildlife movement behavior to identify mitigation locations along linear barriers. The Western Section of the Wildlife Society Annual Meeting. February 6, 2019. Fish Camp, California.

- **Abelson, E.S.,** S. Cushman. Conservation modeling to identify optimal barrier crossing-locations. Society for Conservation Biology: North American Congress for Conservation Biology, July 2018, Toronto, Ontario, CA.
- Roe J.D., T. McCleary, **E.S. Abelson**. Efficacy of camera traps to detect herpetofauna with emphasis on the Alameda Whipsnake and San Francisco Garter Snake. The Wildlife Society Annual Meeting, September 2017, Albuquerque, NM
- **Abelson E.S.**, S. Cushman. Modeling wildlife movement for conservation planning. Ecological Society of America Annual Meeting, August 2017, Portland, OR
- **Abelson, E.S.**, S. Jacobson. The importance of within-species wildlife behavior on mitigating mortalities and the barrier-effect of highways. International Conference on Ecology and Transportation, May 2017, Salt Lake City, UT
- Jacobson, S., C. de Rivera, **E.S. Abelson**. Impacts of roadways on wildlife: barrier impacts from vehicle-caused mortality and road avoidance on species and populations. Society for Conservation Biology: North American Congress for Conservation Biology, July 2016, Madison, WI
- *Nojoumi, M., E.S. Abelson, A.P. Clevenger, D.T. Blumstein. Vehicular traffic effects on elk and white-tailed deer at wildlife crossings in Banff National Park. UCLA Ecology and Evolutionary Biology Poster Day, May 2016, Los Angeles, CA (poster presentation. Awarded second place in poster competition)
- * Nojoumi, M., E.S. Abelson, A.P. Clevenger, D.T. Blumstein. Vehicular traffic effects on elk and white-tailed deer at wildlife crossings in Banff National Park. UCLA Science Poster Day, May 24 2016, Los Angeles, CA (poster presentation)
- **Abelson, E.S.**, S.P.D. Riley, D.T. Blumstein. Wildlife movement, road ecology and impacts of wildlife perception. Organized session: "Road ecology moving forward." Ecological Society of America Annual Meeting, August 2015, Baltimore, MD

* indicates undergraduate mentee & co-author

SELECT SCIENTIFIC OUTREACH & PROFESSIONAL SERVICE

Peer reviewer: Peer reviewer for Biological Conservation, PLOS ONE

Committee board member: Board member for the Animal Behavior Society's Conservation Committee. 2014-2017.

Board of Directors: Amigos del Centro de Educacion Ambiental de las Peninsula Yucateca. Member of the board of directors for the 501 c3 non-profit organization based in Mexico with the mission of conserving and supporting of bio-cultural diversity through education, research and community. November 2012-present.