Marianne S. Moore

Assistant Professor
College of Integrative Sciences and Arts
Arizona State University, Polytechnic Campus
6073 S. Backus Mall, Wanner Hall Rm 310D
office: 480-727-5921
marianne.moore@asu.edu

EDUCATION

Ph.D., Boston University, Boston, MA **2005-2011**
Department of Biology
"Ecological immunology in little brown myotis (*Myotis lucifugus*; Chiroptera) affected by white-nose syndrome."

B.S., The Evergreen State College, Olympia, WA **1999-2002**
Emphasis in Biological and Chemical Sciences
Research topic: "Synthesis and characterization of materials to be used for artificial blood vessels."

APPOINTMENTS

Arizona State University (ASU) at the Polytechnic campus
Assistant Professor, College of Integrative Science and Arts
Honors Faculty, Barrett, The Honors College **2015-present**

Stony Brook University
NIH-Supported Postdoctoral Scholar, Department of Ecology & Evolution **2013-2015**

Bucknell University
Faculty Associate, Department of Biology **2012-2013**
Postdoctoral Researcher and Visiting Instructor, Department of Biology **2011-2012**

Boston University
Postdoctoral Researcher, Ecology, Behavior and Evolution **2010**

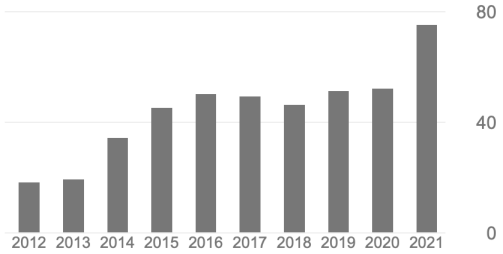
Boston University
Graduate Research and Teaching Assistant, Ecology, Behavior and Evolution **2005-2010**

RESEARCH and SCHOLARSHIP

PUBLICATIONS

Google Scholar: 455 citations
h-index: 9
i10 index: 9

Citations by year: 2012 - October 2021.



Author order:
First author is primary investigator. Author contributions decrease with position. Commonly, last author is principal investigator overseeing the project. Underlined authors are students I mentored.

Peer-reviewed:
Bernard, R.F., J.D. Reichard, J.T.H. Coleman, J.C. Blackwood, M.L. Verant, J.L. Segers, J.M. Lorch, J.P. White, **M.S. Moore**, A.L. Russell, R.A. Katz, D.L. Lindner, R.S. Toomey, G.G. Turner, W.F. Frick, M.J. Vonhof, C.K.R. Willis, and E.H.C. Grant. 2020. Using a systematic approach for identifying research needs to inform white-nose syndrome management decisions. Conservation Science and Practice. 2(8):e220.

Cheng, T.L., A. Gerson, **M.S. Moore**, J.D. Reichard, J. DeSimone, C.K.R. Willis, W.F. Frick, and A.M. Kilpatrick. 2019. Higher fat stores contribute to persistence of little brown bat populations with white-nose syndrome. *Journal of Animal Ecology*, *88*(4), 591-600.

Moore, M.S., K.A. Field, M.J. Behr, G.G. Turner, M.E. Furze, D.W.F. Stern, P.R. Allegra, S.A. Bouboulis, C.D. Musante, M.E. Vodzak, M.E. Biron, M.B. Meierhofer, W.F. Frick, J.T. Foster, D. Howell, J.A. Kath, A. Kurta, G. Nordquist, J.S. Johnson, T.M. Lilley, B.W. Barrett, and D.M. Reeder. 2018. Energy conserving thermoregulatory patterns and lower disease severity in a bat resistant to the impacts of white-nose syndrome. Journal of Comparative Physiology – B. *188*(1), 163-176.

Reichard, J.D., N.W. Fuller, A.B. Bennett, S.R. Darling, **M.S. Moore**, K.E. Langwig, E.D. Preston, S. von Oettingen, C. Richardson, and D.S. Reynolds. 2014. Interannual survival of *Myotis lucifugus* (Chiroptera: Vespertilionidae) near the epicenter of white-nose syndrome. Northeastern Naturalist. 21, N56-N59.

Yates, D.E., E.M. Adams, S.E. Angelo, D.C. Evers, J. Schmerfeld, **M.S. Moore**, T.H. Kunz, T. Divoll, S.T. Edmonds, C. Perkins, R. Taylor, and N.J. O'Driscoll. 2014. Mercury in bats from the northeastern United States. Ecotoxicology 23(1), 45-55.

Pilosof, S., C. Korine, **M.S. Moore**, and B.R. Krasnov. 2013. Effects of sewage-water contamination on the immune response of a desert bat. Mammalian Biology-Zeitschrift für Säugetierkunde. 79(3), 183-186.

Moore, M.S., J.D. Reichard, T.D. Murtha, M.L. Nabhan, R.E. Pian, J.D. Ferreira, and T.H. Kunz. 2013. Hibernating little brown myotis (*Myotis lucifugus*) show variable immunological responses to white-nose syndrome. PLoS ONE 8(3): e58976. doi:10.1371/journal.pone.0058976.

Reeder, D.M. and **M.S. Moore**. White Nose Syndrome: a deadly emerging infectious disease of hibernating bats. 2013. Pp. 413-434. In, Bat Evolution, Ecology, and Conservation. R.A. Adams and S.C. Pedersen (Eds.). Springer Science Press, New York.

Moore, M.S., J.D. Reichard, T.D. Murtha, B. Zahedi, R.M. Fallier, and T.H. Kunz. 2011. Specific alterations in complement protein activity of little brown myotis (*Myotis lucifugus*) hibernating in white-nose syndrome affected sites. PLoS ONE 6(11): e27430. doi:10.1371/journal.pone.0027430.

Puechmaille, S.J., W.F. Frick, T.H. Kunz, P.A. Racey, C.C. Voigt, G. Wibbelt, E.C. Teeling, and **the White-Nose Syndrome Consortium**. 2011. White-nose syndrome: is this emerging disease a threat to European bats? Trends in Ecology and Evolution. 26, 570-576

Wibbelt, G., **M.S. Moore**, T. Schountz, and C. Voigt. 2010. Emerging diseases in Chiroptera: why bats? Biology Letters. 6, 438-440.

***Chapters*:**

Bure, C.M. and **M.S. Moore**. White-nose syndrome: a fungal disease of North American hibernating bats. 2019. pp 1165-1174. In William B. White and David C. Culver, editors: Encyclopedia of Caves 3rd Edition, Chennai: Academic Press.

Moore, M.S. and T.H. Kunz, White-nose syndrome: a fungal disease of North American hibernating bats. 2012. pp. 903-909. In William B. White and David C. Culver, editors: Encyclopedia of Caves 2nd Edition, Chennai: Academic Press.

Kunz, T.H., J.T. Foster, W.F. Frick, A.M. Kilpatrick, G.F. McCracken, **M.S. Moore**, J.D. Reichard, D.M. Reeder, and A.H. Robbins. 2011. White-nose syndrome: an overview of ongoing and future research needs. pp. 189-203, In: Proceedings of Protecting Threatened Bats at Coal Mines: A Technical Interactive Forum (K.C. Vories, A.H. Caswell, and T.M. Price, eds.). U.S. Department of Interior, Office of Surface Mining and Coal Research Center, Alton, Illinois, and Coal Research Center, Southern Illinois University, Carbondale, Illinois.

Popular articles:

Moore, M.S. 2017. White-nose syndrome: a deadly disease for bats. 2017. Mountain Lines, the Magazine of the McDowell Sonoran Conservancy. Fall, 28-29.

ACADEMIC PRESENTATIONS

Underlined authors are students I mentored.

***Invited presentations*:**

2020:

Moore, M.S. Will white-nose syndrome affect cave dwelling bats in the desert southwest? 2020. Arizona Regional Association of the National Speleological Society Winter Technical Meeting. Phoenix, AZ. *Oral presentation.*

2019:

Moore, M.S. Natural histories and natural immunities: investigating bat immunology, physiology, and behavior to understand host responses to the white-nose syndrome fungal pathogen. 2019. College of Integrative Sciences and Arts Science and Mathematics Colloquium Series. Mesa, AZ.

2018:

Moore, M.S. Signals in noise: detecting low-abundance immunological proteins in bat wing membranes to help understand and predict the impacts of white-nose syndrome. 2018. School of Forestry Seminar Series. Northern Arizona University. Flagstaff, AZ.

2015:

Moore, M.S. The quick and the dead: fungal infection and immunity in a hibernating host. 2015. Science and Mathematics Seminar Series. Arizona State University, College of Letters and Sciences. Mesa, AZ.

Moore, M.S. STEM Scholars Keynote Address. 2015. Suffolk County Community College, Ammerman Campus. Selden, NY.

2014:

Moore, M.S. Exploring immune responses and markers of resistance to white-nose syndrome, a fungal disease imperiling North American bats. 2014. Suffolk County Community College, Grant Campus. Brentwood, NY.

Moore, M.S. and L.M. Dávalos. The role of antimicrobial peptides in resisting and treating bat white-nose syndrome. 2014. Northeast Natural History Conference. Springfield, MA.

2013:

Moore, M.S., K.A. Field*, M.J. Behr, G.G. Turner, M.E. Furze, D.W.F. Stern, P.R. Allegra, W.F. Frick, J.T. Foster, A.M. Kilpatrick, S.A. Brownlee-Bouboulis, C.D. Musante, M.E. Vodzak, M.E. Biron, M.B. Meierhofer, J.S. Johnson, and D.M. Reeder. Immune responses against *Pseudogymnoascus destructans* vary between species. 2013. White-nose syndrome Symposium. Boise, ID. (*presenter)

Moore, M.S., K.A. Field*, M.J. Behr, G.G. Turner, M.E. Furze, D.W.F. Stern, P.R. Allegra, W.F. Frick, J.T. Foster, A.M. Kilpatrick, S.A. Brownlee-Bouboulis, C.D. Musante, M.E. Vodzak, M.E. Biron, M.B. Meierhofer, J.S. Johnson, and D.M. Reeder. 2013. Immune responses to *Geomyces destructans* vary between species exhibiting differential white-nose syndrome population declines. 43rd Annual North American Symposium on Bat Research and the 16th International Bat Research Conference. San José, Costa Rica. (*presenter)

Moore, M.S., K.A. Field, M.J. Behr, G.G. Turner, M.E. Furze, D.W.F. Stern, P.R. Allegra, W.F. Frick, J.T. Foster, A.M. Kilpatrick, S.A. Brownlee-Bouboulis, C.D. Musante, M.E. Vodzak, M.E. Biron, M.B. Meierhofer, J.S. Johnson, and D.M. Reeder. Immune responses to *Geomyces destructans* vary between

species exhibiting differential white-nose syndrome population declines. 2013. 93rd Annual Meeting of the American Society of Mammalogists. Philadelphia, PA.

2012:

Moore, M.S., Ecological immunology of bat white-nose syndrome. 2012. Biology Department Seminar Series. University of Scranton. Scranton, PA.

2011:

Moore, **M.S.,** E.L. Buckles, K.A. Field, J.D. Reichard, D.M. Reeder, and T.H. Kunz. Synthesis of white-nose syndrome immune function studies: 2008 to the present and beyond. 2011. 41st Annual North American Symposium on Bat Research. Toronto, Quebec.

Moore, M.S., D.A. Heitzman, K.A. Field, G.G. Turner, C.K.R. Willis, and D.M. Reeder. Can inter-species differences in immunological responses predict who will survive white-nose syndrome? 2011. White-nose Syndrome Symposium. Little Rock, AK.

2010:

Moore, M.S., E.L. Buckles, J.D. Reichard, T.D. Murtha, M.L. Nabhan, R.E. Pian, B. Zahedi, R.M. Fallier and T.H. Kunz. Immunological correlates of white-nose syndrome in little brown myotis (*Myotis lucifugus*). 2010. White-nose Syndrome Symposium. Pittsburgh, PA.

Moore, M.S., J.D. Reichard, T.D. Murtha, B. Zahedi, R.M. Fallier, and T.H. Kunz. Immunological correlates of white-nose syndrome in hibernating little brown myotis (*Myotis lucifugus*): alterations in blood complement protein activity. 2010. 2nd International Berlin Bat Meeting: Bat Biology and Infectious Diseases. Berlin, Germany.

Submitted Presentations:

2021:

Pérez, N.E.M., A.L. McIntire and **M.S. Moore***. Hibernation ecology & physiology of bats using three high-elevation caves in northern Arizona: implications for potential white-nose syndrome impacts on desert southwest species. 2021. Arizona Bat Resource Group Virtual Meeting. *Oral presentation.* (*presenter)

Langenfeld, D. and **M.S. Moore**. Long-Term Bat Population Monitoring. 2021. McDowell Sonoran Conservancy Parsons Field Institute Update. Virtual Meeting. *Oral presentation.*

Pérez, N.E.M., A.L. McIntire and **M.S. Moore**. Desert solitaire: quantifying southwest bat hibernation ecology and behavior to predict potential white-nose syndrome impacts. 2021. White-nose Syndrome National Webinar. *Oral presentation.*

Pérez, N.E.M., A.L. McIntire and **M.S. Moore**. Desert solitaire: quantifying southwest bat hibernation ecology and behavior to predict potential white-nose syndrome impacts. 2021. 100th Annual Meeting of the American Society of Mammalogists. *Oral presentation.*

2020:

Allen, B.D., H.L. Bateman, **M.S. Moore**, and D. M. Hondula. Urban heat island effect and rodent body condition. 2020. 22nd Annual Central Arizona-Phoenix Long-term Ecological Research All Scientists Meeting and Poster Symposium. *Poster presentation*.

Allen, B.D., H.L. Bateman, **M.S. Moore**, and D. M. Hondula. Urban heat island effect and rodent body condition. 2020. 53rd Joint Annual Meeting Arizona and New Mexico Chapters of The Wildlife Society. Prescott, AZ. *Poster presentation*.

2019:

Pérez, N.E.M., A.L. McIntire and **M.S. Moore.** Winter ecophysiology of North American desert southwest bats. 2019. BioSci Southwest Symposium. Tempe, AZ. *Poster presentation*.

Pérez, N.E.M., A.L. McIntire and **M.S. Moore*.** Winter ecophysiology of North American desert southwest bats. 2019. 49th Annual North American Symposium on Bat Research. Kalamazoo, MI. *Poster presentation*. (*presenter)

Moore, M.S., C.M. Bure, R.P. Patrose, A.R. Rasheed, B.M. Boone, J.K. Knight, G.M. Poterewicz, V.S. Gross, A.L. Russell, and L.M. Dávalos. Analyzing the proteomes of bat wing biopsies to uncover characteristics of resistance to white-nose syndrome. 2019. Society for Integrative and Comparative Biology Annual Meeting. Tampa, FL. *Oral presentation.*

Field, K.A., T.M. Lilley, G. Ogata, E.J. Rogers, J.M. Prokkola, **M.S. Moore**, and D.M. Reeder. The challenges of transcriptome-wide comparisons across species and genera. 2019. Society for Integrative and Comparative Biology Annual Meeting. Tampa, FL. *Oral presentation.*

2018:

Bernard, R.F., Reichard, J.D., Coleman, J.T.H., Blackwood, J.C., Verant, M.L., Segers, J.L., Lorch, J.M., White, J.P., **Moore, M.S.**, Russell, A.L., Katz, R.A., Lindner, D.L., Toomey, R.S., Turner, G.G., Frick, W.F., Vonhof, M.J., Willis, C.K.R. and E.H.C. Grant. What are the key research needs for white-nose syndrome mitigation? 2018. Ecological Society of America Annual Meeting. New Orleans, LA. *Oral presentation.*

Moore, M.S., C.M. Bure, R.P. Patrose, A.R. Rasheed, B.M. Boone, J.K. Knight, G.M. Poterewicz, V.S. Gross, A.L. Russell, and L.M. Dávalos. Using wing biopsies and mass spectrometry-based proteomics to investigate characteristics of resistance to white-nose syndrome at the barrier to infection. 2018. National Meeting for the White-Nose Syndrome Response. Tacoma, WA. *Oral presentation.*

Bernard, R.F., Reichard, J.D., Coleman, J.T.H., Blackwood, J.C., Verant, M.L., Segers, J.L., Lorch, J.M., White, J.P., **Moore, M.S.**, Russell, A.L., Katz, R.A., Lindner, D.L., Toomey, R.S., Turner, G.G., Frick, W.F., Vonhof, M.J., Willis, C.K.R. and E.H.C. Grant. A systematic approach for identifying key research needs for white-nose syndrome. 2018. National Meeting for the White-Nose Syndrome Response. Tacoma, WA. *Oral presentation.*

Moore, M.S., C.M. Bure, R.P. Patrose, A.R. Rasheed, B.M. Boone, J.K. Knight, V.S. Gross, A.L. Russell, and L.M. Dávalos. Using high-throughput research methods to inform management of white-nose syndrome, an emergent fungal infection of North American bats. 2018. Arid Lands Research Symposium. Scottsdale, AZ. *Oral presentation.*

Frazier, E.C., A.M. Lake, and **M.S. Moore**. Investigating antimicrobial controls for bat white-nose syndrome. 2018. Barrett, The Honors College Celebrating Honors Symposium. Tempe, AZ. *Poster presentation*.

Patrose, R.P. and **M.S. Moore**. Understanding differences between susceptibility and resistance to white-nose syndrome in bats: methodological optimization. 2018. Barrett, The Honors College Celebrating Honors Symposium. Tempe, AZ. *Poster presentation*.

Bure, C.M., B.M. Boone, A.R. Rashid, R.P. Patrose, J.K. Knight, A.L. Russel, L.M. Dávalos, and **M.S. Moore**. Comparative analysis of wing proteomes and ecological functional traits of five North American bat species. 2018. 51st Joint Annual Meeting Arizona and New Mexico Chapters of The Wildlife Society. Flagstaff, AZ. *Poster presentation*.

Milbrandt, B.J. and **M.S. Moore**. Is a common skin test used to assess immune response in wildlife useful for predicting disease resistance? 2018. 51st Joint Annual Meeting Arizona and New Mexico Chapters of The Wildlife Society. Flagstaff, AZ. *Poster presentation*.

2017:

Cheng, T.L., A. Gerson, J. DeSimone, M. Griego, M. Guitierrez, **M.S. Moore**, J.D. Reichard, G.G. Turner, C.K.R. Willis, W.F. Frick, and A.M. Kilpatrick. Increased fat stores contribute to persistence of little brown bat populations with white-nose syndrome. 2017. 15th Annual Ecology and Evolution of Infectious Disease Meeting. Santa Barbara, CA. *Poster presentation.*

Ureel, F.L., **M.S. Moore**, L.M. Dávalos, and A.L. Russell. From the shadows of the southeast: the population genetics and phylogeography of *Myotis austroriparius*. 2017. 47th Annual North American Symposium on Bat Research. Knoxville, TN. *Poster presentation.*

2016:

Martin, K.R., G.M. Poterewicz, L.M. Dávalos, and **M.S. Moore**. Evolutionary implications of bat antimicrobial peptides in white nose syndrome: from hidden Markov models to hibernacula. 2016. Evolution. Austin, TX. *Poster presentation.*

Cheng, T.L., A. Gerson, J. DeSimone, M. Griego, M.G. Ramirez, **M.S. Moore**, J.D. Reichard, C.K.R. Willis, W.F. Frick, and A.M. Kilpatrick. Investigation of physiological mechanisms of white-nose syndrome tolerance in remnant populations of *Myotis lucifugus*. 2016. White-nose Syndrome Symposium. Denver, CO. *Oral presentation.*

Moore, M.S., G.M. Poterewicz, and L.M. Dávalos. Genomic inventories of bat antimicrobial peptides: implications for resistance to white-nose syndrome. 2016. Society for Integrative and Comparative Biology Annual Meeting. Portland, OR. *Oral presentation.*

2015:

Moore, M.S., G.M. Poterewicz, and L.M. Dávalos. Genomic inventories of bat antimicrobial peptides: implications for resistance to white-nose syndrome. 2015. 45th North American Symposium on Bat Research. Monterey, CA. *Poster presentation.*

Grousd, J., **M.S. Moore**, L.M. Dávalos, and A. Russell. Patterns of neutral genetic variation in bat populations affected by an emerging wildlife disease. 2015. 45th North American Symposium on Bat Research. Monterey, CA. *Poster presentation.*

Moore, M.S., G.M. Poterewicz, and L.M. Dávalos. Host defense peptide diversity in bats: implications for resistance to white-nose syndrome. 2015. IRACDA Conference. San Diego, CA. *Poster presentation.* ***Winner of the "Outstanding Bioinformatics Poster Award."***

Moore, M.S., T.J. Schoberle, P.T. Smith, and C. J. Foley. Active learning exercises effectively bridge gap between hybrid/blended and traditional sections of non-majors introductory biology. 2015. IRACDA Conference. San Diego, CA. *Poster presentation.*

2014:

Moore, M.S., L.M. Dávalos, and A.L. Russel. Uncovering skin immune proteins as predictors of resistance to white-nose syndrome. 2014. 7th Annual White-Nose Syndrome Workshop. St. Louis, MO. 44th Annual Symposium on Bat Research. Albany, NY. *Poster presentation.*

Reeder, D.M., J.S. Johnson, **M.S. Moore**, and K.A. Field. The immunological response to the fungal pathogen (*Pseudogymnoascus destructans*) that causes the deadly white-nose syndrome in bats. Infectious Diseases of Bats Symposium. 2014. Colorado State University, CO. *Oral presentation.*

Field, K.A., S. Reeder, E. Rogers, J. McMichael, L. Sigler, M.E. Vodzak, **M.S. Moore**, J.S. Johnson, and D.M. Reeder. Anti-fungal immune responses to *Pseudogymnoascus destructans* in bats affected by white-nose syndrome. 2014. American Association of Immunologists Annual Meeting, Pittsburgh, PA. *Poster presentation.*

2013:

Moore, M.S. and L.M. Dávalos. Using –omics to investigate white-nose syndrome: an emerging fungal infection devastating hibernating North American bats. 2013. Postdoctoral Research Symposium. Stony Brook, NY. *Poster presentation.*

Moore, M.S., K.A. Field, G.G. Turner, M.E. Furze, D.W.F. Stern, P.R. Allegra, S.A. Brownlee-Bouboulis, C.D. Musante, M.E. Vodzak, M.E. Biron, M.B. Meierhofer, and D.M. Reeder. Understanding species differences in immunological responses to the newly invading pathogen, *Geomyces destructans.* 2013. 3rd International Berlin Bat Meeting: Bats in the Anthropocene. Berlin, Germany. *Oral presentation.*

Reeder, D.M., **M.S. Moore**, S.A. Brownlee-Bouboulis, L.E. Grieneisen, C.D. Musante, M.B. Meierhofer, and K.A. Field. Using our knowledge of how *Geomyces destrucatans* kills bats to understand species differences in the susceptibility to white-nose syndrome. 2013. 3rd International Berlin Bat Meeting: Bats in the Anthropocene. Berlin, Germany. *Poster presentation.*

2012:

Reeder, D.M., **M.S. Moore**, G.G. Turner, M.E. Furze, P.R. Allegra, S.A. Brownlee, C.D. Musante, M.E. Vodzak, M.E. Biron, M.B. Meierhofer, and K.A. Field. Is *Eptesicus fuscus* the super bat? Understanding species differences in the response to white-nose syndrome. 2012. 42nd Annual North American Symposium on Bat Research. San Juan, Puerto Rico. *Oral presentation.*

Moore, M.S., D.A. Heitzman, M.E. Furze, P.R. Allegra, S.A. Brownlee, C.D. Musante, M.E. Vodzak, P.M. Mancuso, M.B. Meierhofer, M.E. Biron, K.A. Field, G.G. Turner, C.K.R. Willis, and D.M. Reeder. Immunological responses to *Geomyces destructans* in experimentally infected little brown myotis (*Myotis lucifugus*) and big brown bats (*Eptesicus fuscus*). 2012. White-nose Syndrome Symposium. Madison, WI. *Poster presentation.*

Moore, M.S., D.A. Heitzman, M.E. Furze, P.R. Allegra, S.A. Brownlee, C.D. Musante, M.E. Vodzak, P.M. Mancuso, M.B. Meierhofer, M.E. Biron, K.A. Field, G.G. Turner, C.K.R. Willis, and D.M. Reeder. Immunological responses to *Geomyces destructans* in experimentally infected little brown myotis (*Myotis lucifugus*) and big brown bats (*Eptesicus fuscus*). 2012. 2nd Annual Research Coordination Network in Ecoimmunology Meeting: Merging Ecoimmunology and Disease Ecology. Ann Arbor, MI. *Poster presentation.*

2011:

Pilosof, S., **M.S. Moore**, B. Krasnov, and C. Korine. First evidence of water contamination effects on the immunocompetence and ectoparasite infection loads of an Israeli bat (*Pipistrellus kuhlii*). 2011. Israel Society for Zoology. Tel-Aviv, Israel. *Oral presentation.*

Musante, C.D., **M.S. Moore**, C.K.R. Willis, and D.M. Reeder. Can thermoregulatory traits and their relationship to body condition predict survivability of big brown bats, *Eptesicus fuscus*? 2011. 41st Annual North American Symposium on Bat Research. Toronto, Quebec. *Poster presentation.*

2010:

Moore, M.S., E.L. Buckles, J.D. Reichard, T.D. Murtha, E.C. Braun de Torrez, and T.H. Kunz. Can hibernating *Myotis lucifugus* mount cutaneous immune responses to *Geomyces destructans*? 2010. 40th Annual North American Symposium on Bat Research. Denver, CO. *Oral presentation.* ***Winner of the "Luis F. Bacardi Conservation Award for Oral Presentation."***

Reichard, J.D., **M.S. Moore**, C.C. Kang, L.M. Nichols, T.D. Murtha, and T.H. Kunz. Patterns of fat accumulation and depletion in little brown myotis affected by white-nose syndrome. 2010. 40th North American Symposium on Bat Research. Denver, CO. *Oral presentation.*

2009:

Moore, M.S., J.D. Reichard, T.D. Murtha, B. Zahedi, R.M. Fallier, N.A. Mofrad, and T.H. Kunz. Immunological correlates of white-nose syndrome in hibernating little brown myotis (*Myotis lucifugus*). 2009. 39th Annual North American Symposium on Bat Research. Portland, OR. *Oral presentation.*

Moore, **M.S.,** D. Yates, B. Zahedi, P.B. Ardapple, C.L. Huck, S.T. Vito, J.J. Schmerfeld, T.H. Kunz, and D.C. Evers. Mercury exposure and immune responses in the little brown myotis (*Myotis lucifugus*). 2009. 39th Annual North American Symposium on Bat Research. Portland, OR. *Poster presentation.* ***Winner of the "Speleobooks Award for Poster Presentation."***

Reichard, J.D., **M.S. Moore**, C. Kang, T.D. Murtha, L. Nicholls, R. Smith, S.R. Darling, and T.H. Kunz. Changes in body mass and fat reserves in pre-hibernating and hibernating little brown myotis, *Myotis lucifugus*, at a white-nose syndrome-affected cave. 2009. 39th Annual North American Symposium on Bat Research. Portland, OR. *Poster presentation.*

Moore, M.S., F.R. Jackson, A.S. Turmelle, B.J. Panasuk, M.T. Mendonça, C.E. Rupprecht, G.F. McCracken, and T.H. Kunz. Rabies exposure and relative immune function in the big brown bat, *Eptesicus fuscus*. 2009. Annual Meeting of the Society for Integrative and Comparative Biology. Boston, MA. *Oral presentation.*

Moore, M.S., J.D. Reichard, T.D. Murtha, B. Zahedi, R.M. Fallier, and T.H. Kunz. Are hibernating bats affected with white-nose syndrome immunocompromised? 2009. Bats and Emerging Viral Diseases Workshop, National Institute of Health and National Institute of Allergy and Infectious Diseases. Rockville, MD. *Poster presentation.*

Moore, M.S., J.D. Reichard, T.D. Murtha, B. Zahedi, R.M. Fallier, and T.H. Kunz. Are hibernating bats affected with white-nose syndrome immunocompromised? 2009. Annual Meeting for the Connecticut Infectious Disease Society. Waterbury, CT. *Poster presentation.*

Moore, M.S., E.L. Buckles, and T.H. Kunz. Are hibernating bats capable of mounting effective immune responses? 2009. Annual Meeting of the Society for Integrative and Comparative Biology. Boston, MA. *Poster presentation.*

2008:

Moore, M.S., F.R. Jackson, A.S. Turmelle, B.J. Panasuk, M.T. Mendonça, C.E. Rupprecht, G.F. McCracken, and T.H. Kunz. Rabies exposure and relative immune function in the big brown bat, *Eptesicus fuscus*. 2008. 38th Annual North American Symposium on Bat Research. Scranton, PA. *Oral presentation.*

Moore, M.S., E.L. Buckles, and T.H. Kunz. Are hibernating bats capable of mounting effective immune responses? 2008. 38th Annual North American Symposium on Bat Research. Scranton, PA. *Poster presentation.*

Moore, M.S., F.R. Jackson, B.J. Panasuk, M.T. Mendonça, G.F. McCracken, and T.H. Kunz. Rabies exposure and infection, relative immune function and life-history traits in the big brown bat, *Eptesicus fuscus*. 2008. Annual Meeting of the Colloquium on Conservation of Mammals in the Southeastern United States. Blacksburg, VA. *Poster presentation.* ***Winner of the "Outstanding Student Poster Award."***

Moore, M.S., F.R. Jackson, B.J. Panasuk, M.T. Mendonça, G.F. McCracken, and T.H. Kunz. Rabies exposure and infection, relative immune function and life-history traits in the big brown bat, *Eptesicus fuscus*. 2008. Annual Meeting of the Society for Integrative and Comparative Biology. San Antonio, TX. *Poster presentation.*

2007 and earlier:

Moore, M.S., F.R. Jackson, B.J. Panasuk, M.T. Mendonça, G.F. McCracken, and T.H. Kunz. Rabies exposure and infection, relative immune function and life-history traits in the big brown bat, *Eptesicus fuscus*. 2007. Annual Meeting of the National Science Foundation Ecology of Infectious Diseases Program. Albuquerque, NM. *Poster presentation.*

Moore, M.S., M.T. Mendonça, G.F. McCracken, and T.H. Kunz. Innate and adaptive immunity in the big brown bat, *Eptesicus fuscus*. 2006. Annual Meeting of the National Science Foundation Ecology of Infectious Diseases Program. Atlanta, GA. *Poster presentation.*

Moore, M.S., M.T. Mendonça, G.F. McCracken, and T.H. Kunz. Innate and adaptive immunity in the big brown bat, *Eptesicus fuscus*. 2006. 36th Annual North American Symposium on Bat Research. Wilmington, NC. *Poster presentation.*

Moore, M.S., J. Rivera, D. Lyman, and P. Schofield. Synthesis, characterization and biocompatibility of polyether-urethane-urea block copolymers. 2002. The American Chemical Society Regional Undergraduate Research Symposium. Seattle, WA. *Poster presentation.*

SPONSORED RESEARCH FUNDING

Pending:
Nothing pending.

Federal funding awarded since joining ASU:
US Fish and Wildlife Service White-nose Syndrome Research Grant. Grant period: 2020-2022. "Investigating the winter ecology and physiology of hibernating desert southwest bats across expanded temporal and geographic scales." **M.S. Moore (PI)** and Angela McIntire (Co-PI). $181,684 from USFWS. $236,190 total for project, with matching.

US Fish and Wildlife Service White-nose Syndrome Small Grants Program 2018-2019: Research and Communication Needs for White-nose Syndrome. Grant period: July 2018 – June 2019. "Exploring the winter ecology and physiology of desert southwest bats to help predict their risk to white-nose syndrome." **M.S. Moore (PI)** and Angela McIntire (Co-PI). $30,000.

US Fish and Wildlife Service 2015 Grant for White-nose Syndrome Research. Grant period: 2015-2016. "Investigating mechanisms of host tolerance in persisting populations of *Myotis lucifugus* in the northeastern USA." to W.F. Frick (PI), A.M. Kilpatrick (Co-PI), C.K.R. Willis (Co-PI), A. Gerson (Co-PI), and **M.S. Moore (Co-PI).** Total budget: $29,954. No ASU contract.

University funding:
Internal Summer Research Award, College of Integrative Sciences and Arts. 2021. **M.S. Moore (PI)**. $5,000.

Internal Summer Research Award, College of Integrative Sciences and Arts. 2019. "Maximizing results from proteomics data using a variety of computational analyses." **M.S. Moore (PI)**. $5,000.

Arizona State University Graduate and Professional Student Association Centennial Professorship Award to **M.S. Moore**. 2019. $10,000.

Internal Summer Research Award, College of Integrative Sciences and Arts. 2018. "Investigating traits of resistance and susceptibility to bat white-nose syndrome." to **M.S. Moore (PI)**. $5,000.

Internal Summer Research Award, College of Integrative Sciences and Arts. 2017. "Sensitivity of activated bat immune cells to variation in nutrient molecules." to **M.S. Moore (PI)**. $5,000.

Internal Summer Research Award, College of Letters and Sciences. 2016. “Testing proliferation of bat immune function cells under various nutrient combinations.” to **M.S. Moore (PI)**. $5,000.

Unfunded since joining ASU:

Women in Philanthropy. Proposed grant period: 2020-2021. “How does a warming climate affect wildlife? Using students and citizen-scientists to study the effects.” H.L. Bateman (PI), **M.S. Moore (Co-I)**. $99,990.

Morris Animal Foundation. Proposed grant period: 2020-2023. “Urban heat island effects on wildlife.” H.L. Bateman (PI), **M.S. Moore (Co-I)**, D.M. Hondula (Co-I). $151,482.

International Foundation on Ethical Research. Proposed grant period: 2019-2021. “Refining the use of bat tissues in physiological and immunological research: generating a new tool for investigating white-nose syndrome.” **M.S. Moore (PI, Primary Mentor)** and T.M. Corbitt (Graduate Fellow). Graduate Fellowship proposal submitted by primary mentor. $30,000.

Morris Animal Foundation. Proposed grant period: 2019-2021. “Urban heat island effects on wildlife.” H.L. Bateman (PI), **M.S. Moore (Co-I)**, D.M. Hondula (Co-I). $104,238.

International Foundation on Ethical Research. Proposed grant period: 2017-2019. “Refining the use of bat tissues in physiological and immunological research: generating a new tool for investigating white-nose syndrome.” **M.S. Moore (PI, Primary Mentor)**, C. Lupfer (Co-mentor), and C.M. Bure (Graduate Fellow). Graduate Fellowship proposal submitted by primary mentor. $30,000.

National Fish and Wildlife Federation, Bats for the Future Fund. Proposed grant period: 2017-2019. “Generating immunological models of responses to *Pseudogymnoascus destructans* exposure in eastern bat species to predict the relative risk of western bat species to white-nose syndrome.” T.E. Tomasi (PI), C. Lupfer (Co-PI), **M.S. Moore (Co-PI)**, and S. Maher (Co-PI). Total budget: $225,443. ASU contract: $87,444.

US Fish and Wildlife Service Grant for White-nose Syndrome Research. Proposed grant period: 2017-2019. “Exploring the winter ecology and physiology of Arizona bats to predict risk of southwestern species to white-nose syndrome.” **M.S. Moore (PI)**. $241,120.

US Fish and Wildlife Service Grant for White-nose Syndrome Research. Proposed grant period: 2017-2019. “Generating immunological models of responses to *Pseudogymnoascus destructans* exposure in eastern bat species to predict the relative risk of western bat species to white-nose syndrome.” T.E. Tomasi (PI), C. Lupfer (Co-PI), **M.S. Moore (Co-PI)**, and S. Maher (Co-PI). Total budget: $225,443. ASU contract: $87,444.

NSF DEB Preliminary Proposal. 2017. “Modelling the potential effects of climate change on the iconic desert saguaro (*Carnegiea gigantea*).” F.S. Albuquerque (PI), **M.S. Moore (Co-PI)**, and S.E. Saul (Co-PI). No budget required for pre-proposal.

Wildlife Acoustics Scientific Product Grant. 2016. “Exploring the winter ecology of Arizona bats to inform conservation needs and understand disease risk.” **M.S. Moore (PI)**. $4,323.

NSF IOS Preliminary Proposal, RUI. 2016. "The energetic cost of immune function during an immune challenge: impact on recovery from white nose syndrome in bats." C.S. Richardson (PI), N.W. Fuller (Co-PI), and **M.S. Moore (Co-PI).** No budget required for pre-proposal.

Arizona Game and Fish Department Heritage Fund: Identification, Inventory, Acquisition, Protection and Management of Sensitive Habitat. 2015. "Winter ecology of Arizona bats." **M.S. Moore (PI).** $93,878.

Awarded prior to joining ASU:

US Fish and Wildlife Service 2014 Grant for White-nose Syndrome Research. 2014. "Uncovering skin immune proteins as predictors of resistance against white-nose syndrome." to **M.S. Moore (PI)**, L.M. Dávalos (Co-PI), and A.L. Russell (Co-PI). $318,455.

National Speleological Society. 2012. "The role of oxidative stress in the development of white-nose syndrome." to **M.S. Moore (PI)** and M.F. Haussmann (Co-PI). $5,000.

Eppley Foundation for Research. 2010. "Is there genetic resistance to white-nose syndrome? Adaptive immune responses against *Geomyces destructans* and variation at the major histocompatibility complex in the little brown myotis (*Myotis lucifugus*)." to T.H. Kunz (PI). $26,000.

- Project conceived and grant written by **M.S. Moore**

National Speleological Society. 2010. "Cytokine profiles in hibernating *Myotis lucifugus*: further assessment of immunocompetence levels in bats affected by white-nose syndrome." to T.H. Kunz (PI) and **M.S. Moore**. $11,591.

- Project conceived and grant written by **M.S. Moore**

United States Fish and Wildlife Service. 2010. "Immune function, body composition, and genetic correlates of bat white-nose syndrome." to T.H. Kunz (PI) and M.D. Sorenson (Co-PI). $105,000.

- Project conceived and grant written 50% by **M.S. Moore**

American Society of Mammalogists, Grants-in-Aid of Research. 2009. "Innate immune defense against *Geomyces destructans* in the little brown myotis (*Myotis lucifugus*)." $1,500.

National Science Foundation, Doctoral Dissertation Improvement Grant. 2008. "Interactions between immune function, stress physiology, pathogens and environmental contaminants in temperate bat species." $11,000.

Bat Conservation International. 2008. "Are bats affected by white-nose syndrome immunocompromised?" to T.H. Kunz (PI) and **M.S. Moore**. $6,404.

- Project conceived and grant written by **M.S. Moore**

National Speleological Society. 2008. "Are bats affected by white-nose syndrome immunocompromised?" to T.H. Kunz (PI) and **M.S. Moore**. $6,133.

- Project conceived and grant written by **M.S. Moore**

Bat Conservation International. 2008. "Can hibernating bats mount an effective immune response?" to E.R. Buckles (PI), T.H. Kunz (Co-PI), and **M.S. Moore**. $2,630.

New York State Department of Environmental Conservation. 2008. "Immunological investigation in bats affected by white-nose syndrome." $2,500.

United States Fish and Wildlife Service. 2008. "Are hibernating bats affected by white-nose syndrome immunocompromised?" $2,410.

BioDiversity Research Institute. 2008. "Effects of mercury contamination on immune function in bats." to T.H. Kunz (PI) and **M.S. Moore**. $60,300.

- Project conceived and grant written by **M.S. Moore**

Bat Conservation International Student Scholarship. 2008. "The effects of mercury contamination on immune function in two temperate bat species—*Myotis lucifugus* and *Eptesicus fuscus*." $3,500.

The Evergreen State College Foundation Activity Grant. 2001. "Synthesis and characterization of materials to be used for artificial blood vessels." to **M.S. Moore** and J. Rivera. $2,000.

TEACHING & MENTORING

COURSES

Curriculum courses at ASU:

Emerging Infections and Epidemics (ABS 494). S2017, Students enrolled: 6; S2018, Students enrolled: 11, Barrett Honors Contracts: 1; S2019, Students enrolled: 23, Barrett Honors Contracts: 2; S2021, Students enrolled: 24.

Comparative Immunology (ABS 467). F2016, Students enrolled: 19; F2017, Students enrolled: 8; F2018, Students enrolled: 21, Barrett Honors Contracts: 2; F2019, Students enrolled: 26, Barrett Honors Contracts: 1; F2020, Students enrolled: 29, Barret Honors Contracts: 1; F2021, Students enrolled: 30.

Animal Physiology (BIO 360). F2015, Students enrolled: 34; S2016, Students enrolled: 53, Barrett Honors Contracts: 4; F2016, Students enrolled: 54, Barrett Honors Contracts: 3; S2017, Students enrolled: 51, Barrett Honors Contracts: 1; F2017, Students enrolled: 53, Barrett Honors Contracts: 4; S2018, Students enrolled: 77, Barrett Honors Contracts: 5; F2018, Students enrolled: 70, Barrett Honors Contracts: 3; S2019, Students enrolled: 77, Barrett Honors Contracts: 2; F2019, Students enrolled: 67; S2020, Students enrolled: 75, Barrett Honors Contracts: 5; F2020, Students enrolled: 71, Barrett Honors Contracts: 5; S2021, Students enrolled: 84; F2021, Students enrolled: 76, Barrett Honors Contracts: 7.

Research courses at ASU:

Undergraduate Research (ABS 489 and BIO 495). S2016, Students enrolled: 3; Summer 2016, Students enrolled: 1; F2016, Students enrolled: 2; S2017, Students enrolled: 5; F2017, Students enrolled: 2; S2018, Student's enrolled: 2; S2018, Students enrolled: 2; S2019, Students enrolled: 5; F2019, Students enrolled: 3; S2020, Students enrolled: 2; F2020, Students enrolled: 1; F2021, Students enrolled: 1.

Instructor at other institutions:

Principles of Biology (BIO 101), Suffolk County Community College, Brentwood Campus. F2014. Lectured, led discussions, designed and executed in-lab activities using ViaResponse "clickers" and other technologies for non-majors hybrid (lectures online, labs in person) course.

Wildlife and Zoonotic Diseases (BIO319/619), Department of Biology, Bucknell University. F2011, Students enrolled: 16. Upper division seminar; conceived, designed and executed all aspects of course.

Undergraduate Research (BIO 399), Department of Biology, Bucknell University. F2011, S2012. Advised 4 undergraduate students in a research-based course.

Invited lectures:

"Mammalian characteristics and diversity." Introduction to Biology (BIO182), Arizona State University. S2017.

"The quick and the dead: fungal infection and immunity in a hibernating host." Ecological Modeling (ABS 560/498), Arizona State University. S2016.

"White-nose syndrome in North American bats." Mt. Ida College. S2010.

"Investigating mercury contamination in bats." Introduction to Environmental Studies (EOP 234), Center for English Language and Orientation Programs. Boston University. F2007, S2008.

"Conserving Chiroptera: interactions between bats, pathogens and environmental contaminants." Conservation Biology, Salem State College. F2007.

Teaching assistantships and tutoring:

Teaching Fellow: Ecology (BI 303), Department of Biology, Boston University. 2007. Led field trips to Broadmoor Wildlife Sanctuary (Natick, MA) for a biodiversity study and Mt. Auburn Cemetery (Cambridge, MA) for a demography study; supervised on-campus laboratories; graded lab reports, research papers and presentations.

Teaching Fellow: Mammalian Ecology (BI 512), Department of Biology, Boston University. 2007. Led weekend field trip to New Hampshire (activities included small mammal trapping, radiotelemetry, identification of mammalian sign, and track casting); designed and implemented on-campus laboratories; supervised museum voucher preparation; designed and graded laboratory exams; graded reports and presentations.

Chemistry Tutor for Key Student Services, The Evergreen State College. 2002. Tutored an individual through her summer course in general chemistry; answered conceptual and technical questions relating to homework, laboratories, and tests.

Biology and Chemistry Tutor, The Evergreen State College. 2002. Tutored students in biology and general chemistry on a weekly basis; graded homework; worked with small and large groups on homework problems, test preparation, and related questions.

Organic Chemistry Lab Assistant, Molecule to Organism, The Evergreen State College. 2001-2002. Gathered and ordered lab materials for organic chemistry laboratories; prepared solutions and materials

for laboratories; supervised students during laboratories; answered technical and conceptual questions regarding laboratory exercises.

STUDENT MENTORING

GRADUATE STUDENTS:

ASU graduate students under my direction:

Hayden Hutcherson. Master's in Applied Biology. "Investigating the winter ecology and physiology of hibernating desert southwest bats across expanded temporal and geographic scales." 2021-present.

Isaias Gomez. Master's in Applied Biology. "Phenology of rare bat activity at an abandoned mine on the McDowell Sonoran Desert Preserve." 2020-present.

Nubia Erandi Maldonado Pérez. Master's in Biology. "Hibernation ecology of bats using three high-elevation caves in northern Arizona: Implications for potential white-nose syndrome impacts on desert southwest species." 2018-2020.

Tatiana Corbitt. Master's in Applied Biology. "Computational analyses of large protein data sets to identify traits of resistance to white-nose syndrome." 2018-2019.

Codi Bure. Master's in Applied Biology. "Principle component and gene ontology analyses of LC-MS/MS derived proteomes." 2016-2019.

***Graduate thesis committee membership at ASU*:**

Brittany Allen. Master's in Applied Biology. 2019-present.
Jesse Dwyer. Master's in Applied Biology. 2018-present.

***Graduate thesis committee membership at other institutions*:**

Chelsey Musante. Master's in Biology. "Exploration of survival traits in the white-nose syndrome-affected big brown bat (*Eptesicus fuscus*)." 2012.

Graduate mentees without committee membership:

Devaughn Fraser, University of California Los Angeles.
Shai Pilosof, Ben-Gurion University of the Negev.

UNDERGRADUATE STUDENTS:

ASU Barrett, the Honors College theses under my direction:

Heidi Kitchell. "Quantifying the preference of *C. townsendii* to hibernate in highly ventilated areas in Arizona caves." S2021.

Yasmeen Maatough. "Establishing a foundation for investigating the role of nutrition on immunity in wildlife" S2020.

Hillary Polk, Saint Escamilla. Uncompleted. S2019 - S2020.

Madison Barton. “Immunological responses to the white-nose syndrome pathogen and their potential use as controls.” S2019.

Alexandra McDowell. “Digging deeper into vitamin supplements: A, B12, and multivitamins” S2018.

Eric Frazier and Alexis Lake. “Investigating antimicrobial controls for bat white-nose syndrome.” S2018.

Reena Patrose. “Understanding differences between susceptibility and resistance to white-nose syndrome in bats: methodological optimization.” S2018.

Xela Viteri. “An analysis of the effects of nutrition on immune cell function.” F2017.

Brianna Boone. “Investigating the skin immune proteome of the white-nose syndrome resistant gray bat, *Myotis grisescens*.” S2017.

Tracy Mackey. “Can the phytohemagglutinin challenge be used to predict disease severity in a host?” S2017.

ASU Barrett, the Honors College thesis committee membership:
Aysha Mahmud and Marija Shahid. “Art of healing”. Second Committee Member. S2019.

Marjan Tamin. “Applying nutritional education within the primary care clinical setting for the prevention and treatment of chronic cardiovascular diseases.” Second Committee Member. F2018.

Patherica Charoenmins. “Evaluating the viability of a DNA-based chip targeted for *C. trachomatis*, *N. gonorrhoeae*, and other pathogens of interest.” Second Committee Member. S2017.

Talia Davis. “Mathematically modelling population dynamics of the honeybee infected with *Varroa destructor* and the related virues.” Second Committee Member. F2015.

ASU undergraduate student researchers:
Jabe Kahawaii, Heidi Kitchell, Harrison Tamayo. “Investigating the winter ecology and physiology of hibernating desert southwest bats across expanded temporal and geographic scales.” F2021-present

Brian O’Toole, Nicole McConnell, Quinn Anderson, Jean-Paul Klein, Harrison Tamayo. “Exploring the winter ecology and physiology of desert southwest bats to predict their susceptibility to white-nose syndrome.” S2019-S2020.

Kendall Capra, Will Harper, Jenna Griffin, Yasmeen Maatough, Hillary Polk, Saint Escamilla. “How does the nutritional environment affect immune function in free-ranging desert adapted bats?” S2019.

Brianna Boone, Codi Bure, Eric Frazier, Alexis Lake, Tracy Mackey, Bradford Milbrandt, Reena Patrose, and Afeefah Rashid. “Do measures of immune function predict susceptibility to disease?” 2016-2017.

Brianna Boone, Mitchell Davis, Geoffrey Giddeon, Aaron Goodwein, Julian Knight, Josh McLaughlin, Reena Patrose, and Afeefah Rashid. “Investigating skin immune proteins as predictors of resistance against white-nose syndrome.” 2016-2018.

Honors thesis committee membership at other institutions:
Rachel Pian. Biology with Distinction Research. "White-nose syndrome and total antioxidant power in the little brown myotis (*Myotis lucifugus*)." 2010.

Undergraduate student researchers at other institutions:
Gregory Poterewicz, John Navilio, and Chap-Long Lau. SUNY Stony Brook. 2013 – 2015.

Paul Allegra, Matthew Biron, Morgan Furze, Daniel Stern, and Sarah Wade. Bucknell University. 2011-2012.

Stephanie Cheney, Renee Fallier, Austin Jung, Neda Mofrad, Timothy Murtha, Morgan Nabhan, Lauren Nadler, India Napier, Rachel Pian, Andrew Ramburg, Zirve Yigit, and Bita Zahedi. Boston University. 2005-2010.

HIGH SCHOOL STUDENTS:
Danielle Stierlen. Nyack, NY High School Science Research Program. "Protein expression changes in wing tissue of a bat experimentally infected with the white-nose syndrome fungus." 2015-2018.

PROFESSIONAL SERVICE, AWARDS, & AFFILIATIONS

SERVICE TO ASU

Unit level:
Advisor, Pre-vet Club at ASU Polytechnic. Fall 2021 to present.

Wildlife Ecology Lecturer Hiring Committee. Summer 2019.

Retirement Planning Committee. Spring 2019.

Biology Instructor Hiring Committee Member. Fall 2016.

University level:
Arizona State University Senate. Fall 2016 to present.

University Senate Personnel Committee. Fall 2017-Spring 2019.

Faculty Expert for "Make Headlines and Earn Your Press Badge!" Night of the Open Door. Arizona State University Polytechnic Campus. February 17, 2017.

Desert Discovery Center (DDC) team and Thinc Design: participated in meeting to aid development of partnership between ASU and DDC. November 30, 2016.

Desert Discovery Center (DDC) team and Thinc Design: presentation on my bat research and discussion of development of partnership between ASU and DDC. August 11, 2016.

SERVICE TO THE PROFESSION

Local Co-Host for North American Symposium on Bat Research in Tempe, AZ. 2019-2021. *Planned meeting events, organized utilization of meeting space, planned program printing, selected optional items for purchase, organized opening reception and social, communicated with members, reported progress to NASBR Board of Directors. During the COVID-19 pandemic, identified and communicated with Arizona lawyer about negotiating new hotel contract, understanding options for contract termination, and generating a new meeting plan under AZHS recommended restrictions for conferences, while protecting the financial viability of the Society. Meeting rescheduled from October 2020 to October 2021, but October 2021 meeting was cancelled in September 2021, approximately 8 weeks prior.*

IRACDA 2021 National Conference Virtual Networking Lunch co-hosted by NYCAPS (Stonybrook University), INSPIRE (Rutgers University), and BETTR (Einstein College of Medicine). June 28, 2021.

Chair of Student Support Committee, Society of Integrative & Comparative Biology. 2018-2020. *Oversees the review process for the Grants in Aid of Research. In 2020, assisted in review process of graduate student grant proposals and training new Chair. Reviewed 25 grant proposals for the 2020 application cycle. Organized and directed the review process of 130 graduate student grant proposals in 2019. Reviewed 42 grant proposals in 2019 and organized a brown bag lunch workshop on grant writing skills at the annual meeting. In 2018, organized the review of 118 proposals, reviewed 29 proposals, and hosted the brown bag lunch workshop on grant writing skills at the annual meeting.*

College of Integrative Sciences and Arts, Science and Mathematics Faculty Writing Group. January 2018 to present.

Invited White-nose Syndrome Technical Expert. US Fish and Wildlife Service project to synthesize knowledge on WNS, identify strategies to minimize future impact and promote species recovery. 2017-present.

Presentation to Women in Science and Engineering (WISE), a Fulton Schools Student Organization and leadership development program for women pursuing careers in science, technology, engineering, entrepreneurship, mathematics, medicine and management. February 19, 2020; 14 participants.

Technical Expert Reviewer. US Fish and Wildlife Service 2016 Grant for White-nose Syndrome Research. 2016.

Communicating Science Workshop Co-organizer and Assistant funded by National Research Mentoring Network. “Distilling Your Message Interactive Plenary” and “Improvisation for Scientists.” Institutional Research and Career Development Award (IRACDA) Conference 2016. Tucson, AZ. June 13-15, 2016.

Student Support Committee Member. Society for Integrative and Comparative Biology. 2015 - 2017. *Reviewed 37 proposals in 2015, 36 proposals in 2016, and 40 proposals in 2017.*

Student Presentation Judge. Society for Integrative and Comparative Biology’s Division of Ecoimmunology and Disease Ecology Student Competition. 2016. *Judged 13 presentations.*

Student Presentation Judge. North American Symposium on Bat Research. 2015. *Judged 8 presentations.*

Mentor. SUNY Stony Brook NSF Research Experiences for Undergraduates Program. Facilitated transition of an undergraduate student (Natalie Jean-Phillippe) from community college to SUNY Stony Brook. 2014.

Member. White-nose Syndrome Epidemiological and Ecological Research Working Group. Advises and guides research priorities for the national response to white-nose syndrome. 2011 to present.

Journal Article Reviewer: PLoS One, Proceedings of the Royal Society B, General and Comparative Endocrinology, Biology Letters, Oecologica, International Journal of Medical Sciences, Journal of Leukocyte Biology. 2011 to present.

Student Representative for the North American Society for Bat Research. 2010.

Advisory Board Member. Biotechnology Innovations- Solving Global Challenges sponsored through 21st Century Skills, Education Connections and Connecticut Career Choices. 2009.

Volunteer for BIOBUGS. Biology Inquiry & Outreach with Boston University Graduate Students. Program designed to encourage local high school students to pursue higher education in the sciences. 2007.

SERVICE TO THE COMMUNITY

Biology Expert for "Sixth Senses" article published in Scholastic Science World. October, 2018.

Research Partner for the Parsons Field Institute at the McDowell Sonoran Conservancy. 2016 – present.

Volunteer. Annual Arizona Bat Blitz. Alpine, AZ. June 26-30, 2016.

Volunteer. Pennsylvania Game Commission, Bureau of Wildlife Management, Wildlife Diversity Section, Summer Bat Roost Surveys (Appalachian Bat Count). 2011.

Guest Speaker. "Bat white-nose syndrome in caves and mines." Presentation and discussion at a community meeting of cavers. Boston Grotto, Massachusetts Institute of Technology, Cambridge, MA. 2009.

Public Seminar Speaker. "Befriending beneficial bats." Public seminar covering basic bat biology, important conservation issues and the proper design and placement of bat houses. Maudslay State Park, Newburyport, MA; Mahoney's Garden Center, Winchester, MA; Breakheart Reservation, Saugus, MA. 2005 – 2006.

AWARDS

Awards:
Badass Women of ASU. Two nominations. 2020.

Arizona State University Graduate and Professional Student Association Centennial Professorship Award. 2019.

Fellowships and scholarships:

Stony Brook NY-CAPS (IRACDA) Postdoctoral Fellowship supported by National Institute of General Medical Science of the National Institutes of Health under award number K12GM102778. 2013-2015.

National Science Foundation Graduate Research Fellowship Program Honorable Mention. 2007.

Boston University Women's Guild Katherine Conner McLaughlin Scholarship. 2006.

Presentations:

Outstanding Bioinformatics Poster Award. IRACDA Conference. 2015.

Luis F. Bacardi Conservation Award for Oral Presentation. 40th Annual North American Symposium on Bat Research. 2010.

Speleobooks Award for Poster Presentation. 39th Annual North American Symposium on Bat Research. 2009.

Outstanding Student Poster Award. 18th Colloquium on Conservation of Mammals in the Southeastern United States. 2008.

Travel:

Postdoctoral Travel Award. 3rd Annual Research Coordination Network in Ecoimmunology Meeting. 2012.

Student Travel Grant Award. 2nd International Berlin Bat Meeting: Bat Biology and Infectious Diseases. 2010.

Boston University George Bernard, Jr. Student Travel Award. 2009.

SOCIETY MEMBERSHIPS

American Society of Mammalogists
Arizona and New Mexico Chapter of the Wildlife Society
Bat Conservation International
Graduate Women in Science
North American Society for Bat Research
Sigma Xi, Biological Honor Society
Society for Integrative and Comparative Biology
The Wildlife Society

TRAININGS & WORKSHOPS (since joining ASU)

Office of American Indian Initiatives and the Knowledge Enterprise, Meaningful Research: Effectively Engaging with Tribal Communities and Working on Tribal Lands. Arizona State University. September 24, 2021.

Faculty Women's Association, Staying Resilient and Avoiding Burnout. Arizona State University. August 30, 2021.

College of Integrative Sciences and Arts, Science and Mathematics, Commit to Submit Research Development and Grant Writing Program. Arizona State University. Spring 2021.

Yellowdig for Discussions. Arizona State University. December 1, 2020.

Best Practices for Deaf Students Lunch and Learn. Arizona State University. December 1, 2020.

ASU Sync Training. Arizona State University. August 18, 2020.

Slack for Teaching. Arizona State University. August 18, 2020.

Office of the University Provost Promotion and Tenure Workshop. Arizona State University. March 13, 2018.

Faculty Women's Association, University Promotion and Tenure Panel Discussion. Arizona State University. January 24, 2018.

Faculty Women's Association, University Promotion and Tenure Panel Discussion. Arizona State University. January 25, 2017.

Provost's Teaching Fellows Workshop, The Flipped Classroom: Hands-on Application. Arizona State University. April 4, 2017.

PEAKS Software Training Workshop. University of California at San Diego. San Diego, CA. March 22 & 23, 2017.

Animal Genome to Phenome Research Coordination Network Workshop. Society for Integrative and Comparative Biology Annual Meeting. Portland, OR. January 2, 2016.

RAS Pivot Open House. Arizona State University. February 3, 2016.

Faculty Women's Association, Promotion & Tenure Workshop. Arizona State University. March 22, 2016.

CISA/UC/OKED Funding Opportunities & Proposal Submission Process Workshop. Arizona State University. October 7, 2016.

Faculty Women's Association, Success in the Early Years Workshop: Strategies for Junior Faculty. Arizona State University. November 9, 2016.

North American Society for Bat Research, Women in Science Breakfast. North American Symposium on Bat Research. Monterey, CA. October 30, 2015.

Faculty Women's Association, Conversations in Leadership Series & Faculty Networking Breakfast. Arizona State University. October 28, 2015.

IN THE NEWS (since joining ASU)

Interviewed for ASU Now "When research crawls, slithers and stings." Story published online October 28, 2016.