

CURRICULUM VITAE

Donald Bailey Miles

Department of Biological Sciences

Ohio University

Athens, Ohio 45701

email: urosaurus@gmail.com; Phone: 740-707-0325

ORCID - 0000-0001-5768-179X

EDUCATION

Ph.D., (Biology), University of Pennsylvania, 1985
M.Phil., (Biometry), Cambridge University, England, 1979
B.A., (Zoology), University of California, Berkeley, 1978

Professional Appointments:

2018 Laureate, Make Our Planet Great Again, SETE CNRS Moulis
2018 - Visiting Professor, Universite Paul Sabatier
2015 - 2017 Visiting Professor, University of California, Berkeley,
Department of Integrative Biology and Museum of Vertebrate Zoology
2015 - Research Associate, California Academy of Sciences
2013 – 2015 Visiting Scientist, University of Brasilia
2009 – 2010 Visiting Professor, University of Paul Sabatier, Toulouse
2008 – 2009 Visiting Professor, Museum für Naturkunde, Berlin
2008 – Visiting Scientist, Station d'Ecologie et Expérimentale du CNRS Moulis, France
2006 – 2007 Visiting Professor, James Cook University, Queensland, Australia
2005 – Full Professor
1994 – 1995 Visiting Associate Professor, Zoology, University of Washington
1991 – 2005 Associate Professor of Zoology, Ohio University
1985-1991 Assistant Professor of Zoology, Ohio University
1984-1985 Teaching Fellow, University of Pennsylvania
1984 Instructor (Adjunct), Cabrini College
1979-1981 Teaching Fellow, University of Pennsylvania

AWARDS, FELLOWSHIPS AND HONORS

1996 William's Lecturer, University of Akron, Department of Biology
1990 Participant, Morphometrics in Systematic Biology NSF Sponsored Workshop
1984-1985 I.B.M. Threshold Fellowship, University of Pennsylvania
1981-1984 PHS Training Grant in Theoretical Biology, University of Pennsylvania, (PHS 5-T32-GM07517-05)
1979 - Elected Fellow, Cambridge Philosophical Society

PUBLICATIONS (* - Undergraduate student, ** - Graduate student) LAST 5 YEARS

- Gilbert, A. L. ** and **D. B. Miles** (*In Press*) Antagonistic Responses of Exposure to Sublethal Temperatures: Adaptive Phenotypic Plasticity Coincides with a Reduction in Organismal Performance. *American Naturalist*
- Fierro-Estrada N., Y. G. González-González, M. Martínez Gómez, A. García, F. R. Méndez de la Cruz, and **D. B. Miles**. (*In Press*) Thermoregulation of the lizard *Barisia imbricata* at altitudinal extremes. *Amphibia-Reptilia*
- Hazard, L. C., K. A. Nagy, **D.B. Miles**, E. I. Svensson, D. Costa and B. Sinervo. (*In Press*) Phenotypic integration, physiological performance, and survival in a lizard (*Uta stansburiana*) with alternative mating strategies. *Physiological Zoology and Biochemistry*.
- Whiting, M. J. and **D. B. Miles**. (*In press*) Behavioral ecology of aggressive behavior in lizards. In *Behavior of Lizards: Evolutionary and Mechanistic Perspectives* (Bels, V. and Russell, A., eds) CRC Press.
- Alés, R., G., J. C. Acosta, V. Astudillo, M. Córdoba, G. M. Blanco, **D. Miles**. (2018) Effect of temperature on the locomotor performance of species in a lizard assemblage in the Puna region of Argentina. *Journal of Comparative Physiology B*. 188: 977 -990.
- Farallo, V. R. **, R. Wier *, and **D. B. Miles**. (2018) The Bogert effect revisited: Salamander regulatory behaviors are differently constrained by time and space. *Ecology and Evolution*.
- Logan, M.L., J. D. Curlis, A. L. Gilbert **, **D.B. Miles**, A. Chung, J. W. McGlothlin, R. M. Cox (2018) The evolutionary potential of thermal physiology and thermoregulatory behaviour in ectotherms. *Proceedings Royal Society London B* 285 (1878) 20180697
- Dupoué, A., A. Rutschmann **, J.-F. Le Galliard, J. Clobert, J., P. Blaimont, B. Sinervo, **D. Miles**, C. Haussy, S. Meylan. (2018) Climate warming and drying induce population extinction despite a reduction of baseline corticosterone in wild lizards. *Journal of Animal Ecology*.
- Octavio A.-O., A. F. Johnson, M.Agha, E. B. Allen, ... , **D. B. Miles** et al. (2018) Harnessing Cross-border Resources to Confront Climate Change. *Environmental Science and Policy Journal*. (Total of 91 authors).
- Diele-Viegas, L. **, L. J. Vitt, B. R. Sinervo, G. R. Colli, F. P. Werneck, **D. B. Miles**, W. E. Magnusson, J. C. Santos, C. M. Sette **, G. H. O. Caetano **, E. Pontes **, T. C. S. Ávila-Pires. (2018) Thermal physiology of Amazonian lizards (Reptilia: Squamata). *PLoS One* 13 (3), e0192834.
- Pontes-da- Silva, E **, W. E. Magnusson, B. R. Sinervo, G. H. Caetano **, **D. B. Miles**, G. R. Colli, L. M. Diele-Viegas **, J. Fenker, J. C. Santos and F. P. Werneck. (2018) Extinction risks forced by climatic change and intraspecific variation in the thermal physiology of a tropical lizard. *Journal of Thermal Biology* 73: 50-60.
- Sinervo, B, Q. Yin, **D. B. Miles**, and Fausto Mendez de la Cruz (2018) Climate change, thermal niches, extinction risk and maternal-effect rescue of Toad-headed lizards, *Phrynocephalus*, in thermal extremes of the Arabian Peninsula to the Tibetan Plateau. *Integrative Zoology*.
- Dupoué, A, A. Rutschmann, J.-F. Le Galliard, J. Clobert, F. Angelier, C. Marciaud, S. Ruault, **D. Miles** and S. Meylan. 2017. Shorter telomeres precede population extinction in wild lizards. *Scientific Reports* 7 (1) 16976.
- Salem, S. B., **D. B. Miles**, A.A. Alm-Eldeen, and R.M. Kandyl ** (2017). Comparative histological characterization of the tongue in two reptiles, *Scincus scincus* (Scincidae) and *Uromastix ornata* (Agamidae) in relation to diet. *Egypt. J. Exp. Biol. (Zool)*. 13: 319 - 327.

DOI: 10.5455/egysebz.20171214034607

- Kirchof, S. **, R. S. Hetem, H. M. Lease, **D.B. Miles**, D. Mitchell, J. Müller, M.-O. Rödel, B. Sinervo, T. Wassenaar, and I. W. Murray (2017) Thermoregulatory behaviour and high thermal preference buffer impact of climate change in a Namib Desert lizard. *Ecosphere*.
- Dupoué, A., A. Rutschmann **, J.-F. Le Galliard, **D. B. Miles**, J. Clobert, D. F. DeNardo, G. A. Bruschi, S. Meylan (2017) Water availability and environmental temperature correlate with geographic variation in water balance in common lizards (*Zootoca vivipara*). *Oecologia* 185: 561-571.
- Gilbert, A. ** and **D. B. Miles**. (2017). Natural Selection on Thermal Preference, Critical Thermal Maxima, and Locomotor Performance. *Proceedings of the Royal Society London B* 284: 2017536. DOI: 10.1098/rspb.2017.0536.
- Vicenzi, N. **, V. Corbalán, **D.B. Miles**, B. Sinervo, and N. Ibargüengoytia (2017) Predicting extinction risk for the high-Andean lizard *Phymaturus palluma* using eco-physiological modelling. *Biological Conservation* 206: 151 - 160.
- Meylan, S., F. Lallemand, C. Haussy, J. Bleu **, and **D. B. Miles** (2017) Arginine vasotocin inhibits social behavior and enhances essential activities in the common lizard (*Zootoca vivipara*). *General and Comparative Endocrinology* 243: 10 - 14.
- Williams, K. A. ** and **D. B. Miles** (2016) Demographic costs associated with differences in habitat space occupancy. *PLoS One*. 11 (11), e0165472
- Rutschmann, A. **, **D. B. Miles**, J. Clobert, M. Richards (2016) Warmer temperatures attenuate the classic offspring quality and number trade-off in the common lizard, *Zootoca vivipara*. *Biology Letters* 12: 20160101
- Gilbert, A. **, **D. B. Miles** (2016) Food, temperature, and endurance: Effects of food deprivation on the thermal sensitivity of physiological performance. *Functional Ecology* 30:1790 - 1799.
- Lattanzio **, M. and **D. B. Miles** (2016) Trophic niche divergence among colour morphs that exhibit alternative mating strategies. *Royal Society Open Science* 3: 150531. DOI: 10.1098/rsos.150531.
- Lattanzio **, M. and **D. B. Miles** (2016) Stable carbon and nitrogen isotopic discrimination and turnover in a small-bodied insectivorous lizard. *Isotopes in Environmental and Health Studies*. dx.doi.org/10.1080/10256016.2016.1154854.
- Farallo **, V. and **D.B. Miles** (2016) The importance of microhabitat: a comparison of two microendemic *Plethodon* species to the widespread *P. cinereus*. *Copeia*. 2016: 67-77.
- Rutschmann **, A., **D. B. Miles**, J.-F. Le Galliard, M. Richard, S. Moulherat, B. Sinervo and J. Clobert (2016) Climate and habitat interacts to shape the thermal reaction norms of breeding phenology across lizard populations. *Journal of Animal Ecology*. DOI: 10.1111/1365-2656.12473
- Hipsley, C. A. **, **D. B. Miles**, J. Müller (2014) Morphological disparity opposes a latitudinal diversity gradient in lacertid lizards. *Biology Letters* 10: doi:10.1098/rsbl.2014.0101.
- Lattanzio **, M. and **D. B. Miles** (2014) Ecological divergence among colour morphs mediated by changes in spatial network structure associated with disturbance. *Journal of Animal Ecology* 83: 1490 – 1500. doi: 10.1111/1365-2656.12252
- Lattanzio, **, M., K. Metro **, and **D.B. Miles** (2014) Preference for Male Traits Differ in Two Female Morphs of the Tree Lizard, *Urosaurus ornatus* *PLoS One*. DOI 10.1371/journal.pone.0101515

- Beal*, M., M. Lattanzio**, **D.B. Miles** (2014) Differences in the thermal physiology of adult Yarrow's spiny lizard (*Sceloporus jarrovi*) in relation to sex and body size. *Ecology and Evolution* 4: 4220 – 4229.
- Meylan, S., M. Richard, S. Bauer, C. Haussy, and **D. Miles** (2013) Costs of mounting an immune response during pregnancy in a lizard. *Physiological and Biochemical Zoology* 86: 127 - 136.
- Zajitschek, S.R.K., F. Zajitschek, **D.B. Miles**, and J. Clobert (2012) The effect of coloration and temperature on sprint performance in male and female wall lizards. *Biological Journal of the Linnean Society* 107: 573-582.
- Medina M., Sclaro A., Méndez-De la Cruz F., Sinervo B., **Miles D.**, Ibarguengoytia N. (2012) Thermal biology of the genus *Liolaemus* a phylogenetic approach reveals advantages of the genus to survive climate change. *Journal of Thermal Biology* 37:579-586.
- Meylan, S., **D. B. Miles**, J. Clobert (2012) Hormonally mediated Maternal Effects, Individual Strategy and Global Change. *Philosophical Transactions of the Royal Society* 367: 1647-1664.

ARTICLES IN THE POPULAR PRESS

- Huey, R. B. and **D. B. Miles**. 2014. Is the sand too hot for the lizards? *SANPark Times* p. 46.
- Huey, R. B. and **D. B. Miles** 2017. The dunes are alive -- with the sound of barking. *SANPark Times*

GRANTS (LAST 5 YEARS)

- 2013.** Quantifying climate-forced extinction risks for lizards, amphibians, fishes, and plants. Co-PI with Sinervo, B., and J. Pitterman. NSF \$885,000.
- 2015.** Will Behavioral Compensation Buffer Species Loss in a Warming Climate? Ohio University Research Committee. \$8000.
- 2016.** Assessment of Extinction Risk of Kgalagadi Lizards: The roles of climate change, habitat modification and phenology. Ohio University Baker Fund. \$11,998.
- 2018.** Integrating temporal and spatial variation in biophysical attributes with ecophysiological and demographic data to predict extinction and persistence of ectothermic vertebrate populations. Make Our Planet Great Again, Campus France. \$8,000
- 2019** PlastiPhys. Plasticity in Physiological Capacity and Thermoregulatory Behavior as Adaptive Responses to Extreme Environments. ~\$17,000

Pending

Collaborative Proposal: MRA: Phenology, Acclimation, Physiology and Demography and Climate Change Impacts on Reptiles and Amphibians. NSF 164,522