

CURRICULUM VITAE

**MARTHA MONICA MUÑOZ**

Department of Ecology and Evolutionary Biology, Yale University  
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**EDUCATION**

- 2014 Ph.D. Organismic and Evolutionary Biology, Harvard University
- 2007 B.A. Biology (with Distinction), *summa cum laude*, Boston University

**APPOINTMENTS**

- 2021- **Assistant Curator of Vertebrate Zoology**, Yale Peabody Museum of Natural History
- 2019- **Assistant Professor**, Department of Ecology and Evolutionary Biology, Yale University  
Affiliate Faculty, Yale Institute for Biospheric Studies
- 2017-2019 **Assistant Professor**, Department of Biological Sciences, Virginia Tech  
Affiliate Faculty, Global Change Center, Virginia Tech
- 2015-2017 **Post-doctoral Researcher**, Department of Biology, Duke University
- 2014-2015 **Post-doctoral Researcher**, Research School of Biology, The Australian National University
- 2007-2008 **Fulbright Research Scholar**, National Museum of Natural Sciences, Madrid, Spain

**SELECTED HONORS AND AWARDS**

- 2022 George Bartholomew Award, Society for Integrative and Comparative Biology
- 2021 Carl Gans Award, Society for Integrative and Comparative Biology
- 2019 'Scientist to Watch', *The Scientist* Magazine
- 2019 Boston University Department of Biology: Distinguished Alumni 'Rising Star' Award
- 2017 Young Investigator Award, American Society of Naturalists
- 2014 Raymond Huey Best Talk Award, Society for Integrative and Comparative Biology
- 2006 Phi Beta Kappa Honor Society, Boston University (early induction)
- 2006 College of Arts and Sciences Merit Award, Boston University
- 2006 Harold Case Award, Boston University
- 2003 National Hispanic Merit Scholar

**FELLOWSHIPS AWARDED**

- 2017 Foerster-Bernstein Postdoctoral Fellowship, Duke University (declined)
- 2014 National Science Foundation, Postdoctoral Research Fellowship (declined)
- 2013 John Parker Merit Fellowship, Harvard University
- 2012 Robert A. Chapman Memorial Fellowship, Harvard University
- 2008 National Science Foundation, Graduate Research Fellowship
- 2008 Herchel Smith Graduate Fellowship, Harvard University
- 2007 William J. Fulbright Research Fellowship, Spain

**FUNDED GRANTS:**

- 2021 National Science Foundation, DEB-2039476, Systematics and Biodiversity Science: Hidden dimensions of diversity in woodland salamanders: Investigating ecophysiological evolution in a classic non-adaptive radiation. Lead PI. Total Award: \$976,607.
- 2021 National Science Foundation, DEB-2054569, Bridging Ecology and Evolution: Niche width evolution and the assembly of faunas. Co-PI. Total Award: \$1,102,014.
- 2021 John Templeton Foundation: De-mystifying the tangled bank: integrating macroevolutionary and mechanistic landscape approaches across scales of organization. Lead PI. Total Award: \$799,641.
- 2018 National Science Foundation, IOS-1839250, Rules of Life:FELS: Conference Grant: Evolutionary biomechanics and morphology in the era of big data, \$21,868 (PI)
- 2018 Global Change Center Seed Grant, Virginia Tech, \$19,810 (co-PI)
- 2012 National Science Foundation, Doctoral Dissertation Improvement Grant, \$14,999
- 2012 Sigma Xi Grant-In-Aid, \$500
- 2012 Ken B. Miyata Expedition Grant, Harvard University, \$9,100
- 2012 David Rockefeller Center for Latin American Studies Grant, Harvard, \$1,500
- 2010 George Putnam Expedition Grant, Harvard University, \$9,700
- 2008 Ken B. Miyata Expedition Grant, Harvard University, \$5,260

**PUBLICATIONS:**

<sup>1</sup>Undergraduate Mentee; <sup>2</sup>Graduate Student; <sup>3</sup>Postdoctoral Researcher; <sup>4</sup>High School Mentee

**Metrics:** 1,050 citations; H-index=17; i10-index=23

***Submitted/In Review:***

41. Burress ED<sup>3</sup>, Gade MR<sup>3</sup>, Riddell ER, **Muñoz MM**. Functional innovations and mountains act synergistically to drive the paradoxical evolution of lungless salamanders. (in review)
40. Bodensteiner BL<sup>2</sup>, **Muñoz MM**. Adaptive radiation without independent stages of trait evolution in a lineage of Caribbean anoles. (in revision)
39. Friedman ST<sup>3</sup>, **Muñoz MM**. A latitudinal gradient of deep-sea invasions for marine fishes. (in revision)

***Accepted/In Press/Published***

38. Dellinger SB, De Vita R, Vlachos PP, **Muñoz MM**, Socha JJ. Material properties of skin in the flying snake *Chrysopelea ornata*. (accepted; *Journal of Experimental Zoology A*)
37. Burress ED<sup>3</sup>, **Muñoz MM**. 2022. Functional trade-offs asymmetrically promote phenotypic diversification. (in press; *Systematic Biology*)

36. Friedman ST<sup>3</sup>, **Muñoz MM**. 2022. The effect of thermally robust ballistic mechanisms on climatic niche in salamanders. *Integrative Organismal Biology* 4:obac020.
35. Domínguez-Guerrero SF<sup>3</sup>, Méndez-de la Cruz FR, Manríquez-Morán NL, Olson ME, Galina-Tessaro P, Arenas-Moreno DM, Bautista-del Moral A, Benítez-Villaseñor A, Gadsden H, Lara-Reséndiz RA, Maciel-Mata CA, Muñoz-Nolasco FJ, Santos-Bibano R, Valdez-Villavicencio JH, Woolrich-Piña GA, **Muñoz MM**. 2022. Exceptional parallelisms characterize the evolutionary transition to live birth in phrynosomatid lizards. *Nature Communications* 13:2881.
34. Landis MJ, Quintero I, **Muñoz MM**, Zapata F, Donoghue MJ. 2022. Phylogenetic inference of where species spread or split across barriers. *Proceedings of the National Academy of Sciences* 119:e2116948119.
33. **Muñoz MM**. 2022. The Bogert effect, a factor in evolution. *Evolution* 76:49—66. [\\*Cover image](#)
32. **Muñoz MM**, Feeley KJ, Martin PM, Farallo VR<sup>3</sup>. 2022. The multidimensional (and contrasting) effects of environmental warming on a group of montane tropical lizards. *Functional Ecology* 35:419—431.
31. Burress ED<sup>3</sup>, **Muñoz MM**. 2022. Ecological opportunity from innovation, not islands, drove the anole lizard adaptive radiation. *Systematic Biology* 71:93—104.
30. Bodensteiner BL<sup>2</sup>, Gangloff EJ, Kouyoumdjian L, **Muñoz MM**, Aubret F. 2021. Thermal-metabolic phenotypes of the lizard *Podarcis muralis* differ across elevation, but converge in high elevation hypoxia. *Journal of Experimental Biology* 224:jeb243660.
29. Bajić D, Rebolleda-Gómez M, **Muñoz MM**, Sánchez Á. 2021. The macroevolutionary consequences of niche construction in microbial metabolism. *Frontiers in Microbiology* 12:718082.
28. Burress ED<sup>3</sup>, **Muñoz MM**. 2021. Ecological limits on the decoupling of prey capture and processing in fishes. *Integrative and Comparative Biology* 61:773—782.
27. Bodensteiner BL<sup>2</sup>, Agudelo-Cantero GA, Arietta AZA, Gunderson AR, **Muñoz MM**, Refsnider JF, Gangloff EJ. 2021. Thermal adaptation revisited: how conserved are thermal traits of reptiles of amphibians? *Journal of Experimental Zoology A* 335:173—194.
26. Domínguez-Guerrero SF<sup>3</sup>, Bodensteiner BL<sup>2</sup>, Pardo-Ramírez A, Aguillón-Gutierrez DR, Méndez-de la Cruz FR, **Muñoz MM**. 2021. Thermal physiology responds to interannual temperature shifts in a montane horned lizard, *Phrynosoma orbiculare*. *Journal of Experimental Zoology A* 335:136—145.
25. Camarillo H<sup>2</sup>, **Muñoz MM**. 2020. Weak relationships between swimming morphology and water depth in wrasses and parrotfish belie multiple selective demands on form-function

- evolution. *Integrative and Comparative Biology* 60:1309—1319.
24. Farallo VR<sup>3</sup>, **Muñoz MM**, Uyeda JC, Miles DB. 2020. Scaling between macro- to microscale climate data reveals strong phylogenetic inertia in niche evolution in plethodontid salamanders. *Evolution* 74:979—991. [\\*Issue cover image](#)
  23. **Muñoz MM**, Price SA. 2019. The future is bright for evolutionary morphology and biomechanics in the era of big data. *Integrative and Comparative Biology* 59:599—603.
  22. **Muñoz MM**. 2019. The evolutionary dynamics of mechanically complex systems. *Integrative and Comparative Biology* 59:705—715.
  21. Salazar JC<sup>1</sup>, Castañeda MR, Londoño GA, Bodensteiner BL<sup>2</sup>, **Muñoz MM**. 2019. Physiological evolution during adaptive radiation: A test of the island effect in *Anolis* lizards. *Evolution* 73:1241—1252. [\\*Issue cover image](#)
  20. Kuo C-Y, **Muñoz MM**, Irschick DJ. 2019. Lizard foraging: A perspective integrating sensory ecology and life history. Pp. 87—106 in **Behavior of Lizards: Evolutionary and Mechanistic Perspectives** (VL Bels & AP Russell, Eds.) Taylor and Francis Publishing; Abingdon, UK.
  19. **Muñoz MM**, Bodensteiner BL<sup>2</sup>. 2019. Janzen’s hypothesis meets the Bogert effect: Connecting climatic variation, thermoregulatory behavior, and rates of physiological evolution. *Integrative Organismal Biology* 1:oby002.
  18. Domínguez-Guerrero S<sup>3</sup>, **Muñoz MM**, Pasten-Téllez D, Arenas-Moreno D, Rodríguez-Miranda L, Manríquez-Morán N, Méndez de la Cruz F. 2019. Interactions between thermoregulatory behavior and physiological acclimatization in a wild lizard population. *Journal of Thermal Biology* 79:135—143.
  17. **Muñoz MM**, Hu Y, Anderson PSL, Patek SN. 2018. Strong mechanical relationships bias the tempo and mode of morphological evolution. *eLife* 7:e37621.
  16. Boronow KE, Shields IH<sup>1</sup>, **Muñoz MM**. 2018. Parallel behavioral divergence with microhabitat in *Anolis* (Squamata: Dactyloidae) lizards from the Dominican Republic. *Breviora* 561:1—17.
  15. **Muñoz MM**, Losos JB. 2018. Thermoregulatory behavior simultaneously promotes and forestalls evolution in a tropical lizard. *American Naturalist* 191:E15—E26.
  14. **Muñoz MM**, Anderson PSL, Patek SN. 2017. Mechanical sensitivity and the dynamics of evolutionary rate shifts in biomechanical systems. *Proceedings of the Royal Society, B* 284:20162325.

13. **Muñoz MM**, Langham GM, Brandley MC, Williams SE, Moritz C. 2016. Basking behavior predicts the evolution of heat tolerance in Australian rainforest lizards. *Evolution* 70:2537—2549.
12. **Muñoz MM**, Moritz C. 2016. Adaptation to a changing world: Evolutionary resilience to climate change. Pp. 238—252 in **How Evolution Shapes Our Lives: Essays on Biology and Society**. (JB Losos & RE Lenski, Eds.) Princeton University Press, Princeton, NJ.
11. Phillips BL, **Muñoz MM**, Hatcher A, Macdonald S, Llewelyn J, Lucy V, Moritz C. 2016. Heat hardening in a tropical lizard: geographic variation explained by the predictability and variance in environmental temperatures. *Functional Ecology* 30: 1161—1168.
10. Conover AE<sup>4</sup>, Cook EG<sup>1</sup>, Boronow KE, **Muñoz MM**. 2015. Effects of ectoparasitism on behavioral thermoregulation in the tropical lizards, *Anolis cybotes* (Squamata: Dactyloidae) and *A. armouri* (Squamata: Dactyloidae). *Breviora* 545:1—13.
9. **Muñoz MM**, Crandell KE, Campbell-Staton S, Fenstermacher K, Kim H, Van Middlesworth P, Sasa M, Losos JB, Herrel A. 2015. Multiple paths to aquatic specialization in four species of Central American aquatic *Anolis* lizards. *Journal of Natural History* 49:1717—1730.
8. **Muñoz MM**. 2015. The London Baedeker for the Darwin enthusiast. *Evolution: Education and Outreach* 8:1.
7. **Muñoz MM**, Wegener JE, Algar AC. 2014. Untangling intra- and interspecific effects on body size clines reveal divergent processes structuring convergent patterns in *Anolis* lizards. *American Naturalist* 184:636—646.
6. **Muñoz MM**, Stimola MA<sup>1</sup>, Algar AC, Conover A<sup>4</sup>, Rodriguez A<sup>1</sup>, Landestoy MA, Bakken GS, Losos JB. 2014. Evolutionary stasis and lability in thermal physiology in a group of tropical lizards. *Proceedings of the Royal Society, B* 281:20132433.
5. **Muñoz MM**, Crawford NG, McGreevy TJ, Messana NJ, Tarvin RD, Revell LJ, Zandvliet RM, Hopwood JM<sup>1</sup>, Mock E<sup>1</sup>, Schneider AL, Schneider CJ. 2013. Divergence in coloration and ecological speciation in the *Anolis marmoratus* species complex. *Molecular Ecology* 22:2668—2682.
4. **Muñoz MM**, Hewlett J. 2011. Ecological consequences of continual volcanic activity on the lizard, *Anolis lividus*, from Montserrat. *Herpetological Review* 42:160—165.
3. Yamaguchi A, **Muñoz MM**, Bose TO, Oberlander JG, Smith S. 2010. Sexually distinct development of vocal pathways in *Xenopus laevis*. *Developmental Neurobiology* 70:862—874.
2. Crandall ED, Jones EM, **Muñoz MM**, Akinronbi B, Erdmann MV, Barber PH. 2008. Comparative phylogeography of two seastars and their ectosymbionts within the Coral Triangle. *Molecular*

*Ecology* 17:5276—5290.

1. Reitzel AM, Sullivan JC, Brown BK, Chin, DW, Cira EK, Edquist SK, Genco BM, Joseph OC, Kaufman CA, Kovitvongsa K, **Muñoz MM**, Negri TL, Taffel JR, Zuehike RT, Finnerty JR. 2007. Ecological and developmental dynamics of a host-parasite system involving a sea anemone and two ctenophores. *Journal of Parasitology* 93:1392—1402.

### KEYNOTES & PLENARIES:

<sup>1</sup>Denotes that talk was delivered in Spanish

- 2023 Stony Brook University, Department of Ecology & Evolution: **Darwin Day Speaker**
- 2022 Society for Integrative & Comparative Biology: **Bartholomew Award Plenary Speaker**  
Wragg-Schmidt Zoology Spring Symposium, University of British Columbia: **Plenary Speaker**  
<sup>1</sup>Asociación Colombiana de Herpetología, Cali, Colombia: **Keynote Speaker**
- 2021 Society for Integrative & Comparative Biology: **Gans Award Plenary Speaker**  
Canadian Society of Zoologists annual meeting: **Plenary Speaker**  
Ontario Ecology, Ethology, and Evolution Colloquium: **Plenary Speaker**  
Gordon Research Conference, Ecol. & Evol. Genomics: **Session Keynote** (cancelled)
- 2020 Iowa State University, Ecology & Evolution Symposium: **Keynote Speaker**
- 2019 College of Charleston, School of Science and Mathematics: **Darwin Day Speaker**
- 2017 <sup>1</sup>Association for Amphibian and Reptile Research and Conservation, San Miguel de Allende, México: **Plenary Speaker**

### INVITED SYMPOSIUM TALKS & PANELS:

<sup>1</sup>Denotes that talk was delivered in Spanish

- 2022 European Society for Evolutionary Biology, Prague, Czech Republic
- 2021 Society for the Study of Evolution, 75<sup>th</sup> Anniversary Symposium, Digital Meeting  
Yale Climate Day 2021, Yale Institute for Biospheric Studies, Digital Meeting  
Society for Integrative and Comparative Biology, Digital Panel  
Intersections Science Fellows Symposium, Yale University, Digital Panel
- 2020 Society for Integrative and Comparative Biology, Austin, TX  
Joint Meeting of Ichthyology and Herpetology, Norfolk, VA (meeting cancelled)
- 2019 International Congress of Vertebrate Morphology, Prague, Czech Republic  
Joint Meeting of Ichthyology and Herpetology, Snowbird, UT  
North American Paleontological Conference, Riverside, CA
- 2017 American Society of Naturalists Young Investigator Award, Portland, OR  
<sup>1</sup>Latin American Herpetology, Quito, Ecuador
- 2013 Biological Impacts of Tropical Warming for Ectotherms, San Juan, Puerto Rico

### CONFERENCES AND SYMPOSIA ORGANIZED:

- 2022 **European Society for Evolutionary Biology**: “Inferring macroevolutionary patterns from microevolutionary processes: methods and practices”; Prague, CZ (Co-organizers:

- Dr. Masahito Tsuboi, Dr. Lee Hsiang Liow)
- 2021 **Society for Integrative and Comparative Biology**: “Honoring the Life and Legacy of Dr. George Gilchrist”; Digital Meeting (Co-organizer: Dr. Cam Ghalambor)
- 2020 **ASN/SSB/SSE Evolution Meeting**: Spotlight Session: “The Role of Behavior in Evolution”; Cleveland, OH (meeting cancelled due to COVID-19)
- 2019 **Society for Integrative and Comparative Biology**: “Comparative Evolutionary Morphology and Biomechanics in the Era of Big Data”; Tampa, FL (Co-organizer: Dr. Sam Price)
- 2018 **ASN/SSB/SSE Evolution Meeting**: “The Macroevolutionary Dynamics of Form-Function Relationships”; Montpellier, France. (Co-organizers: Dr. Josef Uyeda, Dr. Christine Böhmer, Dr. Brandon Kilbourne, Dr. Alexandra Houssaye)
- 2017 **Society for Integrative and Comparative Biology Southeast Regional Meeting**: Virginia Tech; Blacksburg, VA. (Co-organizer: Dr. Hodjat Pendar)

### INVITED SEMINARS:

<sup>1</sup>Denotes that talk was delivered in Spanish.

- 2023 Columbia University, Department of Biological Sciences, *\*Grad. Student Invited Speaker*  
 University of Arizona, Department of Ecology and Evolutionary Biology  
 American Museum of Natural History, New York City  
 Queens College, City University of New York  
 Colorado State University, Department of Biology  
 Penn State University, Department of Biology
- 2022 University of Cambridge, Behaviour, Ecology, and Evolution Series, Cambridge, UK  
<sup>1</sup>Museo Nacional de Historia Natural, Santo Domingo, Dominican Republic  
 Wilhelminenberg Seminar, Konrad Lorenz Institute of Ethology, Vienna, Austria  
 University of Toronto, Department of Ecology and Evolutionary Biology  
 University of Connecticut, Department of Ecology and Evolutionary Biology  
 University of Massachusetts-Amherst, Organismic and Evolutionary Biology Program  
 University of Miami, Department of Biology  
 Boston University, Department of Biology  
 University of Colorado Denver, Department of Integrative Biology  
 UC Berkeley, Department of Integrative Biology  
 UC Berkeley, Museum of Vertebrate Zoology, *\*Graduate Student Invited Speaker*
- 2021 Princeton University, Ecology and Evolutionary Biology Colloquium Series  
 Musée National d’Histoire Naturelle; Paris, France  
 Max Planck Institute of Animal Behavior; Radolfzell, Germany  
 Universidad Rey Juan Carlos; Departamento de Biología y Geología, Madrid, Spain  
 University of Bath, Milner Centre for Evolution Seminar Series; Bath, UK  
 University of Bristol, School of Earth Sciences; Bristol, UK  
 University of Konstanz, Department of Biology, Konstanz, Germany  
 University of Melbourne/The Australian National University Joint Digital Seminar Series  
 UC Riverside, Department of Evolution, Ecology, and Organismal Biology  
 UCLA, Department of Ecology and Evolutionary Biology

- McMaster University, Department of Biology, Hamilton, Ontario, Canada  
 Michigan State University, Department of Integrative Biology  
 Auburn University, Department of Biological Sciences  
 University of Massachusetts, Lowell, Department of Biological Sciences  
 Louisiana State University, Museum of Natural Sciences  
 University of Oregon, The Institute of Ecology and Evolution  
 Notre Dame of Maryland University, Biology Department  
 University of Texas, Arlington, Department of Biology  
 2020 Cornell University, Department of Ecology and Evolutionary Biology  
 Brown University, Department of Ecology and Evolutionary Biology  
 University of Georgia, Department of Genetics  
 University of Tennessee, Knoxville, Department of Ecology and Evolutionary Biology  
 Loyola University, Department of Biology  
 EvoEcoSeminars, Digital Seminar Series for Evolution and Ecology  
 Washington University in St. Louis, Tyson Research Center  
 Rockefeller University, Center for Physics and Biology  
 University of California, Irvine, EEB, *\*Graduate Student Invited Speaker*  
 University of Bern, Institute of Ecology and Evolution; Bern, Switzerland  
 Swiss Federal Institute of Aquatic Science and Technology; Lucerne, Switzerland  
 University of Massachusetts, Boston, Department of Biology  
 2019 Harvard University, Organismic & Evolutionary Bio., *\*Graduate Student Invited Speaker*  
 Yale University, Department of Biomedical Engineering  
 Yale University, Yale Institute for Biospheric Studies  
 University of Pittsburgh, Department of Biological Sciences  
 University of Chicago, Department of Ecology and Evolution  
 Yale University, Department of Ecology & Evolutionary Biology  
 University of Wisconsin-Madison, Department of Integrative Biology  
 Christopher Newport University, Department of Organismal and Environmental Biology  
 2018 Purdue University, Department of Biological Sciences  
 University of Florida, Department of Biology  
 Case Western Reserve University, Department of Biology  
 Mountain Lake Biological Station, University of Virginia  
 University of Idaho, Department of Biological Sciences  
 University of Chicago, Committee on Evolutionary Bio., Evolutionary Morphology Series  
 2017 Duke University, Department of Biology, Population Biology Series  
 University of Virginia, Department of Biology  
 Ohio University, Department of Biological Sciences  
 University of North Carolina, Chapel Hill, Biology Department  
 2016 Duke University, Department of Biology, University Program in Ecology Series  
 Virginia Tech, Department of Biological Sciences  
 University of North Carolina, Asheville, Department of Biology  
 East Carolina University, Department of Biology  
 2015 The Australian National University, Division of Ecology and Evolution  
 2014 James Cook University, Centre for Tropical Biodiversity and Climate Change



- University of Arizona, Department of Ecology & Evolutionary Biology, Lunch Seminar  
 Union College, Department of Biology  
 2012 Indiana State University, Department of Biology  
 2010 Buffalo State College, Women in Science and Math Lecture Series

### OTHER INVITED TALKS:

<sup>1</sup>Denotes that talk was delivered in Spanish.

- 2022 Earth Day Speaker, CUNY Hostos Community College, Bronx, NY  
<sup>1</sup>Biological Bases of Behavior Course, Universidad Nacional Autónoma de México  
 Macroevolution: Theory and Applications, Universidade de São Paulo, Brazil  
 Yale Center Beijing, Summer Lecture  
 2021 Science Talks @ Tilde Café, Public Lecture Series, Branford, CT  
 2012 Harvard Museum of Natural History, 'Topics in Evolution' Public Lecture Series

### SELECTED MEDIA COVERAGE:

- "Latinx professors at Yale break barriers in STEM", by S. Wang & K. Yup, Yale Daily News, Oct. 2022 [\[link\]](#)  
 "Natural Inspiration", by E. Pennisi, *Science* 377:1372-1375, Sep. 2022 [\[link\]](#)  
 "In the field: an interview with Martha Muñoz", by K. Knight, *J. Exp. Biol.*, July 2022 [\[link\]](#)  
 "How staying cool blunts evolution", *Big Biology Podcast*, Episode 81, May 2022 [\[link\]](#)  
 "Lizard profiteers of climate change: ain't no mountain hot enough" by A. Breit, *Outside JEB*, Feb. 2022 [\[link\]](#)  
 "Reptiles and viruses: New E&EB faculty lead research", Yale Daily News, Feb. 2022 [\[link\]](#)  
 "A clean sweep for Martha Muñoz", Yale News, Dec. 2021 [\[link\]](#)  
 "Peabody curators stimulate wonder through science", Yale News, July 2021 [\[link\]](#)  
 "(Not) sticking to the science", *The Women in Ecology and Evolution Podcast*, Dec. 2020 [\[link\]](#)  
 "Martha Muñoz: Uncovering the mechanisms underlying uneven rates of evolution across organisms", *People Behind the Science Podcast*, June 2020 [\[link\]](#)  
 "Martha Muñoz uncovers the drivers and dampers of biodiversity" by N. Lanese, *The Scientist Magazine*, Nov. 2019. [\[link\]](#)  
 "Island lizards are expert sunbathers, and researchers find it's slowing their evolution" by B. Bodensteiner, *Virginia Tech News*, Apr. 2019. [\[link\]](#)  
 "Researchers examine how the laws of physics impact evolution" by K. Rose, *Virginia Tech News*, Sept. 2019 [\[link\]](#)  
 "Basking behavior reveals vulnerability to climate change" by J. Nowack, *Outside JEB*, Nov. 2017 [\[link\]](#)  
 "Researcher settles decades-old evolutionary biology question by examining Caribbean lizards" by L. Key, *Virginia Tech News*, Oct. 2017. [\[link\]](#)  
 "Lizards in the Caribbean: How geography influences animal evolution" by A. Algar, *University of Nottingham*, Oct. 2014. [\[link\]](#)

### CONFERENCE PRESENTATIONS:

#### I. Contributed Talks (As Presenting Author)

- 2021 Max Planck-Yale Center for Biodiversity Digital Conference
- 2020 ASN/SSB/SSE Evolution Meeting, Cleveland, OH (cancelled)
- 2019 Society for Integrative and Comparative Biology, Tampa, FL (2 talks)
- 2018 Society for Integrative and Comparative Biology, San Francisco, CA  
Society for Integrative and Comparative Biology, Regional Meeting, Clemson, SC
- 2017 Society for Integrative and Comparative Biology, Regional Meeting, Blacksburg, VA  
Society for Integrative and Comparative Biology, New Orleans, LA
- 2016 Society for Integrative and Comparative Biology, Regional Meeting, Durham, NC  
Society for Integrative and Comparative Biology, Portland, OR
- 2015 Australian Society of Herpetology, Eildon, Australia
- 2014 ASN/SSB/SSE Evolution Meeting, Raleigh, NC  
Society for Integrative and Comparative Biology, Austin, TX
- 2013 ASN/SSB/SSE Evolution Meeting, Snowbird, UT  
Society for Integrative and Comparative Biology, San Francisco, CA
- 2012 Society for Integrative and Comparative Biology, Charleston, SC
- 2009 Society for Integrative and Comparative Biology, Boston, MA
- 2008 Latin American Herpetology Conference, Varadero, Cuba  
William J. Fulbright Research Conference, Valencia, Spain
- 2006 ASN/SSB/SSE Evolution Meeting, Stony Brook, NY  
Boston University Undergraduate Research Symposium, Boston, MA
- 2005 Young Scientist Symposium, Woods Hole Oceanographic Institute, Woods Hole, MA

## II. Contributed Talks with Student or Postdoc as Presenting Author

- 2023 Society for Integrative and Comparative Biology, Austin, TX (4 talks, 3 posters)
- 2022 Gordon Research Seminar: Unifying Ecology Across Scales (1 talk)  
ASN/SSB/SSE Evolution Meeting, Cleveland, OH (1 talk, 2 posters)  
Society for Integrative and Comparative Biology, Phoenix, AZ (3 talks)
- 2021 ASN/SSB/SSE Evolution Meeting, Digital Meeting (1 talk)
- 2020 World Congress of Herpetology, Dunedin, New Zealand (1 talk)  
Society for Integrative and Comparative Biology, Austin, TX (2 talks)
- 2019 Society for Integrative and Comparative Biology, Tampa, FL (2 talks)  
ASN/SSB/SSE Evolution Meeting, Providence, RI (2 talks)
- 2013 Society for Integrative and Comparative Biology, San Francisco (1 talk, 1 poster)
- 2012 Society for Integrative and Comparative Biology, Charleston, SC (1 talk)

## **TEACHING EXPERIENCE:**

**Department of Ecology & Evolutionary Biology, Yale University, Assistant Professor**

- 2022 Life in Motion: Ecological and Evolutionary Physiology (E&EB 295)
- 2022 Evolutionary Architects: Organisms as Targets and Agents of Natural Selection (E&EB 865)
- 2021 Adaptive Radiation (E&EB 834)
- 2020 Life in Motion: Ecological and Evolutionary Physiology (E&EB 295)
- 2020 Evolutionary Biology (E&EB 225)
- 2019 Life in the Anthropocene (E&EB 804)

**Department of Biological Sciences, Virginia Tech, Assistant Professor**

- 2019 Evolutionary Biology (BIOL 2704)
- 2018 Life in the Anthropocene (BIOL 5984)
- 2018 Evolutionary Biology (BIOL 2704)

**Department of Organismic and Evolutionary Biology, Harvard University, Graduate TF**

\*Distinction in Teaching Award from the Derek Bok Center, Harvard University

- 2013 Adaptive Radiation
- 2011 Evolutionary Biology\*  
Animal Behavior\*
- 2009 Evolutionary Biology\*

**STUDENTS ADVISED AND STUDENT COMMITTEES:****a. Graduate Students**

- 2021- Nathalie Alomar (Ph.D. student), NSF GRFP Fellowship
- 2020- Júlia Laterza-Barbosa (Ph.D. student)
- 2018- Henry Camarillo (Ph.D. candidate), Ford Foundation Fellowship
- 2017- Brooke Bodensteiner (Ph.D. candidate)

**b. Postdoctoral Researchers**

- 2022- Dr. Sina Rometsch; Yale Donnelley Fellow
- 2021- Dr. Laura Alencar
- 2021- Dr. Saúl Domínguez-Guerrero; Yale Endowed Postdoctoral Fellow
- 2020-2022 Dr. Edward Burress (Assistant Professor, University of Alabama, Tuscaloosa)
- 2021-2022 Dr. Meaghan Gade (Director of Wildlife Programs, Assoc. for Fish & Wildlife Agencies)
- 2020-2021 Dr. Sarah Friedman; Hutchinson Fellow (Research Fish Biologist, NOAA Fisheries)
- 2017-2020 Dr. Vincent Farallo (Assistant Professor, University of Scranton)

**c. Visiting Students**

- 2018-2020 Saúl Domínguez (Ph.D. candidate; Universidad Nacional Autónoma de México)
- 2017 Jhan Carlos Salazar (Undergraduate; Universidad ICESI, Cali, Colombia)

**d. Doctoral Student Committees**

- 2022- Alison Robey, Yale University, Ecology & Evolutionary Biology
- 2022- Shubhi Sharma, Yale University, Ecology & Evolutionary Biology
- 2022- Dalton Meyer, Yale University, Earth & Planetary Sciences
- 2021- Richard Li, Yale University, Ecology & Evolutionary Biology
- 2021- Logan Billet, Yale University, Yale School of the Environment
- 2021- Diego Ellis Soto, Yale University, Ecology & Evolutionary Biology
- 2020- Ava Ghezelayagh, Yale University, Ecology & Evolutionary Biology
- 2020- Yara Alshwairikh, Yale University, Yale School of the Environment
- 2019- Jasmine Mah, Yale University, Ecology & Evolutionary Biology

2019-	Liam Taylor, Yale University, Ecology & Evolutionary Biology
2019-	Kelsey Jenkins, Yale University, Earth & Planetary Sciences
2019-2022	Michael Hanson, Yale University, Earth & Planetary Sciences
2017-2019	Jack Whitehead, Virginia Tech, Department of Biological Sciences

#### e. Masters Student Committees

2022-	Elizabeth Daniel Tarimo, Virginia Tech, Department of Biological Sciences
2020-2021	Dahn-Young Dong, Yale University, School of the Environment
2018-2020	Sean Kelly, Virginia Tech, Department of Biological Sciences

#### f. Doctoral Student Committees – External Member

2021-	Morgan Muell, Auburn University, Department of Biological Sciences
2020-	Renoir Auguste, University of the West Indies, Department of Life Sciences
2019-2021	Jonathan Rader, UNC-Chapel Hill, Department of Biology

#### g. Undergraduate and High School Mentees

<sup>1</sup>Senior Thesis Mentee; <sup>2</sup>Publication co-author; <sup>3</sup>Student presented at a conference

2022-2023	<sup>1</sup> Kiran Masroor (Yale University)
2022-2023	<sup>1,3</sup> Emmy James (Yale University) YPM Summer Intern
2022-2023	<sup>1</sup> Erika Mendez (Yale University)
2022	<sup>3</sup> Aha Anderson (Bryn Mawr College) NSF REU Scholar
2022	Jessica Coutee (University of Maryland, Baltimore County) Yale NSF REVU Scholar
2022	<sup>3</sup> Jesús Buenrostro (Heritage University) YIBS SURES Scholar
2021-2022	Alice Xu (Amity Regional High School, CT)
2021-2022	<sup>1</sup> Leo Roberts (Yale University)
2021-2022	Tasman Rosenfeld (Yale University)
2021-2022	Lauren Chong (Yale University)
2021-2022	Rosemary Lee (Yale University)
2020-2022	<sup>1,3</sup> Christine Ho (Yale University)
2019-2021	<sup>1</sup> Christian Milian (Yale University)
2019-2020	<sup>1</sup> Marcus Lau (Bronx High School of Science, NYC)
2018-2019	Emma White (Virginia Tech)
2017-2019	Michelle Cox (Virginia Tech)
2016-2017	Riya Dange (Duke University)
2012-2014	<sup>1,2</sup> Ian Shields (Harvard University)
2012-2013	<sup>2,3</sup> Ellee Cook (Trinity University)
2012-2013	<sup>2,3</sup> Maureen Stimola (Columbia University)
2011-2013	<sup>1,2,3</sup> Asa Conover (Stuyvesant High School, NYC)
2011-2012	<sup>2</sup> Anthony Rodriguez (UC Davis)
2009-2011	<sup>2</sup> Juanita Madrid Hopwood (Harvard University)
2009	<sup>2</sup> Elbert Mock (UC Davis)

#### h. Yale E&EB Rotation Students Hosted

2022	Alison Robey
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2022 Julia Wood

**i. External Dissertation Examiner or Qualifying Examiner**

2023 Marvin Moosmann, University of Bern, Switzerland (Dissertation Examiner)  
 2022 Estefany Guevara Molina, Universidade de São Paulo, Brazil (Qualifying Examiner)  
 2022 Rodolfo Anderson, Monash University, Australia (Dissertation Examiner)

**SCIENTIFIC AND SOCIETY SERVICE:**

**I. EDITORIAL SERVICE**

2022- *American Naturalist*: Associate Editor  
 2021-2022 *Integrative Organismal Biology*: Associate Editor  
 2020 *Current Zoology*: Guest Editor for Special Issue

**II. PROFESSIONAL REVIEWING**

**Selected Journals:** *American Naturalist*, *Biological Journal of the Linnean Society*, *Biology Letters*, *BMC Evolutionary Biology*, *Current Biology*, *Diversity and Distributions*, *Ecography*, *Ecology*, *Ecology Letters*, *Evolution*, *Evolutionary Biology*, *Functional Ecology*, *Global Ecology and Biogeography*, *Herpetologica*, *Integrative and Comparative Biology*, *Integrative Organismal Biology*, *Journal of Biogeography*, *Journal of Experimental Biology*, *Journal of Morphology*, *Journal of Thermal Biology*, *Molecular Ecology*, *Nature Communications*, *Nature Ecology and Evolution*, *Oecologia*, *PLOS Biology*, *Proceedings of the National Academy of Sciences*, *Proceedings of the Royal Society B*, *Science*, *Science Advances*, *Systematic Biology*, *Trends in Ecology and Evolution*, *Zoology*

**Federal and Independent Agencies (ad hoc reviews):** National Geographic Society, National Science Foundation DEB & IOS, National Environment Research Council (UK)

**National Science Foundation Panels:** DEB Dimensions of Biodiversity; DEB Evolutionary Processes (2); IOS Physiological Mechanisms and Biomechanics

**III. UNIVERSITY SERVICE**

**Departmental Committees & Service, Yale University, Department of Ecology & Evolutionary Biology**

2022-2023 E&EB Graduate Student Entry Committee  
 E&EB Steering Committee (spring 2023)  
 Interim Director of Graduate Studies (spring 2023)  
 2021-2022 E&EB Faculty Search Committee (YCNCC Search)  
 Faculty Mentor for E&EB Sophomores  
 2020-2021 E&EB Faculty Search Committee (Ecology & Evolution Search)  
 E&EB Diversity and Climate Committee  
 First-Year Graduate Student Advisory Committee  
 Faculty Mentor for E&EB Sophomores  
 E&EB Seminar Series Organizer  
 2019-2020 Undergraduate Curriculum Committee

**Inter-Departmental Committees, Yale University**

2020 Review Committee; Graduate Fellowships; Yale Institute for Biospheric Studies

Review Committee; Hutchinson Fellowship; Yale Institute for Biospheric Studies

#### **Yale College, Yale University**

2022 Head of College Search Committee; Jonathan Edwards College  
 2021-present First-Year Advisor; Jonathan Edwards College  
 2021 Reviewer; Dean's Fellowship  
 2020 Reviewer; Henry Edwards Ellsworth Prize; Jonathan Edwards College  
 2020 Reviewer; Rosenfeld Science Scholars Program; Yale College  
 2019-present Resident Fellow, Jonathan Edwards College

#### **Departmental Committees, Virginia Tech**

2017-2019 Diversity Committee, Department of Biological Sciences

#### **IV. SERVICE TO THE SOCIETY FOR INTEGRATIVE AND COMPARATIVE BIOLOGY**

2022 Bartholomew Award Committee; Division of Comparative Physiology & Biochemistry  
 2022-2023 Program Officer, Division of Ecology and Evolution  
 2019-2020 Secretary, Division of Ecology and Evolution  
 2017-2021 Public Affairs Committee  
 2016-2017 Broadening Participation Committee – Mentor  
 2016-2018 Huey Award Committee, Division of Ecology and Evolution

#### **V. PROFESSIONAL MEMBERSHIP:**

American Society of Naturalists; Society for the Study of Evolution; Society for Integrative and Comparative Biology; Sigma Xi

#### **VI. SELECTED MEDIA COMMENTARY:**

"A frog so small, it could not frog" by K. Wu, *The Atlantic*, 6/2022  
 "Tiny differences in plumage and song have split two nearly identical birds into different species" by E. Pennisi, *Science*, 3/2021.  
 "Scientific journals commit to diversity, but lack the data" by K. Wu, *New York Times*, 10/2020.  
 "Meet Lizard Man, a reptile-loving biologist tackling some of the biggest questions in evolution" by E. Pennisi, *Science*, 7/2020.  
 "Evolutionary climate control" by M. Eisenstein, *Nature Middle East*, 10/2019.  
 "These albino lizards are the first gene-edited non-avian reptiles" by K. Wu, *PBS NOVA*, 9/2019.  
 "Predators drove a lizard population to extinction without eating them" by K. Wu, *PBS NOVA*, 6/2019.  
 "The wild experiment that showed evolution in real time" by E. Yong, *The Atlantic*, 1/2019.  
 "A single spine from this cactus can lift a half-pound slab of pork" by K. Wu, *PBS NOVA*, 11/2018.  
 "Hurricanes may have made these lizards better huggers" by K. Eschner, *Popular Science*, 7/ 2018.  
 "Lizards with Bigger Toes & Smaller Hind Legs Survive Hurricanes" by J. Learn, *Smithsonian*, 7/ 2018.  
 "Natural History Makes a Comeback on Campus" by D. Lyman, *Undark Magazine*, 11/2017.