

CURRICULUM VITAE

MARTHA MONICA MUÑOZ

Department of Ecology and Evolutionary Biology, Yale University
165 Prospect Street, New Haven, CT 06511

email: martha.munoz@yale.edu; phone: (203) 432-9861; website: www.marthamunoz.com

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-2054569, Bridging Ecology and Evolution: Niche width evolution and the assembly of faunas. (Co-PI) \$1,102,014
- 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) \$691,807
- 2021 John Templeton Foundation: De-mystifying the tangled bank: integrating macroevolutionary and mechanistic landscape approaches across scales of organization (Lead PI) \$799,641
- 2018 National Science Foundation, IOS-1839250, Rules of Life:FELS: Conference Grant: Evolutionary biomechanics 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:

¹Undergraduate Mentee; ²Graduate Student; ³Postdoctoral Researcher; ⁴High School Mentee

Metrics: 915 citations; H-index=16; i10-index=20

In Review/Revision:

39. Bodensteiner BL², **Muñoz MM**. Adaptive radiation without independent stages of trait evolution in a lineage of Caribbean anoles. (in revision)
38. Friedman ST³, **Muñoz MM**. A latitudinal gradient of deep-sea invasions for marine fishes. (in revision)
37. Burress ED³, **Muñoz MM**. Functional trade-offs asymmetrically promote phenotypic diversification. (in revision)

In Press/Published

36. Friedman ST³, **Muñoz MM**. 2022. Thermally robust ballistic mechanisms do not expand the climatic niche of salamanders. (in press; *Integrative Organismal Biology*)
35. Domínguez-Guerrero SF³, 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 VR³. 2022. The multidimensional (and contrasting) effects of environmental warming on a group of montane tropical lizards. *Functional Ecology* 35:419—431.
31. Burress ED³, **Muñoz MM**. 2022. Ecological opportunity from innovation, not islands, drove the anole lizard adaptive radiation. *Systematic Biology* 71:93—104.
30. Bodensteiner BL², 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 ED³, **Muñoz MM**. 2021. Ecological limits on the decoupling of prey capture and processing in fishes. *Integrative and Comparative Biology* 61:773—782.
27. Bodensteiner BL², 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 SF², Bodensteiner BL², 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 H², **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 VR³, **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 JC¹, Castañeda MR, Londoño GA, Bodensteiner BL², **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 BL². 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 S⁵, **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 IH¹, **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 AE⁴, Cook EG¹, 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 MA¹, Algar AC, Conover A⁴, Rodriguez A¹, 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 JM¹, Mock E¹, 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:

- 2022 Society for Integrative & Comparative Biology: **Bartholomew Award Plenary Speaker**
Wragg-Schmidt Zoology Spring Symposium, University of British Columbia: **Plenary Speaker**
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 Association for Amphibian and Reptile Research and Conservation, San Miguel de Allende, México: **Plenary Speaker** (Delivered in Spanish)

INVITED SYMPOSIUM TALKS & PANELS:

- 2022 European Society for Evolutionary Biology, Prague, Czech Republic
- 2021 Society for the Study of Evolution, 75th 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
Latin American Herpetology, Quito, Ecuador (Delivered in Spanish)
- 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:

- 2023 Columbia University, Department of Biological Sciences, *Grad. Student Invited Speaker
 Colorado State University, Department of Biology
 Penn State University, Department of Biology
- 2022 University of Cambridge, Behaviour, Ecology, and Evolution Series, Cambridge, UK
 Wilhelminenberg Seminar, Konrad Lorenz Institute of Ethology, Vienna, Austria
 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 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:

- 2022 Earth Day Speaker, CUNY Hostos Community College
 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:

- "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, 12/2021 [[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 ‘

“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. Student or Postdoc as Presenting Author

2022 Society for Integrative and Comparative Biology, Phoenix, AZ (3 talks)

2021 ASN/SSB/SSE Evolution Meeting, Digital Meeting

2020 World Congress of Herpetology, Dunedin, New Zealand
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

TEACHING EXPERIENCE:

Department of Ecology and Evolutionary Biology, Yale University, Assistant Professor

- 2022 Evolutionary Architects: Organisms as Targets and Agents of Natural Selection (E&EB 865);
Course Director. Enrollment: 18 students (5 YC, 12 GSAS, 1 YSA)
- 2021 Adaptive Radiation (E&EB 834); Course Co-Director. Enrollment: 8 students (1 YC, 7 GSAS)
- 2020 Life in Motion: Ecological and Evolutionary Physiology (E&EB 295); Course Director.
Enrollment: 21 students (21 YC)
- 2020 Evolutionary Biology (E&EB 225); Course Co-Director. Enrollment: 41 students (41 YC)
- 2019 Life in the Anthropocene (E&EB 804); Enrollment: 9 students (1 YC, 8 GSAS)

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

b. Postdoctoral Researchers

- 2022- Sina Rometsch (starting 11/2022)
- 2021- Dr. Laura Alencar
- 2021- Dr. Saúl Domínguez-Guerrero
- 2020- Dr. Edward Burress
- 2021-2022 Dr. Meaghan Gade (Director of Wildlife Programs, Assoc. for Fish & Wildlife Agencies)
- 2020-2021 Dr. Sarah Friedman (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, Colombia)

d. Doctoral Student Committees

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, 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, 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

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

2022 Aha Anderson (Bryn Mawr College) NSF REU Scholar
 2022 Jessica Coutee (Blinn College) Yale NSF REVU Scholar
 2022 Jesús Buenrostro (Heritage College) YIBS SURES Scholar
 2022- ¹Kiran Masroor (Yale University)
 2022- ¹Emmy James (Yale University) YPM Summer Intern
 2021-2022 Alice Xu (Amity Regional High School, CT)
 2021-2022 ¹Leo Roberts (Yale University)
 2021-2022 ¹Tasman Rosenfeld (Yale University)
 2021-2022 Lauren Chong (Yale University)
 2021-2022 Rosemary Lee (Yale University)
 2020-2022 ^{1,3}Christine Ho (Yale University)
 2019-2021 ¹Christian Milian (Yale University)
 2019-2020 ¹Marcus 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	^{1,2} Ian Shields (Harvard University)
2012-2013	^{2,3} Ellee Cook (Trinity University)
2012-2013	^{2,3} Maureen Stimola (Columbia University)
2011-2013	^{1,2,3} Asa Conover (Stuyvesant High School, NYC)
2011-2012	² Anthony Rodriguez (UC Davis)
2009-2011	² Juanita Madrid Hopwood (Harvard University)
2009	² Elbert Mock (UC Davis)

h. Yale E&EB Rotation Students Hosted

2022	Alison Robey
2022	Julia Wood

SCIENTIFIC AND SOCIETY SERVICE:

I. EDITORIAL SERVICE

2022-	<i>American Naturalist</i> : Associate Editor
2021-2022	<i>Integrative Organismal Biology</i> : Associate Editor
2020	<i>Current Zoology</i> : 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); DEB CAREER Award; IOS Physiological Mechanisms and Biomechanics

III. UNIVERSITY SERVICE

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

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
 2020 Review Committee; Hutchinson Fellowship; Yale Institute for Biospheric Studies

Yale College, Yale University

2022 Head of College Search Committee; Jonathan Edwards College
 2021-2022 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

2022-2023 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:

"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.