

# AMBIKA KAMATH

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## EDUCATION

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- 2011-2017**    **Harvard University**  
Ph.D. in Organismic and Evolutionary Biology. Advisor: Dr. Jonathan Losos  
*Thesis Title: Phenotypic Variation and the Behavioral Ecology of Lizards*
- 2007-2011**    **Amherst College**  
B.A. *summa cum laude* in Biology. GPA: 3.98/4.0. Advisor: Dr. Jill Miller  
*Thesis Title: The evolution of floral morphology accompanying the transition from cosexuality to gender dimorphism in Lycium californicum (Solanaceae)*
- 2012, 2009**    **Organization for Tropical Studies**  
Costa Rica Graduate Course in Tropical Biology  
South Africa Semester in Ecology and Conservation

## APPOINTMENTS

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- 2018-2021**    **Miller Institute for Basic Research in Science,  
University of California Berkeley**  
Post-doctoral fellow. Faculty Host: Dr. Damian Elias
- 2017-2018**    **University of California, Santa Barbara**  
Post-doctoral researcher. Advisor: Dr. Jonathan Pruitt

## PUBLICATIONS

(\* indicates undergraduate mentee; § indicates equal contribution)

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1. Moon R\*, and A **Kamath**. 2019. Re-examining habitat use and escape behavior as correlates of dorsal pattern variation in female brown anole lizards, *Anolis sagrei* (Squamata: Dactyloidae). *Biological Journal of the Linnean Society*. <https://doi.org/10.1093/biolinnean/blz006>
2. **Kamath A**, S Primavera\*, CM Wright, GN Doering, KA Sheehy\*, N Pinter-Wollman, and JN Pruitt. 2018. Collective behavior and colony persistence of social spiders depends on their physical environment. *Behavioral Ecology*. [doi.org/10.1093/beheco/ary158](https://doi.org/10.1093/beheco/ary158)
3. **Kamath A**§, JN Pruitt§, AJ Brooks, MC Ladd, DT Cook, JP Gallagher, ME Vickers, SJ Holbrook, and RJ Schmitt. 2018. Collective response by farmerfish to intruding corallivores contributes to coral recovery within farmerfish gardens. *Oikos*. [doi.org/10.1111/oik.05854](https://doi.org/10.1111/oik.05854)
4. Lichtenstein JLL, A **Kamath**, SE Bengston, L Avilés, and JN Pruitt. 2018. Female-biased sex ratios increase colony survival and reproductive output in the spider *Anelosimus studiosus*. *American Naturalist* 192: 10.1086/699838

5. Knowlton E, and **A Kamath**. 2018. Ants do not traverse the silk of adult female *Nephila clavipes* (Linnaeus) webs. *Neotropical Entomology*. doi.org/10.1007/s13744-018-0631-6
6. Doering GN, **A Kamath**, CM Wright, and JN Pruitt. 2018. Worker size is associated with foraging surface in the African ant *Anoplolepis custodiens*. *Insectes Sociaux* doi.org/10.1007/s00040-018-0645-4
7. Donihue CM, A Herrel, A-C Fabre, **A Kamath**, AJ Geneva, TW Schoener, JJ Kolbe, and JB Losos. 2018. Hurricane-induced adaptive shifts in the morphology of an island lizard. *Nature* 560: 88-91.
8. **Kamath A**, and JB Losos. 2018. Reconsidering territoriality is necessary for understanding *Anolis* mating systems. *Behavioral Ecology and Sociobiology* 72: 106
9. **Kamath A**, and JB Losos. 2018. Estimating encounter rates as the first step of sexual selection in the lizard *Anolis sagrei*. *Proceedings of the Royal Society B* 285: 1873.
10. Pruitt JN, CM Wright, JLL Lichtenstein, GT Chism, BL McEwan, **A Kamath**, and N Pinter-Wollman. 2017. Selection on collective aggressiveness favors followership, not leadership. *Current Biology* 28: 100-105.
11. Lichtenstein JLL, GT Chism, **A Kamath**, and JN Pruitt. 2017. Higher intraindividual behavioral variability predicts foraging outcome in a beach-dwelling jumping spider. *Scientific Reports* 7: 18063.
12. **Kamath A**, and JB Losos. 2017. The erratic and contingent progression of research on territoriality: a case study. *Behavioral Ecology and Sociobiology* 71: 89.
13. **Kamath A**, and JB Losos. 2017. Does ecological specialization transcend scale? Habitat partitioning among individuals and species of *Anolis* lizards. *Evolution* 71: 541-549.
14. **Kamath A**, RA Levin, and JS Miller. 2017. Floral size and shape evolution following the transition to gender dimorphism. *American Journal of Botany* 104: 451-460.
15. Brown, H, **A Kamath**, and M Rubega. 2017. Facilitating discussions about privilege among future conservation practitioners. *Conservation Biology* 31: 727-730.
16. **Kamath A**. 2016. Ornament morphology varies with display behaviour and sexual size dimorphism, but not habitat, in the fan-throated lizard (*Sitana*, Agamidae). *Journal of Herpetology* 50 (3): 394-403.
17. **Kamath, A**, and R Sreekar. 2016. Morphology, ecology, and behavior of *Hylarana intermedia*, a Western Ghats frog. *Acta Herpetologica* 11 (1): 15-20.
18. Miller, JS, **A Kamath**, BC Husband, and RA Levin. 2016. Correlated polymorphism in cytotype and sexual system within a monophyletic species, *Lycium californicum*. *Annals of Botany* 117: 307-317.
19. **Kamath, A**. and YE Stuart. 2015. Movement rates of the lizard *Anolis carolinensis* in the presence and absence of *Anolis sagrei*. *Breviora* 546: 1-7.
20. **Kamath, A**, YE Stuart, and TS Campbell. 2013. Behavioral partitioning by the native lizard *Anolis carolinensis* in the presence and absence of the invasive *Anolis sagrei* in Florida. *Breviora* 535: 1-10.
21. Miller JS, **A Kamath**, J Damashek, and RA Levin. 2011. Out of America to Africa or Asia: Inference of dispersal histories using nuclear and plastid DNA and the *S-RNase* self-incompatibility locus. *Molecular Biology and Evolution* 28: 793-801.

22. Miller JS, **A Kamath**, and RA Levin. 2009. Do multiple tortoises equal a hare? The utility of nine noncoding plastid regions for species-level phylogenetics in Tribe Lycieae. *Systematic Botany* 34: 796-804.
23. **Kamath A.** 2009. What is the unit of natural selection? Is the gene's eye view of evolution unacceptably reductionist? *Resonance* 14: 1047-1059.

## GRANTS, FELLOWSHIPS & HONORS

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- 2019 American Society of Naturalists' Jasper Loftus-Hills Young Investigator Award
- 2018 Miller Institute for Basic Research in Science Postdoctoral Fellowship, University of California, Berkeley (\$225,000)
- 2018 Killam Postdoctoral Fellowship, University of British Columbia (\$104,000; *declined*)
- 2016 Semi-Finalist, Harvard Horizons Symposium Competition (\$1000)
- 2015 Animal Behavior Society Student Research Grant (\$2000)  
Robert A. Chapman Memorial Scholarship Fund, Harvard University (\$4000)
- 2014 National Geographic Young Explorer's Grant (\$5000)  
Madras Naturalists' Society M. Krishnan Memorial Nature Writing Award
- 2012 Rosemary Grant Research Award, Society for the Study of Evolution (\$2000)
- 2013, 2012 Kenneth Miyata Award for Research in Herpetology, Museum of Comparative Zoology, Harvard University (\$4285, \$1485)  
South Asia Initiative Research Award, Harvard University (\$2500, \$4500)
- 2012-2015 Rufus B. Kellogg Fellowship for Graduate Studies, awarded once every three years based on academic excellence, Amherst College (\$75,000)
- 2011-2012 Fellowship for Students from India, Harvard University
- 2011-2012 John Simpson Fellowship for Graduate Studies, Amherst College (\$2,300)
- 2011 Elected to Phi Beta Kappa, the academic honor society, Amherst College Chapter  
Elected to Sigma Xi, the scientific research society, Amherst College Chapter  
Oscar E. Schotté Prize, best honors thesis in biology, Amherst College (\$1,250)  
Oscar E. Schotté Scholarship, for research in biology, Amherst College (\$1,250)
- 2008-2011 Schupf Scholarship, funding independent research, Amherst College (\$28,645)
- 2010 Charles W. Cole Scholarship, awarded to the undergraduate with established financial need who stands highest in academic rank in the sophomore class, Amherst College
- 2009 Sawyer Prize, for promise as a student of biology, Amherst College (\$1,220)  
Walker Prize, awarded for proficiency in mathematics, Amherst College (\$1,124)
- 2008 Edward Hitchcock Fellowship, for summer research, Amherst College (\$4,800)

## TEACHING EXPERIENCE

(\* indicates Certificate for Teaching Excellence for overall evaluation score >4.5/5.0)

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2016\*, 2015\* Teaching Assistant for OEB210 *Writing Scientific Papers* at Harvard University

- 2016\* Teaching Assistant for OEB167 *Herpetology* at Harvard University
- 2016 Designed and led a 4-session workshop on writing style and editing for students in the School of Engineering and Applied Sciences, Harvard University
- 2014-2016 Designed and led a two-hour workshop for first-year graduate students in the Organismic and Evolutionary Biology department titled *Making Science More Welcoming of Underrepresented Groups*, Harvard University
- 2011, 2009 Laboratory Teaching Assistant for BIOL181 *Adaptation and the Organism* at Amherst College
- 2010 Laboratory Teaching Assistant for BIOL321 *Evolution* at Amherst College

### MENTORING & RESEARCH SUPERVISION

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- 2018-2019 Yuheng Sun, Undergraduate Visiting Student, University of California Berkeley  
*Thesis: Substrate choice in male and female jumping spiders.*
- 2018 Skylar Primavera, Undergraduate, University of California Santa Barbara
- 2018 Kirsten Sheehy, Lab Technician, University of California Santa Barbara
- 2017 Thomas Lenihan, Undergraduate, University of California Santa Barbara
- 2014-2017 Christian Perez, Undergraduate, Harvard University  
*Thesis: Niche Partitioning in Three Species of Mainland Costa Rican Anoles.*  
*Project: Transcontinental Convergence in Head Shape across Vine Snakes*
- 2014-2016 Rachel Moon, Undergraduate, Harvard University  
*Thesis: Examining the Ecological, Morphological, and Behavioral Correlates of Dorsal Pattern Variation in Female Brown Anole Lizards (Anolis sagrei).*
- 2015 Jonathan Suh, Undergraduate, Boston University  
*Project: Variation in Male Display Behavior with Social Context in Anolis sagrei.*
- 2013 Divyaraj Shah, Undergraduate, St. Xavier's College, Ahmedabad, India
- 2012 Chetan Kokatnur, Diploma Student, New Polytechnic College, Kolhapur, India

### INVITED TALKS

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- 2018 University of California Davis Center for Population Biology. *Three Windows into Behavioral Ecology: Examples from Lizards and Spiders.*
- 2018 American Society of Naturalists. *A Broader Legacy of Orians (1969)*. For the "150 Years of *The American Naturalist*" Symposium.
- 2018 Animal Behavior Society. *How Do We Know What We Think We know in Animal Behavior? Paradigms, Imperfect Science, and Lessons from Lizard Mating Systems*. For the "Animal Behavior in Historical Context: Novel Insights from Interdisciplinary Encounters" Symposium
- 2018 University of California Santa Barbara Department of Ecology, Evolution and Marine Biology. *Three Windows into Behavioral Ecology.*
- 2018 California State University Dominguez Hills Department of Biology. *How Space Use Behavior Influences the Social Interactions of Lizards and Spiders.*

- 2017 Trinity University Biology Department. *How Space Use Behavior Influences Animals' Social Lives.*
- 2017 New England Herpetological Society. *New Perspectives on the Social Lives of Lizards.*
- 2015 Amherst College Biology Department. *Do Individual Differences Influence the Lives of Lizards?*

### CONTRIBUTED TALKS

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- 2018 Animal Behavior Society, Milwaukee, Wisconsin, USA
- 2018 International Society for Behavioral Ecology, Minneapolis, USA
- 2017 Evolution, Portland, Oregon, USA.
- 2016 International Society for Behavioural Ecology, Exeter, UK.
- 2016 American Society of Naturalists, Asilomar, California, USA.
- 2014 Animal Behavior Society, Princeton, New Jersey, USA.
- 2014 Society for Integrative and Comparative Biology, Austin, Texas, USA.

### EDITING & REVIEWING

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- Member, Editorial Board, *The Scientific Naturalist (Ecology)*
- Reviewer for *The American Naturalist*, *Behavior*, *Behavioral Ecology*, *Behavioral Ecology and Sociobiology*, *Biological Journal of the Linnean Society*, *Caribbean Naturalist*, *Current Zoology*, *Ecology Letters*, *Evolutionary Anthropology*, *Journal of Arid Ecology*, *Journal of Herpetology*, *Oxford University Press*, *Phyllomedusa*, *PLoS One*, *The Science of Nature*, *Zoologischer Anzeiger*.
- Grant reviewer for *National Geographic*
- Conference abstract reviewer for *American Society of Naturalists*, *International Society for Behavioural Ecology*

### POPULAR SCIENCE WRITING

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#### For *The Hindu BLink*

- January 2014 – April 2016 and September 2017 – April 2018: *Creature Feature*. A monthly column featuring the natural history, ecology, evolution, and behaviour of underappreciated organisms. (archive at [ambikamath.wordpress.com/category/creature-feature/](http://ambikamath.wordpress.com/category/creature-feature/)). Sample pieces include:
  - July 2014: [Bee-eaters](#)
  - September 2014: [Indian Desert Jird](#)
  - October 2014: [Bagworms](#)
  - June 2015: [Bats and Wasps](#)
- March 2014: [The Nature of Things](#). On travelling in India to study fan-throated lizards.
- April 2014: [Alone but not Lost](#). On vagrant birds, and their importance for ecology, evolution, and birders.
- September 2014: [Matching Steps](#). On the ways in which to watch animals.
- June 2015: [Looking for Home](#). On ideas proposed before the world is ready for them.

**Blogging and Other Outlets**

- I contribute to *Anole Annals* (>50 posts), where I write about the ecology, evolution, and behavior of *Anolis*, *Sitana* and other lizards ([anoleannals.org/author/ambikamath/](http://anoleannals.org/author/ambikamath/))
- All my other writing (>70 posts), including essays on biology, science, fieldwork, travel, and the social aspects of science and academia, can be found at [ambikamath.wordpress.com/blog/](http://ambikamath.wordpress.com/blog/).

**MISCELLANEOUS PROFESSIONAL ACTIVITIES**

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- Head Steward and Joint Council Member, UAW Local 5810, the University of California Postdoc Union (December 2018-present).
- Panelist for *Queer Ecologies: Rethinking Biology, Sex, and Environment* at the Social Science Matrix, UC Berkeley (November 2018).
- Panelist for discussion on the postdoc experience, organized by graduate students in the Department of Environmental Science, Policy, and Management at UC Berkeley (October 2018).
- Panelist for discussion on the postdoc experience, organized by graduate students in the Department of Ecology, Evolution, and Marine Biology at UC Santa Barbara (February 2018).
- Graduate Student Liaison for the Office of Sexual Assault Prevention and Response at Harvard University (September-December 2016).
- Hosted conversation and book reading with Dr. Hope Jahren about her memoir *Lab Girl* for the Harvard Bookstore (April 2016).
- Panelist for a conversation during Conference on Gender and Science, San Michele all'Adige, Trentino, Italy (March 2016).
- Representative from the Dept. of Organismic and Evolutionary Biology (Harvard University) at the Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) conference (October 2015).