

Benjamin R. Karin

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EDUCATION

PhD Candidate, University of California Berkeley

Advisor: Prof. Jimmy A. McGuire

M.S. Biology, Villanova University

Advisor: Prof. Aaron M. Bauer

B.A. Integrative Biology, University of California Berkeley

Highest Honors and Distinction

Berkeley, CA

2016–Present

Villanova, PA

2013–2016

Berkeley, CA

2008–2012

PUBLICATIONS

1. Blom M.P.K., Matzke N.J., Bragg J.G., Arida E., Austin C.C., Backlin A., Carretero M.A., Fisher R.N., Glaw F., Hathaway S., Iskandar D.T., McGuire J.A., **Karin B.R.**, Reilly S.B., Rittmeyer E.N., Rocha S., Sanchez M., Stubbs A.L., Vences M., Moritz C. Habitat preference modulates trans-oceanic dispersal in a terrestrial vertebrate. *Proceedings of the Royal Society B: Biological Sciences* 286(1904):20182575.
2. Reilly S.B., Stubbs A.L., **Karin B.R.**, Arida A., Iskandar D.T., McGuire J.A. Recent and rapid colonization of the Lesser Sundas Archipelago from adjacent Sundaland by seven amphibian and reptile species. *Zoologica Scripta* 46(4):757–769.
3. Grismer L.L., Dzukaflly Z., Muin M.A., Quah E.S.H., **Karin B.R.**, Anuar S, Freitas E.S. 2019. A new skink of the genus *Subdoluseps* (Hardwicke & Gray, 1828) from Peninsular Malaysia. *Zootaxa* 4609(2):358–372.
4. Reilly S.B., Stubbs A.L., **Karin B.R.**, Bi K., Arida A., Iskandar D.T., McGuire J.A. **2019**. Leap-frog dispersal and mitochondrial introgression: Phylogenomics and biogeography of *Limnonectes* fanged frogs in the Lesser Sundas Archipelago of Wallacea. *Journal of Biogeography* 46:757–769.
5. **Karin B.R.***, Stubbs A.L.*, Arifin U., Bloch M., Ramadhan G., Iskandar D.T., Arida E., Reilly S.B., Kusnadi A., McGuire J.A. **2018**. The herpetofauna of the Kei Islands (Maluku, Indonesia): Comprehensive report on new and historical collections, biogeographic patterns, conservation concerns, and an annotated checklist of species from Kei Kecil, Kei Besar, Tam, and Kur. *Raffles Bulletin of Zoology* 66:704–738.
6. **Karin B.R.**, Cicero C.C., Koo M.S., Bowie R.C.K. **2018**. The role of history and ecology as drivers of song divergence in Bell's and Sagebrush sparrows (*Artemisiospiza*, Aves: Passerellidae). *Biological Journal of the Linnean Society* bly090.
7. **Karin B.R.**, Freitas E.S., Shonleben S., Grismer L.L., Bauer A.M., Das I. **2018**. Undescribed diversity in an urban rainforest: A new species of *Lygosoma* (Squamata: Scincidae) from western Sarawak, Malaysia (Borneo). *Zootaxa* 4370(4):345–362.
8. Stubbs, A.L.*, **Karin B.R.***, Arifin U., Iskandar D.T., Arida E., Reilly S.B., Block L.M., McGuire J.A. **2017**. A new species of *Lepidodactylus* (Squamata: Gekkonidae) from the Kei Islands, Maluku, Indonesia. *Zootaxa* 4350(1):91–105.
9. **Karin B.R.**, Das I., Jackman T., Bauer A.M. **2017**. Ancient divergence time estimates in *Eutropis rugifera* support the existence of Pleistocene barriers on the exposed Sunda Shelf. *PeerJ* 5:e3762.
10. Das I., Pui Y.M., Shabrani A., **Karin B.R.**, Breuer H. **2017**. Reptiles. In: *Gunung Penrissen: The roof of western Borneo*. Mohd-Azlan J., Tuen A.A. & Das I. (Eds.) Natural History Publications (Borneo) Sdn Bhd, Kota Kinabalu, pp. 109–119.
11. Pui Y.M., **Karin B.R.**, Bauer A.M., Das I. **2017**. A new species of *Tropidophorus* Duméril & Bibron, 1839 (Squamata: Sauria: Scincidae) from Sarawak, East Malaysia (Borneo). *Zootaxa* 4258(6):539–550.

12. **Karin B.R.**, Metallinou M., Weinell J.L., Jackman T.R., Bauer A.M. **2016**. Resolving the higher-order phylogenetic relationships of the circumtropical *Mabuya* group (Squamata: Scincidae): An out-of-Asia diversification. *Molecular Phylogenetics and Evolution* 102:220–232.
13. Metallinou M., Weinell J.L., **Karin B.R.**, Conradie W., Wagner P., Schmitz A., Jackman T.R., Bauer A.M. **2016**. A single origin of extreme matrotrophy in African mabuyine skinks. *Biology Letters* 12: 20160430
14. **Karin B.R.**, Das I., Bauer A.M. **2016**. Two new species of diminutive leaf-litter skinks (Squamata: Scincidae: *Tytthoscincus*) from Gunung Penrissen, Sarawak, Malaysia (northern Borneo). *Zootaxa* 4093(3):407–423.
15. **Karin B.R.**, Stubbs A.L., Arifin U. **2013**. *Limnonectes grunniens*. Saline Water Tolerance. *Herpetological Review* 44(4):656.

* **Co-First Author**

PUBLICATIONS (IN REVIEW OR REVISION)

16. **Karin B.R.**, Gamble T., Jackman T. Rapidly Evolving Long Exon Capture: A new sequence capture dataset for phylogenomics in amniotes. *Molecular Biology and Evolution*. **In Review**.
17. **Karin B.R.**, Stubbs A.L., Arifin U., Iskandar D.T., Arida E., Austin C.C., McGuire J.A. Crossing Lydekker's Line: Northern Water Dragons (*Tropicagama temporalis*) colonized the Mollucan Islands of Indonesia from New Guinea. *Journal of Biogeography*. **In Review**.

CONFERENCE PRESENTATIONS

- Southeast Asia Gateway of Evolution** - Bogor, Indonesia **2017**
- Karin B.R., Das I., Jackman T.R., Bauer A.M. Comparative phylogeography of three lizards of the genus *Eutropis* (Squamata: Scincidae) on Borneo.
- Evolution** - Portland, OR **2017**
- Karin B.R. Gamble T., Jackman T.R. Rapidly Evolving Long Exon Capture: A new sequence capture dataset for phylogenomics in amniotes.
- Society for the Study of Amphibians and Reptiles** - Lawrence, KS **2015**
- Karin B.R., Stubbs A.L., and McGuire J.A. Comparative phylogeography of three species of *Eutropis* (Squamata:Scincidae) on Borneo.
- World Congress of Herpetology** - Vancouver, BC **2012**
- Karin B.R., Stubbs A.L., and McGuire J.A. Comparative biogeography of three lizard genera in Indonesia: *Lophognathus*, *Lamprolepis*, and *Cyrtodactylus*.
- North American Ornithological Conference** - Vancouver, BC **2012**
- Cicero, C.C., Karin B.R., Bowie, R.C.K. Phylogeny vs. Ecology in the Evolution of Songs in Sage Sparrows

INVITED RESEARCH SEMINARS

- Herpetology Group Seminar, Museum of Vertebrate Zoology** - UC Berkeley **2018**
- Karin B.R., Stubbs A.L., Arifin U., Bloch M., Ramadhan G., Iskandar D.T., Arida E., Reilly S.B., Kusnadi A., McGuire J.A. Herps of the Kei Islands: 150 years of collections and still more to find.
- Herpetology Group Seminar, Museum of Vertebrate Zoology** - UC Berkeley **2012**
- Karin B.R., Stubbs A.L. Biogeography of Maluku Province, Indonesia

INVITED PUBLIC SEMINARS

- Honors Biology Class** - Los Gatos High School, Los Gatos, CA **2013**
- Lecture to high school biology class on science, herpetology, and genetics.
- Panel for majors in Biological Sciences - L&S1** - UC Berkeley **2012**
- Chosen to represent the Integrative Biology major.

FELLOWSHIPS

- **Annie M. Alexander Fellowship** - Museum of Vertebrate Zoology 2019
- **Berkeley Fellowship** - UC Berkeley 2016–2019
- **Biology Department Academic Year Graduate Fellowship** - Villanova University 2015
- **Biology Department Summer Research Fellowship** - Villanova University 2015
- **Biology Department Summer Research Fellowship** - Villanova University 2014
- **Summer Undergraduate Research Fellowship** - UC Berkeley 2011

GRANTS

- **Summer Research Funds** - Museum of Vertebrate Zoology 2019
- **Summer Research Funds** - Museum of Vertebrate Zoology 2018
- **Summer Research Funds** - Department of Integrative Biology 2018
- **GRAC Research Funds** - Department of Integrative Biology 2018
- **Summer Research Funds** - Museum of Vertebrate Zoology 2017
- **Young Explorers Grant** - National Geographic Society 2016
- **Graduate Summer Research Award** - Villanova University 2014

HONORS AND AWARDS

- **Certificate of Merit** - Plumas National Forest 2012
- **Highest Honors in Integrative Biology** - UC Berkeley 2012
- **Distinction in General Scholarship** - UC Berkeley 2012

PEER REVIEWS

- **PLoS One** — 2 reviews 2018–present
- **Molecular Phylogenetics and Evolution** — 1 review 2017–present
- **PeerJ** — 1 review 2017–present
- **Herpetologica** — 3 reviews 2016–present
- **Zootaxa** — 6 reviews 2014–present

SERVICE

- **IUCN Skink Specialist Group** 2019–present

SOCIETY MEMBERSHIP

- **Society for the Study of Evolution** 2016–present
- **Society for the Study of Amphibians and Reptiles** 2014–present

WORKSHOPS TAUGHT

Field Genomics - 10 day course taking undergrads through field collections, Oxford Nanopore sequencing, and bioinformatics with the goal of preparing them for research lab positions. Summer 2019

R Workshop - 1 week introductory course for Integrative Biology graduate students. Spring 2017

WORKSHOPS AND TRAINING

- Trees in the Desert** - University of Arizona Tucson, AZ
- NSF-funded workshop on building ultra-large phylogenetic trees 12-14 April, 2019
- Python Workshop - Computational Genomics Resource Laboratory** - UC Berkeley Berkeley, CA
- Introduction to programming with Python. 2015
- Lizard Thermal Physiology Training** - UC Santa Cruz Santa Cruz, CA

- 1 week learning thermal physiology methods and protocols using *Uta stansburiana*. 2014

VOLUNTEERING AND MENTORING

- Preparation Lab** - Museum of Vertebrate Zoology - UC Berkeley 2009–2012
- Cal Day Panel for Integrative Biology** - UC Berkeley 2012

GRADUATE STUDENT INSTRUCTOR COURSES

- Human Reproduction** - UC Berkeley Spring 2017
- Animal Behavior** - UC Berkeley Fall 2016
- Evolution** - Villanova University Spring 2015
- Histology** - Villanova University Spring 2015
- General Biology** - Villanova University Fall 2013 – Spring 2014

EMPLOYMENT HISTORY

- Amphibian Field Technician** - UC Santa Barbara Sierra Nevada Mountains, CA 2016
 - Assisted Dr. Roland Knapp with study of *Bd* in *Rana sierrae*.
- Tutor** - TutorSync Oakland, CA 2015
 - Tutoring High School students in Science and Math.
- Biological Sciences Technician** - Plumas National Forest Oroville, CA 2012
 - Amphibian Surveys, Stream Condition Inventory protocol, fish electroshocking surveys.
- Biological Sciences Technician** - United States Department of Agriculture Albany, CA 2010–2011
 - Assisted Dr. William Vensel in lab research. Effects of environment on wheat flour quality.

OTHER TRAINING

- Level I Avalanche, Level 2 Avalanche** - College of the Siskiyous Weed, CA 2012
 - Training in snow travel and avalanche recognition and safety. Level I: 24 hours; Level II: 32 hours.
- National Outdoor Leadership School (NOLS)** Wind River Range, WY 2009
 - 6 Credit Hours: Environmental Ethics, Skills Practicum, Risk Assessment.