

Benjamin R. Karin

Email: benkarin@berkeley.edu

Website: <http://benkarin.com/>

[Google Scholar Profile](#)

EDUCATION

PhD Candidate, University of California Berkeley

Advisor: Prof. Jimmy A. McGuire

Berkeley, CA

2016–Present

M.S. Biology, Villanova University

Advisor: Prof. Aaron M. Bauer

Villanova, PA

2013–2016

B.A. Integrative Biology, University of California Berkeley

Highest Honors and Distinction

Berkeley, CA

2008–2012

PUBLICATIONS

1. Chapple D.G., Roll U., Böhm M., et al. Conservation status of the world's skinks (Scincidae): taxonomic and geographic patterns in extinction risk. *Biological Conservation* (In Press).
2. Reilly S.B., Stubbs A.L., **Karin B.R.**, Arifin U., Arida E., Iskandar D.T., McGuire J.A. 2021 Genetic divergence of the Sunda ratsnake (*Coelognathus subradiatus*) across the Lesser Sunda Islands (Squamata:Colubridae). *Amphibia-Reptilia* (In Press).
3. Reilly S.B., Stubbs A.L., Arida E., Arifin U., Bloch L., Hamidy A., Harmon K., Hykin S., **Karin B.R.**, Ramadan G., Iskandar D.T., McGuire J.A. **2020**. New island records for anurans and squamates from the Lesser Sundas Archipelago. *Herpetological Review* 51(4): 785–789.
4. **Karin B.R.**, Gamble T., Jackman T. **2020**. Rapidly Evolving Long Exon Capture: A new sequence capture dataset for phylogenomics in amniotes. *Molecular Biology and Evolution* 37(3):904–922.
5. **Karin B.R.**, Stubbs A.L., Arifin U., Iskandar D.T., Arida E., Austin C.C., McGuire J.A. **2020**. Crossing Lydekker's Line: Northern Water Dragons (*Tropicagama temporalis*) colonized the Mollucan Islands of Indonesia from New Guinea. *Herpetologica* 76(3):344–350.
6. Oliver P., Brown R.M., **Karin B.R.**, Grismer L.L. **2020**. Mountain endemism in Malesian geckos: Are biotic interactions driving lizards up hills? *Israel Journal of Ecology and Evolution* 20191089.
7. Davis H.R., Chan K.O., Das I., Brennan G., **Karin B.R.**, Jackman T.R., Brown R.M., Iskandar D.T., Nashriq I., Grismer L.L., Bauer A.M. **2020**. Multilocus phylogeny of Bornean Bent-Toed Geckos (Gekkonidae: *Cyrtodactylus*) reveals hidden diversity, taxonomic disarray, and novel biogeographic patterns. *Molecular Phylogenetics and Evolution* 106:785.
8. 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. **2019**. Habitat preference modulates trans-oceanic dispersal in a terrestrial vertebrate. *Proceedings of the Royal Society B: Biological Sciences* 286(1904):20182575.
9. Reilly S.B., Stubbs A.L., **Karin B.R.**, Arida A., Iskandar D.T., McGuire J.A. **2019**. Recent and rapid colonization of the Lesser Sundas Archipelago from adjacent Sundaland by seven amphibian and reptile species. *Zoologica Scripta* 46(4):757–769.
10. 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.
11. 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.

12. **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 (*Artemisospiza*, Aves: Passerellidae). *Biological Journal of the Linnean Society* bly090.
13. **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.
14. **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.
15. 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.
16. **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.
17. 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.
18. 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.
19. **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.
20. 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
21. **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.
22. **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)

23. **Karin B.R.**, Oliver P.M., Stubbs A.L., Arifin U., Iskandar D.T., Arida E., McGuire J., Kraus F., Fujita M., Ineich I., Ota H., Hathaway S., Fisher R.N. On the identity and distribution of one paternal hybrid ancestor of *Lepidodactylus lugubris* (Reptilia: Squamata: Gekkonidae). *In Review (Zootaxa)*.
24. Davis H.R., Das I., Leaché A.D., **Karin B.R.**, Brennan I.G., Jackman T.R., Nashriq I., Chan K.O., Bauer M. Genetically diverse yet morphologically conserved: Hidden diversity revealed among Bornean geckos (Gekkonidae: *Cyrtodactylus*). *In Review (Systematics and Biodiversity)*.
25. Reilly S.B., Stubbs A.L., Arida A., **Karin B.R.**, Arifin U., Kaiser H., Bi K., Iskandar D.T., McGuire J.A. Diversification and gene flow in the flying lizards of the Lesser Sundas Archipelago: Phylogenomic analysis of dispersal-driven speciation within a wallacean radiation. *In Revision (Systematic Biology)*.
26. Das I., Pui Y.M., Shabrani A., **Karin B.R.**, Wahab M.P. Reptiles of Pelagus National Park (Book Chapter). *In Press (Natural History Publications (Borneo) Sdn Bhd, Kota Kinabalu)*.

CONTRIBUTED ORAL PRESENTATIONS

- Genomic Social Hour** - California Academy of Sciences virtual series **April 2020**
- Karin B.R., Gamble T., Jackman T.R. Rapidly Evolving Long Exon Capture: A new sequence capture dataset for phylogenomics in amniotes.
- 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

- Biogeography and Field Work in the Kei Islands, Indonesia** - NCB Leiden **March 2021**
- Karin B.R., Stubbs A.L.
- 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

- Black Pine Circle School** - Berkeley, CA **2017**
- Career Day talk to elementary school students on science and animals.
- Los Gatos High School** - Los Gatos, CA **2013**
- Lecture to high school biology class on research, herpetology, and genetics.
- Panel for majors in Biological Sciences - L&S1** - UC Berkeley **2012**
- Chosen to represent the Integrative Biology major.

RESEARCH ASSISTANTSHIPS

- **Avian Phylogenomics** - Prof. Rauri Bowie **Summer and Fall, 2020**

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 2020
- **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

- **Journal of Herpetology** — 1 review 2021–present
- **Molecular Biology and Evolution** — 1 review 2020–present
- **Herpetological Monographs** — 1 review 2019–present
- **PLoS One** — 2 reviews 2018–present
- **Molecular Phylogenetics and Evolution** — 3 reviews 2017–present
- **PeerJ** — 1 review 2017–present
- **Herpetologica** — 3 reviews 2016–present
- **Zootaxa** — 8 reviews 2014–present

SERVICE

- **IUCN Skink Specialist Group** 2019–present
- **IUCN *Lepidodactylus* assessment** December 2020

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

MENTORING

Kayla Walzer - UC Berkeley undergrad	2021–Present
Anya Prasad - UC Berkeley undergrad	2021–Present
Selene Arellano - UC Berkeley undergrad	2019–Present
Laura Wang - UC Berkeley undergrad	2019–Present
Collin Bos - UC Berkeley undergrad	2019–Present
Andrew Cho - UC Berkeley undergrad	2017–2018
Zheng Oong - UC Berkeley undergrad	2016–2017

VOLUNTEERING

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

GRADUATE STUDENT INSTRUCTOR COURSES

IB104LF Natural History of the Vertebrates - UC Berkeley	Spring 2021
IB175L Herpetology - UC Berkeley	Spring 2020
IB140 Human Reproduction - UC Berkeley	Spring 2017
IB144 Animal Behavior - UC Berkeley	Fall 2016
BIO4305 Evolution - Villanova University	Spring 2015
BIO3455 Histology - Villanova University	Spring 2015
BIO2106 General Biology II - Villanova University	Fall 2013 – Spring 2014

EMPLOYMENT HISTORY

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

OTHER TRAINING

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