Luke J. Harmon

Curriculum Vitae

Academic employment

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2012 – current	Associate Professor
2007 - 2012	Assistant Professor
	Department of Biological Sciences
	Adjunct, Department of Statistics
	Affiliated faculty, Bioinformatics and Computational Biology
	University of Idaho, Moscow, Idaho
2013-current	Adjunct Professor, University of Bern
2005-2007	Postdoctoral Fellow, Biodiversity Research Centre
	University of British Columbia, Vancouver, B.C.
	Supervisor: Dr. Dolph Schluter
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Education

2000-2005	Washington University, St. Louis, MO Ph. D. in Evolution, Ecology, and Population Biology
1994-1998	Advisor: Dr. Jonathan Losos Iowa State University, Ames, IA B.S. with honors, summa cum laude Major: Zoology Minor: Mathematics

Awards

2011	Early-Career Faculty Award, University of Idaho
2009	Young Investigators Prize, American Society of Naturalists
2006	Just Desserts Award (for services to graduate students), University of
	British Columbia

Grants and fellowships

NSF DEB, Special Creativity Supplement, "Collaborative Research: arbor:
Comparative Analysis Workflows for the Tree of Life" (\$542,969)
NSF DEB, "Collaborative Research: arbor: Comparative Analysis Workflows
for the Tree of Life" (co-PIs Robert Thacker, Chelsea Specht, Curtis Lisle, and
Jorge Soberon; total \$4,000,000, Harmon lab budget \$921,602)
NSF BEACON, "The Genetic Architecture of Multidimensional Adaptation
and Speciation" (co-PIs Jenny Boughman and Erica Rosenblum; total \$96,900,
Harmon lab budget \$1,500)
NSF BEACON, "Mystery of Mysteries" (co-PIs Jenny Boughman, Rich Lenski,
and Barrie Williams; total \$165,353, Harmon lab budget \$3,442)
NSF BEACON, "Long-term consequences of evolution in action examined
over a phylogeny" (co-PI Joe Felsenstein; total \$132,794, Harmon lab budget
\$65,306)
NIH COBRE Administrative Supplement, "Evolution of Antibiotic Resistance
in Bacterial Biofilms" (co-PI Erica Rosenblum; total \$399,488, Harmon lab
budget \$199,488)
NSF DEB, "Collaborative Research: Tempo and Mode of Diversification in
Vertebrates" (co-PI Mike Alfaro; total \$720,204, Harmon lab budget \$462,704)

2009-2013	NSF DEB, "RUI: REVSYS: Integrative Systematics of Gekkotan Lizards -
	Phylogenetic Resolution, Taxonomic Revision, and Comparative Biology" (PIs:
	Bauer and Jackman; total \$909,212; Harmon lab subcontract: \$45,923)
2009-2010	NIH COBRE pilot grant, University of Idaho, \$39,726
2009	Short-term sabbatical award: Integrating Fossil and Molecular Data in the Study
	of Diversification, NESCent, Duke University, Durham, NC
2008-2009	NIH COBRE pilot grant addendum, University of Idaho, \$22,500
2008-2009	NIH COBRE pilot grant, University of Idaho, \$39,720
2005-2007	Biodiversity Postdoctoral Fellowship, University of British Columbia, \$84,000
2002-2005	National Science Foundation Dissertation Improvement Grant, \$10,800
2001-2004	National Science Foundation Graduate Research Fellowship

Student Grants and Awards

2014	Daniel Caetano, Student Travel Grant, UI, \$700; Denim Jochimsen, GPSA
	Teaching Excellence and Graduate Achievement Workshop Award, UI, \$1500;
	Kayla Hardwick, AAUW Fellowship, \$20,000
2013	Denim Jochimsen, Student Travel Grant, UI \$700; Kayla Hardwick, Student
	Travel Grant, UI, \$700; Matt Pennell, NSERC Graduate Fellowship, \$38,000
2012	Travis Hagey, National Geographic Waitt Grant, \$14,920; Kayla Hardwick,
	Gaige Fund Award, \$500; Isaiah Hoyer, Student Grant, UI, \$1048; Matt Pennell,
	NESCent graduate fellowship, \$15,500; BCB Fellowship, UIdaho,
	\$21,000; Rosemary Grant Student Research Award, \$2000; NESCent Graduate
	Fellowship, \$15,000; Best poster, Evo-WIBO conference; Daniel Caetano,
	Science Without Borders Graduate Fellowship (Brazil), \$78,000
2011	Travis Hagey, Student Travel Grant, UI, \$490, SSAR Travel Award, \$300,
	Student Travel Grant, UI, \$539; Simone Des Roches, Student Travel Grant, UI,
	\$514; Brian Lohman, Biology Dept. Research Grant, UI, \$500; Kayla
	Hardwick, SGP Project Grant, UI, \$2989; Kayla Hardwick, GPSA Travel
	Award, \$539, AMNH Roosevelt Grant, \$824, SSE Rosemary Grant Award,
	\$1754; Denim Jochimsen, GPSA Student Travel Award, UI, \$623
2010	Denim Jochimsen, Student Grant, UI, \$3586, GPSA Student Travel Award, UI,
	\$865, Teaching Award, UI, \$1000; Travis Hagey, IDEA Travel Grant, Univ.
	Idaho, \$1500, American Society of Naturalists Travel Award, \$500; Simone Des
	Roches, Student Grant Program, Univ. Idaho, \$2986, ASIH Gaige Grant, \$500,
	NSERC PGS-D, \$63000; Matt Pennell, NSERC PGS-M, \$17200; Kayla
	Hardwick, SGP Project Grant, Univ. Idaho, \$2950, GPSA Travel Award, \$627,
2000	Sigma Xi GIAR, \$400
2009	Simone Des Roches, NSERC PGS-M, \$17200, Student Grant Program, Univ.
	Idaho, \$2888, Travel Grant, Univ. Idaho, \$800; Jack Torresdal, Student Grant
	Program, Univ. Idaho, \$961, Berklund Undergraduate Research Award, Univ.
2000	Idaho, \$3000
2008.	Travis Hagey, Student Grant Program, Univ. Idaho, \$1450
2006	Nick Smeenk, Biology Department Research Grant, Univ. Idaho, \$1431

Teaching experience

2013-present	Co-instructor, Interdisciplinary Studies 400 (Film), University of Idaho
2007-present	Lecturer, Biology 489 (Herpetology), University of Idaho
2010-2013	Lecturer, Biology 213 (Principles of Biological Structure and Function),
	University of Idaho

2009-2013	Seminar leader, Macroevolution, University of Idaho and
	Washington State University
2011-2012	Co-instructor, Evolutionary Quantitative Genetics course. At NESCent with
	Steve Arnold and Joe Felsenstein.
2011	Instructor, Comparative Methods in R; Canadian Society for Ecology and
	Evolution Annual Meeting, Banff, Canada
2009	Lecturer, Systematics, University of Idaho (co-taught with Jack Sullivan)
2007-2008	Co-instructor (with M. Alfaro), Macroevolution, University of Idaho and
	Washington State University
2005-2007	Coordinator, Biodiversity Discussion Group, University of British Columbia
2006	Lecturer, Biology 300 (Biometry), University of British Columbia
2001-2003	Teaching Assistant, Washington University (Ecology, Conservation Biology)
1999-2000	Head of Science, and Science Teacher for Forms 4 and 5
	Sir Dudley Tuti College, Ysabel Province, Solomon Islands, South Pacific
1995-1996	Leader and Seminar Coordinator, Freshman Honors Program
	Iowa State University

Professional service activities

2016	President-Elect, Society of Systematic Biology
2013-present	Associate Editor, American Naturalist
2013-present	Associate Editor, Ecology Letters
2012-present	Associate Editor, Evolution
2011-present	Associate Editor, Systematic Biology
2011-2013	Associate Editor, Methods in Ecology and Evolution
2012-present	Council member, Society for the Study of Evolution
2011-2014	Council member, Society for Systematic Biology
2005-2006	Coordinator, Ecology and Evolution Retreat, University of British Columbia,
	University of Victoria, and Simon Fraser University

Invited talks

2015	
2015	Smithsonian Institution, UC San Diego, and Stanford
2014	Universidad de los Andes, University of Sao Paulo, University of Zurich,
	American Society of Naturalists (debate participant), University of Idaho
	UIdeas symposium, TDWG meeting, Sweden
2013	University of Florida, American Museum of Natural History, University of
	Massachusetts - Boston, University of Lausanne, Universite de Montreal,
	Gonzaga University, University of Idaho - Coeur d'Alene, ETH Zurich,
	Washington State University; Symposium speaker, Evolution and ESA
2012	University of Colorado, University of Michigan, Michigan State University,
	University of Kansas, EAWAG (Switzerland), Universitat Basel, UC Davis
2011	University of Chicago, phyloseminar.org (online seminar), BEACON (Michigan
	State University); Keynote speaker, Symposium, Zoological Society of London
2010	University of California, Berkeley
2009	University of Ottawa, Duke University, University of Texas;
	Invited symposium speaker, Evolution and ESA
2008	Co-coordinated (with M. Alfaro) and gave presentation in Late Breaking
	Symposium: Testing Macroevolutionary Hypotheses of Diversification:
	Approaches and Perspectives, at SICB meetings in San Antonio, TX.
2008	Lewis and Clark University, Washington State University
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2007 Harvard University, University of Washington, University of Idaho, Washington

State University

2006 University of Victoria, Simon Fraser University, University of Calgary,

University of Idaho, Rice University, University of Glasgow, Iowa State

University

2005 University of British Columbia

Advising

Current students D. Jochimsen (PhD) and and D. Caetano (PhD)

(*coadvised with E. B. Rosenblum)

Current postdocs J. Uyeda, R. Maia, E. Miller

Completed K. Hardwick* (PhD, now postdoc at Reed College), M. Pennell (PhD, now

postdoc at UBC), S. Des Roches* (PhD, now postdoc at UC Berkeley), T. Hagey

(PhD, now postdoc at U Texas), J. Brown (postdoc, now postdoc at U Michigan), J. Tyerman (postdoc, now working at Genomatica), J. Rosindell (postdoc, now an NERC Fellow, Imperial, UK); K. Wagner (postdoc, now a

faculty member at U Wyoming), J. Eastman (now a firefighter)

Completed Chris Dekker (UI MS), Chad Brock (WSU MSc, 2009), William

Godsoe (UI PhD 2009), Jon Eastman (WSU PhD 2010), Barb Banbury (WSU PhD 2010), Hugo Alamillo (WSU PhD 2010), Cody Hinchliff (WSU PhD 2011), Brice Sarver (UI PhD 2014), Simon Uribe-Convers (UI PhD 2014), Edy

Piascik (UBC MS 2014)

In progress Hannah Marx (UI PhD), Katie Shine (UI PhD), Diego Morales-

Briones (UI PhD), Gustavo Ferreira (USP Brazil)

Publications

In revision

Harmon, L. J. *In revision*. A nonparametric method to test for correlated evolution in a phylogenetic context. For *Systematic Biology*.

Eastman, J. M., D. Wegmann, C. Leuenberger, and L. J. Harmon. Simpsonian "Evolution by Jumps" in an Adaptive Radiation of Anolis Lizards. For American Naturalist.

Sarver, B. A. J., M. W. Pennell, J. W. Brown, K. M. Hardwick, J. Sullivan, and L. J. Harmon. The Choice of Tree Prior and Molecular Clock Does Not Substantially Affect Phylogenetic Inferences of Diversification Rates. To be resubmitted to Systematic Biology.

In review

Hagey, T. J., N. Cole, D. Davidson, A. Henricks, L. L. Harmon, and L. J. Harmon. Temporal Variation in Structural Microhabitat Use of *Phelsuma* Geckos in Mauritius. Submitted to Copeia 16 June 2013.

Published or in press

Pennell, M. W., R. G. FitzJohn, W. K. Cornwell, and L. J. Harmon. *In press.* Model adequacy and the macroevolution of angiosperm functional traits. American Naturalist.

Tank, D. C., J. M. Eastman, M. W. Pennell, P. S. Soltis, D. E. Soltis, C. E. Hinchliff, J. W. Brown, and L. J. Harmon. *In press*. Nested radiations and the pulse of angiosperm diversification. New Phytologist.

Deans, A. R. and 55 others including L. J. Harmon. 2015. Finding our way through phenotypes. PLoS Biology 13: e1002033.

Rosindell, J., L. J. Harmon, and R. S. Etienne. 2015. Unifying ecology and macroevolution with individual-based theory. Ecology Letters 18: 472-482.

Harmon, L. J. and S. Harrison. 2015. Species diversity is dynamic and unbounded at local and continental scales. The American Naturalist 185: 584-593.

Hardwick, K. M., L. J. Harmon, S. D. Hardwick, and E. B. Rosenblum. 2015. When field experiments yield unexpected results: lessons learned from measuring selection in White Sands lizards. PLoS ONE 10: e0118560.

Des Roches, S., M. Brinkmeyer, L. J. Harmon, and E. B. Rosenblum. 2015. Ecological release and directional change in White Sands lizard trophic ecomorphology. Evolutionary Ecology 29: 1-16.

Nuismer, S. L. and L. J. Harmon. 2015. Predicting rates of interspecific interaction from phylogenetic trees. Ecology Letters 18: 17-28.

Jochimsen, D. M., C. R. Peterson, and L. J. Harmon. 2014. Influence of ecology and landscape on snake road mortality in a sagebrush-steppe ecosystem. Animal Conservation 17: 583-592.

Muschick, M., P. Nosil, M. Roesti, M. T. Dittman, L. Harmon, and W. Salzburger. 2014. Testing the stages model in the adaptive radiation of cichlid fishes in East African Lake Tanganyika. Proceedings of the Royal Society B 281: 20140605.

Uyeda, J. C. and L. J. Harmon. 2014. A novel Bayesian method for inferring and interpreting the dynamics of adaptive landscapes from phylogenetic comparative data. Systematic Biology 63: 902-918.

Pennell, M. W., J. M. Eastman, G. J. Slater, J. W. Brown, J. C. Uyeda, R. G. Fitzjohn, M. E. Alfaro, and L. J. Harmon. 2014. geiger v2.0: an expanded suite of methods for fitting macroevolutionary models to phylogenetic trees. Bioinformatics 30: 2216-2218.

Davis, C. C., H. Schaefer, W. R. Anderson, Z. Xi, D. A. Baum, M. J. Donoghue, and L J. Harmon. 2014. Long-term morphological stasis maintained by a plant-pollinator mutualism. PNAS 111: 5914-5919.

Cranston, K., L. J. Harmon, M. A. O'Leary, and C. Lisle. 2014. Best practices for data sharing in phylogenetic research. PLoS Currents Tree of Life 2014 Jun 19.

Hagey, T., J. Puthoff, M. Holbrook, L. J. Harmon, and K. Autumn. 2014. Variation in Setal Micromechanics and Performance of Two Gecko Species. Zoomorphology 133: 111-126.

Wagner, C. E., L. J. Harmon, and O. Seehausen. 2014. Cichlid species-area curves are shaped by adaptive radiations that scale with area. Ecology Letters 17: 538-592.

Pennell, M. W., L. J. Harmon, and J. C. Uyeda. 2014. Speciation is unlikely to drive divergence rates. Trends in Ecology and Evolution 29: 72-73.

Pennell, M. W., L. J. Harmon, and J. C. Uyeda. 2014. Is there room for punctuated equilibrium in macroevolution? Trends in Ecology and Evolution 29: 23-32.

DesRoches, S., J. Torresdal, T. Morgan, L. J. Harmon, and E. B. Rosenblum. 2014. Beyond black and white: comparative ecomorphology in three rapidly evolving lizard species at White Sands. Biological Journal of the Linnean Society 111: 169-182.

Anderson, C. J. R. and L. J. Harmon. 2014. Ecological and mutation-order speciation in digital organisms. American Naturalist 183: 257-268.

Slater, G. J. and L. J. Harmon. 2013. Unifying fossils and phylogenies for comparative analyses of diversification and trait evolution. Methods in Ecology and Evolution 4: 699-702.

Pennell, M. W. and L. J. Harmon. 2013. An Integrative View of Phylogenetic Comparative Methods: Connections to Population Genetics, Paleobiology and Community Ecology. The Year in Evolutionary Biology 1289: 90-105.

Eastman, J. M., L. J. Harmon, and D. C. Tank. 2013. Congruification: support for time-scaling large phylogenetic trees. Methods in Ecology and Evolution 4: 688-691.

Harmon, L. J., J. Baumes, C. Hughes, J. Soberon, C. Specht, B. Thacker, W. Turner, and C. Lisle. 2013. Arbor: Comparative Analysis Workflows for the Tree of Life. PLoS Currents: Tree of Life: June 21, 2013.

Stoltzfus, A., H. Lapp, N. Matasci, H. Deus, B. Sidlauskas, C.M. Zmasek, G. Vaidya, E. Pontelli, K. Cranston, R. Vos, C. O. Webb, L. J. Harmon, M. Pirrung, B. O'Meara, M. W. Pennell, S. Mirarab, M. S. Rosenberg, J. P. Balhoff, H. M. Bik, T. Heath, P. Midford, J. W. Brown, E. J. McTavish, J. Sukumaran, M. Westneat, M. E. Alfaro, and A. Steele. 2013. Phylotastic! Making Tree-of-Life Knowledge Accessible, Reusable and Convenient. BMC Bioinformatics 14:158.

Des Roches, S., J. B. Shurin, D. Schluter, and L. J. Harmon. 2013. Ecological and evolutionary effects of stickleback on ecosystem function. PLoS ONE 8: e59644.

Rosindell, J. and L. J. Harmon. 2013. A unified model of species immigration, extinction and abundance on islands. *Journal of Biogeography* 40: 1107-118.

Tyerman, J. G., J. M. Ponciano, P. Joyce, L. J. Forney and L. J. Harmon. 2013. The evolution of antibiotic susceptibility and resistance during the formation of *Escherichia coli* biofilms. BMC Evolutionary Biology 13: 22.

Slater, G. J., L. J. Harmon, and M. E. Alfaro. 2012. Integrating Fossils with Molecular Phylogenies Improves Inference of Trait Evolution. *Evolution* 12: 3931-3944.

Rosindell, J. and L. J. Harmon. 2012. OneZoom: A Fractal Explorer for the Tree of Life. *PLoS Biology* 10: e1001406.

- Pennell, M. W., B. A. J. Sarver, and L. J. Harmon. 2012. Trees of Unusual Size: Sampling Bias Can Influence Inference of Early Bursts from Molecular Phylogenies. *PLoS ONE* 7: e43348.
- Ingram. T., L. J. Harmon, and J. B. Shurin. 2012. When should we expect early bursts of trait evolution in comparative data? Predictions from an evolutionary food web model. *Journal of Evolutionary Biology* 25: 1902-1910.
- Wagner, C. E., L. J. Harmon, and O. Seehausen. 2012. Ecological opportunity and sexual selection together predict adaptive radiation. *Nature* 487: 366-369.
- Rosenblum, E. B.*, B. A. J. Sarver, J. W. Brown, S. Des Roches, K. M. Hardwick, T. D. Hether, J. M. Eastman, M. W. Pennell, and L. J. Harmon*. 2012. Goldilocks meets Santa Rosalia: An ephemeral speciation model explains patterns of diversification across time scales. *Evolutionary Biology* 39: 255-261
- Godsoe, W. and L. J. Harmon. 2012. How do species interactions affect species distribution models? *Ecography* 35: 811-820.
- Rosindell, J., S. P. Hubbell, F. He, L. J. Harmon, and R. S. Etienne. 2012. The case for ecological neutral theory. *Trends in Ecology and Evolution* 27: 203-208.
- Slater, G. J., L. J. Harmon, P. Joyce, L J. Revell, and M. E. Alfaro. 2012. Fitting models of continuous trait evolution to incompletely sampled comparative data using Approximate Bayesian Computation. *Evolution* 66: 752-762.
- Stack, J., L. J. Harmon, and B. O'Meara. 2011. RBrownie: An R package for testing hypotheses about rates of evolutionary change. *Methods in Ecology and Evolution* 2: 660-662.
- Eastman, J. M., M. E. Alfaro, P. Joyce, A. L. Hipp, and L. J. Harmon. 2011. A novel comparative method for modeling shifts in the rate of character evolution on trees. *Evolution* 65: 3578-3589.
- Eastman, J. M., L. J. Harmon, H.-J. La, P. Joyce, and L. J. Forney. 2011. The onion model, a simple neutral model for the evolution of diversity in bacterial biofilms. *J. Evol. Biol.* 11: 2496-2504.
- Des Roches, S., J. M. Robertson, L. J. Harmon, and E. B. Rosenblum. 2011. Ecological release in white sands lizards. *Ecology and Evolution* 1: 571-578.
- Davies, T. J., G. Smith, D. U. Bellstedt, J. Boatwright, B. Bytebier, R. Cowling, F. Forest, L. J. Harmon, A. M. Muasya, B. D. Schrire, Y. Steenkamp, M. van de Bank, and V. Savolainen. 2011. Extinction risk and diversification are linked in a plant biodiversity hotspot. *PLoS Biology* 9: e1000620.
- Smith, K. L., L. J. Harmon, L. Shoo, and J. Melville. 2011. Evidence of constrained phenotypic evolution in a cryptic species complex of agamid lizards. *Evolution* 65: 976-992.
- Brock, C. D., L. J. Harmon, and M. E. Alfaro. 2011. Testing for Temporal Variation in Diversification Rates When Sampling is Incomplete and Nonrandom. *Systematic Biology* 60: 410-419.

- Carlson, B. A., S. M. Hasan, M. Hollmann, D. B. Miller, L. J. Harmon, and M. E. Arnegard. 2011. Brain evolution triggers explosive diversification of species and signals. *Science* 332: 583-586.
- Rosenblum, E. B. and L. J. Harmon. 2011. Same same but different: replicated ecological speciation at White Sands. *Evolution* 65: 946-960.
- Arnegard, M. E., P. B. McIntyre, L. J. Harmon, M. L. Zelditch, W. G. R. Crampton, J. K. Davis, J. P. Sullivan, S. Lavoué, and C. D. Hopkins. 2010. Sexual signal evolution outpaces ecological divergence during electric fish species radiation. *American Naturalist* 176:335-356.
- Yoder, J. B., S. Des Roches, J. M. Eastman, L. Gentry, W. K. W. Godsoe, T. Hagey, D. Jochimsen, B. P. Oswald, J. Robertson, B. A. J. Sarver, J. J. Schenk, S. F. Spear, and L. J. Harmon. 2010. Ecological opportunity and the origin of adaptive radiations. *Journal of Evolutionary Biology* 23: 1581-1596, doi: 10.1111/j.1420-9101.2010.02029.x.
- Harmon, L. J., J. B. Losos, J. Davies, R. G. Gillespie, J. L. Gittleman, W. B. Jennings, K. Kozak, M. A. McPeek, F. Moreno-Roark, T. J. Near, A. Purvis, R. E. Ricklefs, D. Schluter, J. A. Schulte II, O. Seehausen, B. Sidlauskas, O. Torres-Carvajal, J. T. Weir, & A. Ø. Mooers. 2010. Early bursts of body size and shape evolution are rare in comparative data. *Evolution* 64: 2385-2396. doi:10.1111/j. 1558-5646.2010.01025.x.
- Harmon, L. J. and R. E. Glor. 2010. Poor statistical performance of the Mantel test in phylogenetic comparative analyses. *Evolution* 64: 2173-2178, doi:10.1111/j.1558-5646.2010.00973.x.
- Matthews, B., L. J. Harmon, L. M'Gonigle, K. B. Marchinko, and H. Schaschl. 2010. Sympatric and allopatric divergence of MHC genes in threespine stickleback. *PLoS ONE* 5:e10948.
- Hagey, T. J., J. B. Losos, and L. J. Harmon. 2010. Cruise foraging of invasive chameleons (*Chamaeleo jacksonii*) in Hawaii. *Breviora* 519:1-7.
- Alfaro, M. E., F. Santini, C. Brock, H. Alamillo, A. Dornburg, D. L. Rabosky, G. Carnevale, and L. J. Harmon. 2009. Nine exceptional radiations plus high turnover explain species diversity in jawed vertebrates. *PNAS* 106:13410-13414.
- Santini, F., L. J. Harmon, G. Carnevale, and M. E. Alfaro. 2009. Did genome duplication drive the origin of teleosts? A comparative study of diversification in ray-finned fishes. *BMC Evlutionary Biology* 9: 194.
- Ingram, T., L. J. Harmon, and J. B. Shurin. 2009. Niche evolution, trophic structure and species turnover in model food webs. *American Naturalist* 174: 56-67.
- Harmon, L. J.*, B. Matthews*, S. Des Roches, J. Chase, J. Shurin, and D. Schluter. 2009. Evolutionary diversification in stickleback affects ecosystem functioning. *Nature* 458: 1167-1170.
- Nosil, P., L. J. Harmon, and O. Seehausen. 2009. Ecological explanations for (incomplete) speciation. *Trends in Ecology and Evolution* 24:145-156.
- Pinto, G., D. L. Mahler, L. J. Harmon, and J. B. Losos. 2008. Testing the island effect in adaptive radiation: rates and patterns of morphological diversification in Caribbean and mainland *Anolis* lizards. *Proceedings of the Royal Society B* 275: 2749-2757.

- Revell, L. J., L. J. Harmon, and D. C. Collar. 2008. Phylogenetic signal, evolutionary process, and rate. *Systematic Biology* 57: 591-601.
- Harmon, L. J., J. Melville, A. Larson, and J. B. Losos. 2008. The Role of Geography and Ecological Opportunity in the Diversification of Day Geckos (*Phelsuma*). *Systematic Biology* 57: 562-573.
- Revell, L. J. and L. J. Harmon. 2008. Testing quantitative genetic hypotheses about the evolutionary rate matrix for continuous characters. *Evolutionary Ecology Research* 10: 311-321.
- Harmon, L. J., J. Weir, C. Brock, R. E. Glor, and W. Challenger. 2008. GEIGER: Investigating evolutionary radiations. *Bioinformatics* 24:129-131.
- Harmon, L. J., L. L. Harmon, and C. G. Jones. 2007. Competition and community structure in diurnal arboreal geckos (genus *Phelsuma*) in the Indian Ocean. *Oikos* 116: 1863-1878, DOI: 10.1111/j.2007.0030-1299.15958.x.
- Vellend, M., L. J. Harmon, J. L. Lockwood, M. M. Mayfield, A. R. Hughes, J. P. Wares, and D. F. Sax. 2007. Effects of exotic species on evolutionary diversification. *Trends in Ecology and Evolution* 22: 481-488.
- Nicholson, K. E., L. J. Harmon, and J. B. Losos. 2007. Evolution of *Anolis* lizard dewlap diversity. *PLoS ONE* 2(3): e274. doi:10.1371/journal.pone.0000274.
- Revell, L. J., L. J. Harmon, R. B. Langerhans, and J. J. Kolbe. 2007. A phylogenetic approach to determining the importance of constraint on phenotypic evolution in the neotropical lizard *Anolis cristatellus*. *Evolutionary Ecology Research* 9: 261-282.
- Harmon, L. J. and R. Gibson. 2006. Multivariate phenotypic evolution among island and mainland populations of the ornate day gecko, *Phelsuma ornata*. *Evolution* 60: 2622-2632.
- Melville, J., L. J. Harmon, and J. B. Losos. 2006. Intercontinental community convergence of ecology and morphology in desert lizards. *Proceedings of the Royal Society Series B: Biological Sciences* 273: 557-563.
- Harmon, L. J. and J. B. Losos. 2005. The effect of intraspecific sample size on type I and type II error rates in comparative studies. *Evolution* 59:2705-2710.
- Revell, L. J., L. J. Harmon, and R. E. Glor, 2005. Under-parameterized model of sequence evolution leads to bias in the estimation of diversification rates from molecular phylogenies. *Systematic Biology* 54: 973-983.
- Weisrock, D. W., L. J. Harmon, and A. Larson. 2005. Resolving deep phylogenetic relationships in salamanders: analyses of mitochondrial and nuclear genomic data. *Systematic Biology* 54:758-777.
- Kozak, K. H., A. Larson, R. M. Bonett, and L. J. Harmon. 2005. Phylogenetic analysis of ecomorphological divergence, species coexistence, and diversification rates in dusky salamanders (Plethodontidae, Desmognathinae). *Evolution* 59: 2000-2016.

Harmon, L. J., K. Bauman, M. McCloud, J. Parks, S. Howell, and J. B. Losos. 2005. What the free-ranging animals do at the zoo: a study of the behavior and habitat use of opossums (*Didelphis virginiana*) on the grounds of the St. Louis Zoo. *Zoo Biology* 24: 197-213.

Harmon, L. J., J. J. Kolbe, J. M. Cheverud, and J. B. Losos. 2005. Convergence and the multidimensional niche. *Evolution* 59: 409-421.

Harmon, L. J., J. A. Schulte, J. B. Losos, and A. Larson. 2003. Tempo and mode of evolutionary radiation in iguanian lizards. *Science* 301: 961-964.

Harmon, L. J. 2002. Some observations of the natural history of the prehensile-tailed skink, *Corucia zebrata*, in the Solomon Islands. *Herpetological Review* 33: 177-179.

Harmon, L. J. 2000. A Translocation Strategy for Confiscated Pancake Tortoises. *Chelonian Conservation and Biology* 3(4):738-743.

Kolbe, J. J., L. J. Harmon, and D. A. Warner. 1999. New state record lengths and associated natural history notes for some Illinois snakes. *Transactions of the Illinois State Academy of Science* 92:133-135.

Book chapters and other publications

Harmon, L. J. 2013. Is character displacement central to ecology and evolutionary biology? Ecology 94: 2658-2659.

Harmon, L. J. 2013. "Convergent Evolution." In Oxford Bibliographies in Evolutionary Biology. Ed. Jonathan Losos. New York: Oxford University Press, forthcoming.

Harmon, L. J. 2013. Macroevolutionary rates. In: J. B. Losos, *Ed.*, The Princeton Guide to Evolution. Princeton University Press.

Harmon, L. J. 2012. An inordinate fondness for eukaryotic diversity. *PLoS Biology* 10: e1001382.

McInnes, L., W. J. Baker, T. G. Barraclough, K. K. Dasmahapatra, A. Goswami, L. J. Harmon, H. Morlon, A. Purvis, J. Rosindell, G. H. Thomas, S. T. Turvey, and A. B. Phillimore. 2011. Integrating ecology into macroevolutionary research (meeting report). *Biology Letters* 7: 644-646.

Harmon, L. J. 2011. My island life. In: J. B. Losos, editor. Evolution Emerging: Essays from Leading Evolutionary Biologists. Roberts & Company Publishers.

Harmon, L. J. 2010. Journal Club: An evolutionary biologist ponders the pace of evolution. *Nature* 463: 1003.

Harmon, L. J. and S. Braude. 2010. Conservation of Small Populations: Effective Population Size, Inbreeding, and the 50/500 Rule. pp. 125-138 *in* S. Braude and B. S. Low, *Eds.*, An Introduction to Methods and Models in Ecology and Conservation Biology. Princeton University Press.

Bailey, J. K., A. Hendry, M. Kennison, D. Post, E. Palkovacs, F. Pelletier, L. J. Harmon, and J. A. Schweitzer. 2009. From Genes to Ecosystems: An Emerging Synthesis of Eco-Evolutionary Dynamics. New Phytologist 184: 746–749.

Nosil, P. and L. J. Harmon. 2009. Niche dimensionality and ecological speciation. In: R. Butlin, J. Bridle, and D. Schluter, editors. *Speciation and Patterns of Diversity*. Cambridge University Press.

Mooers, A.O., Harmon, L.J., Wong, D.H.J., and S.B. Heard. 2007. Some models of phylogenetic tree shape. Pages 147-168 *in* New Mathematical Models for Evolution (O. Gascuel and M. Steel, eds.), Oxford University Press, Oxford.

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