Michael G. Harvey

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EDUCATION:

2004 – 2008	B.A. Biology	Cornell University, Ithaca, NY *(Advisor: John W. Fitzpatrick)*
2010 – 2015	Ph.D. Biology	Louisiana State University, Baton Rouge, LA *(Advisor: Robb T. Brumfield)*

EXPERIENCE:

2016 – 2017	NSF Postdoctoral Fellow	University of Michigan, Ann Arbor, MI *(Sponsor: Daniel L. Rabosky)*
2018 – present	Postdoctoral Researcher	University of Tennessee, Knoxville, TN *(Advisor: Elizabeth P. Derryberry)*

PEER-REVIEWED PUBLICATIONS:

Evolution and Genomics:

1. Oswald JA, **Harvey MG**, Remsen RC, Dittmann DL, Cardiff SW, Brumfield RT. In revision. Trans-oceanic colonization and introgressive hybridization in a genus of vagile waterbirds (Aves; *Plegadis*). For ***Molecular Ecology***.
2. **Harvey MG**, Rabosky DL. In revision. Studying trait-dependent diversification using comparative population genetics. For ***Trends in Ecology and Evolution***.
3. **Harvey MG**, Rabosky DL. 2018. Continuous traits and speciation rates: Alternatives to state-dependent diversification models. ***Methods in Ecology and Evolution*** 9: 984-993.
4. **Harvey MG**, Aleixo A, Ribas CC, Brumfield RT. 2017. Habitat preference predicts genetic diversity and population divergence in Amazonian birds. ***American Naturalist*** 190: 631-648.
5. **Harvey MG**, Seeholzer GF, Smith BT, Rabosky DL, Cuervo AM, Brumfield RT. 2017. Positive association between population genetic differentiation and speciation rates in New World birds. ***Proceedings of the National Academy of Sciences*** 114: 6328-6333.

6. Smith BT, Seeholzer GF, **Harvey MG**, Cuervo AM, Brumfield RT. 2017. A latitudinal intraspecific diversity gradient in birds. ***PLoS Biology*** 15: e2001073.
7. Lim HC, Shakya S, **Harvey MG**, Rahman M, Sheldon FH. 2017. Sundaland's east-west rainforest population structure: Variable manifestations in four polytypic bird species examined using RAD-Seq and plumage analysis. ***Journal of Biogeography*** 44: 2259-2271.
8. **Harvey MG**, Smith BT, Glenn TC, Faircloth BC, Brumfield RT. 2016. Sequence capture versus restriction site associated DNA sequencing for shallow systematics. ***Systematic Biology*** 65: 910-924.
9. Oswald JA, **Harvey MG**, Remsen RC, Foxworth DU, Cardiff SW, Dittmann DL, Megna LC, Carling MD, Brumfield RT. 2016. Willet be one species or two?: A genomic view of the evolutionary history of *Tringa semipalmata*. ***Auk*** 133: 593-614.
10. Zucker MR, **Harvey MG**, Oswald JA, Cuervo A, Derryberry E, Brumfield RT. 2016. The Mouse-colored Tyrannulet (*Phaeomyias murina*) is a species complex that includes the Cocos Flycatcher (*Nesotriccus ridgwayi*), an island form that underwent a population bottleneck. ***Molecular Phylogenetics and Evolution*** 101: 209-302.
11. Toews DP, Campagna L, Taylor S, Balakrishnan C, Baldassarre D, Dean-Coe P, **Harvey MG**, Hooper D, Irwin D, Judy C *et al*. 2016. Genomics approaches to understanding population divergence and speciation in birds. ***Auk*** 133: 13-30.
12. **Harvey MG**, Judy CD, Seeholzer GF, Maley JM, Graves GR, Brumfield RT. 2015. Similarity thresholds used in DNA sequence assembly from short reads reduce the comparability of population histories across species. ***PeerJ*** 3: e895.
13. **Harvey MG**, Brumfield RT. 2015. Genomic variation in a widespread Neotropical bird (*Xenops minutus*) reveals divergence, population expansion, and gene flow. ***Molecular Phylogenetics and Evolution*** 83: 305-316.
14. Smith BT, McCormack JE, Cuervo AM, Hickerson MJ, Aleixo A, Cadena CD, Pérez Eman JE, Burney CW, Xie X, **Harvey MG**, *et al*. 2014. The drivers of tropical speciation. ***Nature*** 515: 406-409.
15. Smith BT, **Harvey MG**, Faircloth BC, Glenn TC, Brumfield RT. 2014. Target capture and massively parallel sequencing of ultraconserved elements (UCEs) for comparative studies at shallow evolutionary timescales. ***Systematic Biology*** 63: 83-95.
16. Carstens BC, Brennan RS, Chua V, Duffie CV, **Harvey MG**, Koch RA, McMahan CD, Nelson BJ, Newman CE, Satler JD, *et al.*. 2013. Model selection as a tool for phylogeographic inference: An example from the willow *Salix melanopsis*. ***Molecular Ecology*** 22: 4014-4028.
17. McCormack JE, **Harvey MG**, Faircloth BC, Crawford NG, Glenn TC, Brumfield RT. 2013. A phylogeny of birds based on over 1,500 loci collected by target enrichment and high-throughput sequencing. ***PLoS One*** 8: e54848.
18. Faircloth BC, McCormack JE, Crawford NG, **Harvey MG**, Brumfield RT, Glenn TC. 2012. Ultraconserved elements anchor thousands of genetic markers for target enrichment spanning multiple evolutionary timescales. ***Systematic Biology*** 61: 717-726.

19. **Harvey MG**, Bonter DN, Stenzler LM, Lovette IJ. 2006. A comparison of plucked feathers versus blood samples as DNA sources for molecular sexing. ***Journal of Field Ornithology*** 77: 136-140.

Natural History, Taxonomy, and Biogeography:

1. Moncrieff AE, Johnson O, Lane DF, Álvarez Alono J, Balta K, Eckhardt K, Armenta J, Valqui T, Hernández Camacho F, Soto Huaira M, Mur C, **Harvey MG**, Verde-Guerra K, Figueroa Ramírez S. In review. Avifaunal surveys along the lower Huallaga River, Region of Loreto, Peru: new distributional records, collection of topotypes, and taxonomic implications. For ***Wilson Journal of Ornithology***.
2. Costa TV, Piacentini VQ, Oliveira DMM, Schunck F, Whitney BM, Rêgo M, Rubio TC, Oliveira F, Freitas B, Del-Rio G, *et al*. 2017. New records of the enigmatic *Clytoctantes atrogularis* (Thamnophilidae) in Amazonian Brazil, with remarks on plumage, natural history, and distribution. ***Wilson Journal of Ornithology*** 129: 1-12.
3. **Harvey MG**, Seeholzer GF, Cáceres Apaza D, Winger BM, Tello JG, Hernández Camacho F, Aponte Justiniano M, Duffie CV, Figueroa Ramírez S, Terrill RS, *et al*. 2014. Avian Biogeography of an Amazonian headwater: The upper Ucayali River, Peru. ***Wilson Journal of Ornithology*** 126: 179-191.
4. Terrill RS, Aponte Justiniano MA, **Harvey MG**, Seeholzer GF, Strem RI. 2014. Notes on the avifauna of the Río Mamoré, Beni, Bolivia, with a description of the juvenile plumage of Unicolored Thrush (*Turdus haplochrous*)(Aves: Turdidae). ***Occasional Papers of the LSU Museum of Natural Science*** 82: 1-21.
5. **Harvey MG**, Lane DF, Hite J, Terrill RS, Figueroa Ramírez S, Smith BT, Klicka J, Vargas Campos W. 2014. Notes on bird species in bamboo in northern Madre de Dios, Peru including the first Peruvian record of Acre Tody-Tyrant (*Hemitriccus cohnhafti*). ***Occasional Papers of the LSU Museum of Natural Science*** 81: 1-38.
6. Seeholzer GF, **Harvey MG**, Winger BM, Cáceres Apaza D, Weckstein JD. 2012. A new species of barbet (Aves: Capitonidae) from the Cerros del Sira of central Peru. ***Auk*** 129: 551-559.
7. **Harvey MG**, Winger BM, Seeholzer GF, Cáceres Apaza D. 2011. Avifauna of the Gran Pajonal and southern Cerros del Sira, Peru. ***Wilson Journal of Ornithology*** 123: 289-315.
8. Bonter DN, **Harvey MG**. 2008. Winter survey data reveal range-wide decline in Evening Grosbeak populations. ***Condor*** 110: 376-381.
9. Lebbin DJ, **Harvey MG**, Lenz TC, Andersen MJ, Ellis JM. 2007. Nocturnal migrants foraging at night by artificial light. ***Wilson Journal of Ornithology*** 119: 506-508.

GRANTS and AWARDS:

2016 – 2017	National Science Foundation Postdoctoral Research Fellowship	$138,000
2016	North American Ornithological Conference Travel Award	$175
2016	LSU College of Science Outstanding Dissertation Award	$500

2015	Society for the Study of Evolution Hamilton Award finalist	$500
2015	NSF/SSB Workshop Travel Award	$1,750
2014	Mary Lou Applewhite Fellowship, Louisiana State University	$11,250
2014	American Ornithologist's Union Student Travel Award	$375
2013	American Ornithologist's Union Student Travel Award	$500
2012	LSU BioGrads Research Symposium Award	$50
2012	Nuttall Ornithological Club Blake-Nuttall Award	$2,500
2012	Lewis and Clark Research Award	$4,000
2012	National Geographic Society Grant	$20,000
2012	American Ornithologist's Union Research	$2,500
2012	T. Vinton Holmes Award, Louisiana State University	$500
2012	NSF Doctoral Dissertation Improvement Grant	$15,000
2012	North American Ornithological Conference Travel Award	$500
2011	Neotropical Ornithological Conference Travel Award	$550
2011	LSU Virginia L. Mouw Award in Ornithology	$400
2010	National Geographic Society Grant	$24,000
2008	Cornell Lab of Ornithology Student Research Grant	$20,000
2008	National Geographic Society Young Explorer's Grant	$5,000
2008	Explorer's Club Youth Activity Award	$1,500
2007	Cornell Lab of Ornithology Student Research Grant	$4,000
2006	American Ornithologist's Union Student Travel Award	$550
2005 – 2008	Hunter R. Rawlings Cornell Presidential Research Scholarship	$5,000

PRESENTATIONS:

First-authored Invited Symposium Talks:

1. A comprehensive phylogeny of suboscine birds and the origins of Neotropical avian megadiversity. Genomic approaches to understanding adapatation and diversification of birds in biodiversity hotspots symposium talk. **Annual meeting of the American Ornithological Society**, Tucson, Arizona (2018).
2. Connecting micro- and macroevolution using comparative genomics of museum specimens. Genomics and Collections: Adaptation to Macroevolution invited speaker. **CSIRO/ANU Center for Biodiversity Analysis annual conference**, Canberra, Australia (2017).
3. Population divergence predicts evolutionary diversification in New World birds. Hamilton Award Symposium talk. **Evolution**, Guarujá, Brazil (2015).
4. Comparative phylogeography using genomic datasets. Avian genomics symposium talk, **Annual meeting of the American Ornithologist's Union**, Estes Park, Colorado (2014).
5. SNPs versus sequences for phylogeography - an exploration using simulations and massively parallel sequencing in a non-model bird. Society of Systematic Biologists Symposium talk. **Evolution**, Snowbird, Utah (2013).

First-authored Contributed Talks:

1. Diversification of suboscine birds based on a genome-wide species-level phylogeny. **Evolution**, Portland, Oregon (2017).
2. Continuous traits and lineage diversification rates: Alternatives to formal state-dependent diversification models. **Society of Systematic Biologists Meeting**, Baton Rouge, Louisiana (2017).
3. Contrasting evolutionary histories between birds of upland and floodplain forest in the Amazon. **American Society of Naturalists Meeting** (Asilomar, California, 2016), **Evolution** (Austin, TX, 2016), and **Sixth North American Ornithological Conference** (Washington, D.C., 2016).
4. Comparative phylogeography using genomic datasets. **Annual meeting of the American Ornithologist's Union**, Estes Park, Colorado (2014).
5. Harnessing genomics for evolutionary study of Neotropical birds. **Third Meeting of the Network for Neotropical Biogeography**, Bogotá, Colombia (2014).
6. Phylogeography of the Neotropical bird *Xenops minutus* using genome-wide single nucleotide polymorphisms. **Annual meeting of the American Ornithologist's Union**, Chicago, Illinois (2013).
7. Genomic phylogeography of lowland Neotropical birds using ultraconserved elements (UCEs). **Fifth North American Ornithological Conference**, Vancouver, Canada (2012).
8. Genomic ultraconserved elements (UCEs) - information content for phylogenetics and phylogeography in birds. **First Joint Congress on Evolutionary Biology**, Ottawa, Canada (2012).

TEACHING EXPERIENCE:

Instructor

- Workshop on Ultraconserved Elements. Louisiana State University, Baton Rouge, LA (2013).

Teaching Assistant

- Principles of Genetics (Louisiana State University sophomore-level course, 2010)
- Biology for Science Majors (Louisiana State University introductory course, 2010)
- Ornithology (Cornell University senior-level course, 2008)

Mentorship

- Marc Zucker, undergraduate student at Louisiana State University (2014 – 2016)
- Andrea Stacy, undergraduate student at Louisiana State University (2014)
- Rosalind Remsen, Baton Rouge High School, Baton Rouge, LA (2014 – 2015)
- Claudia Carrizales, undergraduate student at Louisiana State University (2011 – 2012)
- Diana Singh, undergraduate student at Louisiana State University (2011)

- Trained graduate students and postdoctoral researchers (Jessica Oswald, César Sanchez, Glaucia Del-Rio, Sara Lipshutz, Mae Berlow, and Rachael Herman) in sequence capture laboratory work, bioinformatics, computer programming, and statistics.

Guest Lecturer

- Ornithology (University of Michigan upper-level course, 2016)
- Ornithology (Cornell University senior-level course, 2008)

SERVICE and OUTREACH:

- Coordinator of museum ornithology program for kids, Ann Arbor SummerFest (2017)
- Co-organizer of multi-lab reading group, University of Michigan (2016)
- Organizer of cross-departmental evolution reading group, Louisiana State University (2014 – 2015)
- Organizer, webmaster (www.lsubigday.org), and world birding big day record holder for LSU Peru Big Day Fundraiser and Outreach Effort (2014)
- Social coordinator for Louisiana State University BioGrads (2012 – 2013)
- Team member and first place, Peru Birding Rally Challenge (2012)
- Team member and Louisiana birding big day record holder, LSU Museum of Natural Science Annual Big Day (2010, 2012, 2014)
- Coordinator of LSU Museum of Natural Science Seminar Series (2010 – 2011)
- Led tours of LSU Museum of Natural Science for public visitors (2010 – 2016)
- Reviewer for Graduate Women in Science (www.gwis.org) fellowship program (2017)
- Reviewer for scientific journals including *Systematic Biology, Molecular Ecology, Evolution, Molecular Phylogenetics and Evolution, Auk, Journal of Field Ornithology, Cotinga,* and *Biotropica* (2010 – present)

MUSEUM EXPERIENCE:

Curatorial Work

2012 – 2013 Curatorial Assistant in Ornithology, LSU Museum of Natural Science
2011 – 2012 Curatorial Assistant in Genetic Resources, LSU Museum of Natural Science
2007 – 2008 Collections Assistant, Macaulay Library of Natural Sounds, Cornell University

Led or participated in multi-national museum field expeditions to Peru (5), Brazil (2), Bolivia (2), Costa Rica (1), and Kyrgyzstan (1) between 2008 and present. These trips resulted in the addition of over 6,000 data-rich bird specimens to collections across different institutions.