Michael G. Harvey

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EDUCATION:

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

EXPERIENCE:

2016 – present NSF Postdoctoral Fellow University of Michigan, Ann Arbor, MI

(Faculty Mentor: Daniel L. Rabosky)

PEER-REVIEWED PUBLICATIONS:

Evolution and Genomics:

- 1. **Harvey MG**, Rabosky DL. In review. Continuous traits and speciation rates: Alternatives to state-dependent diversification models.
- 2. **Harvey MG**, Rabosky DL. In revision. Studying trait-dependent diversification using comparative population genetics.
- 3. **Harvey MG**, Aleixo A, Ribas CC, Brumfield RT. In press. Habitat preference predicts genetic diversity and population divergence in Amazonian birds. *American Naturalist*. bioRxiv preprint doi:10.1101/085126.
- 4. **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.
- 5. Smith BT, Seeholzer GF, **Harvey MG**, Cuervo AM, Brumfield RT. 2017. A latitudinal intraspecific diversity gradient in birds. *PLoS Biology* 15: e2001073.
- 6. Lim HC, Shakya S, **Harvey MG**, Rahman M, Sheldon FH. In press. Sundaland's east-west rainforest population structure: Variable manifestations in four polytypic bird species examined using RAD-Seq and plumage analysis. *Journal of Biogeography*.
- 7. **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.

- 8. 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.
- 9. 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.
- 10. 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.
- 11. **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.
- 12. **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.
- 13. 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.
- 14. 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.
- 15. 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.
- 16. 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.
- 17. 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.
- 18. **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. 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.

- 2. **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.
- 3. 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.
- 4. **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.
- 5. 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.
- 6. **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.
- 7. Bonter DN, **Harvey MG**. 2008. Winter survey data reveal range-wide decline in Evening Grosbeak populations. *Condor* 110: 376-381.
- 8. 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 |
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| 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 |
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| 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. Population divergence predicts evolutionary diversification in New World birds. Hamilton Award Symposium talk. **Evolution**, Guarujá, Brazil (2015).
- 2. Comparative phylogeography using genomic datasets. Avian genomics symposium talk, **Annual meeting of the American Ornithologist's Union**, Estes Park, Colorado (2014).
- 3. SNPs versus sequences for phylogeography an exploration using simulations and massively parallel sequencing in a non-model bird. Society of Systematic Biologists invited symposium talk. **Evolution**, Snowbird, Utah (2013).

First-authored Contributed Talks:

- 1. Continuous traits and lineage diversification rates: Alternatives to formal state-dependent diversification models. **Society of Systematic Biologists Meeting**, Baton Rouge, Louisiana (2017).
- 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).
- 3. Comparative phylogeography using genomic datasets. **Annual meeting of the American Ornithologist's Union**, Estes Park, Colorado (2014).
- 4. Harnessing genomics for evolutionary study of Neotropical birds. **Third Meeting of the Network for Neotropical Biogeography**, Bogotá, Colombia (2014).
- 5. Phylogeography of the Neotropical bird *Xenops minutus* using genome-wide single nucleotide polymorphisms. **Annual meeting of the American Ornithologist's Union**, Chicago, Illinois (2013).
- 6. Genomic phylogeography of lowland Neotropical birds using ultraconserved elements (UCEs). **Fifth North American Ornithological Conference**, Vancouver, Canada (2012).
- 7. 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) in sequence capture laboratory work and bioinformatics.

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 scientific journals including *Systematic Biology, Molecular Ecology, 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 |
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| 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), and Costa Rica (1) between 2008 and present.