

Education

- Postdoc The University of Michigan, July 2015 - Current
Ph.D. Committee on Evolutionary Biology, The University of Chicago, June 2015
B.S. Geology *magna cum laude* Appalachian State University, 2010

Publications

- In press Johnson, A.E, **Mitchell, J.S.**, and Brown, M.B. Convergent evolution in social swallows (Aves: Hirundinidae). *Ecology & Evolution*
- 2016 Bernardi, M, Angielczyk, K.D., **Mitchell, J.S.**, and Ruta, M. Phylogenetic stability, tree shape, and character compatibility: A case study using early Tetrapods. *Systematic Biology*, doi: 10.1093/sysbio/syw049
- 2016 **Mitchell, J.S.** and Rabosky, D.L. Bayesian model selection with BAMM: effects of the model prior on the inferred number of diversification shifts. *Methods in Ecology and Evolution* 65(5) 737-758 doi: 10.1111/2041-210X.12626.
- 2015 **Mitchell, J.S.** Extant only comparative methods fail to recover the disparity preserved in the bird fossil record. *Evolution* 69(9) 2414-2424.
- 2015 **Mitchell, J.S.** 2015. Preservation is predictable: Quantifying the impact of taphonomic biases on ecological disparity in birds. *Paleobiology* 41(2) 353-367 doi: <http://dx.doi.org/10.1017/pab.2014.23>
- 2014 **Mitchell, J.S.** and Makovicky, P.J. 2014. Low ecological disparity in Early Cretaceous birds. *Proceedings of the Royal Society B.* 281(1787), doi:10.1098/rspb.2014.0608
- 2012 **Mitchell, J.S.**, Roopnarine, P.D., Angielczyk K.D. 2012. Late Cretaceous restructuring of dinosaur-bearing communities facilitated the End-Cretaceous mass extinction. *Proceedings of the National Academy of Sciences* 109(46):18857-61. doi: 10.1073/pnas.1202196109
- 2012 Heckert, A.B., **Mitchell, J.S.**, Schneider, V., and Olsen, P.E. 2012. Diverse new microvertebrate assemblage from the Upper Triassic (Norian) Cummock Formation, Sanford Subbasin, North Carolina, USA. *Journal of Paleontology*, 86(2):368-390, doi: <http://dx.doi.org/10.1666/11-098.1>
- 2010 **Mitchell, J.S.**, Heckert A. B., and Sues, H-D. 2010. Grooves to tubes: Evolution of the venom delivery system in a Late Triassic "reptile". *Naturwissenschaften* 97:1117-1121.
- 2010 **Mitchell, J.S.** and A. B. Heckert. 2010. The setup, use and efficacy of sodium polytungstate separation methodology with respect to microvertebrate remains. *Journal of Paleontological Techniques*, 7: 1-12
- In review Zelditch M.L., Ye J., **Mitchell J.S.**, and Swiderski D. L. Rare ecomorphological convergence on a complex adaptive landscape: Body size and diet mediate evolution of jaw shape in squirrels (Sciuridae). In review at *Evolution*.
- Rabosky D.L., Mitchell J.S., and Chang, J. Is BAMM flawed? Theoretical and practical concerns in inference of multi-rate models. In review.

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| In prep. | Mitchell, J.S. , Etienne, R and Rabosky D.L.. fossilBAMM: A General Multiprocess Diversification Model for Paleontological and Molecular Phylogenetic Data. In preparation for submission to <i>Systematic Biology</i> . |
| | Smith, N.A., Boyd, C., Stidham, T. and Mitchell, J.S. . Body mass in prey size in owls, including a description of a new species of fossil owl. In preparation for submission to <i>Biology Letters</i> . |
| | Mitchell, J.S. , Tomiya, S. and Kroeller, K. A new Eocene spoonbill-like bird from the Washakie Basin, Wyoming. In preparation, intended for <i>Journal of Vertebrate Paleontology</i> . |
| | Kroeller, K. and Mitchell, J.S. . Paleoecology of the Cedar Mountain Formation (Early Cretaceous, Utah). In preparation, intended for <i>Journal of Vertebrate Paleontology</i> . |
| Book reviews | |
| 2015 | Mitchell, J.S. . Issues in Palaeobiology: a Global View. <i>Quarterly Review of Biology</i> . 90:424-429 |

Teaching Experience

| | Teaching assistantships | Institution |
|-------------------------|---------------------------------------|------------------------------|
| Winter 2015 | Environmental Ecology (non-majors) | The University of Chicago |
| Summer 2014 | Stones and Bones (high school) | The University of Chicago |
| Spring 2013 | Scientific Ethics & Integrity (grad.) | The University of Chicago |
| Spring 2013 | Biodiversity (undergrad.) | The University of Chicago |
| Fall 2012 | Biological Evolution (non-majors) | The University of Chicago |
| Fall 2009 - Spring 2010 | Introduction to Geology (undergrad.) | Appalachian State University |

Outreach

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| 2014-2015 | Advisor to undergraduate intern, Krista Kroeller, Field Museum |
| 2013-2015 | Presenter for Geology Badge, Boy Scouts of America, Field Museum |
| 2012-2015 | Dozin' with the Dinos, Field Museum Public Outreach Program |
| 2010-2015 | Ask-a-paleontologist outreach to Chicago Public Schools Kindergarten classes |
| 2009-2015 | Over 20 presentations to middle-high school classrooms in rural North Carolina and Chicago Public Schools |
| 2014 | "Wild Wednesday" Presenter, Garfield Park Conservatory, Chicago |
| 2013 | Educator Open House, Field Museum |
| 2012 | Presentation to undergraduate Geology Club, The University of Chicago |
| 2011 | Proof-reader for Chicago Public Schools science materials, Field Museum |
| 2010 | Public Lecture hosted by the New Mexico Friends of Paleontology |

Grants

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| 2012 | Doctoral Dissertation Improvement Grant \$14,960 (DEB-1311389) | NSF |
| 2012 | Hinds Fund \$500 | The University of Chicago |
| 2011 | Hinds Fund \$1,520 | The University of Chicago |
| 2011 | Paleontological Society Student Grant \$850 | The Paleontological Society |
| 2010 | East Asia and Pacific Summer Institute Grant \$5,700 (OISE-1107676) | NSF |

Presentations

Conference presentations

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| 2016 | Evolution (15 minute Talk) |
| 2014 | Society of Vertebrate Paleontology (15 minute Talk) |
| 2014 | Geological Society of America (15 minute Talk) |
| 2014 | Evolution (20 minute Talk) (link to video) |
| 2013 | Society of Vertebrate Paleontology Meeting (Poster) |
| 2013 | American Ornithologist's Union (20 minute Talk) |
| 2013 | Society of Integrative and Comparative Biology Meeting (20 minute Talk) |
| 2012 | Society of Vertebrate Paleontology Meeting (15 minute Talk) |
| 2012 | Society of Vertebrate Paleontology Meeting (Poster, co-author) |
| 2012 | Geological Society of America Meeting (Poster, co-author) |
| 2011 | Society of Vertebrate Paleontology Meeting (Poster) |
| 2011 | Geological Society of America Meeting: Phylogenetic Methods & the Fossil Record (15 minute Talk) |
| 2010 | Geological Society of America Meeting (15 minute Talk) |
| 2010 | Society of Vertebrate Paleontology Meeting (Poster in Colbert Prize Session) |
| 2009 | Society of Vertebrate Paleontology Meeting (Poster) |
| 2009 | Appalachian State University Student Research Symposium (15 minute Talk) |
| 2008 | Society of Vertebrate Paleontology Meeting (Poster) |
| 2008 | Society of Vertebrate Paleontology Meeting Preparator's Session (Poster) |
| 2008 | Southeastern Geological Society of America Meeting 2008 (Poster) |
| 2008 | Appalachian State University Student Research Symposium (Poster) |

Other presentations

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| 2014 | Field Museum Science & Education Interchange Seminar Series (30 minute Talk) |
| 2008 | Appalachian State University, Geology Department Seminar Series (45 minute Talk) |
| 2008 | Smithsonian Research Training Program Symposium (Poster) |
| 2008 | Appalachian State University Student Research Symposium (Poster) |

Professional training

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| 2014 | Human Anatomy | Pritzker School of Medicine |
| 2013 | K-Pg Food Web Workshop | UC Berkeley |
| 2011 | Pedagogy in Evolutionary Biology | The University of Chicago |
| 2010 | Analytical Methods in Paleobiology Workshop, Paleobiology Database | Macquarie University |

Professional service

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| Peer Review | Paleobiology, Proceedings of the Royal Society B, Palaeontology, Ecology Letters, Current Biology, Naturwissenschaften, Fieldiana and Journal of Geophysical Research - Biogeosciences |
| Workshops | Presenter at K-Pg food web workshop at UC Berkeley, supported by the Welles Fund; Organized and ran a graduate student programming workshop series at the University of Chicago |
| Session Moderator | Society of Vertebrate Paleontology (2012), Society of Integrative Biology (2013), Evolution (2014) |
| Grant reviewer | UChicago Dean's Council Travel Grant Review Panel (2012-2015) |
| Committees | Dean's Council, Biological Sciences, The University of Chicago (2011-2015) |

Professional societies

Society for the Study of Evolution, Society of Integrative and Comparative Biology, Geological Society of America, Society of Vertebrate Paleontology

Select media coverage

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| University of Chicago, early birds (link) |
| University of Chicago, food webs (link) |
| Nature News, <i>Uatchitodon</i> (link) |
| National Geographic, <i>Uatchitodon</i> (link) |
| University of Chicago, <i>Uatchitodon</i> (link) |

Field work

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| 2012-2013, 2015 | Utah, Cedar Mountain Fm., Early Cretaceous |
| 2013-2014 | Wyoming, Green River Fm., Eocene |
| 2013-2014 | Argentina, Huincul Fm., Early Cretaceous |
| 2007, 2008, 2010 | Arizona, New Mexico & Colorado, Chinle Fm., Late Triassic |
| 2008 | Wyoming, Cloverly Fm., Early Cretaceous |
| 2008 | North Carolina, Newark Group, Pekin Fm., Late Triassic |