

EDUCATION

- Asst. Prof. Coe College, 2023 - Current
Asst. Prof. West Virginia University Institute of Technology, 2017 - 2023
Postdoc The University of Michigan, 2015 - 2017
Ph.D. Committee on Evolutionary Biology, The University of Chicago, June 2015
B.S. Geology *magna cum laude* Appalachian State University, 2010

PUBLICATIONS

- ORCID <https://orcid.org/0000-0002-8666-5825>
- 2025 Saitta E.T., Balaji L., **Mitchell J.S.**, and Makovicky P.J. Feather evolution following flight loss in crown group birds: relaxed selection and developmental constraints. *Evolution* 79(5) <https://doi.org/10.1093/evolut/qpafo20>.
- 2022 Canale J.I., Apesteguia S, Gallina P.A., **Mitchell J.S.**, Smith N.D., Cullen T.M., Shinya A., Haluza A., Gianechini F.A., and Makovicky P.J. New giant carnivorous dinosaur reveals convergent evolutionary trends in theropod arm reduction. *Current Biology*. <https://doi.org/10.1016/j.cub.2022.05.057>
- 2022 Lopez-Antonanzas R., **Mitchell J.S.**, Simoes T.R., Condamine F.L., Aguilee R., Pelaez-Campomanes P., Renaud S., Rolland J., and Donoghue P.C.J. Integrative Phylogenetics: Tools for Palaeontologists to Explore the Tree of Life. *MDPI Biology*. <https://doi.org/10.3390/biology11081185>
- 2021 Smith N.A., Koeller K., Clarke J., Ksepka D., **Mitchell J.S.**, Nabavizadeh A., Ridgely R., and Witmer L. Convergent Evolution In Dippers (Aves, Cinclidae): The Only Wing-propelled Diving Songbirds. *Anatomical Record*. <https://doi.org/10.1002/ar.24820>
- 2020 Smith N.A., Stidham T.A., **Mitchell J.S.** The First Fossil Owl (Aves, Strigiformes) From the Paleogene of Africa. *Diversity* 12(4), 163; <https://doi.org/10.3390/d12040163>.
- 2019 **Mitchell, J.S.**, Etienne, R and Rabosky D.L.. fossilBAMM: A General Multiprocess Diversification Model for Paleontological and Molecular Phylogenetic Data. *Systematic Biology* 68(1); <https://doi.org/10.1093/sysbio/syy035>.
- 2017 Rabosky D.L., **Mitchell J.S.**, and Chang, J. Is BAMM flawed? Theoretical and practical concerns in the analysis of multi-rate diversification models. *Systematic Biology* 66:4 477 - 498.
- 2017 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). *Evolution* 71(3); doi:10.1111/evo.13168.
- 2017 Johnson, A.E, **Mitchell, J.S.**, and Brown, M.B. Convergent evolution in social swallows (Aves: Hirundinidae). *Ecology & Evolution* 7(2) 550-560 doi:10.1002/ece3.2641
- 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. <i>Evolution</i> 69(9) 2414-2424.
2015	Mitchell, J.S. Preservation is predictable: Quantifying the impact of taphonomic biases on ecological disparity in birds. <i>Paleobiology</i> 41(2) 353-367 doi: http://dx.doi.org/10.1017/pab.2014.23
2014	Mitchell, J.S. and Makovicky, P.J. Low ecological disparity in Early Cretaceous birds. <i>Proceedings of the Royal Society B.</i> 281(1787), doi:10.1098/rspb.2014.0608
2012	Mitchell, J.S. , Roopnarine, P.D., Angielczyk K.D. Late Cretaceous restructuring of dinosaur-bearing communities facilitated the End-Cretaceous mass extinction. <i>Proceedings of the National Academy of Sciences</i> 109(46):18857-61. doi: 10.1073/pnas.1202196109
2012	Heckert, A.B., Mitchell, J.S. , Schneider, V., and Olsen, P.E. Diverse new microvertebrate assemblage from the Upper Triassic (Norian) Cumnock Formation, Sanford Subbasin, North Carolina, USA. <i>Journal of Paleontology</i> , 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. Grooves to tubes: Evolution of the venom delivery system in a Late Triassic "reptile". <i>Naturwissenschaften</i> 97:1117-1121.
2010	Mitchell, J.S. and A. B. Heckert. The setup, use and efficacy of sodium polytungstate separation methodology with respect to microvertebrate remains. <i>Journal of Paleontological Techniques</i> , 7: 1-12

BOOK

REVIEWS

- 2015 **Mitchell, J.S.**. Issues in Palaeobiology: a Global View. *Quarterly Review of Biology*. 90:424-429

TEACHING EXPERIENCE

	Courses designed & taught	Institution
2024	Comparative Chordate Anatomy	Coe College
2024, 2025	BIO 145 Cell & Molecular Biology	Coe College
2024, 2025	BIO 315 Integrated Human Anatomy	Coe College
2023, 2024, 2025	BIO 155 Organismal & Ecological Biology	Coe College
2023, 2025	BIO 202 Topics in Evolution	Coe College
2018, 2020, 2022	Comparative Vertebrate Anatomy	WVU Tech
2018 - 2022	Evolution	WVU Tech
2017, 2019, & 2021	Vertebrate Embryology	WVU Tech
2018 - 2022	Human Anatomy & Physiology II	WVU Tech
2017 - 2022	Human Anatomy & Physiology I	WVU Tech
2020 & 2021	Geology	WVU Tech
2019 - 2021	Freshmen Seminar	WVU Tech
2022	Paleobiology	WVU Tech

PROFESSIONAL SERVICE

COMMITTEES	Committee on Academic Persistence and Enrollment, Coe College (2024-Current) Faculty Evaluation Committee, WVU Tech (2019, 2022) Legislative Committee, WVU Tech (2020 - 2023) Election Committee, WVU Tech (2020) Dean's Council, Biological Sciences, The University of Chicago (2011-2015)
PEER REVIEW	Paleobiology, Proceedings of the Royal Society B, Palaeontology, Ecology Letters, Current Biology, Naturwissenschaften, Fieldiana and Journal of Geophysical Research - Biogeosciences, Systematic Biology, TREE, Nature Communications, Journal of Biogeography, Biology Letters
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)

OUTREACH

2021	<i>The Final Ghouls</i> Podcast interview
2018, 2020	Camp STEM, WVU Tech
2019	Presenter Girl Scouts of America
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

2025	Pochobradksy \$6,000	Coe College
2024	Pochobradsky & Coe Research Fund Grant \$5,844	Coe College
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

PROFESSIONAL TRAINING

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 SOCIETIES

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

SELECT MEDIA COVERAGE

Business Insider, on *Meraxes* ([link](#))

University of Chicago, early birds ([link](#))

University of Chicago, food webs ([link](#))

Nature News, *Uatchitodon* ([link](#))

National Geographic, *Uatchitodon* ([link](#))

University of Chicago, *Uatchitodon* ([link](#))

FIELD WORK

2012, 2013, Utah, Cedar Mountain Fm., Early Cretaceous

2015, 2020,

2021

2013-2014 Wyoming, Green River Fm., Eocene

2013-2014 Argentina, Huincul Fm., Early Cretaceous

2007, 2008, Arizona, New Mexico & Colorado, Chinle Fm., Late Triassic

2010

2008 Wyoming, Cloverly Fm., Early Cretaceous

2008 North Carolina, Newark Group, Pekin Fm., Late Triassic