

TYLER R. LYSON
CURATOR OF VERTEBRATE PALEONTOLOGY

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Google Scholar Citation Indices

h-index: 28; i10-index: 45

Education

- 2008 – 2012 Ph.D., Yale University, Dept. Geology & Geophysics, Advisor: Jacques Gauthier [Awarded Orville Prize by the Yale G&G faculty for “Best Dissertation”]
2006 – 2008 M. Phil., Yale University, Dept. of Geology & Geophysics
2002 – 2006 B.A. Swarthmore College, Biology (High Honors), Advisor: Scott Gilbert
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Work Experience

- 2014 – recent **Curator of Vertebrate Paleontology**, Denver Museum of Nature & Science
2012 – 2014 **Peter Buck Postdoctoral Researcher**, Smithsonian Institution National Museum of Natural History, Advisor: Kevin de Queiroz
2003 – recent **Founder and Director**, Marmarth Research Foundation (MRF)
Developed a 501(c)3 nonprofit research center to promote informal scientific education and promote scientific research in the fossil-rich Hell Creek Formation of southwestern North Dakota (see www.mrfdigs.com)
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Professional Affiliations

- 2013 – recent **Honorary Researcher**, Evolutionary Studies Institute (University of Witwatersrand, South Africa)
2012 – recent **Curatorial Affiliate**, Yale Peabody Museum of Natural History (Yale University, USA)
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Keynote Talks/Professional Awards

- 2020 Natural History Museum of Utah’s Dinofest, Keynote Speaker
Colorado Scientific Society, Keynote Speaker
Colorado Scientific Society 2020 Best Paper
2018 GeoBonn 2018 Living Earth (Bonn, Germany), Keynote Speaker
2016 Willi Hennig Society (Buenos Aires, Argentina), Plenary Speaker
2012 Harrismith Mug – “Best paper” at biannual Palaeontological Society of Southern Africa
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Peer Reviewed Papers

- XX. Bertrand, O. C., Shelley, S. L., Williamson, T. E., Wible, J. R., Chester, S. G. B., Flynn, J. J., Holbrook, L. T., **Lyson, T. R.**, Meng, J., Miller, I. M., Püschel, H. E., Smith, T., Spaulding, M., Tseng, Z. J., Brusatte, S. L. In Press. Brawn before brains in placental mammals after the end-Cretaceous extinction. *Science*.

58. Krause, D. W., Hoffmann, S., **Lyson T. R.**, Dougan, L. G., Petermann, H., Tezca, A., Chester, S. G. B., & Miller, I. M. 2021. New skull material of *Taeniolabis taoensis* (Multituberculata, Taeniolabididae) from the early Paleocene (Danian) of the Denver Basin, Colorado. *Journal of Mammalian Evolution*. doi.org/10.1007/s10914-021-09584-3
57. **Lyson, T. R.**, Petermann, H., Toth, N., Bastien, S., & Miller, I. M. 2021. A new baenid turtle, *Palatobaena knellerorum*, sp. nov. from the lower Paleocene (Danian) Denver Formation of south-central Colorado, USA. *Journal of Vertebrate Paleontology* e1925558. doi:10.1080/02724634.2021.1925558. **[Cover of journal]**
56. **Lyson, T. R.**, Petermann, H., & Miller, I. M. 2021. A new plastomenid trionychid turtle, *Plastomenus joycei*, sp. nov. from the earliest Paleocene (Danian) Denver Formation of south-central Colorado, USA. *Journal of Vertebrate Paleontology* e1913600. doi:10.1080/02724634.2021.1913600. **[Cover of journal]**
55. Joyce, W. G., Anquetin, J., Cadena, E.-A., Claude, J., Danilov, I. G., Evers, S. W., Ferrera, G. S., Gentry, A. D., Georgalis, G. L., **Lyson, T. R.**, Perez-Garcia, A., Rabi, M., Sterli, J., Vitek, N. S., & Parham, J. F. 2021. A nomenclature for fossil and living turtles using phylogenetically defined clade names. *Swiss Journal of Palaeontology* 140, 1-45.
54. Joyce, W. G., Rollet, Y., Evers, S. W., **Lyson, T. R.**, Rahantarisoa, L. J., & Krause, D. W. 2021. A new pelomedusoid turtle, *Sahonachelys mailakavava*, from the Late Cretaceous of Madagascar provides evidence for convergent evolution of specialized suction feeding among pleurodires. *Royal Society Open* 8, 210098.
53. Woodruff, D. C., Goodwin, M. B., **Lyson, T. R.**, & Evans, D. C. 2021. Ontogeny and variation of the pachycephalosaurine dinosaur *Sphaerotholus buchholtzae*, and its systematics within the genus. *Zoological Journal of the Linnean Society*, zlaa179.
52. **Lyson, T. R.** & Bever, G. S. 2020. Evolutionary Origin of the Turtle Body Plan. *Annual Review of Ecology, Evolution, and Systematics* 51, 143-166.
51. Joyce, W. G., Parham, J. F., Anquetin, J., Claude, J., Danilov, I. G., Iverson, J. B., Kear, B., **Lyson, T. R.**, Rabi, M., & Sterli, J. 2020. *Pan-Testudines; Testudinata; Testudines; Pan-Pleurodira; Pleurodira; Pan-Cryptodira; Cryptodira*. In K. de Queiroz, P. D. Cantino & J. A. Gauthier (Eds.). *Phylonoms – A Companion to the PhyloCode* (pp. 1041–1043, 1045–1048, 1049–1051, 1053–1054, 1055–1057, 1059–1060, 1061–1063). Boca Raton, CRC Press.
50. Joyce, W. G., Brinkman, D. B., & **Lyson, T. R.** 2019. A new species of trionychid turtle, *Axestemys infernalis* sp. nov., from the Late Cretaceous (Maastrichtian) Hell Creek and Lance formations of the Northern Great Plains, USA. *Paleontologia Electronica*. 22.3.72.
49. Fuentes, A. J., Clyde, W. C., Weissenburger, K., Bercovici, A., **Lyson, T. R.**, Miller, I. M., Ramezani, J., Schmitz, M. D., and Johnson, K. R. 2019. Constructing a timescale of biotic recovery across the Cretaceous–Paleogene boundary, Corral Bluffs, Denver Basin, Colorado. *Rocky Mountain Geology*
48. **Lyson, T. R.**, Miller, I. M., Bercovici, A. D., Weissenburger, K., Fuentes, A. J., Clyde, W. C., Hagadorn, J. W., Butrim, M. J., Johnson, K. R., Fleming, R. F., Barclay, R. S., Maaccracken, S. A., Lloyd, B., Wilson, G. P., Krause, D. W., and Chester, S. G. B. 2019. Exceptional continental record of biotic recovery after the Cretaceous–Paleogene mass extinction. *Science* 366, 977-983.
47. **Lyson, T. R.**, Saylor, J. L., & Joyce, W. G. 2019. A new baenid turtle, *Saxochelys gilberti*, gen. et sp. nov, from the uppermost Cretaceous (Maastrichtian) Hell Creek Formation: sexual dimorphism and spatial niche partitioning within the most speciose group of Late

- Cretaceous turtles. *Journal of Vertebrate Paleontology*.
doi:10.1080/02724634.2019.1662428. **[Cover of journal]**
46. Joyce, W. G., **Lyson, T. R.**, & Sertich, J. J. W. 2018. A new species of trionychid turtle from the Upper Cretaceous (Campanian) Fruitland Formation of New Mexico, U.S.A. *Journal of Paleontology*.
45. Rollot, Y., Joyce, W. G., & **Lyson, T. R.** 2018. A description of the skull of *Eubaena cephalica* (Hay, 1908) and new insights into the cranial circulation and innervation of baenid turtles. *Journal of Vertebrate Paleontology*. doi: 10.1080/02724634.2018.1474886.
44. Field, D. J., Bercovici, A., Berv, J. S., Dunn, R., Fastovsky, D., **Lyson, T. R.**, Vajda, V., & Gauthier, J. A. 2018. Early evolution of modern birds structured by global forest collapse at the end-Cretaceous mass extinction. *Current Biology*. doi 10.1016/j.cub.2018.04.062. **[Featured selection and cover of journal]**
43. Joyce, W. G. & **Lyson, T. R.** 2017. The shell morphology of the latest Cretaceous (Maastrichtian) trionychid turtle *Helopanoplia distincta*. *PeerJ* 5:e4169.
42. **Lyson, T. R.**, Joyce, W. G., & Sertich, J. J. W. 2017. A new chelydroid turtle, *Lutemys warreni* gen. et sp. nov., from the Late Cretaceous (Campanian) Kaiparowits Formation of southern Utah. *Journal of Vertebrate Paleontology*. doi:10.1080/02724634.2017.1390672.
41. Schachner, E. R., Sedlmayr, J. C., Schott, R., **Lyson, T. R.**, Sanders, R. K., & Lambertz, M. 2017. Pulmonary anatomy and a case of unilateral aplasia in a common snapping turtle (*Chelydra serpentina*): developmental perspectives on cryptodiran lungs. *Journal of Anatomy* 231: 835-848. **[Featured selection and cover of journal]**
40. Bever, G. S., **Lyson, T. R.**, Field, D. J., & Bhullar, B.-A. S. 2016. The amniote temporal roof and the diapsid origin of the turtle skull. *Zoology*. 119 471 - 473
39. Joyce, W. G., **Lyson, T. R.**, & Kirkland, J. I. 2016. An early bothremydid (Testudines, Pleurodira) from the Late Cretaceous (Cenomanian) of Utah, North America. *PeerJ*. 4:e2502.
38. Joyce, W. G., **Lyson, T. R.**, & Williams, S. 2016. New cranial material of *Gilmoremys lancensis* (Testudines, Trionychidae) from the Hell Creek Formation of southeastern Montana, USA. *Journal of Vertebrate Paleontology* 36: e1225748
37. **Lyson, T. R.**, Rubidge, B. S., Scheyer, T. M, de Queiroz, K., Schachner, E. R., Smith, R. M. H., Botha-Brink, J., & Bever, G. S. 2016. Fossorial origin of the turtle shell. *Current Biology*. 26: 1887 – 1894.
36. **Lyson, T. R.**, Joyce, W. G., Lucas, S. G., Sullivan, R. M. 2016. A new baenid turtle from the early Paleocene (Torrejonian) of New Mexico and a species level phylogenetic analysis of Baenidae. *Journal of Paleontology*. 90: 305 - 316
35. Bever, G. S., **Lyson, T. R.**, Field, D. J., & Bhullar, B. -A. S. 2015. Evolutionary origin of the turtle skull. *Nature* 525: 239-242.
34. Joyce, W. G. & **Lyson, T. R.** 2015. A review of the fossil record of turtles of the clade *Baenidae*. *Bulletin of the Peabody Museum of Natural History* 56:147-183.
33. Warnock, R. C. M, Parham, J. F., Joyce, W. G., **Lyson, T. R.**, Donoghue, P. C. J. 2015. Calibration uncertainty in molecular dating analyses: There is no substitute for the prior evaluation of time priors. *Proceedings of the Royal Society of London B* 282: 20141013.

32. Bourke, J. M., Porter, W. M. R., Ridgely, R. C., **Lyson, T. R.**, Schachner, E. R., Bell, P. R. & Witmer, L. M. 2014. Breathing Life into Dinosaurs: Tackling Challenges of Soft-Tissue Restoration and Nasal Airflow in Extinct Species. *Anatomical Record* 297: 2148-2186.
31. Field, D. J., Gauthier, J. A., King, B. L., Pisani, D., **Lyson, T. R.**, & Peterson, K. J. 2014. Consilience in reptile phylogeny: microRNAs support an archosaur, rather than a lepidosaur affinity for turtles. *Evolution and Development*. **[Cover of journal]**
30. Lamanna, M. C, Sues, H.-D., Schachner, E. R. & **Lyson, T. R.** 2014. A new large-bodied oviraptorosaurian theropod dinosaur from the latest Cretaceous of western North America. *PLOS ONE* 9:e92022 doi: 10.1371/journal.pone.0092022
29. **Lyson, T. R.**, Schachner, E. R., Botha-Brink, J., Scheyer, T. M., Lambertz, M., Bever, G. S., Rubidge, B., de Queiroz, K. 2014. Origin of the novel lung ventilatory apparatus of turtles. *Nature Communications*. 5:5211 doi: 10.1038/ncomms6211
28. Manning, P. L., Wogelius, R. A., Dongen, B. E. van., **Lyson, T. R.**, Bergmann, U., Webb, S., Buckley, M., Egerton, V., & Sellers, W. I. 2014. The role of skin pigment and biochemistry in the exceptional preservation of hadrosaur skin.
27. Hagelin, J. C., Simonet, J. C. & **Lyson, T. R.** 2013. Embryonic domestic chickens can detect compounds in an avian chemosignal before breathing air. IN *Chemical Signals in Vertebrates 12* (Springer, New York) pp. 363-377.
26. Joyce, W. G., **Lyson, T. R.**, & Schoch, R. 2013. The girdles of the oldest fossil turtle, *Proterochersis robusta*, and the age of the turtle crown. *BMC Evolutionary Biology* 13:266.
25. Joyce, W. G., Parham, J. F., **Lyson, T. R.**, Warnock, R. C. M., & Donoghue, P. C. J. 2013. A divergence dating analysis of turtles using fossil calibrations: an example of best practice. *Journal of Paleontology* 87:612-634.
24. Joyce, W. G., Werneburg, I. & **Lyson, T. R.** 2013. The hooked element in the pes of turtles (Testudines): a global approach to exploring homology. *Journal of Anatomy* 223:421-441. **[Featured selection and cover of journal]**
23. **Lyson, T. R.**, Bhullar, B.-A. S., Bever, G. S., Joyce, W. G., de Queiroz, K., Abzhanov, A., & Gauthier, J. A. 2013. Homology of the enigmatic nuchal bone reveals novel reorganization of the shoulder girdle in the evolution of the turtle shell. *Evolution and Development* 15:317-325. **[Featured selection and cover of journal]**
22. **Lyson, T. R.**, Bever, G. S., Scheyer, T. M., Hsiang, A. Y., & Gauthier, J. A. 2013. Evolutionary origin of the turtle shell. *Current Biology* 23:1-7. **[Featured selection with an accompanying "Commentary" article]**
21. Vajde, V., **Lyson, T. R.**, Bercovici, A., Doman, J. H., & Pearson, D. A. 2013. A snapshot into the terrestrial ecosystem of an exceptionally well-preserved dinosaur (Hadrosauridae) from the Upper Cretaceous of North Dakota, USA. *Cretaceous Research* 46:114-122.
20. Joyce, W. G., Petricevic, A., **Lyson, T. R.**, & Czaplewski, N. J. 2012. A new box turtle from the Miocene/Pliocene boundary (latest Hemphillian) of Oklahoma and a refined chronology of box turtle diversification. *Journal of Paleontology* 86:177-190.
19. **Lyson, T. R.**, Sperling, E. A., Gauthier, J. A., Heimburg, A. M., & Peterson, K. J. 2012. microRNAs support a Testudines-Lepidosaur clade. *Biology Letters* 8:104-107.
18. **Lyson, T. R.** & Joyce, W. G. 2012. Evolution of the turtle bauplan: the topological relationship of the scapula relative to the ribcage. *Biology Letters* 8:1028-1031.

17. Joyce, W. G. & **Lyson, T. R.** 2011. New material of *Gilmoremys lancensis* Nov. Comb. (Testudines:Trionychidae) from the Hell Creek Formation and the diagnosis of plastomenid turtles. *Journal of Paleontology* 85:444-461.
16. Knauss, G., Joyce, W. G., **Lyson, T. R.**, & Pearson, D. 2011. A new kinosternoid from the Late Cretaceous Hell Creek Formation of North Dakota and the origin of the *Dermatemys mawii* lineage. *Paläontologische Zeitschrift* 85:125-142.
15. **Lyson, T. R.**, Bercovici, A., Chester, S., Sargis, E., Pearson, D, & Joyce, W. G. 2011. Dinosaur extinction: Closing the “three meter gap.” *Biology Letters* 7:925-928. **[Chosen as one of Discovery magazine’s top 100 science discoveries of 2011 (34th)]**
14. **Lyson, T. R.** & Longrich, N. R. 2011. Spatial niche partitioning in dinosaurs from the latest Cretaceous (Maastrichtian) of North America. *Proceedings of the Royal Society of London B* 278:1158-1164.
13. **Lyson, T. R.** & Joyce, W. G. 2011. Cranial anatomy and phylogenetic placement of the enigmatic turtle *Compsemys victa*. *Journal of Paleontology* 85:794-806.
12. **Lyson, T. R.**, Joyce, W. G., Knauss, G., & Pearson, D. 2011. *Boremys* (Testudines: Baenidae) from the latest Cretaceous and early Paleocene of North Dakota: an 11 million year range extension and an additional K/T survivor. *Journal of Vertebrate Paleontology* 31:1-9. **[Featured selection and cover of the journal]**
11. Joyce, W. G. & **Lyson, T. R.** 2010. A neglected lineage of North American turtles fills a major gap in the fossil record. *Palaeontology* 53:241-248.
10. Joyce, W. G. & **Lyson, T. R.** 2010. *Pangshura tatrotia*, a new species of pond turtle (Testudinoidea) from the Pliocene Siwaliks of Pakistan. *Journal of Systematic Palaeontology* 8:449-458.
9. **Lyson, T. R.**, Bever, G. S., Bhullar, A. Joyce, W. G., & Gauthier, J. A. 2010. Transitional fossils and the origin of turtles. *Biology Letters* 6:830-833 doi:10.1098/rsbl.2010.0371. **[Biology Letters Top five most downloaded paper in 2010]**
8. **Lyson, T. R.** & Joyce, W. G. 2010. A new baenid turtle from the latest Cretaceous (Maastrichtian) of North Dakota and a revision of the Cretaceous Baenidae alpha taxonomy. *Journal of Vertebrate Paleontology* 30:394-402.
7. Joyce, W. G., Revan, A., **Lyson, T. R.**, & Danilov, I. G. 2009. Two new plastomenine softshell turtles from the Paleocene of Montana. *Yale Peabody Bulletin* 50:307-325.
6. **Lyson, T. R.** & Gilbert, S. 2009. Turtles all the way down: loggerheads at the root of the chelonian tree. *Evolution and Development* 11:133-135.
5. **Lyson, T. R.** & Joyce, W. G. 2009a. A new species of *Palatobaena* (Testudines: Baenidae) and a maximum parsimony and Bayesian phylogenetic analysis of Baenidae. *Journal of Paleontology* 83: 457-470.
4. **Lyson, T. R.** & Joyce, W. G. 2009b. A revision of *Plesiobaena* (Testudines: Baenidae) and an assessment of baenid ecology across the K/T boundary. *Journal of Paleontology* 83: 833-853.
3. Manning, P. L., Morris, P. M., McMahon, A., Jones, E., Gize, A., Macquaker, J. H. S., Wolff, G., Thompson, A., Marshall, J., Taylor, K. G., **Lyson, T. R.**, Gaskell, S., Reamtong, O., Sellers, W. I., van Dongen, B. E., Buckley, M., & Wogelius, R. A. 2009. Soft-Tissue Structure and Chemistry in a Mummified Hadrosaur from the Hell Creek Formation, North Dakota (USA). *Proceedings of the Royal Society of London* 276: 3429-3437. **[Chosen as one of Discovery magazine’s top 100 science discoveries of 2009 (46th)]**

2. Schachner, E. R., **Lyson, T. R.**, & Dodson, P. 2009. Evolution of the respiratory system in non-avian dinosaurs: evidence from rib and vertebral morphology. *Anatomical Record* 292: 1501-1513. Doi:10.1002/ar.20989.
1. Sellers, W. I., Manning, P. L., **Lyson, T. R.**, Stevens, K., & Margets, L. 2009. Virtual paleontology: gait reconstruction of extinct vertebrates using high performance computing. *Palaeontologica Electronica* 12.3.13A.

Research Grants and Awards

2021	Lyda Hill Philanthropies – awarded to CO Springs post-K/Pg recovery	\$450,000
2020	National Science Foundation Division of Environmental Biology (DMNS portion = \$206,961)	\$555,763
2018	Lyda Hill Philanthropies – awarded to CO Springs post-K/Pg recovery	\$180,000
2015	K/T Challenge – awarded to K/Pg extinction work in ND/MT	\$4000
2012	Orville Prize – awarded by the Yale G&G faculty for “Best Dissertation”	\$1000
2010	Estwing Award – awarded by the Yale G&G faculty for “Outstanding Student”	\$750
2010	NSF International Congress of Vertebrate Morphology – travel grant	\$1000
2008	National Geographic Society (Young Explorer)	\$3200
2007	National Geographic Society co-PI (NG#CRE0322-07)	\$100,000
2007	National Geographic Film & Television prep-grant	\$25,000
2006	National Geographic Society co-PI (NG#EC0294-06)	\$75,000
2006	National Geographic Society co-PI (NG#CRE8063-06)	\$40,702
2006 – 2012	National Science Foundation Graduate Research Fellowship	\$90,000
2002–2006	Phillip Evans Scholar, Swarthmore College	\$131,000
2005	Howard Hughes travel grant, Swarthmore Chapter	\$1000
2004	Howard Hughes travel grant, Swarthmore Chapter	\$1000
2003	Howard Hughes travel grant, Swarthmore Chapter	\$1000

Popular Books and Articles

Dinomummy, Kingfisher Publications, December 4, 2007. Forward for a 64-page children’s book on the life, death, and discovery of a dinosaur “mummy” I discovered

Dinosaurs of the Desert, three articles in the companion guide to the international dinosaur expo (Tokyo, Japan)

Professional Presentations

- Stone, R., Vignieri, S., **Lyson, T. R.**, and Miller, I. M. 2020. Breaking a big science story through film: *Rise of the Mammals*. Annual American Association for the Advancement of Science Conference, Seattle, USA.
- Lyson, T. R.**, Bercovici, A. D., and Miller, I. M. 2019. Changes in dinosaur ecosystems leading up to the Cretaceous–Paleogene boundary in North America. *European Geophysical Union* meeting on Mass Extinction, Utrecht, Netherlands.
- Lyson, T. R.**, Bercovici, A. D., and Miller, I. M. 2019. Changes in dinosaur ecosystems from the Hell Creek Formation leading up to the Cretaceous–Paleogene boundary in North America. *Annual Society of Vertebrate Paleontology Conference*, Brisbane, Australia (Oct. 9-12).
- Miller, I. M., **Lyson, T. R.**, and Bercovici, A. D. 2019. Correlated plant diversity and climate in North America during Earth system succession following the K–Pg mass extinction. *European Geophysical Union* meeting on Mass Extinction, Utrecht, Netherlands.

- Miller, I. M., **Lyson, T. R.**, and Bercovici, A. D. 2019. Plant evolution and diversification shaped vertebrate ecosystems during the late Cretaceous and early Paleogene in western North America. *Annual Society of Vertebrate Paleontology Conference*, Brisbane, Australia (Oct. 9-12).
- Dunn, R., Bercovici, A. D., Vajda, V., Field, D., **Lyson, T. R.**, Fastovsky, D., and Pearson, D. 2019. New evidence for canopy collapse at the Cretaceous–Paleogene boundary from leaf cuticles. *European Geophysical Union meeting on Mass Extinction*, Utrecht, Netherlands.
- Field, D., Berv, J., Saupe, E., Bercovici, A., Hsiang, A., **Lyson, T. R.**, and Dunn, R. 2019. Second-coming of the dinosaurs: Rapid diversification of birds following the end-Cretaceous mass extinction. *European Geophysical Union meeting on Mass Extinction*, Utrecht, Netherlands.
- Bercovici, A., Dunn, R. E., Vajda, V., Field, D. J., **Lyson, T. R.**, Fastovsky, D. E., and Pearson, D. 2019. Rapid ecological succession of pioneering fern species at the John’s Nose Cretaceous–Paleogene boundary section (North Dakota, USA). *European Geophysical Union meeting on Mass Extinction*, Utrecht, Netherlands.
- Hankla, J., **Lyson, T. R.**, Helft, L., Richards, S., & Wyman, J. 2016. Live science in the Valley of the Last Dinosaurs: A public window into the world of paleontology. *Annual Geological Society of America Conference*.
- Lyson, T. R.**, Rossetto, G., Evans, S. J., Bercovici, A., Johnson, K., & Pearson, D. 2016. Dinosaur skeleton occurrence in the latest Cretaceous (late Maastrichtian) Hell Creek Formation of southwestern North Dakota and southeastern Montana. *Annual Geological Society of America Conference*
- Rossetto, G., Lyson, T. R., Evans, E. S. J., Bercovici, A., Pearson, D., & Johnson, K. 2016. Using GIS to map, interpolate, and visualize the terrestrial Cretaceous/Paleogene extinction event in the Williston Basin’s Cedar Creek anticline. *Annual Geological Society of America Conference*
- Lyson, T. R.**, Schachner, E. R., Botha-Brink, J., Scheyer, T. M., Lambertz, M., Bever, G. S., Rubidge, B., de Queiroz, K. 2014. Origin of the novel lung ventilatory apparatus of turtles. *Symposium on Turtle Evolution*, Rio de Janeiro, Brazil .
- Bever, G. S., **Lyson, T. R.**, & Bhullar, A.-B. B. 2014. Fossil evidence for a diapsid origin of the anapsid turtle skull. *Annual Society of Vertebrate Paleontology Conference*, Berlin, Germany.
- Chester, S., Sargis, E., Cohron, C., Hunter, J., & **Lyson, T. R.** 2014. New species of *Mimatuta* (“Condylarthra,” Periptychidae) from the earliest Paleocene of Montana. *Annual Society of Vertebrate Paleontology Conference*, Berlin, Germany.
- Lyson, T. R.**, Schachner, E. R., Botha-Brink, J., Scheyer, T. M., Lambertz, M., Bever, G. S., Rubidge, B., de Queiroz, K. 2014. Origin of the novel lung ventilatory apparatus of turtles. *Annual Society of Vertebrate Paleontology Conference*, Berlin, Germany.
- Lyson, T. R.**, Schachner, E. R., Botha-Brink, J., Scheyer, T. M., Lambertz, M., Bever, G. S., Rubidge, B., de Queiroz, K. 2014. Origin of the novel lung ventilatory apparatus of turtles. *International Congress of Respiratory Science*, Bonn, Germany.
- Bever, G. S. & **Lyson, T. R.** 2013. Cranial evolution and the origin of turtles: Insights from *Eunotosaurus africanus*. *International Congress of Vertebrate Morphology*, Barcelona, Spain.
- Bever, G. S. & **Lyson, T. R.** 2013. Cranial evolution and the origin of turtles: Insights from *Eunotosaurus africanus*. *Annual Society of Vertebrate Paleontology Conference*.

- Bourke, J. M., Ridgely, R. C., Porter, W. R., **Lyson, T. R.**, Schachner, E. R., Bell, P. R., & Witmer, L. M. 2013. Breathing life into dinosaurs: tackling challenges of soft-tissue reconstruction and nasal airflow in extinct species. *International Congress of Vertebrate Morphology*, Barcelona, Spain.
- Bourke, J. M., Porter, W. R., **Lyson, T. R.**, Schachner, E. R., & Bell, P. R. 2013. Breathing life into dinosaurs: tackling challenges of soft-tissue reconstruction and nasal airflow in extinct species. *Annual Society of Vertebrate Paleontology Conference*.
- Lyson, T. R.**, Bever, G. S., Scheyer, T. M., Hsiang, A. Y., & Gauthier, J. A. 2013. Evolutionary developmental model for the origin of the turtle shell. *International Congress of Vertebrate Morphology*, Barcelona, Spain.
- Schachner, E. R., **Lyson, T. R.**, & Farmer, C. G. 2013. Pulmonary anatomy and the evolution of turtles. *Annual Society of Integrative and Comparative Biology Conference*.
- Schachner, E. R., **Lyson, T. R.**, & Farmer, C. G. 2013. Evolution of the respiratory system in Testudines: anatomy and phylogeny. *Experimental Biology*.
- Bercovici, A., Vajda, V., **Lyson, T. R.**, Chester, S. G. B., Sargis, E. J., Pearson, D. A., Joyce, W. G. 2012. Terrestrial ecosystem collapse associated to the K-Pg boundary and dinosaur extinction: palynological evidences. *European Geosciences Union*, Vienna.
- Bercovici, A., Vajda, V., **Lyson, T. R.**, Pearson, D. A. 2012. Climatic disruption after the Cretaceous - Paleogene mass extinction event – evidence from North Dakota, USA. *LUCCI (Centre for Studies of Carbon Cycle and Climate interactions) annual meeting*, Örenäs, Sweden.
- Bever, G., **Lyson, T. R.**, Bhullar, B. 2012. The quadratomaxillary ligament and its implications for the evolution of cranial fenestration in reptiles. *Annual Society of Vertebrate Paleontology Conference*.
- Chapman, S., Sterli, J., **Lyson, T. R.**, & Joyce, W. G. 2012. The anatomy and phylogenetic placement of the Cretaceous stem turtle *Naomichelys speciosa*. *Annual Society of Vertebrate Paleontology Conference*.
- Doman, J. H., Roach, B., & **Lyson, T. R.** 2012. Evidence for periods of increased aridity during the latest Cretaceous of North America: A description of several mass death assemblages of turtles. *Annual Society of Vertebrate Paleontology Conference*.
- Lyson, T. R.** 2012. Evolutionary developmental model for the origin of the turtle shell and a novel functional hypothesis for the origin of the chelonian lung ventilation mechanism. *Annual Society of Vertebrate Paleontology Conference*.
- Lyson, T. R.**, Bever, G. S., Scheyer, T. M., Hsiang, A. Y., & Gauthier, J. A. 2012. Evolutionary developmental model for the origin of the turtle shell. *Symposium on Turtle Evolution*, Tübingen, Germany.
- Lyson, T. R.**, Bever, G. S., Scheyer, T. M., Hsiang, A. Y., & Gauthier, J. A. 2012. Evolutionary developmental model for the origin of the turtle shell. *World Congress of Herpetology*, Vancouver, Canada.
- Lyson, T. R.**, Bever, G. S., Scheyer, T. M., Hsiang, A. Y., & Gauthier, J. A. 2012. Evolutionary developmental model for the origin of the turtle shell. *Palaeontological Society of Southern Africa*, Cape Town, South Africa.
- [Awarded Harrismith Mug for “Best Paper”]
- Warnock, R., Joyce, W. G., Parham, J., **Lyson, T. R.**, & Donoghue, P. 2012. Exploring uncertainty in the calibration of the molecular clock. *Annual Society of Vertebrate Paleontology Conference*.

- Williams, S. & **Lyson, T. R.** 2012. Taphonomic and paleoenvironmental implications of a new mass death assemblage of baenid turtles from the Hell Creek formation (latest Maastrichtian) of southeastern Montana. *Annual Society of Vertebrate Paleontology Conference*.
- Bercovici, A., **Lyson, T. R.**, Vajda, V., Chester, S. G. B., Sargis, E. J., Pearson, D. A., Joyce, W. G. 2011. Dinosaur extinction: no demise prior to the Chicxulub asteroid impact. *2nd Wiman Meeting on Scandinavian-Baltic Palaeontology*, Uppsala, Sweden.
- Bhullar, B.-A. S., Bever, G. S., Merck, J. W., **Lyson, T. R.**, & Gauthier, J. A. 2011. Uniting microevolution and macroevolution in deep time: the zone of variability in Archosauromorpha. *Annual Society of Vertebrate Paleontology Conference*.
- Lamanna, M., Sues, H.-D., Schachner, E., & **Lyson, T. R.** 2011. A new caenagnatid oviraptorosaur (Theropoda: Maniraptora) from the Upper Cretaceous (Maastrichtian) Hell Creek Formation of the Western United States. *Annual Society of Vertebrate Paleontology Conference*.
- Lyson, T. R.**, Bercovici, A., Chester, S. G., Sargis, E., Pearson, D., & Joyce, W. G. 2011. Dinosaur extinction: closing the “three-meter gap.” *Annual Society of Vertebrate Paleontology Conference*.
- Lyson, T. R.**, Sperling, E., Heimberg, A. M., Gauthier, J., & Peterson, K. J. 2010. MicroRNAs support a Testudines – Lepidosaur clade. *Annual Society of Integrative and Comparative Biology Conference*.
- Lyson, T. R.** & Longrich, N. 2010. Spatial niche partitioning in dinosaurs from the latest Cretaceous (Maastrichtian) of North America. *Annual Geological Society of America Conference*.
- Lyson, T.R.**, Bhullar, B. A. S., Bever, G. S. Joyce, W.G., & Gauthier, J. A. 2010. Vertical split of the turtle shoulder girdle pushes the limits of muscle scaffold homology. *Annual Society of Vertebrate Paleontology Conference*.
- Peterson, K. J., **Lyson, T. R.**, Heimberg, A. M., Sperling, E., Gauthier, J., & Donoghue, P. 2010. MicroRNAs and vertebrate phylogenetics. *Annual Geological Society of America Conference*.
- Lyson, T.R.**, Bhullar, B. A. S., Bever, G. S. Joyce, W.G., & Gauthier, J. A. 2010. Vertical split of the turtle shoulder girdle pushes the limits of muscle scaffold homology. *International Conference of Vertebrate Morphology*.
- Lyson, T.R.** & Joyce, W.G. 2009. Paleoeology of two stratigraphically equivalent latest Cretaceous (Maastrichtian) turtle death assemblages. *Gaffney Turtle Symposium*.
- Joyce, W.G. & **Lyson, T. R.** 2009. Plastronid turtles from southwestern North Dakota and their potential link with cyclanorbines. *Gaffney Turtle Symposium*.
- Lyson, T.R.** & Joyce, W.G. 2009. A species level response of baenid turtles across the Cretaceous/Tertiary boundary. *Annual Society of Vertebrate Paleontology Conference*.
- Joyce, W. G. & **Lyson, T. R.** 2009. A neglected lineage of North American turtles fills a major gap in the fossil record. *Annual Society of Vertebrate Paleontology Conference*.
- Lyson, T. R.** & Joyce, W. G. 2008. How did the turtle get its shoulder girdle inside its ribcage, or did it? *Annual Society of Vertebrate Paleontology Conference*.
- Joyce, W. G. & **Lyson, T. R.** 2008. The response of turtles to the breakup of Pangaea: vicariance versus dispersal. *Annual Society of Vertebrate Paleontology Conference*.
- Lyson, T. R.** 2007. Variation, growth, and alpha taxonomy of baenid turtles: Insights from a Late Cretaceous death assemblage. *Annual Society of Vertebrate Paleontology Conference*.

- Schachner, E., **Lyson, T. R.**, Atterholt, J., Hanks, H. 2007. A preliminary report of a new specimen of *Chirostenotes* (Oviraptorosauria: Theropoda) from the Hell Creek Formation of North Dakota. *Annual Society of Vertebrate Paleontology Conference*.
- Lyson, T. R.**, Schachner, E., Hanks, H. D., Tremain, E. 2006. A new turtle taxon (Baenidae) from the latest Cretaceous of North Dakota. *Annual Society of Vertebrate Paleontology Conference*.
- Lyson, T. R.**, Schachner, E., Tremain, E., Hanks, H. D. 2005. Sexual dimorphism in *Eubaena cephalica* from the late Cretaceous (Hell Creek formation) of southwestern North Dakota. *Annual Society of Vertebrate Paleontology Conference*.
- Simonet, J., **Lyson, T. R.**, Hagelin, J. 2005. Chicken embryos are capable of habituating to an avian social odor. *Annual Association for Chemoreception Sciences Conference*.
- Lyson, T. R.**, Schachner, E., Tremain, E., Hanks, H. D. 2004. Preliminary report of a significant assemblage of baenid turtles from the upper Cretaceous (late Maestrichtian) Hell Creek formation of southwestern North Dakota. *Annual Society of Vertebrate Paleontology Conference*.
- Lyson, T. R.**, Tremain, E., Hanks, H.D. 2003. Significant skin structures from a juvenile Hadrosaur from the Hell Creek formation of southwestern North Dakota. *Annual Society of Vertebrate Paleontology Conference*.
- Hanks, H.D., Haire, S., Tremain, E., **Lyson, T. R.** 2002. The power of paleontology. *Annual Geological Society of America Conference*.
- Lyson, T. R.**, Hanks, H.D., Haire, S., Tremain, E. 2002. Technology as a learning tool in earth science curricula. *Annual Geological Society of America Conference*.
- Haire, S., Hanks, H.D., Tremain, E., **Lyson, T. R.** 2002. The use of inquiry-based methods: from the classroom to the field. *Annual Geological Society of America Conference*.
- Tremain, E., Hanks, H.D., Haire, S., **Lyson, T. R.** 2002. The micro-vertebrate fauna from the Carlile Shale (late Cretaceous; Turonian) of Milbank, South Dakota. *Annual Geological Society of America Conference*.
- Hanks, H.D., **Lyson, T. R.**, Tremain, E., Roberts, J., Erickson, B., Haire, S. 2002. A new occurrence of vertebrate trackways from the late Paleocene (Bullion Creek Formation) of Wannagan Creek, North Dakota. *Annual Geological Society of America Conference*.
- Tremain, E., Knauss, G., Hanks, H. D. Haire, S., **Lyson, T. R.**, Kokes, J. 2001. Research and the public, can it work? *Annual Geological Society of America Conference*.
- Hanks, H.D., Haire, S., Knauss, G., Tremain, E., **Lyson, T. R.**, Kokes, J. 2001. A Paleocene classroom in the grasslands of North Dakota. *Annual Geological Society of America Conference*.
- Haire, S., Hanks, H.D., Tremain, E., Knauss, G., **Lyson, T. R.**, Kokes, J. 2001. Fossil insect damage on Paleocene leaves from Wannagan Creek, North Dakota. *Annual Geological Society of America Conference*.
- Lyson, T. R.** and Garstka, W. 1998. Noteworthy skin structures from a Late Cretaceous dinosaur. *Dinofest Symposium*.

Invited Lectures and Departmental Seminars

- 2021 University of Cambridge, Cambridge, United Kingdom, Invited Speaker
- 2020 Southwest Research Institute, Boulder, CO, Invited Speaker
Brigham Young University, Price, UT, Keynote Speaker
- 2018 GeoBonn Conference, Bonn, Germany, Keynote Speaker

- 2017 University of Stony Brook, Invited Speaker (Department of Anatomical Sciences)
University of Witswatersrand, Evolutionary Studies Institute, Johannesburg, South Africa
- 2016 Willi Hennig Society (Buenos Aires, Argentina), Plenary Speaker
Anschutz Medical School (CO, USA), Invited Speaker (Dept. of Biology)
University of Colorado, Boulder (CO, USA), Invited Speaker (Dept. of Geology)
- 2015 Burpee Museum (IL, USA), *Paleofest Symposium* Invited Speaker
- 2014 Millersville University, Invited Speaker (Dept. of Biology)
Notre Dame of Maryland University, Invited Speaker (Dept. of Biology)
Burpee Museum (IL, USA), *Paleofest Symposium* Invited Speaker
Denver Museum of Nature and Science Invited Speaker (Dept. of Earth Sciences)
University of North Dakota, Invited Speaker (Dept. of Geosciences)
- 2013 Burpee Museum (IL, USA), *Paleofest Symposium* Invited Speaker
Chicago Field Museum of Natural History, Invited Speaker (Geology Dept.)
Minot State University, Invited Speaker (Dept. of Biology)
The George Washington University, Invited Speaker (Dept. of Biological Sciences)
- 2012 Brown University Invited Speaker (Ecology and Evolutionary Biology)
Southern Connecticut State University Invited Class Lecturer (Anthropology Dept.)
University of Utah Invited Speaker (Dept. of Biology)
University of Rhode Island Invited Speaker (Dept. of Geosciences)
- 2011 Bard College Invited Speaker (Biology Dept.)
Denver Museum of Nature and Science Invited Speaker
Swarthmore College Biology Colloquium Invited Speaker (Biology Dept.)
Yale University Anthropology Colloquium Invited Speaker (Anthropology Dept.)
- 2010 Yale University Global Change Invited Speaker (Dept. of Geology and Geophysics)
- 2009 International Japanese Dinosaur Expo. “Dinosaurs of the Desert” (Tokyo, Japan)
- 2008 National Geographic Society (Washington, D.C.)
- 2007 International Reading Association (Toronto, Canada)

Select Public Lectures

- 2021 Collegiate Peaks Keynote Lecture – *Rise of the Mammals* (Buena Vista, CO)
- 2020 Denver Museum of Nature & Science – Evolutionary History of Turtles (Denver, CO)
Colorado Yale Association – *Rise of Mammals* (Denver, CO, USA)
Colorado College Women’s Club – *Rise of Mammals* (Colorado Springs, CO, USA)
Colorado Scientific Society – *Earth’s Comeback Story* (Denver, CO, USA)
Natural History Museum of Utah – *Earth’s Last Dinosaur Ecosystems* (Salt Lake, UT)
Google, Boulder CO – *After the Asteroid – Earth’s Comeback Story* (Boulder, CO, USA)
University of Colorado, Denver - *Rise of Mammals* (Denver, CO)
- 2019 Denver Museum of Nature & Science – *Rise of the Mammals* (Denver, CO, USA)
Pioneers Museum – *Rise of the Mammals* (Colorado Springs, CO, USA)
Colorado College – *Rise of the Mammals* (Colorado Springs, CO, USA)
Denver Mile High Rotary – *Rise of the Mammals* (Denver, CO, USA)
- 2017 Ekalaka Museum, *Dino ShinDig Symposium* Invited Speaker (Ekalaka, MT, USA)
Denver Museum of Nature & Science – Cretaceous Crash Course (Denver, CO, USA)
Denver Museum of Nature & Science – Saving the Sea Turtles (Denver, CO, USA)
- 2016 Denver Museum of Nature & Science – Why did the Turtle get a Shell? (Denver, CO, USA)

- Ekalaka Museum, *Dino ShinDig Symposium* Invited Speaker (Ekalaka, MT, USA)
- 2015 Denver Museum of Nature and Science – Evolution of Turtles (Denver, CO, USA)
- 2014 Denver Museum of Nature and Science – Evolution of Dinosaurs (Denver, CO, USA)
- New York Turtle and Tortoise Society (New York City, NY, USA)
- Paleontological Society of Washington (Washington, DC, USA)
- Delaware Vertebrate Paleontological Society (Philadelphia, PA, USA)
- Ekalaka Museum, *Dino ShinDig Symposium* Invited Speaker (Ekalaka, MT, USA)
- 2013 “Lightening Talk” to Board of Directors, Smithsonian Institution (Washington, DC, USA)
- Yale Peabody Museum Marsh Fellows Program (Yale University, New Haven, CT, USA)
- Congressional Night at the Museum, Smithsonian Institution (Washington, DC, USA)
- Ekalaka Museum, *Dino ShinDig Symposium* Invited Speaker (Ekalaka, MT, USA)
- Minot State University, “Darwin Day” Keynote Speaker (Minot, ND, USA)
- Ontario’s Wonderland Park “Physics, Science, Math Day” (Toronto, Canada)
- 2012 Appalachian Mountain Club (Cheshire, CT, USA)
- Howard Hughes Medical Institute (Chevy Chase, MD, USA)
- North Dakota Science Teacher’s Association Keynote Speaker (Bismarck, ND, USA)
- Roberge Early Learning Center (Middletown, CT, USA)
- 2011 Yale Peabody Museum Marsh Fellows Program (Yale University, New Haven, CT, USA)
- Pioneer Trails Regional Museum (Bowman, ND, USA)
- Yale University Geology Dept. Prospective Grad. Students Week (New Haven, CT, USA)
- 2010 Roberge Early Learning Center (Middletown, CT, USA)
- Yale University Geology Dept. Prospective Grad. Students Week (New Haven, CT, USA)
- 2009 Islip’s High School Science Symposium Keynote Speaker (Islip, NY, USA)
- Pioneer Trails Regional Museum (Bowman, ND, USA)
- Yale University Geology Dept. Prospective Grad. Students Week (New Haven, CT, USA)
- 2008 Yale Peabody Museum docents (Yale University, New Haven, CT, USA)
- Plainfield School’s “Connecticut Loves to Read Day” (Plainfield, CT, USA)
- Moosup Elementary School (Moosup, CT, USA)
- Marmarth, North Dakota Community Center (Marmarth, ND, USA)
- 2006 Delaware Vertebrate Paleontological Society (Philadelphia, PA, USA)
- 2004 Mile Creek Elementary School (Old Lyme, CT, USA)
- 2001 Broadus Elementary School (Broadus, MT, USA)
- Plevna Elementary School (Plevna, MT, USA)

Other Professional Honors

Discover Magazine Top 100 Science Stories of 2011 (35th).

Discover Magazine Top 100 Science Stories of 2009 (46th).

Select Media Recognition

2019 -**Nova** documentary entitled “Rise of the Mammals”

-**New York Times, Wall Street Journal, Washington Post, CNN, Smithsonian Magazine** etc. on published research on the recovery of life after the Cretaceous–Paleogene mass extinction – over 800 stories that reached 1.7 billion people.

-Exhibit at the Denver Museum of Nature & Science entitled “*After the Asteroid: Earth’s Comeback Story*” featuring the discovery and published science on the recovery of life after the Cretaceous–Paleogene mass extinction.

- 2018 -**BBC, Guardian, The Atlantic, NPR, CNN, National Geographic, etc.** on published research on why certain birds survived the Cretaceous/Paleogene mass extinction event published in *Current Biology* – 136 stories with over 40.4 million unique views
- 2017 -**Nova** documentary entitled “Day the Dinosaurs Died” – 3 million viewers on day of broadcast
 -**NHK (Japan)** documentary on the extinction of the dinosaurs – over 4 million viewers on day of broadcast
 -**Smithsonian Magazine** on public fossil digs and research on latest Cretaceous dinosaur ecosystems
- 2016 -**The Atlantic, Smithsonian Magazine, The Denver Post, Colorado Public Radio, etc.** on published research on why the turtle got its shell published in *Current Biology* – 133 stories in 19 countries with over 300 million unique views
- 2015 -**NPR** “Evolution of Turtles” comment/quotes as an expert in the field
 -**Nova** documentary entitled “The Making of North America”
- 2014 -**BBC News, CNN, NPR, CBS, Washington Post, Pittsburgh Post, Smithsonian Magazine, The Independent, etc.** on published research describing a new large bodied oviraptorosaurian theropod dinosaur from the latest Cretaceous of North America published in *PLOS One*.
 -**Earth Magazine** “The Trouble with Turtles: Paleontology at a Crossroads.”
- 2013 - **BBC News, Boston Globe, The Times of London, CBS radio, CBC radio, The Australian, etc.** on published research on the evolutionary origin of the turtle shell published in *Current Biology*
 - **Howard Hughes Medical Institute** documentary entitled “The Day the Mesozoic Died”
 - **Science Channel** documentary entitled “How the Earth Works – Meteorite Armageddon”
- 2012 - **New York Times** “For Dakota paleontologist, it all started with a turtle”
- 2011 - **Science Now** “Case closed for dino killer?”
 - **Nature News** “The youngest dinosaur fragment yet?”
 - **BBC News, The Guardian, CBS, ABC, China Daily, National Geographic, etc.** on published research on a fossil discovery and its impact on the cause of the Cretaceous/Paleogene extinction event published in *Biology Letters*
 - **Discovery News** “Tough turtle survives what dinosaurs couldn’t” on published research about turtle survivorship across the Cretaceous/Paleogene extinction event published in *Journal of Vertebrate Paleontology*
 - **History** “Survivors in a half shell: Turtles withstood dinosaur die-out”
- 2010 - **Live Science, Fox News, MSNBC** “Dinosaur graves show how they lived”
- 2009 - **National Geographic** “Dinosaur mummy’ has skin like birds and crocodiles”
 - **NPR** “Fossil Hunters Uncover Rare Dinosaur Skin”
 - **Fox’s** “Are you Smarter than a 5th Grader?” scientific guest/questioner
 - **TV Tokyo** interview
 - **North Dakota Horizons** magazine article
- 2008 - **CNN’s Young People Who Rock** guest
 - **AP Press**, “Workers uncovering mummified dinosaur.” March 18, 2008.
 - **South Dakota Public Broadcasting** A half hour documentary regarding my field work

- 2007 - **National Geographic Television**, “Dinosaur Autopsy.” December 9, 2007. A one-hour documentary about the excavation and ongoing research on a hadrosaur dinosaur “mummy” I discovered
- **ABC Good Morning America** guest
 - **Fox ‘N Friends** guest
- 2006 - **Washington Post**, “Scientists get rare look at Dinosaur soft tissue.” December 3, 2007
- 2006 - **Fox News**, “Amateur Paleontologists get to Dig up Dinosaurs, Keep Bones” August 3, 2006
- **Live Science**, “Digging up Dinosaurs...and Keeping the Bones” August 2, 2006
 - **Minneapolis Pioneer Press**, “Dinosaur Excavation Vacation” September, 2006
- 2005 - **New York Times**, “Digging up Dinosaur Bones in the Fossil-Rich Badlands”, Sept. 11

Student/Intern Advising (Research)

- 2019-2021 Committee member: Master’s student Mariah Green (UC Boulder)
- 2019-present Committee member: Master’s student Ryan Allen (UC Boulder)
- 2017-2019 Committee member: Master’s student Anthony Fuentes (University of New Hampshire)
- 2016-2019 Committee member: Master’s student Vikki Crystal (UC Boulder)
- 2017 Advised Yann Rollet’s work on digital segmentation of early Paleocene mammal
- 2016-2017 Advised Richard Matt Hess’ work on post K/Pg recovery (DMNS)
- 2015-2016 Co-advised Gabriella Rossetto’s GIS work on the K/Pg extinction (DMNS)
- 2015-2016 Advised Erica Evans dGPS work on the K/Pg extinction (DMNS)
- 2011-2014 Co-advised Jake Saylor’s undergraduate senior thesis (Yale University)
- 2010-2011 Co-advised Natasha Vitek’s undergraduate senior thesis (Yale University)

Additional Public Outreach

- 2013 – Worked with artists and animators to create three movies documenting the evolutionary origin of the turtle shell (based on developmental and fossil data), which combined have over 500,000 views:
<https://www.youtube.com/watch?v=qIOPDysP74g>
<https://www.youtube.com/watch?v=NphNApmSZ0U>
https://www.youtube.com/watch?v=fHVIEUgF_nw
- 2003-present Provide hands on training in paleontology and geology for over 60 people each year, including numerous high school students and teachers.
- 2003-present Raised money (\$200,000) to build a local natural history research center in Marmarth, ND, USA (www.mrfdigs.com)
- 2004-2010 Organized an annual community event (DinoDaze) to provide an economic stimulus for the community and raise local geological and paleontological awareness
- 2008-2011 Participated in The Johns Hopkins University Center for Talented Youth program, Yale Peabody Museum