**CURRICULUM VITA**

**MICHAEL D. D’EMIC**

**EDUCATION**

PhD, Earth and Environmental Sciences, University of Michigan, 09/2006–08/2011

MS, Earth and Environmental Sciences, University of Michigan, 09/2006–07/2010

BA, Biology (with Distinction), Boston University, 09/2002–05/2006

**PROFESSIONAL EXPERIENCE – ACADEMIC**

FULL-TIME

Associate Professor, Adelphi University, 09/2020–present

Assistant Professor, Adelphi University, 09/2015–08/2020

Research Instructor, Stony Brook University, 08/2012–08/2015

Visiting Assistant Professor, Georgia Southern University, 08/2011–07/2012

PART-TIME

Research Associate, Sam Noble Museum, University of Oklahoma, 01/2019­–present

Adjunct Assistant Professor (research), Stony Brook University, 10/2015–present

Research Associate, Burpee Museum of Natural History, 09/2013–09/2017

**PUBLICATIONS**

*Updated May 2024*

*h-index: 21 i-10 index: 27*

*Total citations: 1,716*

REFEREED JOURNAL ARTICLES (asterisk indicates student co-author)

33. **D’Emic, M.D.** 2023. The evolution of maximum terrestrial body size in sauropod dinosaurs. *Current Biology* 33, 349–350.

32. **D’Emic, M.D.**,O'Connor, P.M., Sombathy, R.S.\*, Cerda, I., Pascucci, T.\*, Varricchio, D., Pol, D., Dave, A.\*, Coria, R., and Curry Rogers, K.A. 2023. Developmental strategies underlying gigantism and miniaturization in non-avialan theropod dinosaurs. *Science* 379, 811–814.

31. Finch, S.P.\*, **D’Emic, M.D**. 2022. Evolution of amniote dentine apposition rates. *Biology Letters* 18: 20220092. https://doi.org/10.1098/rsbl.2022.0092

30. Foreman, B.Z., **D’Emic, M.D**., Malone, D., Craddock, J.P. 2022*.* Over- to Under- to Back-filled: Early Evolution of the Sevier Foreland Basin in Wyoming, U.S.A. *Geological Society of America Special Paper*: Tectonic Evolution of the Sevier-Laramide Hinterland, Thrust Belt, Foreland and Post-Orogenic Slab Rollback (150–20 Ma), //doi.org/10.1130/2021.2555(03).

29. Malone, J.R.\*, Strasser, J., Malone, D.H., **D’Emic, M.D**., Brown, L.\*, Craddock, J.P. 2021. Upper Jurassic dinosaurs on the move: gastrolith provenance and long-distance migration. *Terra Nova* 33:375–382*.*

28. **D’Emic, M.D.** and Carrano, M.T. 2020. Redescription of brachiosaurid sauropod dinosaur material from the Upper Jurassic Morrison Formation, Colorado, USA. *The Anatomical Record* 303:732–758.

27. **D’Emic, M.D.,** Pascucci, T.R.\*, O’Connor, P.M., Gavras, J.\*, Mardakhayava, E.\*, and Lund, E.\* 2019. Evolution of high tooth replacement rates in theropod dinosaurs. *PLOS ONE* doi:10.1371/journal.pone.0224734.

26. Grunmeier, O.\* and **D’Emic, M.D**. 2019. Scaling of statically derived osteocyte lacunae: implications for paleophysiological reconstruction. *Biology Letters* 15: 20180837.

25. **D’Emic, M.D.,** Foreman, B.Z., Jud, N.A., Britt, B.B., Crowley, J.L., Schmitz, M. 2019*.* Chronostratigraphic revision of the Cloverly Formation (Lower Cretaceous), Western Interior, USA. *Bulletin of the Peabody Museum of Natural History* 60:3–40.

24. Jud, N.A., **D’Emic, M.D.,** Williams, S.A., Mathews, J.\*, Tremaine, K.\*, and Bhattacharya, J. 2018. A new fossil assemblage shows that large angiosperm trees grew in North America by the Turonian (Late Cretaceous). *Science Advances* 4: eaar8568.

23. Curry Rogers, K.A., Whitney, M.\*, **D’Emic, M.D**., and Bagley, B. 2016. Precocity in a tiny titanosaur from the Cretaceous of Madagascar. *Science* 352:450–453.

22. Melstrom, K.M.\*, **D’Emic, M.D**., Wilson, J.A., Chure, D. 2016. A juvenile sauropod dinosaur from the Late Jurassic of Utah, USA, presents further evidence of an avian style air-sac system. *Journal of Vertebrate Paleontology* e1111898.

21. **D’Emic, M.D.**, Foreman, B.Z., Jud, N.A.\* 2016. Anatomy, systematics,

paleoenvironment, and age of the sauropod dinosaur *Sonorasaurus thompsoni*

from the Cretaceous of Arizona, USA. *Journal of Paleontology* 90:102–132.

20. **D’Emic, M.D.** and Foster, J.F. 2016. The oldest Cretaceous North American sauropod dinosaur. *Historical Biology* 28:470-478.

19. Hill, R.V., **D’Emic, M.D.**, Bever, G., Norell, M. 2015*.* A complex hyobranchial apparatus in a Cretaceous dinosaur and the antiquity of avian paraglossalia. *Zoological Journal of the Linnean Society* 175:892–909.

18. **D’Emic, M.D**., Smith, K.M., Ansley, Z.\* 2015. Unusual costal histology and morphology in mosasaurs (Squamata). *Palaeontology* 58:511–520.

17. Carrano, M.T. and **D’Emic, M.D**. 2015. Osteoderms of the titanosaur sauropod dinosaur *Alamosaurus sanjuanensis* Gilmore, 1922. *Journal of Vertebrate Paleontology* e901334.

16. **D’Emic, M.D.** 2015. Comment on "Evidence for Mesothermy in Dinosaurs."

*Science* 348:982b.

15. **D’Emic, M.D.**, Mannion, P.D., Upchurch, P., Benson, R.B.J., Pang, Q. 2013*.* Osteology of *Huabeisaurus allocotus* (Dinosauria: Sauropoda) from the Upper Cretaceous of China. *PLOS ONE* 8: e69375

14. **D’Emic, M.D.** and Benson, R.B.J. 2013. Measurement, variation, and scaling of osteocyte lacunae: a case study in birds. *Bone* 57:300-310.

13. **D’Emic, M.D.**, Whitlock, J.A., Smith, K.M., Wilson, J.A., Fisher, D.C. 2013. Evolution of high tooth replacement rates in sauropod dinosaurs. *PLOS ONE* 8: e69235.

12. **D’Emic, M.D.** 2013. Revision of the sauropod dinosaurs of the Trinity Group (Lower Cretaceous) of Texas and Oklahoma, USA. *Journal of Systematic Palaeontology* 11:707–726.

11. **D’Emic, M.D.** 2012*.* Early evolution of titanosauriform sauropod dinosaurs.

*Zoological Journal of the Linnean Society* 166: 624–671.

10. **D’Emic, M.D.** and Foreman, B.Z. 2012*.* The beginning of the sauropod hiatus in North America: insights from the Cloverly Formation of Wyoming. *Journal of Vertebrate Paleontology* 32: 883–902.

9. **D’Emic, M.D.,** Melstrom, K., and Eddy, D.R. 2012*.* Paleobiology and geographic range of the large-bodied Cretaceous theropod dinosaur *Acrocanthosaurus atokensis*. *Palaeogeography, Palaeoclimatology, Palaeoecology* 333–334: 13–23.

8. Curry Rogers, K.A., **D’Emic, M.D.**, Vickaryous, M., Rogers, R., and Cagan, A. 2011. Sauropod dinosaur osteoderms from the Late Cretaceous of Madagascar. *Nature Communications* 2: 564–569.

7. **D’Emic, M.D.,** Wilson, J.A., and Williamson, T.E. 2011. A sauropod dinosaur pes from the latest Cretaceous of North America and the validity of *Alamosaurus sanjuanensis* (Sauropoda, Titanosauria). *Journal of Vertebrate Paleontology* 31: 1072–1079.

6. Wilson, J.A., **D’Emic, M.D.,** Ikejiri, T., Moacdieh, E., and Whitlock, J.A. 2011. A nomenclature for vertebral fossae in sauropods and other saurischian dinosaurs. *PLOS One* 6: e17114.

5. **D’Emic, M.D.,** and Wilson, J.A. 2011. New remains attributable to the holotype of *Neuquensaurus australis*: implications for the taxonomy of saltasaurine sauropods. *Acta Palaeontologica Polonica* 56: 61–73.

4. Whitlock, J.A., **D’Emic, M.D.,** and Wilson, J.A. 2011*.* Cretaceous diplodocids in Asia? Re-evaluating the affinities of a fragmentary specimen. *Palaeontology* 54: 351– 364*.*

3. **D’Emic, M.D.,** Wilson, J.A., and Thompson, R. 2010. The end of the sauropod dinosaur hiatus in North America. *Palaeogeography, Palaeoclimatology, Palaeoecology* 297: 486–490.

2. Wilson, J.A., **D’Emic, M.D.**, Curry Rogers, K.A., Mohabey, D.M., and Sen, S. 2009. Reassessment of the sauropod dinosaur *Jainosaurus (= “Antarctosaurus”) septentrionalis* from the Upper Cretaceous of India. *Contributions from the Museum of Paleontology of the University of Michigan* 32: 17–40.

1. **D’Emic, M.D**., Wilson, J.A., and Chatterjee, S. 2009. The titanosaur osteoderm record: review and first definitive specimen from India. *Journal of Vertebrate Paleontology* 29: 165–177.

**OTHER PAPERS AND PRESENTATIONS**

5. **D’Emic, M.D.**, 2023. Evolution of the Earth Shakers: How sauropod dinosaurs became the largest land animals again and again. *Scientific American* 329: 26–33. [Cover Article].

4. López-Arbarello, A. and **D’Emic, M.D**. 2023. New fossils, new ideas: selected contributions of vertebrate paleontology to scientific knowledge. *Journal of Vertebrate Paleontology*, 42:e2267264. [Editorial]

3. **D’Emic, M.D.**, Hoffmann, S.H., and Foreman, B.Z. 2020. Body size evolution of the large pantodont mammal Coryphodon during Paleogene hyperthermal events. *Short Contributions of the Keck Geology Consortium*, 33: 1–4.

2. **D'Emic, M.D.** 2017. Book Review: *Origins: The Search for Our Prehistoric Past* by Frank H. T. Rhodes. *Quarterly Review of Biology* 92:308–309.

1. Curry Rogers, K.A. and **D’Emic, M.D.** 2012. Triumph of the Titans. *Scientific American* 306: 48–55.

**REFEREED PRESENTATIONS (asterisk indicates student co-author)**

60. Unruh-Friesen, E.\*, **D’Emic, M.D**., Smiley, T.M., and Hoffmann, S.H. 2024. Mammalian paleoecology revealed by stable isotopes through Eocene hyperthermal events. Northeast Regional Vertebrate Evolution Symposium, New York, New York.

59. **D’Emic, M.D**., Finch, S.P.\* 2023. Determinants of dentine growth rates across Amniota. Society of Vertebrate Paleontology 83rd Annual Meeting, Cincinnati, Ohio.

58. Sombathy, R.S.\*, **D’Emic, M.D**., O’Connor, P.M. 2023. Growth and ontogeny in the theropod dinosaur *Ceratosaurus*. Society of Vertebrate Paleontology 83rd Annual Meeting, Cincinnati, Ohio.

57. Kalu, Q.\*, Suarez, C., Sharman, G., Suarez, M., Allen, M., and **D’Emic, M.D.** pCO2 Calculations from Cloverly Formation in northern Wyoming using pedogenic carbonate nodules. The Anatomical Record, 14th Symposium on Mesozoic Terrestrial Ecosystems and Biota, 306.

56. **D’Emic, M.D.**,O'Connor, P.M., Sombathy, R.S.\*, Cerda, I., Pascucci, T.\*, Varricchio, D., Pol, D., Dave, A.\*, Coria, R., and Curry Rogers, K.A. The evolution of gigantism and miniaturization in theropod dinosaurs. Society of Vertebrate Paleontology 82nd Annual Meeting, Toronto, Canada.

55. Sombathy, R.S.\* and **D’Emic, M.D.** 2022. The significance of ‘multi-lags’ in cortical bone inferred from a large histological sample of the theropod dinosaur *Allosaurus*. Society of Vertebrate Paleontology 82nd Annual Meeting, Toronto, Canada.

54. Finch, S.P.\* and **D’Emic, M.D.** 2022. A juvenile specimen of the ornithopod dinosaur *Tenontosaurus* from the Lower Cretaceous of Montana, U.S.A. Society of Vertebrate Paleontology Paleontology 82nd Annual Meeting, Toronto, Canada.

53. Harper, A.Q.\* and **D’Emic, M.D.** 2022. New crocodyliform material from the Cloverly Formation (Albian) of Wyoming, U.S.A. Society of Vertebrate Paleontology 82nd Annual Meeting, Toronto, Canada.

52. **D’Emic, M.D.** 2021. Evolution of body size in sauropod dinosaurs. Society of Vertebrate Paleontology 81st Annual Meeting [virtual meeting].

51. Finch, S.\* and **D’Emic, M.D.** 2021. Patterns in the scaling of amniote dentine apposition. Society of Vertebrate Paleontology 81st Annual Meeting [virtual meeting].

50. Sombathy, R.\* and **D’Emic, M.D**. 2021. Reconstructing growth and body size in *Allosaurus* across its paleolatitudinal range in North America. Society of Vertebrate Paleontology 81st Annual Meeting [virtual meeting].

49. Gonzalez, R.\*, **D’Emic, M.D.,** Hoffmann, S., Adams, T., Foreman, B. 2020. Estimating the mass of the large mammal *Coryphodon* through Paleogene hypothermal events. Annual meeting of the Geological Society of America, Rocky Mountain Section.

48. Randall, E.\*, **D’Emic, M.D.,** Foreman, B.Z., Hoffmann, S., Sageman, I., Wilson M. 2020. Paleoenvironments containing *Coryphodon* in the Fort Union and Willwood Formations spanning the Paleocene-Eocene Thermal Maximum (PETM), Bighorn Basin, Wyoming. Annual meeting of the Geological Society of America, Rocky Mountain Section.

47. Bowers G.W.\*, Hoffmann, S., **D’Emic, M.D.** 2020. Long bone histology of the large Paleogene mammal *Coryphodon*. Annual meeting of the Geological Society of America, Rocky Mountain Section.

46. Sageman, I.\*, **D’Emic M.D.,** Hoffmann, S., Foreman, B.Z., Randall, E.\*, Hurtgen, M.T. 2020. Climatic and paleoenvironmental changes associated with the evolution of the first mammalian megaherbivore *Coryphodon* during Paleogene hyperthermal events, Bighorn Basin, Wyoming. Annual meeting of the Geological Society of America, Rocky Mountain Section.

45. Mayback, D.\*, **D’Emic M.D.,** Hoffmann, S. 2020. Using cementum histology to estimate age in *Coryphodon*. Annual meeting of the Geological Society of America Rocky Mountain Section 2020.

44. Skonieczny, K.\*, **D’Emic, M.D.,** Burk, C., Hoffmann, S. 2020. Cementum analysis for age estimation in fossil mammals: micro-CT vs. histological thin sections. Society for Integrative & Comparative Biology, Austin, TX.

43. Skonieczny, K.\*, **D’Emic, M.D**., and Hoffmann, S.H. 2019. Cementum analysis in *Coryphodon* using microCT. Society of Integrative and Comparative Biology, Northeast Regional Meeting, Boston, MA.

42. Pascucci, T.R.\* and **D’Emic, M.D**. 2019. Systematic revision of *Deinonychus* including data from a new juvenile specimen. Northeast Regional Vertebrate Evolution Symposium, Old Westbury, New York.

41. Skonieczny, K.\*, **D’Emic, M.D**., and Hoffmann, S.H. 2019. Do look a *Coryphodon* in the mouth. Northeast Regional Vertebrate Evolution Symposium, Old Westbury, New York.

40. **D’Emic, M.D.,** O’Connor, P.M., Gavras, J.\*, Mardakhayava, E.\*, and Lund, E.\* 2018. Modeling tooth formation time to predict tooth replacement rates in *Majungasaurus* and other theropod dinosaurs. Society of Vertebrate Paleontology 78th Annual Meeting, Albuquerque, NM.

39. Pascucci, T.R.\*, **D’Emic, M.D.** 2018. Growth of the dromaeosaurid theropod dinosaur *Deinonychus antirrhopus.* Society of Vertebrate Paleontology 78th Annual Meeting, Albuquerque, NM.

38. Grunmeier, O.\*, **D’Emic, M.D.** Scaling of statically derived osteocyte lacunae: implications for paleophysiological reconstruction. Society of Vertebrate Paleontology 78th Annual Meeting, Albuquerque, NM.

37. Flores, A.\*, **D’Emic, M.D.** 2018. Understanding the factors underlying growth variation in the theropod dinosaur *Allosaurus.* Society of Vertebrate Paleontology 78th Annual Meeting, Albuquerque, NM.

36. **D’Emic, M.D.**, Melstrom, K.M.\*, Pascucci, T.R.\*, and Hoffmann, S.H. 2018. Estimating body mass from tooth dimensions in extinct mammals. Northeast Regional Vertebrate Evolution Symposium, Old Westbury, New York.

35. Jud, N.A., **D’Emic, M.D.**, Williams, S.A., Mathews, J.\*, Tremaine, K.\*, and Bhattacharya, J. Fossil woods and the evolution of angiosperm body size. Botany Conference 2017, Ft. Worth, TX.

34. Foreman, B.Z., **D’Emic, M.D.**, Malone, D., Craddock, J. 2017. Comparison of U-Pb detrital zircon provenance between upper Jurassic Morrison Formation and Lower Cretaceous Cloverly Formation (Bighorn Basin, Northwest Wyoming, USA). Geological Society of America Annual Meeting, Seattle, WA. **[session Co-chair]**

33. **D’Emic, M.D.**, Foreman, B.Z., Jud, N.A., Britt, B.B., Crowley, J., Schmitz, M. 2017. Revised age of the Cloverly Formation (Western Interior, USA). Geological Society of America Annual Meeting, Seattle, WA. **[session Co-chair]**

32. **D’Emic, M.D.**, O’Connor, P.M., Mardakhayava, E.\*, Lund, M.\* 2017. Rapid tooth replacement rates in the theropod dinosaur *Majungasaurus* from the Late Cretaceous (Maastrichtian) of Madagascar. Fourth Meeting of the International Society of Paleohistology, Trenton, NJ.

31. **D’Emic, M.D**., Curry Rogers, K.A., O’Connor, P.M. 2016. Bone histology reveals unusual life history in the theropod dinosaur *Majungasaurus crenatissimus* from the latest Cretaceous of Madagascar. Society of Vertebrate Paleontology 76th Annual Meeting, Salt Lake City, UT.

30. **D’Emic, M.D.** 2016. The problem of scale dependence of vertebrate growth rates. Northeast Regional Vertebrate Evolution Symposium, Garden City, NY.

29. Hill, R.V., **D’Emic, M.D**., Bever, G.S., Norell, M.A. 2016. Ontogenetic endpoints and taxonomic identities of ankylosaurid dinosaurs from the Djadokhta formation of Mongolia. Society of Vertebrate Paleontology 76th Annual Meeting, Salt Lake City, UT.

28. **D’Emic, M.D.** 2015. Accounting for scaling issues in the estimation of growth rate suggests endothermy in non-avian dinosaurs. Society of Vertebrate Paleontology 75th Annual Meeting, Dallas, TX.

27. Williams, S.A., **D’Emic, M.D.**, Bennett, S.C., Mathews, J.C.\*, Tremaine, K.M.\*, Bhattacharya, J.P. 2015. A new terrestrial vertebrate fauna from the Late Cretaceous Ferron Sandstone of North America. Society of Vertebrate Paleontology 75th Annual Meeting, Dallas, TX.

26. Hill, R.V., **D’Emic, M.D.**, Bever, G.S., Norell, M.A. 2015. Braincase anatomy and ontogeny in juvenile *Pinacosaurus grangeri* (Ornithischia: Ankylosauria). Society of Vertebrate Paleontology 75th Annual Meeting, Dallas, TX.

25. Tremaine, K.\*, **D’Emic, M.D**., Williams, S., Hunt-Foster, R.K., Foster, J., Mathews, J.\* 2015. Paleoecological implications of a new specimen of the ankylosaur *Mymoorapelta maysi* from the Hanksville-Burpee quarry, latest Jurassic (Tithonian) Morrison Formation (Brushy Basin Member). Society of Vertebrate Paleontology 75th Annual Meeting, Dallas, TX.

24. Curry Rogers, K.A., Whitney, M.\*, Bagley, B., **D’Emic, M.D.** 2015. Tiny titanosaurs: primary growth and early ontogeny in a very young sauropod from Madagascar. Society of Vertebrate Paleontology 75th Annual Meeting, Dallas, TX.

23. **D’Emic, M.D.**, Benson, R.B.J. 2015. Using bone microstructure to infer life history traits. Northeast Regional Vertebrate Evolution Symposium, New York, NY.

22. Hill, R., **D’Emic, M.D.**, Bever, G., and Norell, M. 2014. The most complete, ossified hyobranchial apparatus of a fossil dinosaur: implications for ontogeny and functional anatomy. Society of Vertebrate Paleontology 74th Annual Meeting, Berlin, Germany.

21. Carrano, M., **D’Emic, M.D.** 2014.First definitive presence of osteoderms of the titanosaurian sauropod dinosaur *Alamosaurus sanjuanensis*. Society of Vertebrate Paleontology 74th Annual Meeting, Berlin, Germany.

20. Ansley, Z.T.\*, **D’Emic, M.D.**, and Smith, K.M. 2013. Unusual costal bone morphology and histology in a large Cretaceous mosasaur (Squamata). Geological Society of America 125th Annual Meeting, Denver, CO.

19. Whitlock, J.A., **D’Emic, M.D.**, and Smith, K.M. 2013. Complex tooth histology in a sauropod dinosaur. Society of Vertebrate Paleontology 73rd Annual Meeting, Los Angeles, CA.

18. **D’Emic, M.D.** and Sereno, P.C. 2013. Bone histology of sauropod dinosaurs from Niger. Society of Vertebrate Paleontology 73rd Annual Meeting, Los Angeles, CA.

17. Ansley, Z.T.\*, Smith, K.M., **D’Emic, M.D.** 2013. Tooth age and growth rate in the mosasaur *Tylosaurus* *proriger*. Georgia Academy of Sciences Annual Meeting. v.71. no.1. p. 65

16. **D’Emic, M.D.** and Wilson, J.A. 2012. Bone histology of a dwarf sauropod dinosaur from the latest Cretaceous of Jordan and a possible biomechanical explanation for ‘titanosaur-type’ bone histology. Society of Vertebrate Paleontology 72nd Annual Meeting, Raleigh, NC.

15. Upchurch, P., **D’Emic, M.D.**, Mannion, P.D., Benson R.B.J., and Pang, Q. 2012. New information on the anatomy and relationships of titanosauriform sauropods from the Cretaceous of East Asia. Society of Vertebrate Paleontology 72nd Annual Meeting, Raleigh, NC.

14. Ansley, Z.T.\*, **D’Emic, M.D.**, and Smith, K.M. 2012. Tooth replacement patterns and rates in the Late Cretaceous mosasaur *Tylosaurus proriger* (Squamata, Reptilia). Georgia Academy of Sciences Annual Meeting.

13. **D’Emic, M.D.** 2011. Early evolution of titanosauriform sauropod dinosaurs. IV Congreso Latinamericano, Paleontologia de Vertebratos. San Juan, Argentina.

12.Curry Rogers, K.A., **D’Emic, M.D.**,and Vickaryous, M. 2011.Titanosaur osteoderm anatomy, ontogeny, and function: new data from *Rapetosaurus* *krausei* (Maevarano Formation, Madagascar). IV Congreso Latinamericano, Paleontologia de Vertebratos. San Juan, Argentina.

11. **D’Emic, M.D.** 2011. Early evolution of titanosauriform sauropod dinosaurs: taxonomic revision, phylogeny, and paleobiogeography. Society of Vertebrate Paleontology 71st Annual Meeting, Las Vegas, NV.

10. Wilson, J.A. and **D’Emic, M.D.** 2011. A nearly complete sauropod pes from the latest Cretaceous of North America and the validity of *Alamosaurus*. Society of Vertebrate Paleontology 71st Annual Meeting, Las Vegas, NV.

9. Melstrom K.\* and **D’Emic, M.D.** 2011. *Acrocanthosaurus* *atokensis* from the Cloverly Formation of Wyoming: implications for Early Cretaceous North American ecosystems. Society of Vertebrate Paleontology 71st Annual Meeting, Las Vegas, NV.

8. **D’Emic, M.D.,** Wilson, J.A., and Thompson, R. 2010. The end of the sauropod dinosaur hiatus in North America. Geological Society of America 122nd Annual Meeting, Denver, CO.

7. **D’Emic, M.D.**, and Wilson, J.A. 2010. Augmentation of the holotype of *Neuquensaurus* *australis*: implications for the taxonomy of saltasaurine sauropods. Society of Vertebrate Paleontology 70th Annual Meeting, Pittsburgh, PA.

6. Curry Rogers, K.A., **D’Emic, M.D.**, and Cagan, A.\* 2010. Titanosaur osteoderm ontogeny, anatomy, and function: new data from *Rapetosaurus* *krausei* (Maevarano Formation), Madagascar. Society of Vertebrate Paleontology 70th Annual Meeting, Pittsburgh, PA.

5. Whitlock, J.A., **D’Emic, M.D.**, Fisher, D.C., Smith, K.M., and Wilson, J.A. 2010. Trends in sauropod tooth size, shape, and replacement rate. Society of Vertebrate Paleontology 70th Annual Meeting, Pittsburgh, PA.

4. Wilson, J.A., **D’Emic, M.D.**, Ikejiri, T., Moacdieh, E., and Whitlock, J.A. 2010*.* A nomenclature for vertebral fossae in sauropods and other saurischian dinosaurs. Society of Vertebrate Paleontology 70th Annual Meeting, Pittsburgh, PA.

3. **D’Emic, M.D.**, Whitlock, J.A., Smith, K.M., Wilson, J.A., and Fisher, D.C. 2009. The evolution of tooth replacement rates in sauropod dinosaurs. Society of Vertebrate Paleontology 69th Annual Meeting, Bristol, England.

2. **D’Emic, M.D.**, and Britt, B.B. 2008. Reevaluation of the phylogenetic affinities and age of a basal titanosauriform (Sauropoda: Dinosauria) from the Early Cretaceous Cloverly Formation of North America. Society of Vertebrate Paleontology 68th Annual Meeting, Cleveland, OH.

1. **D’Emic, M.D.**, Wilson, J.A., and S. Chatterjee, 2007. The first definitive titanosaur (Sauropoda) osteoderm from India and the nature of the titanosaur osteoderm record. Society of Vertebrate Paleontology 67th Annual Meeting, Austin, TX.

**GRANTS**

*Total Awarded: $262,498*

$1,169—"The growth and evolution of a group of long-necked dinosaurs from Utah, USA”. Adelphi University Faculty Development Grant, Awarded 2023. PI: D’Emic

$6,150— “The evolution of the first mammalian megaherbivore”. Eppley Foundation for Research. Awarded 2022. PI: D’Emic

$5,000 — “Impact of climate on the evolution of growth.” Toomey Foundation for the Natural Sciences. Awarded 2022. PI: D’Emic

$38,255 — “Survey of the abundant fossil resources of the Pryor Mountain Wilderness Study Area.” National Conservation Lands Scientific Support Study Program, United States Bureau of Land Management. Awarded 2022–2026. PI: D’Emic

$9,889 — “Fossil survey of the Pryor Mountain Wilderness Study Area.” National Conservation Lands Scientific Support Study Program, United States Bureau of Land Management. Awarded 2020–2021. PI: D’Emic

$3,000 — “Investigating extinction through excavation of a rare and extensive dinosaur bonebed.” Franklin Research Grant, American Philosophical Society. Awarded 2020–present. PI: D’Emic

$14,458 – “Fossils of the Pryor Mountain Wilderness Study Area: Citizen Science Meets Student Training.” National Conservation Lands Scientific Support Study Program, United States Bureau of Land Management. Awarded 2019. PI: D’Emic

$45,725 — “Body Size Evolution of the First Mammalian Megaherbivore during Paleogene Hyperthermal Events.” Keck Geology Consortium. Awarded 2019. co-PI: Dr. Simone Hoffmann, NY Institute of Technology.

$4,945 — “Excavation of Dinosaur Fossils in the Western USA.” Adelphi University Faculty Development Grant, Awarded 2019. PI: D’Emic

$2,000 — “Excavation of New Dinosaur Species from Wyoming: Implications for Extinction.” Bettelheim Award, Adelphi University, Awarded 2017. PI: D’Emic

$5,000 — “Excavation of Dinosaurs from a Unique Time in the History of North America.” Adelphi University Faculty Development Grant, Awarded 2017. PI: D’Emic

$6,992 — “Excavation of one of the Largest Dinosaur Deposits in the World: Scientific Collection meets Public Education.” Canyonlands Natural History Association, Awarded 2017. PI: D’Emic

$6,850 — “Paleobiology and Paleoecology of New Fossil Species from Wyoming.” Eppley Foundation for Research. Awarded 2016. PI: D’Emic

$4,641— “Excavation of dinosaurs from Montana.” Toomey Foundation for the Natural Sciences. Awarded 2016. PI: D’Emic

$55,000 — “3-D imaging of experimental stratigraphy using computed tomography.” Petroleum Research Foundation. PI: Dr. B.Z. Foreman, Western Washington University. Awarded 2016. Co-PI: D’Emic

$5,507 — “Digging up an exceptionally large dinosaur graveyard.” experiment.com

crowdfunding project. 2016. PI: D’Emic

$1,000 — “Paleontological Studies and Curation Support”, Bureau of Land Management. Awarded 2016. PI: D’Emic

$3,000 — “First ash-derived radiometric date from the Lower Cretaceous Cloverly Formation: paleogeographic, tectonic, and biostratigraphic implications.” A.J. Boucot Award, Paleontological Society, Awarded 2016. PI: D’Emic

$4,500 — “Testing for evolutionary interactions between dinosaurs and flowering plants.” Adelphi University Faculty Development Grant, Awarded 2016. PI: D’Emic

$17,586 — “Dinosaur extinction, dispersal, and latitudinal biodiversity differences in North America.” National Geographic Committee for Research and Exploration, Awarded 2013-2014. PI: D’Emic

$2,391 — “Solving the ‘problem’ of sauropod growth: aging and growth rates in the largest dinosaurs.” Jurassic Foundation, Awarded 2014. PI: D’Emic

$3000 — Predoctoral Fellowship Grant, Society of Vertebrate Paleontology, Awarded 2010. PI: D’Emic

$2250 — “Investigating the mid-Cretaceous North American extinction of sauropod dinosaurs.” Scott D. Turner Award, University of Michigan Department of Geological Sciences, Awarded 2010. PI: D’Emic

$3177 — “Phylogenetic and paleobiogeographic relationships of East Asian Cretaceous sauropods.” Geological Society of America Research Grant, Awarded 2010. PI: D’Emic

$2360 — “The evolution of cell size in sauropod dinosaurs.” Scott D. Turner Award, University of Michigan Department of Geological Sciences, Awarded 2009. PI: D’Emic

$2415 — “Microscopic investigation of sauropod dinosaur growth rates.” Rackham Graduate Student Research Award, University of Michigan, Awarded 2009. PI: D’Emic

$600 — Steinmann-Institut für Geologie, Mineralogie und Paläontologie, Sauropod paleobiology workshop, University of Bonn, Germany, Awarded 2008. PI: D’Emic

$1812 — “The Sauropod hiatus of North America: patterns, causes, and consequences,”

Scott Turner Award, University of Michigan Department of Geological Sciences, Awarded 2008. PI: D’Emic

$1526 — “Early Evolution of Titanosauriformes,” Scott D. Turner Award, University of Michigan Department of Geological Sciences, Awarded 2007. PI: D’Emic

$2300 — Rackham Graduate School Travel Awards, Society of Vertebrate Paleontology Annual Meetings 2007–2010; Geological Society of America Annual Meeting, Denver, Awarded 2010. PI: D’Emic

**OTHER PROFESSIONAL ACHIEVEMENTS**

MEDIA APPEARANCES:

* Media coverage for: “The evolution of maximum terrestrial body size in sauropod dinosaurs, ” 2023
  + *Smithsonian Magazine, “The Top Ten Dinosaur Discoveries of 2023”* [*https://www.smithsonianmag.com/science-nature/the-top-ten-dinosaur-discoveries-of-2023-180983403/*](https://www.smithsonianmag.com/science-nature/the-top-ten-dinosaur-discoveries-of-2023-180983403/)
  + *Discover Magazine*: <https://www.discovermagazine.com/the-sciences/how-sauropods-evolved-to-their-enormous-size>
  + *Reuters:* <https://www.reuters.com/science/how-build-giant-sauropod-dinosaurs-did-it-36-different-ways-2023-05-08/>
  + *BBC Science Focus*: <https://www.sciencefocus.com/news/how-sauropod-dinosaurs-got-big/>
* Media coverage for: “Developmental Strategies Underlying Gigantism and Miniaturization in non-avialan theropod dinosaurs,” 2023
  + *NPR’s Weekend Edition*: <https://www.npr.org/2023/02/26/1159528499/why-did-some-dinosaurs-grow-so-large-researchers-have-new-insights>
  + *The Atlantic*: <https://www.theatlantic.com/science/archive/2023/04/dinosaurs-animals-growing-fast-slow-bones/673599/>
  + *Thompson Reuters*: <https://www.reuters.com/lifestyle/science/bone-study-transforms-understanding-dinosaur-growth-2023-02-23/>
  + *Quanta Magazine*: <https://www.quantamagazine.org/dinosaur-bone-study-reveals-that-not-all-giants-grew-alike-20230320/>
  + UC Berkeley, *Understanding Evolution*: <https://evolution.berkeley.edu/evo-news/how-did-dinos-get-so-big-and-so-little/>
  + *Nature News*: <https://www.nature.com/articles/d41586-023-00549-5>
* *LiveScience*, Commentary, 2023: <https://www.livescience.com/titanosaur-eggs-india>
* *Newsday*, Coverage of “Age of Dinosaurs” exhibit, Long Island Children’s Museum, 2022: <https://www.newsday.com/lifestyle/family/dinosaur-exhibit-long-island-childrens-museum-1.50487610>
* *NPR’s All Things Considered*, Commentary, 2021: <https://www.npr.org/2021/06/24/1009992648/baby-dinosaur-bones-found-in-the-alaska-arctic-suggest-they-lived-there-year-rou>
* *LiveScience,* Commentary, 2021: <https://www.livescience.com/oldest-complex-social-behaviors-dinosaurs>
* *Scientific American,* Commentary, 2021: <https://www.scientificamerican.com/article/new-process-helps-unscramble-dinosaur-boneyard-chaos/>
* *Anchorage Daily News*, Commentary, 2021: <https://www.adn.com/alaska-news/science/2021/06/27/remains-of-baby-dinosaurs-found-in-alaska-put-a-twist-on-theories-about-their-life-in-the-arctic/>
* Media Coverage for: “Upper Jurassic dinosaurs on the move: gastrolith provenance and long-distance migration”, 2021:

<https://www.nytimes.com/2021/04/09/science/dinosaurs-gastroliths-bellies.html>

<https://www.syfy.com/syfywire/mysterious-rocks-traveled-far-because-migrating-dinosaurs>

<https://www.livescience.com/jurassic-dinosaurs-migrated.html>

* *LiveScience*, Commentary, “Medium-size dinos are missing from the fossil record. Here's why”, 2021: <https://www.livescience.com/missing-medium-size-dinosaurs.html>
* *New York Times*, Commentary, 2020: “Fossil Reveals ‘One of the Cutest Dinosaurs’ Ever Found.” <https://www.nytimes.com/2020/08/27/science/dinosaur-face-fossil.html>
* Media Coverage for “Evolution of high tooth replacement rates in theropod dinosaurs”, 2019:

<https://www.nytimes.com/2019/12/06/science/dinosaurs-teeth-cannibal-carnivores.html>

<https://www.newsweek.com/majungasaurus-replace-teeth-sharks-1474676>

<https://www.smithsonianmag.com/science-nature/flesh-ripping-dinosaurs-replaced-their-teeth-multiple-times-year-180973661/>

<https://www.cnn.com/2019/11/27/world/dinosaur-teeth-replacements-scn/index.html>

<https://www.independent.co.uk/news/science/sponge-dinosaur-great-auk-paleolithic-dogs-science-news-a9250486.html>

* *“You’re the Expert”* Podcast, Digging Up Dinosaurs two-part episode, November 2018. Downloaded over 50,000 times.
* *“I know Dino”* Podcast, Featured Scientist, March 2019.
* Educator/Creator, TED-Ed video lesson, “When will the Next Mass Extinction Occur?” over 1.6 million views since January 2016 <https://ed.ted.com/lessons/when-will-the-next-mass-extinction-occur-borths-d-emic-and-pritchard>
* Wyoming Public Radio, 2018: <https://www.wyomingpublicmedia.org/open-spaces/2018-02-02/how-fast-did-dinosaurs-grow-up-paleontologist-set-to-present-at-uw>
* Media Coverage for “Precocity in a tiny titanosaur from the Cretaceous of Madagascar”, 2016:

<https://www.npr.org/sections/thetwo-way/2016/04/26/475597917/long-necks-and-super-hearing-scientists-learn-why-sauropods-ruled>

<https://www.nationalgeographic.com/animals/article/160421-baby-dinosaur-titanosaur-fossil-independent>

* *TIME* essay, “Not so fast, *Brontosaurus*” <https://time.com/3810104/not-so-fast-brontosaurus/> , 2015
* *PBS NOVA* ScienceCafe, Lecturer, Boston, 2012
* “Living Large: The Secrets of Sauropods.” American Museum of Natural History Paleontology educational website, contributor & featured paleontologist, 2011
* University of Michigan Ruthven Museums “Identification Day” fossil expert, 2010
* *BBC*, “Planet Dinosaur”, advisor, 2010
* Discovery Channel, “Mastodon in Your Backyard,” featured, 2000

CONFERENCE HOST & ORGANIZER:

* Northeast Regional Vertebrate Evolution Symposium, Spring 2016

EXHIBITS:

* Contributor, “Age of Dinosaurs”, Long Island Children’s Museum, 2022
* Curator, “Life as a Dinosaur”, Georgia Southern Museum, 2012–2013
* Contributor, “Sauropods,” American Museum of Natural History, Spring 2011

INVITED LECTURES:

* Utah Friends of Paleontology, Spring 2023
* Hofstra University, Department of Biology, Spring 2023
* Ohio University, Department of Biomedical Sciences, Spring 2022
* Long Island Children’s Museum, Spring 2022
* Adelphi University, Biology Department Seminar, Fall 2021
* Adelphi University, College of Arts and Sciences Faculty Salon, Spring 2021
* University of Michigan, Museum of Paleontology, Fall 2019
* Buffalo Bill Center of the West, Summer 2019
* Explorer’s Club, Spring 2019
* New York Institute of Technology, Spring 2019
* Jericho High School STEM Day, Spring 2019
* Long Island Children’s Museum, Spring 2018
* Holy Angels Academy, Spring 2018
* University of Wyoming, Department of Geology & Geophysics, Distinguished

Lecturer Series, Spring 2018

* University of Wyoming Geological Museum & University of Wyoming Biodiversity Institute, Darwin Days Lecture, Spring 2018
* Stony Brook University, Dept. of Anatomical Sciences, Spring 2017
* University of Pennsylvania, Geology Department, Spring 2016
* Ohio University, Department of Biomedical Sciences, Fall 2015
* Northern Illinois University, Geology and Biology Departments, Fall 2014
* Georgia Southern University, College of Science and Math, Fall 2014
* Stony Brook University, Geology Department, Fall 2014
* University of Minnesota, Earth Sciences Department, Spring 2014
* Arizona Sonora Desert Museum, Spring 2014
* Burpee Museum of Natural History, Spring 2013
* Stony Brook University, Anatomical Sciences Department, Spring 2013
* New York Institute of Technology, Anatomy Department, Spring 2013

HONORS AND AWARDS:

* Adelphi University Excellence in Faculty Scholarship Award, 2022
* Adelphi University Teaching Excellence Award, 2019
* Dean’s Student Circle Outstanding Mentor Award, Adelphi University, 2019
* Bettelheim Award, Adelphi University, 2017
* AJ Boucot Award, Paleontological Society, 2016
* Sweetland Center for Writing, Dissertation Writing Institute Fellowship, University of Michigan, 2011
* Predoctoral Fellowship, Society of Vertebrate Paleontology, 2010
* Ross Research Award, Geological Society of America, 2010

ACADEMIC AND PROFESSIONAL SOCIETIES:

* Society of Vertebrate Paleontology, 2006–present
* Paleontological Society, 2007–present
* Geological Society of America, 2007–present

**SERVICE**

PROFESSIONAL:

2023–present — Dissertation Committee Member, Riley Sombathy, Ohio State University

2023–examiner, Dissertation Committee, T. Frauenfelder, University of New England, Australia

2020–present, Reviewer, Natural Sciences and Engineering Research Council of Canada (NSERC), Discovery Grants

2021–present — Senior Editor (= Editor in Chief), Journal of Vertebrate

Paleontology

2019–2022 — External Member, NSF-funded microCT committee, NYIT

2018–present — Scientific Advisory Board, Morphobank, morphobank.org

2021 — Reviewer/Scientific Committee Member, 3rd Palaeontological    
Virtual Congress

2015–2021 — Editorial Board Member, Journal of Vertebrate Paleontology

2015–2020 — Editorial Board Member, Nature Scientific Reports

2017–2020 — Dissertation Committee Member, Jens Kosch, North Carolina

State Museum [chair: Dr. Lindsay Zanno]

2015–2019 — Judge, Colbert Student Poster Prize, Society of Vertebrate

Paleontology Annual Meeting

2016–2018 — Thesis Committee Member, Kris Phillips, Western Washington University [chair: Dr. Brady Foreman]

2007 to present — Peer reviewer for:

*Acta Palaeontologica Polonica*

*Biological Journal of the Linnean Society*

*Biology Comms.: Vestnik of St Petersburg Univ.*

*BMC Evolutionary Biology*

*Bulletin of the Alabama Mus. of Natural History*

*Bulletin of the American Mus. of Natural History*

*Bulletin of Zoological Nomenclature*

*Canadian Journal of Earth Sciences*

*Contributions from the Museum of Paleontology*

*Cretaceous Research*

*The Dinosauria (vol. 3)*

*eLife*

*Frontiers in Earth Science*

*Geological Magazine*

*Historical Biology*

*Integrative and Comparative Biology*

*Integrative Organismal Biology*

*Journal of African Earth Sciences*

*Journal of Bone and Mineral Research*

*Journal of Evolutionary Biology*

*Journal of Iberian Geology*

*Journal of Morphology*

*Journal of South American Earth Sciences*

*Journal of Vertebrate Paleontology*

*Lethaia*

*Medical Science Monitor*

*Nature Communications*

*Nature Ecology & Evolution*

*Nature Scientific Reports*

*Naturwissenschaften*

*Neues Jahrbuch für Geologie und Paläontologie*

*New Mexico Earth Matters (educational publication)*

*Open Veterinary Journal*

*PLOS ONE*

*Palaeontology*

*Palaeontographica Abt. A*

*Palaeontologica Electronica*

*Paleobiology*

*Paleontological Research—Paleo. Soc. of Japan*

*PeerJ*

*Philosophical Transactions of the Royal Society B*

*Proceedings of the Royal Society B*

*Rivista Italiana di Paleontologia e Stratigrafia*

*Royal Society Open Science*

*S. American Sauropodomorph Dinosaurs (book)*

*Scottish Journal of Geology*

*Zoological Journal of the Linnean Society*

*Zootaxa*

2010–Grant application reviewer, Undergraduate Research Opportunities Program, University of Michigan

2013–present, Grant application reviewer, National Geographic Society Committee for Research and Exploration

SCHOOL/DEPARTMENT:

2021, Chair, Faculty Search Committee, [Animal Behavior], Biology

2020, Chair, Faculty Search Committee, [Physiologist], Biology [search cancelled at interview stage due to COVID-19 pandemic]

2020–2022, College of Arts and Sciences Academic Affairs Committee

2019, Diversity Officer, Faculty Search Committee [Evolutionary Biologist], Biology Department

2018, Chair, Faculty Search Committee, [Neurobiologist], Biology Department

2018, Classroom observations (4): Agelarakis, Lawver, Ferrer, Tavrov

2018, Scholarship Dinner Representative

2017–present, Graduate Committee, Biology

2019–present, Faculty Mentor

2017, Assisted in redesign of Anatomy and Physiology curriculum and rooms

133/134 laboratory space

2017–2018: Interdisciplinary Major Chair Advisor, Sae Bom Ra (Major: Scientific Illustration)

2017, Visiting Faculty Search Committee, Environmental Studies

2017–2018: Pre-Health Council Member

2016–2018, Organizer, Fall Semester Biology Department Research Seminars

2016–2017; 2019, Judge, McDonell Fellowship Application

2016–2018, Reviewer, Research Day

2016, Faculty Search Committee [Physiologist], Biology

2016–present: Thesis Committee Member: Alyssa Costa, Rohit

Singla, Chinelo Nnebe, Himlir Louima, Lauren Spiegel, Lynne

Rader, Alina Sheikh, Noah Triano, Michael Curran, Elyane

Barrosdepina, Huong Nguyen

2016–present: Undergraduate Thesis Chair: Danielle Mark, Michael Miskiewicz, Sae Bom Ra, Michael Rogers, Anjali Dave, Elizabeth Mardakhaya, Joanna Gavras, Sabrina Catanese, Alexa Catalano

2019–present: Scholarly Paper supervisor, Adrian Flores, Ankita Chatterjee, Kelsey Capobianco

2018–present: Master’s Thesis Chair, Thomas Pascucci, Orvil Grunmeier, Riley Sombathy, Stephen Finch, Aren Harper, Evan Unruh-Friesen

UNIVERSITY

2022–present, Faculty Committee on Retention, Tenure, and Promotion

2022–present, Faculty Senate Committee on Scholarship

2022–present, Excellence in Faculty Scholarship Award Committee

2021–present, Executive Committee, Heath Sciences Program

2021–2022, Faculty Development Award Committee

2020–2022, Excellence in Faculty Teaching Award Committee

2018, Health Sciences Major Task Force

2016–2020, Institutional Review Board Committee