Department of Ecology and Evolution Stony Brook University 632 Life Sciences Building Stony Brook, NY 11794-5245 14 January 2024 Phone: +1 631-632-8591 Email: <u>natasha.vitek@stonybrook.edu</u> ORCiD: 0000-0003-0587-8907

EDUCATION

August 2013 – May 3 2019, Ph.D, *Biology*. The University of Florida August 2011 – May 18 2013. M.S., *Geological Sciences*. The University of Texas at Austin September 2007 – May 23 2011. B.S., *Geology & Geophysics*. Yale University

APPOINTMENTS

2021-2023. Affiliate, Turkana Basin Institute, Stony Brook University
2019-present. Affiliate Faculty, Interdepartmental Doctoral Program in Anthropological Sciences, Stony Brook University
2019-present. Assistant Professor, Department of Ecology and Evolution, Stony Brook University

PEER-REVIEWED PUBLICATIONS

- 39. Burroughs, R.W.**, Percival, C.J., Vitek, N.S. Submitted. Reduced dietary protein induces changes in the dental proteome. Journal of Experimental Zoology Part B: Molecular and Developmental Evolution.
- 38. Vitek, N.S., Saks, E.**, Dong, A.**, Burroughs, R.W.**, Ward, D.L., Pomeroy, E., Martin-Gronert, M., Ozanne, S.E. Submitted. Developmentally cascading structures do not lose evolutionary potential, but compound developmental instability in rat molars. Proceedings of the Royal Society B: Biological Sciences.
- 37. Korasidis, V.A., Wing, S.L., Morse, P.E., Vitek, N.S., Bloch, J.I. In Review. Evidence for increased animal pollination during the Paleocene-Eocene Thermal Maximum. Paleobiology.
- 36. Russo, G.A., Miller, E.R., Feibel, C.S., Smiley, T.M., Hintermeister, M.P., Seiffert, E.R., Vitek, N.S., Prang, T.C., McGechie, F.R., Kou, S. Ward, C.V., Rowan, J., Lazagabaster, I.A., Rios, M., Morlo, M., Friscia, A. Lavin, S. Fry, T.P., Myers, L., Omondi, E.A., Rasbury, E. T., Kinyanjui, R.N., Cox, S.E., Sousa, F.J., Mana, S., Hatton, K., Steponaitis, E., Hemming, S., Saslaw, M., Stinchcomb, G.E., Nyete, C., Kirinya, M., Leakey, M.G., Leakey, L.N., Green, D.R., Uno, K.T., Beck, C.C., Henkes, G.A., Nengo, I.O. In Review. The paleoanthropological significance of Napudet, Turkana Basin, Kenya. Invited chapter submitted to R.E. Leakey Memorial Volume
- 35. Smiley, T.M., Rowan, J.R., Aoron, E., Barrett, P.Z., Beck, C.C., Feibel, C.S., Fortelius, M., Gaiku, M., Green, D.R., Henkes, G., Holt, W.E., Kinyanjui, R.N., Lavin, S.T., Lee, D., Liutkus-Pierce, C., Miller, E.R., Myerholtz, L., Omondi, E.A., Poulsen, C.J., Princehouse, P., Rowan, C.M., Russo. G.A., Sankau, L., Uno, K.T., Vitek, N.S., Žliobaitė, I., Nengo, I.O.. In Review. The Miocene record of primate and faunal evolution in the Turkana Basin. Invited chapter submitted to R.E. Leakey Memorial Volume
- 34. Princehouse, P.M., Vitek, N.S., Borths, M., Aoron, E.E., Kinyanjui, R.N., Akwee, P.E., de Vries, D., Heritage, S., Gaiku, M., Mbogo, W., Sousa, F.J., Seiffert, E.R., Nengo, I.O., Leakey, R. In Review. Topernawi, a rich new Oligocene primate site in West Turkana, Kenya. Invited chapter submitted to R.E. Leakey Memorial Volume
- 33. Green, D.R., Uno, K.T., Miller, E.R., Feibel, C.S., Aoron, E.E., Beck, C.C., Grossman, A., Kirera, F.M., Kirinya, M.M., Leakey, L.N., Liutkus-Pierce, C., Manthi, F.K., Ndiema, E.K., Nengo, I.O., Nyete, C., Rowan, J., Russo, G.A., Sanders, W.J., Smiley, T.M., Princehouse, P., Vitek, N.S., Cleland, T.P. In Review. 29 million years of diverse mammalian proteomes recovered from the East African Rift System. Nature
- Vitek, N.S., Seiffert, E.R., Heritage, S., Gaiku, M.W., Feibel, C.S., Sousa, F.J., Nengo, I.O., Aoron, E.E., Princehouse, P.E. 2024. Hyracoidea from the Oligocene locality Topernawi, Turkana Basin, Kenya. Journal of Vertebrate Paleontology. doi: 10.1080/02724634.2024.2409326
- 31. Seiffert, E.R., Heritage, S., de Vries, D., Sallam, H.M., Vitek, N.S., Aoron, E. Princehouse, P. 2024. Oldest record of a crown anomaluroid rodent from sub-Saharan Africa: A new genus and species from the early Oligocene Topernawi Formation of northern Kenya. Historical Biology. doi: 10.1080/08912963.2024.2370015
- 30. Vitek, N.S., Hoeflich, J.C., Magallanes, I., Moran, S.M., Narducci, R.E., Perez, V.J. Pirlo, J., Riegler, M.S., Selba, M.C., Vallejo-Pareja, M.C., Ziegler, M.J., Granatosky, M.C., Hulbert, Jr., R.C., Bloch, J.I. 2024. A North American Porcupine with a South American tail. Current Biology 34(12):P2712-2718.E3. doi: 10.1016/j.cub.2024.04.069
 Press: "Rare' Florida Fossil Find Resolves Evolutionary Mystery", A. Georgiou, Newsweek. https://www.newsweek.com/rare-florida-fossil-resolves-evolutionary-mystery-porcupines-1905956
 "Florida fossil porcupine solves a prickly dilemma 10-million years in the making" J. Pinson

https://www.floridamuseum.ufl.edu/science/florida-fossil-porcupine-solves-a-prickly-dilemma-10-million-years-in-the-

making/; "Rare Florida fossil finally ends debate about how porcupine jaws and tails evolved" https://theconversation.com/rare-florida-fossil-finally-ends-debate-about-how-porcupine-jaws-and-tails-evolved-234976

- 29. Vitek, N.S., Princehouse. P.M. 2024. Evaluating the utility of linear measurements for identifying isolated tooth loci of extinct Hyracoidea. Acta Palaeontologica Polonica 69(1):109-126. doi:10.4202/app.01094.2023
- 28. Blackburn, D.C., Boyer, D.M., Gray, J.A., Winchester, J., Bates, J.M., Baumgart, S.L., Braker, E. Coldren, D., Conway, K.W., Rabosky, A.D., de la Sancha, N., Dillman, C.B., Dunnum, J.L., Early, C.M., Frable, B.W., Gage, M.W., Hanken, J., Maisano, J.A., Marks, B.D., Maslenikov, K.P., McCormack, J.E., Nagesan, R.S., Pandelis, G.G., Prestridge, H.L., Rabosky, D.L., Randall, Z.S., Robbins, M.B., Scheinberg, L.A., Spencer, C.L., Summers, A.P., Tapanila, L. Thompson, C.W., Tornabene, L., Watkins-Colwell, G.J., Welton, L.J., the oVert Project Team, and Stanley, E.L. 2024. Increasing the impact of vertebrate scientific collections through 3D-imaging: the openVertebrate (oVert) Thematic Collections Network. BioScience. 0:1-18. https://doi.org/10.1093/biosci/biad120. [Member of oVert project team, full list of team authors in supplementary data].
- 27. Pamfilie, A.M. **, Espinal, M.D.**, Vitek, N.S. 2023. Quantifying shell patterning helps identify species of Trionychidae. The Anatomical Record. 306(6). https://doi.org/10.1002/ar.25064
- 26. Vitek, N.S., McDaniel, S.F., Bloch, J.I. 2022. Microevolutionary variation in molar morphology of *Onychomys leucogaster* decoupled from genetic structure. Evolution 76:2032-2048.
- 25. Sousa, F.J., Cox, S.E., Hemming, S., Rasbury, E.T., Steponaitis, E., Hatton, K., Saslaw, M., Henkes, G., Princehouse, P., Vitek, N., Nengo, I. 2022. New Discovery of Oligocene Strata in the Topernawi Formation, Turkana County, Kenya. Frontiers in Earth Science 10:799097.
- 24. Vitek, N.S., Chen, H.** 2022. The impact of tooth wear on occlusal shape and the identification of fossils of New World porcupines (Rodentia: Erethizontidae). Journal of Mammalian Evolution 29:677-692.
- 23. Vitek, N.S., Morse, P.E., Boyer, D.M., Strait, S.G., Bloch, J.I. 2021. Evaluating the responses of three closely related small mammal lineages to climate change across the Paleocene-Eocene Thermal Maximum. Paleobiology 47: 464-486.
- 22. Joyce, W., Anquetin, J., Cadena, E.-A., Claude, J., Danilov, I.G., Evers, S.W., Ferreira, G.S., Gentry, A.D., Georgalis, G.L., Lyson, T.R., Pérez-García, 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(5):1-45.
- 21. Vitek, N.S., Roseman, C.C., Bloch, J.I. 2020. Mammal molar size ratios and the inhibitory cascade at the intraspecific scale. Integrative Organismal Biology 2(1):1-17.
- 20. Vitek, N.S. 2018. Delineating modern variation from extinct morphology in the fossil record using shells of the Eastern Box Turtle (*Terrapene carolina*). PLoS ONE 13:e0193437.
 - Press: "Turtle shells help decode complex links between modern, fossil species." N. Van Hoose. https://www.floridamuseum.ufl.edu/science/turtle-shells-decode-links-between-modern-fossil-species/
 "Shell Shock! Can morphometrics distinguish fossil turtle species?" S. Gibson. http://blogs.plos.org/paleocomm/2018/03/08/shell-shock-can-morphometrics-distinguish-fossil-turtle-species/
- 19. Valdes, N.**, Bourque, J.R., Vitek, N.S. 2017. A new soft-shelled turtle (Trionychidae, *Apalone*) from the late Miocene of north-central Florida. Bulletin of the Florida Museum of Natural History 55:117-138.
- Vitek, N.S., Austin, J.D., Bloch, J.I. 2017. Long-term association between the commensal *Podomys floridanus* and *Gopherus polyphemus* in the fossil record of Florida. Bulletin of the Florida Museum of Natural History 55:105-116.
 Press: "Odd couple: Florida Mouse, Gopher Tortoise have been rooming for centuries." M.-L. Watkinson. https://www.floridamuseum.ufl.edu/science/odd-couple-florida-mouse-and-gopher-tortoise/
- Vitek, N.S., Manz, C.L., Gao, T.R, Bloch, J.I., Strait, S.G., Boyer, D.M. 2017. Semi-supervised determination of pseudocryptic morphotypes using observer-free characterizations of anatomical alignment and shape. Ecology & Evolution: 1-15.
- 16. Vitek, N.S., Danilov, I.G., Nakajima, Y., Hirayama, R. 2017. Redescription of the skull of "*Trionyx*" *kyrgyzensis* and improved phylogenetic taxon sampling of Cretaceous and Paleogene soft-shelled turtles (Trionychidae) of Asia, including the oldest crown trionychids. Journal of Systematic Palaeontology:1-13.
- 15. Vitek, N.S., and Joyce, W.G. 2015. A review of the fossil record of New World turtles of the clade Pan-Trionychidae. Bulletin of the Peabody Museum of Natural History 56:185-244.
 Invited review, part of fossil turtle book project
- 14. Danilov, I.G., Sukhanov, V.B., Obraztsova, E.M., and Vitek, N.S. 2015. First reliable record of trionychid turtles in the Paleocene of Asia. Paleontological Journal 49:407-412.
- 13. Vitek, N.S., and Danilov, I.G. 2015. New Material of *Ulutrionyx ninae* from the Oligocene of Kazakhstan with a review of Oligocene trionychids of Asia. Journal of Vertebrate Paleontology 35(5):e973570.
- Danilov, I.G., Vitek, N.S., Averianov, A.O., and Glinskiy, V.N. 2015. A new softshelled turtle of the genus *Khunnuchelys* (Trionychidae: Trionychinae) from the Upper Cretaceous Bostobe Formation of Kazakhstan. Acta Palaeontologica Polonica 60:155-161.

- 11. Vitek, N.S., and Danilov, I.G. 2014. Soft-shelled turtles (Trionychidae) from the Cenomanian of Uzbekistan. Cretaceous Research 49:1-12.
- 10. Danilov, I.G., Hirayama, R., Sukhanov, V.B., Suzuki, S., Watabe, M, and Vitek, N.S. 2014. Cretaceous soft-shelled turtles (Trionychidae) of Mongolia: New diversity, records, and a revision. Journal of Systematic Paleontology 12:799-832.
- 9. Danilov, I.G., Cherepanov, G.O. and Vitek, N.S. 2013. Chelonological studies of L.I. Khosatzky with his annotated bibliography on turtles. Proceedings of the Zoological Institute RAS 317:382-425.
- 8. Vitek, N.S., and Danilov, I.G. 2013. Soft-shelled turtles (Trionychidae) from the Bissekty Formation (Upper Cretaceous: Turonian) of Uzbekistan: skull-based taxa and probable skull-shell associations. Cretaceous Research 43:48-58.
- Vitek, N.S., Vinther, J., Schiffbauer, J.D., Briggs, D., and Prum, R. 2013. Exceptional three-dimensional preservation and colouration of an iridescent fossil feather from the Middle Eocene Messel Oil Shale. Paläontologische Zeitschrift 87:493-503.
- 6. Danilov, I.G., and **Vitek, N.S.** 2013. Soft-shelled turtles (Trionychidae) from the Bissekty Formation (late Cretaceous: late Turonian) of Uzbekistan: shell-based taxa. Cretaceous Research 41:5-64.
- Danilov, I.G., and Vitek, N.S. 2013 (2012). Cretaceous trionychids of Asia: a review of record and biogeography In: Brinkman, D.B., Holroyd, P.A., and Gardner, J.D. (eds.), *Morphology and Evolution of Turtles: Origin and Early Diversification*. Springer, Dordrecht, 419-438.
- 4. Vitek, N.S., and Danilov, I.G. 2012. New data on the soft-shelled turtles from the Upper Cretaceous Kyrkkuduk I locality of southern Kazakhstan. Proceedings of the Zoological Institute RAS 316:50-56.
- 3. Vitek, N.S. 2012. Giant fossil soft-shelled turtles of North America. Palaeontologia Electronica. Vol. 15, Issue 1:13A, 43p.; palaeo-electronica.org/content/2012-issue-1-articles/210-giant-soft-shelled-turtles.
- 2. Vitek, N.S. 2011. Insight into the taxonomy and systematics of North American Eocene soft-shelled turtles from a wellpreserved specimen. Bulletin of the Peabody Museum of Natural History 52:189-208.
- 1. Vitek, N.S., and Danilov, I.G. 2010. New material and a reassessment of soft-shelled turtles (Trionychidae) from the Late Cretaceous of Middle Asia & Kazakhstan. Journal of Vertebrate Paleontology 30:2, 383-393.
- **mentored student or postdoc

ADDITIONAL PEER-REVIEWED PUBLICATIONS FROM MY LAB*

- Burroughs, R. W.**, Parham, J., Stuart, B. A., Smits, P. D., and Angielczyk, K. D. 2024. Morphological Species Delimitation in the Northern and Southern Pacific Pond Turtle (*Actinemys marmorata, Actinemys pallida*): Can Machine Learning Methods Aid in Cryptic Species Identification? Journal of Integrative and Comparative Biology. https://doi.org/10.1093/iob/obae010
- Pamfilie A.M.**, Garner A.M., Russell A.P., Dhinojwala A., Niewiarowski P.H. 2023. Get to the point: Claw morphology impacts frictional interactions on rough substrates. Zoology 157:126078. DOI: 10.1016/j.zool.2023.126078.

*My resources and mentorship contributed to this product, although it did not rise to the level of authorship according to my lab policies

EXTERNAL GRANTS & AWARDS

2024, **NSF SGP-2422840** "Collaborative Research: Harnessing a high-resolution fossil record and novel (AI) workflows to study the effects of climate change on mammalian functional diversity". \$205,877, Total Amount: \$997,306.

2021. NSF BCS-2124792. "Collaborative Research: The Topernawi Research Project: Hominoid origins in a unique palaocommunity." Awarded: \$50,036. Total Amount: \$450,000

paleocommunity". Awarded: \$59,036; Total Amount: \$450,000

2018. P.E.O. Scholar Award. Excellence in graduate student research. \$15,000

2017. FPS Morgan Award. Turtle research with mentored undergraduate. \$1,000

2012. Paleontological Society of Austin Research Grant. Master's thesis research. \$500

2012. GSA Research Award. Research in St. Petersburg, Russia. \$1,872

2012. James M. & Thomas J. M. Schopf Award.. Master's thesis research. \$800

2011. NSF Graduate Research Fellowship. deferred until fall 2013. Graduate study in paleontology. \$100,000

INTERNAL GRANTS & AWARDS

2020. OER. Increasing vertebrate diversity in a vertebrate biology lab through 3D models \$2500

2018. Austin Award. Excellence in graduate student research.

2017. GSC travel award. Ph.D research. \$350

- 2017. UF Open Access Publishing Fund. Ph.D. research publication \$1,560.
- 2013. Miss Lucy Dickinson Fellowship. Ph.D. research. \$18,000
- 2013. University of Florida matching NSF Research Funds. Ph.D. research. \$6,000
- 2012. Off-Campus Research Funds. Master's thesis research. \$700

2012. Lundelius Scholarship. Masters' thesis research. \$900

- 2011. Dorothy B. Banks Scholarship. Graduate study. \$24,000
- 2011. Belknap Prize. Outstanding achievement in geology. \$1,000
- 2011. Bensinger Prize. Research in St. Petersburg, Russia and Austin, Texas. \$3,000
- 2010. Yale College Dean's Research Fellowship. Senior thesis research in North Dakota. \$2,490
- 2010. Robert C. Bates Fellowship. Research in St. Petersburg, Russia. \$3,506

2008. Leitner Project Award. Research in St. Petersburg, Russia. \$6,626

PUBLISHED ABSTRACTS

- 50. Henkes, G.A., Beck, C.C., Craig S. Feibel, C.S., Poulsen, C.J., Uno, K.T., Bahadori, A., Becel, A., Cox, S., Fortelius, M., Green, D., Hemming, S., Holt, W., Kinyanjui, R.N., Liutkus-Pierce, C.M., Malit, N., Mana, S, Miller, E.R., Rowan, J., Rasbury, T., Russo, G.A., Smiley, T.M., Sousa, F., Stinchcomb, G.E., Ungar, P.S., Vitek, N.S., Žliobaitė, I., and TMP members. 2024. Miocene Landscape Reconstruction and Faunal Evolution in Kenya's Turkana Basin: A Report from the Turkana Miocene Project. Geological Society of America Abstracts with Programs. Vol. 56, No. 6, 2023 https://doi.org/10.1130/abs/2024AM-402921
- 49. Morse, P.E., Vitek, N.S., Secord, R., Boyer, D.M., Milligan, J.N., Wing, S.L., Bloch, J.I. 2024. A multiproxy approach to characterizing the ecology of the earliest known crown primate from the Bighorn Basin, WY. In: 12th North American Paleontological Convention University of Michigan 17-21 June 2024 Program with Abstracts. University of Michigan Papers on Paleontology 39:319-320.
- 48. Riegler, M.S., Vitek, N.S., Morse, P.E., Bloch, J.I. 2024. Documenting lizard faunas across the Paleocene-Eocene Thermal Maximum in the Bighorn Basin, Wyoming. In: 12th North American Paleontological Convention University of Michigan 17-21 June 2024 Program with Abstracts. University of Michigan Papers on Paleontology 39:362-363.
- 47. Bloch, J.I., Vitek, N.S., Strait, S.G., Birlenbach, D., Boyer, D.M., Reigler, M.S., Wing, S., Morse, P.E. 2024. The Bighorn Basin PETM MicroVertebrate Project (PETM-MVP): New high-resolution records of vertebrate response to climate change across the Paleocene-Eocene Thermal Maximum. In: 12th North American Paleontological Convention University of Michigan 17-21 June 2024 Program with Abstracts. University of Michigan Papers on Paleontology 39:123-124.
- 46. Vitek, N.S., Morse, P.E., Strait, S.G., Boyer, D.M., Wing, S.L., Bloch, J.I. 2024. Sustained work breaks new ground: Evolutionary research frontiers in the Bighorn Basin. In: 12th North American Paleontological Convention University of Michigan 17-21 June 2024 Program with Abstracts. University of Michigan Papers on Paleontology 39:427-428.
- 45. Green, D.R., Uno, K.T., Miller, E.R., Feibel, C.S., Aoron, E.E., Beck, C.C., Grossman, A., Kirera, F.M., Kirinya, M.M., Leakey, L.N., Liutkus-Pierce, C., Manthi, F.K., Ndiema, E.K., Nyete, C., Rowan, J., Russo, G.A., Sanders, W.J., Smiley, T.M., Princehouse, P., Vitek, N.S., and the Turkana Miocene Project. 2024 29 million years of diverse mammalian enamel proteomes from Turkana in the East African Rift System. EGU General Assembly 2024, Vienna, Austria, 14-19 April 2024, EGU 24-211192. https://doi.org/10.5194/egusphere-egu24-21192.
- 44. Hintermeister, M.P., Seiffert, E.R., **Vitek, N.S.**, Siddiqui, A., Nengo, I.O., Russo, G.A. 2024. A fossil galagid from the middle Miocene of Napudet, northern Kenya. American Association of Biological Anthropology.
- 43. Uno, K., Bapana, S, House, A., Liutkus-Pierce, C.M., Miller, E., Princehouse, P., Rowan, J., Sankau, L., Vitek, N., Green, D.R. 2023. Neogene climate and tectonic influences on ecology and evolution in East Africa. AGU Fall Meeting 2023, held in Chicago, IL, 12-16 December 2022, id. PP42D-1141.
- Uno, K., Green, D.R., Bapana, S, House, A., Beck, C., Liutkus-Pierce, C.M., Princehouse, P., Rowan, J., Sankau, L., Vitek, N. 2023. Neogene ecosystems and mammal diets in East Africa. Geological Society of America Abstracts with Programs. Vol. 55, No. 6, 2023. doi: 10.1130/abs/2023AM-391622
- 41. Vitek, N.S., Saks, E.**, Dong, A.**, Ward, D.L., Pomeroy, E., Martin-Gronert, M., Ozanne, S.E. 2023. Mammalian molar size can change significantly without evolving: implications of lab nutrition studies for interpreting the fossil record. Society of Vertebrate Paleontology, Programs and Abstracts, 434.
- 40. Pamfilie, A.M., Bryan, A., Vitek, N.S. 2023. Spatial variation in craniodental morphology in the American mink (*Neogale vison*). 13th International Mammalogical Congress & 102nd Annual Meeting of the American Society of Mammalogists. 14-20 July 2023, Anchorage, Alaska.
- 39. Pamfilie, A.M., Bryan, A., **Vitek, N.S.** 2023. Trends in craniodental morphology in the American Mink (*Neogale vison*). Society of Vertebrate Paleontology, Programs and Abstracts, 333.
- 38. Wyatt, M.R, **Vitek**, **N.S.**, Smiley, T.M. 2023. Modern spatial diversity, disparity, and turnover in the Heteromyidae (Rodentia). Society of Vertebrate Paleontology, Programs and Abstracts, 456.
- 37. Bloch, J.I., Morse, P.E., Vitek, N.S., Boyer, D.M., Korasidis, V. A., Wing, S.L. 2023. Implications of immigrant arrival times during the Paleocene-Eocene Thermal Maximum for mammal biogeographic response to modern climate change. In: Abstracts of the 2nd Conservation Paleobiology Symposium. Bulletin of the Florida Museum of Natural History 60(2):63. <u>https://doi.org/10.58782/flmnh.pyuj3341</u>

- 36. House, A., Uno, K.T., Bapana, S. Aoron, E.E., Princehouse, P., Vitek, N., Green, D.R. 2022. Faunal Stable Isotopes Describe Eastern African Hydroclimate Across the Afro-Eurasian Collision. AGU Fall Meeting 2022, held in Chicago, IL, 12-16 December 2022, id. PP42D-1141.
- 35. Gaiku, M.W., Feibel, C.S., Seiffert, E.R., **Vitek, N.S.,** Aoron, E., Princehouse, P. 2022. Geospatial analysis of the geology and faunal communities of the Topernawi locality in northern Turkana, Kenya. Geological Society of America Abstracts with Programs 54(5). doi: 10.1130/abs/2022AM-382176
- 34. Gaiku, M.W., Feibel, C.S., Vitek, N.S., Seiffert, E.R., Rowan, J., Aoron, E., Princehouse, P. 2022. Diversity and distribution of new Paleogene mammalian faunas from the Topernawi locality (Turkana Depression, Kenya) Journal of Vertebrate Paleontology, Programs and Abstracts. 148.
- 33. Vitek, N.S., Rutig, N.**, Seiffert, E.R., Heritage, S., Aoron, E., Nengo, I., Princehouse, P. 2022. New hyracoids (Mammalia: Afrotheria) from the early Oligocene of Topernawi, Turkana Basin, Kenya. Journal of Vertebrate Paleontology, Programs and Abstracts 336-337
- 32. Pamfilie, A.M.**, Espinal, M.D.**, **Vitek, N.S.** 2022. Quantifying shell patterning helps identify species of softshell turtles. Society of Integrative and Comparative Biology Annual Meeting
- 31. Pamfilie, A.M.**, Espinal, M.D.**, **Vitek, N.S.** 2021. Quantifying shell patterning helps identify species of softshell turtles. Turtle Evolution Symposium, 10-13 November 2021.
- 30. Wing, S.E., Morse, P.E., Vitek, N., Bloch, J.I., Korasidis, V., Baczynski, A.A., Bowen, G.J., Kraus, M.J. 2021. An earliest Eocene conglomerate in the Bighorn Basin, Wyoming, and possible relationship to the Paleocene-Eocene Thermal Maximum. Geological Society of America Abstracts with Programs 50(5). doi: 10.1130/abs/2021AM-370596
- 29. Vitek, N.S., Morse, P.E., Strait, S.G., Boyer, D.M., Bloch, J.I. 2021. Transient Changes in Relative Crown Area and Enamel Thickness in the Mammal *Macrocranion* during The Paleocene-Eocene Thermal Maximum. Journal of Vertebrate Paleontology, Programs and Abstracts. [Invited symposium participant]
- Vitek, N.S., Boyer, D.M., Strait, S.G., Bloch, J.I. 2020. The phenomic toolkit and paleontology: a case study using Paleogene marsupials. Geological Society of America Abstracts with Programs 52 (6):79-8. doi: 10.1130/abs/2020AM-356739 [Invited symposium participant]
- 27. Vitek, N.S., Hoeflich, J.C., Magallanes, I., Moran, S.M., Narducci, R.E., Ocon, S.B., Perez, V.J., Pirlo, J., Riegler, M.S., Rodgers, M., Selba, M.C., Vallejo-Pareja, M.C., Ziegler, M.J., Granatosky, M.C., Bloch, J.I. 2020. Phylogeny of fossil and extant New World porcupines: re-evaluation of an Early Pleistocene porcupine skeleton from Florida with tropical, arboreal morphology. Journal of Vertebrate Paleontology, Programs and Abstracts.
- Vitek, N.S., McDaniel, S.F., Bloch, J.I. 2020. Is variation in molar tooth crown morphology of the Grasshopper Mouse (*Onychomys leucogaster*) a reflection of selection or drift? Society of Integrative and Comparative Biology Annual Meeting, 3-7 January 2020.
- 25. Vitek, N.S., Morse, P.E., Boyer, D.M., Strait, S.G., Bloch, J.I. 2019. Community ecological context plays a role in predicting responses of individual species to climate change during the Paleocene-Eocene Thermal Maximum. Geological Society of America Annual Meeting 22-25 September 2019.
- 24. Vitek, N.S., Morse, P.E., Strait, S.G., Boyer, D.M., Bloch, J.I. 2019. Changes in relative molar size in the small-bodied mammal *Macrocranion* across the Paleocene-Eocene Thermal Maximum follow predictions of nutritional deficit. Society of Integrative and Comparative Biology Annual Meeting, 3-7 January 2019, Tampa, FL, 418.
- 23. Vitek, N.S., Baker, C.B., Bloch, J.I. 2018. Bringing microvertebrates into the math classroom: STEM integration using 3D printed fossils and other biological objects. Journal of Vertebrate Paleontology, Programs and Abstracts, 234.
- 22. Vitek, N.S., Boyer, D.M., Strait, S.G., Bloch, J.I. 2018. Automated geometric morphometric methods as a component of the phenomic toolkit: a case study using Paleogene peradectids (Mammalia: Marsupialia). Journal of Vertebrate Paleontology, Programs and Abstracts, 234. [Invited symposium participant]
- 21. Bloch, J.I., Morse, P.E., **Vitek, N.S.**, Boyer, D.M., Wing, S. 2018. Implications of immigrant arrival times during the Paleocene-Eocene Thermal Maximum for mammal habitat specificity. Journal of Vertebrate Paleontology, Programs and Abstracts, 92.
- 20. Narducci, R.E., Hulbert, R.C., Bloch, J.I., MacFadden, B.J., Bourque, J.R., Poyer, A.R., Pirlo, J., Vitek, N.S., Grant, C.A., Ziegler, M.J. 2018. Recovery and curation of a critically important late Miocene fossil deposit in North-Central Florida: a rare opportunity for citizen science and public education. Journal of Vertebrate Paleontology, Programs and Abstracts, 189.
- 19. Vitek, N.S., Morse, P.E., Strait, S.G., Boyer, D.M., Bloch, J.I. 2017. Changes in relative molar size of the small-bodied mammal *Macrocranion* (Eulipotyphla, Erinaceomorpha) across the Paleocene-Eocene Thermal Maximum follow the inhibitory cascade model. Climatic and Biotic Events of the Paleocene, 4-7 September, 2013, Snowbird, UT, 50.
- Morse, P.E., Vitek, N.S., Bloch, J.I. 2017. Change in relative abundance of primates and small mammal faunal composition before, during, and after the Paleocene-Eocene Thermal Maximum in the Southern Bighorn Basin. Climatic and Biotic Events of the Paleocene, 4-7 September, 2013, Snowbird, UT, 51.

- 17. Bloch, J.I., Morse, P.E., **Vitek, N.S.**, Boyer, D.M., Wing, S. 2017. Decoupling of plant and mammal responses to climate change across the Paleocene-Eocene Thermal Maximum in the Northern Hemisphere. Climatic and Biotic Events of the Paleocene, 4-7 September, 2013, Snowbird, UT, 52.
- Vitek, N.S., Strait, S.G., Boyer, D.M., Bloch, J.I. 2017. Morphological response of three closely related small-bodied mammals (Eulipotyphla, Erinaceomorpha) to climate change across the Paleocene-Eocene Thermal Maximum. Journal of Vertebrate Paleontology, Programs and Abstracts, 209.
- Vitek, N.S., Morse, P.E., Strait, S.G., Boyer, D.M., Bloch, J.I. 2016. Multivariate change in the dental morphology of the small-bodied insectivorous mammal *Macrocranion* (Eulipotyphla, Erinaceomorpha) across the Paleocene-Eocene Thermal Maximum. Journal of Vertebrate Paleontology, Programs and Abstracts, 244.
- 14. Danilov, I.G., **Vitek, N.S.**, Nakajima, Y., Hirayama, R. 2016. Phylogenetic position of some fossil soft-shelled turtles from the Cretaceous and Paleogene of Asia. Journal of Vertebrate Paleontology, Programs and Abstracts, 122.
- 13. Vitek, N.S., Manz, C.L., Bloch, J.I., Boyer, D.M., Strait, S.G. 2015. Differentiating tooth shape using automated threedimensional geometric morphometrics: testing alignment sensitivity and utility for analyses of small mammals across the Paleocene-Eocene Thermal Maximum. Journal of Vertebrate Paleontology, Programs and Abstracts, 232. [Invited symposium participant]
- 12. Rosenbach, K.L.**, **Vitek, N.S.,** Manz, C.L., Bloch, J.I., Boyer, D.M., Strait, S.G. 2015. Morphological disparity of insectivores (Mammalia, Eulipotyphla) across rapid environmental changes during the Paleocene-Eocene Thermal Maximum. Journal of Vertebrate Paleontology, Programs and Abstracts, 204.
- 11. Vitek, N., C. Manz, J. Bloch, D. Boyer, and S. Strait. 2014. Evolution of small mammals during the Paleocene-Eocene Thermal Maximum: A case study using automated geometric morphometric methods to quantify tooth shape and size. SVP Programs and Abstracts, 248-249.
- Wang, Z.*, N. Vitek*, U.P. Karadkar, A.M. Molineux. 2014. Bringing museum collections to the public through a smartphone app. 10th North American Paleontological Convention Abstract Book. The Paleontological Society Special Publications 13:98.
- 9. Vitek, N. 2013. New patterns of spatiotemporal variation in the Eastern Box Turtle (*Terrapene carolina*) and their influence on evolutionary hypotheses. SVP Program and Abstracts, 233.
- Vitek, N.S. 2013. Morphometric analysis of spatiotemporal variation supports reinterpretation of the fossil record of the Eastern Box Turtle (*Terrapene carolina*). Geological Society of America South-Central Section – 47th Annual Meeting, 4-5 April, 2013.
- 7. Vitek, N.S. and R.W. Burroughs, 2012. Variation in complex systematic problems: a case study. SVP Program and Abstracts, 189-190.
- 6. Vitek, N.S. and R.W. Burroughs. 2012. Cf. *Terrapene*: a complicated evolutionary history. Symposium on Turtle Evolution Program and Abstracts Volume, 45.
- 5. Vitek, N. 2011. Giant fossil soft-shelled turtles of North America. Journal of Vertebrate Paleontology, Program and Abstracts Book, 210A.
- 4. Vitek, N.S. 2011. Giant fossil soft-shelled turtles of North America. Texas Herpetological Society Student Research Symposium Program and Abstracts Volume, 15.
- 3. Vitek, N. 2010. Character reinterpretation and fossil soft-shelled turtle taxa (Trionychidae) work together to recover new relationships. Journal of Vertebrate Paleontology, SVP Program and Abstracts Book, 182A.
- 2. Danilov, I.G. and **Vitek, N.S.** 2009. Cretaceous Trionychids of Asia: a review of record and biogeography. Gaffney Turtle Symposium (17-18 October 2009, Drumheller, Canada). Drumheller, Canada, 52-58.
- Vitek, N. and Danilov, I.G. 2008. [Morphology and systematic position of trionychid turtles from the Late Cretaceous of Kazakhstan and Tadzhikistan]. In Modern Paleontology: Classic and Newest Methods. The fifth All-Russian Scientific School for Young Scientists in Paleontology. Abstracts. Paleontological Institute of the Russian Academy of Sciences, Moscow, 17–18 [in Russian].

*co-first authors

**mentored student

COURSES TAUGHT

Stony Brook University: (parentheses indicate enrollment numbers)

BIO 344, Chordate Zoology. Spring 2020 (118), 2021 (144), 2023 (92), 2024 (96), 2025(96)

- **BIO 354, Evolution (50%).** Fall 2020 (116)
- BIO 489, Undergraduate Research. Fall 2020 (1), Spring 2021 (2), Fall 2022 (2), Spring 2023 (2)

BEE 690 Frontiers of Biotic Response to Climate Change. Fall 2022 (14)

- BEE 564 Geometric Morphometrics. Spring 2023 (6)*
- **BEE 553 Multivariate Statistics**. Spring 2025 (10+)

*Note: To date, 4 additional students from Stony Brook University, Syracuse University, and University of the Witwatersrand have used these materials via auditing or informal teaching

BROADER IMPACTS

Postdoctoral Associate Mentor (Stony Brook University)

2022 – present: Robert Burroughs°, IRACDA NY-CAPS postdoctoral associate, Stony Brook University.

Ph.D. Advisor. (Stony Brook University)

- 2024 present: Kaitlyn Puorro, Department of Ecology & Evolution, Stony Brook University.
- 2023 present: Morgan Williams, Department of Ecology & Evolution, Stony Brook University.
- 2020 present: Alexandra Pamfilie°, Department of Ecology & Evolution, Stony Brook University.
- 2020 2021: George Gurgis, Department of Ecology & Evolution, Stony Brook University.

Ph.D. Committee Member. (Stony Brook University)

- 2023 present: Evan Abreu, Ecology & Evolution.
- 2023 present: Maria Feiler, Interdepartmental Doctoral Program in Anthropological Sciences
- 2023 present: Sam Lavin, Ecology & Evolution [Chair].
- 2023 present: Raisa Campos Rizzieri, Ecology & Evolution [Chair].
- 2022 2024: Tianyu (Terry) Li, Ecology & Evolution.
- 2022 present: Shannon McKeon, Interdepartmental Doctoral Program in Anthropological Sciences
- 2021 present: Kate Blackwell, Ecology & Evolution.
- 2021 present: Megan Wyatt, Ecology & Evolution.
- 2019 2024: Jose Moscoso, Ecology & Evolution [Chair].
- 2019 2022: Anna McPherran, Ecology & Evolution.

Undergraduate and Postbaccalaureate Mentor, independent research.

Stony Brook University

- 2024 present: Khushi Bist [PB], Nia Franklin, Caroline Hammons, Sebastian Koko, David Lin, Natalee Morales
- 2024: Chris Castillo. SUNY SOAR participant 2024 [PSB R. Burroughs].
- 2023 present: Kayla Malarkey, Yan Ping Liu, Kelly Zheng, Dong Ha Kim, Trinity Zhou (PSB R. Burroughs)
- 2022 present: Avion Christie, Emily Ynoa, Allysa Tagle, Britney Williams
- 2022 2024: Loy Hashimoto. SUNY Chancellor's Award for Student Excellence 2022. SUNY SOAR participant 2023.
- URECA researcher of the month October 2024.
- 2022 2023: Averill Bryan, Amy Dong° (PSB A. Pamfilie)

2022: Brian Hsiao

- 2021 present: Deyonce Myles
- 2021 present: Jia Ci Deng, URECA summer scholar (includes undergraduate honors thesis), now PB.
- 2020 2021: Ella Saks° (includes undergraduate honors thesis)
- 2020 2021: Nick Rutig, Hui Chen°
- 2020: Milka Espinal°
- University of Florida
- 2017 2018: Michael Christie, Haley Busenbarrick, co-advised with Paul Morse.
- 2016 2018: Kimberly Placencia. Presented at departmental undergraduate research symposium (2017).
- 2016 2017: Sabrina Han
- 2015 2016: Karlena Cahill
- 2014 2016: Kierstin Rosenbach. Recipient of 2015 Biology Graduate Student Association Grant in Aid of Research; Research presented at professional meeting (see abstract #12)
- 2013 2014: Natalí Valdes°. Included senior thesis research. Thesis received Highest Honors from Department of Anthropology

Reader, Undergraduate Honors Thesis (Stony Brook University).

- 2024. Mason Hintermeister
- 2021. Maya Bharatiya
- 2020. Christina Mazza
- High School Mentor, independent research.

2020 – 2021: Rhianna Schantz

Abbreviations: PB, postbaccalaureate; PSB, primarily supervised by; ° = co-author of peer-reviewed paper

Creator and co-teacher, Super-Sized Life, 2015 –2019: IRB ID# IRB201600806. Evaluation reported in co-authorship with K-12 teacher in Vitek, Baker, Bloch 2018. Curriculum shared as open educational resource doi:10.25334/PECK-4J20

Exhibit committee co-chair, Vertebrate Paleontology Temporary Exhibit, Florida Museum of Natural History. 2016 – 2017.

Exhibit co-designer, Student Research Exhibits, Florida Museum of Natural History. 2015.

Content Developer for "Fossil Roulette" smartphone application & blog Non-Vertebrate Paleontology, Texas Natural Sciences Center. 2012 – 2019

Outreach Volunteer, Florida Museum of Natural History, September 2013 – May 2019.

Outreach Volunteer, Non-Vertebrate Paleontology, Texas Natural Sciences Center, September 2011-May 2013

Explore UT Volunteer, The University of Texas at Austin. March 2012, 2013.

Paleo-Knowledge Bowl Volunteer, Yale Peabody Museum, November 2009.

Special Programs Volunteer, North Carolina State Museum of Natural Sciences, 2003-2007.

SERVICE

Committee Membership

Professional Societies Scientific Committee, member, Turtle Evolution Symposium 2021. Student Research Grants Committee, member, Paleontological Society, 2020-2022. Member: Turtle Phylogenetic Nomenclature Working Group. 2019-2020. Student & Post-Doctoral Liaison Committee, member, Society of Vertebrate Paleontology, 2015-2019. Stony Brook University Graduate Program Executive Committee, Ecology & Evolution, 2024-present. Undergraduate Research & Creative Activities (URECA), Summer Program Proposal Reviewer, Spring 2024 Code of Ethics Committee, Department of Ecology & Evolution 2020-2024 [Head of Committee]. Executive Committee, Department of Ecology & Evolution 2020-2024. Undergraduate Biology Executive Committee, Department of Ecology & Evolution 2020-2024. COVID Syllabus Revision Task Force, Department of Ecology & Evolution 2020-2021. **Ph.D. Admissions Committee**, Department of Ecology & Evolution 2019-2021. Bylaw Amendment Subcommittee, Department of Ecology & Evolution 2020. Prelim Exam Committee, Department of Ecology & Evolution 2019-2020. Darwin Day Committee, Department of Ecology & Evolution 2019-2020. Annual Awards Committee, Department of Ecology & Evolution 2019-2020. Florida Museum of Natural History Museum Seminar Committee, student representative, Florida Museum of Natural History, 2015-2016; 2018-2019. Library committee, student representative, University of Florida, 2016-2017. Faculty search committee, for shark biologist at the University of Florida. 2016. Graduate Student Council, biology representative, University of Florida, 2015-2016. Undergraduate Teaching Committee, Florida Museum of Natural History, 2015-2016. University of Texas at Austin Faculty search committee, for invertebrate paleontologist at UT Austin. 2013.

Reviewer for:

Alabama Bulletin of Natural History, 2012 American Journal of Physical Anthropology, 2020 Bulletin of the Florida Museum of Natural History, 2021 Bulletin of the New Mexico Museum of Natural History, 2018 Bulletin of the Yale Peabody Museum of Natural History, 2015 Cambridge Prisms: Extinction, 2023 Cretaceous Research, 2015, 2019 Ecology Letters, 2021 Evolution: Education and Outreach, 2020, 2023 Geobios. 2020 Herpetological Review, 2018 Historical Biology, 2023 Integrative and Comparative Biology, 2019 Integrative Organismal Biology, 2019 Journal of Mammalian Evolution, 2021 Journal of Paleontology, 2010, 2019

Journal of Vertebrate Paleontology, 2011, 2012, 2013, 2016, 2020, 2024 Palaeontology, 2021 Palaeontologia Electronica, 2019 Paleobiology, 2020 Papers in Palaeontology, 2021 PeerJ, 2015, 2016, 2018 Proceedings of the Royal Society B: Biological Sciences: 2024 Russian Journal of Herpetology, 2011 Science Advances, 2020, 2021 Scientific Reports, 2017, 2019. Smithsonian Scholarly Press, 2020 Swiss Journal of Paleontology, 2023, 2024, 2025 Western North American Naturalist, 2024

National Science Foundation

Panel Member: 2020, 2024. **Ad Hoc Reviewer**: 2020, 2022, 2023.

Swiss National Science Foundation Ad Hoc Reviewer: 2023

Software: Morphosource Batch Conversion (https://github.com/nsvitek/CT_tools/tree/master/morphosource_batch_convert)

Fossil Preparation Volunteer,

Florida Museum of Natural History, January 2014 – March 2014. North Carolina State Museum of Natural Sciences, April 2006 – June 2011.

Training

FieldFutures safe and inclusive fieldwork training, October 2023 CIMER Entering Mentoring training, August 2023 Reproducible research short course, iDigBio, 1-2 June 2015 Geometric morphometrics workshop, University of California, Berkeley, 16-20 July 2012 Signature Course Teaching, for first-year interdisciplinary instruction. The University of Texas at Austin Fall 2012.

Volunteer,

Session Moderator, Society of Vertebrate Paleontology, 2016 Society of Integrative and Comparative Biology, 2020 10th North American Paleontological Convention, 15-18 February, 2014. Geological Society of America South-Central Section – 47th Annual Meeting, 4-5 April, 2013.

INVITED LECTURES & PRESENTATIONS

- **2022.** University of Minnesota Twin Cities, N.H. Winchell School of Earth and Environmental Sciences: "Apples, Oranges, and Stasis in a New Generation of Data" [15 September 2022]
- 2022. Washakie Museum: "Gators in your backyard: What fossils tell us about changes in Wyoming's past" [9 July 2022]
- **2021.** Stony Brook University, Living World Talk Series: "The Spice of Life: Variation that Drives and Preserves Biodiversity" [17 September 2021]
- **2021.** New York Institute of Technology, Anatomy Talk Series: "Parallelizing a porcupine: Implications for temperate adaptations and dispersal corridors from an extraordinary specimen." [26 February 2021]
- **2021.** Institute for the Science of Origins: "The Tiniest Teeth: How 3D Technology is Changing Paleontology" [19 January 2021]; "Parallelizing a porcupine" [15 June 2021]
- **2020.** Dr. Grella's 4th Period Research class (Brentwood Union Free School District): "How fossils fit: Bridging biological scales through the measure of shape" [15 December 2020]
- **2018, 2019:** Washakie Museum talks: "Applying 3D Technology to Challenges of Evolution and Education." [14 July 2018] & "On the Hunt for New Species; Continuing Discoveries After a Century of Searching" [13 July 2019]
- **2015.** iDigBio, 3D Digitization of Fossils for Educators & Citizen Scientists Workshop: "Base-ten conversion." Co-presented with Chris Baker [15 June 2015]. Can be viewed at

https://www.idigbio.org/wiki/index.php/Digitization_Technology_for_Educators_and_Citizen_Scientists_Workshop

2015. Orlando Science Center: "What About Fossils Too Small to See?"

2013. Paleontological Society of Austin: "The Eastern Box Turtle in Time and Space."

2013. The University of Texas at Austin, Jackson School of Geosciences Vertebrate Paleontology Research Group: "The Space-Time Turtle Continuum."

2011. The University of Texas at Austin, Jackson School of Geosciences Vertebrate Paleontology Research Group: "The Long and Winding Road to Turtle Zen."

OTHER PRESENTATIONS

Vitek, N.S. and R.W. Burroughs. 2013. The impacts of intraspecific variation on phylogenetic resolution in *Terrapene*. 2013 Box Turtle Conservation Workshop, 22-23 March 2013, Asheboro, NC.

Vitek, N.S. 2013. Patterns of morphological variation in the shell of the Eastern Box Turtle (*Terrapene carolina*). 2013 Box Turtle Conservation Workshop, 22-23 March 2013, Asheboro, NC.

Vitek, N.S. 2013. Spatiotemporal variation in the Eastern Box Turtle (*Terrapene carolina*). Jackson School Research Symposium, 2 February 2013, Austin, TX.

OTHER PUBLICATIONS

Vitek, N.S. In Revision. *Podomys floridanus*. Vertebrate Fossil Species of Florida. To be published at https://www.flmnh.ufl.edu/florida-vertebrate-fossils/species/

Vitek, N.S. In Revision. *Apalone ferox*. Vertebrate Fossil Species of Florida. To be published at <u>https://www.flmnh.ufl.edu/florida-vertebrate-fossils/species/</u>

Bloch, J.I., Morse, P.E., Vitek, N.S. 2018. Paleontological Resource Use Permit PA10-WY-185. Annual Report 2017. Bureau of Land Management, United States Department of the Interior.

Vitek, N.S. 2012. The Systematics of Strange Turtles. Guest post on the Palaeontologia Electronica blog. Posted March 25, 2012. http://www.palaeo-electronica.org/blog/?p=694

FIELD WORK

2020-2021. Kenya, Turkana Basin, in collaboration with Case Western University.

2015-2019. Florida, Miocene & Pliocene, various sites with the Florida Museum of Natural History

2013-2019, 2021-2023. Wyoming, Paleocene-Eocene, Fort Union and Willwood Fms., with the University of Florida

2013, Panama Canal, Panama, Miocene, with the University of Florida.

2013, Texas, Pleistocene, Phillips Cave, with the University of Texas at Austin

2010, 2011. Montana/North Dakota, Hell Creek Fm., with the Marmarth Research Foundation/Yale University

2010, 2011. North Carolina, Pekin Fm., with the North Carolina State Museum of Natural Sciences

2007. Montana, Hell Creek Fm., with the North Carolina State Museum of Natural Sciences

STUDENT APPOINTMENTS

August 2013 – May 2019. Ph.D student, University of Florida, Department of Biology September 2011 – May 2013 Master's Student, The University of Texas at Austin, Jackson School of Geosciences September 2007 – May 2011. Undergraduate Collections Assistant, Yale Peabody Museum.

PROFESSIONAL AFFILIATIONS

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