

DANIEL J. PEPPE

Baylor University, Department of Geosciences,
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EDUCATION

Ph.D. , Yale University, Department of Geology and Geophysics	2009
M.Phil. , Yale University, Department of Geology and Geophysics	2005
B.S. with honors in Geology , magna cum laude, St. Lawrence University	2003

PROFESSIONAL EXPERIENCE

Graduate Program Director , Baylor University, Department of Geosciences	2016 – Present
Associate Professor , Baylor University, Department of Geosciences	2015 – Present
Assistant Professor , Baylor University, Department of Geosciences	2009 – 2015
Post-doctoral Research Associate , Wesleyan University, Department of Earth and Environmental Sciences	2008 – 2009
Teaching Fellow , Yale University, Department of Geology and Geophysics: Stratigraphy and Sedimentology, History of Life, Physical Geology	2003 – 2008
Geoscience Intern , Mineral Management Service, Gulf of Mexico Region	2001

RESEARCH INTERESTS

Paleoclimatology, paleobotany, paleoecology, sedimentology, stratigraphy, ecology, biostratigraphy, paleomagnetism, geochronology, human evolution

HONORS AND FELLOWSHIPS

Bryce C. Brown Research Fellowship , Mayborn Museum	2017
Research Leave (competitive application), Baylor University	2015
Summer Sabbatical (competitive application), Baylor University	2014
Research Leave (competitive application), Baylor University	2013
Summer Faculty Teaching Institute , Baylor University	2012
Dissertation Initiatives for the Advancement of Climate Change Research Fellowship (DISCCRS)	2011
George Gaylord Simpson Prize , Awarded for best paper on evolution and the fossil record, Yale Peabody Museum	2011
Summer Sabbatical (competitive application), Baylor University	2011
The Philip M. Orville Prize for outstanding research and scholarship in the earth sciences, Yale Graduate School of Arts and Sciences, Yale University	2008
Visiting Research Fellowship , Institute of Rock Magnetism, University of Minnesota	2008
Phi Beta Kappa Honorary Society	2003

RESEARCH GRANT AWARDS

Baylor University, University Research Committee: *Assessing the effects of shade on sycamore ecophysiology*, Project duration: June 1, 2018 – May 21, 2019 (12 months); Amount awarded: \$4499; Sole PI

Baylor University, Faculty Research Investment Program: *Paleoclimate and paleoenvironmental reconstruction of Early Miocene hominoid-bearing fossil assemblages in western Kenya*, Project duration: June 1, 2017 – May 31, 2018 (12 months); Amount awarded: \$23,349; Sole PI

National Science Foundation – Earth Sciences, Sedimentary Geology and Paleobiology (EAR-1325552): *Collaborative Research: testing the link between climate and mammalian faunal dynamics in the early Paleocene record of the San Juan Basin, New Mexico*; Project duration: 9/1/13 – 8/31/17 (48 months); Amount awarded: \$167,419 (BU portion); Co-PI with Stacy Atchley, Lee Nordt (Baylor University), Tom Williamson (New Mexico Museum of Natural History), and Ross Secord (University of Nebraska-Lincoln)

American Chemical Society – Petroleum Research Fund (PRF 52822-DNI8): *Climate, tectonics and the ecosystem response: exploring the relationship between extrinsic controls and cyclic alluvial stratal accumulations within the Paleocene Nacimiento Formation, San Juan Basin, New Mexico, USA*; Project duration: 1/1/13 – 8/31/17 (56 months); Amount awarded: \$100,000; Sole PI

National Science Foundation – Behavioral and Cognitive Sciences, Biological Anthropology (BCS-1241812): *IPG: Collaborative Research: Research on East African Catarrhine and Hominoid Evolution*; Project duration: 9/24/12 – 9/23/17 (60 months); \$152,870 (BU portion); Co-PI with Steven Driese (Baylor University), Kieran McNulty (University of Minnesota), Al Deino (Berkeley Geochronology Center), Laura MacLatchy (University of Michigan), and James Rossie (Stony Brook University)

National Science Foundation – Earth Sciences (EAR-113214): *Early Career: Acquisition of a Nuclear Magnetic Resonance Facility for Earth Science Research at Baylor University*, Project duration: 9/1/12 – 8/31/13 (12 months); Amount awarded: \$92,801; Co-PI with William Hockaday, Steven Driese, Patrick Farmer, and Boris Lau (Baylor University)

The Leakey Foundation: *Paleoenvironment reconstruction of the Early Miocene of Rusinga Island, Kenya*; Project duration: 06/01/2012 – 8/31/2013 (15 months); Amount awarded: \$13,000; Sole PI

Baylor University, Young Investigator Development Program: *Influence of phylogeny and ecology on leaf size and shape: implications for paleoclimatic interpretation*; Project duration: June 1, 2011 – May 31, 2012 (12 months); Amount awarded: \$24,500; Sole PI

National Science Foundation – Behavioral and Cognitive Sciences, Archeology (BCS-1013108): *Collaborative Research: Quaternary Archaeology and Environments of Rusinga and Mfangano Islands Kenya*, Project Duration: 09/01/10 – 08/31/13 (36 months); Amount awarded: \$52,722 (BU portion); Co-PI with: Christian Tryon (New York University) and David Fox (University of Minnesota)

PEER-REVIEWED PUBLICATIONS

* graduate student author, ** undergraduate student author, †advisee

(50) *†Flynn, A., G., **Peppe, D.J.**, *in revision*, Diverse early Paleocene megaflora from the Ojo Alamo Sandstone, San Juan Basin, New Mexico, USA. *Paleobiology*.
<https://dx.doi.org/10.17605/OSF.IO/RMZ87>.

- (49) **Peppe, D.J.**, *†Baumgartner, A., *†Flynn A., Blonder, B. *in press*, 2018, Reconstructing Paleoclimate and paleoecology using fossil leaves. In Croft, D.A., Simpson, S.W. and Su, D.F. (eds.), *Methods in Paleoecology: Reconstructing Cenozoic Terrestrial Environments and Ecological Communities*. Springer (Vertebrate Paleobiology and Paleoanthropology Series), Cham, Switzerland.
<https://dx.doi.org/10.17605/OSF.IO/STZUC>.
- (48) Deino, A., and **Peppe, D. J.**, 2018, Geochronology, *in* Callan, H., ed., *The International Encyclopedia of Anthropology*, Wiley-Blackwell.
<https://doi.org/10.1002/9781118924396.wbiea2233>.
- (47) *†Leslie, C.E., **Peppe, D.J.**, Williamson, T.E., Bilardello, D., Heizler, M., Secord, R., **†Leggett, T., 2018, High-resolution magnetostratigraphy of the upper Nacimiento Formation, San Juan Basin, New Mexico, USA: Implications for basin evolution and mammalian turnover. *American Journal of Science* 318: 300-334.
<https://dx.doi.org/10.17605/OSF.IO/QXW4N>.
- (46) *†Leslie, C.E., **Peppe, D.J.**, Williamson, T.E., Heizler, M., Jackson, M., Atchley, S.C., Nordt, L., Standhart, B., 2018, Revised age constraints for Late Cretaceous to early Paleocene terrestrial strata from the Dawson Creek section, Big Bend National Park, west Texas. *Geological Society of America Bulletin* 130 (7-8): 1143-1163.
<https://doi.org/10.1130/B31785>.
- (45) *Wiest, L.A., *Lukens, W.E., **Peppe, D.J.**, Driese, S.G., Tubbs, J., 2018, Terrestrial evidence for the Lilluput effect across the Cretaceous-Paleogene (K-Pg) boundary, *Palaeogeography, Palaeoclimatology, Palaeoecology* 491: 161-169.
<https://doi.org/10.1016/j.palaeo.2017.12.005>.
- (44) Blegen, N., Faith, J.T., *Mant-Melville, A., **Peppe, D.J.**, Tryon, C.A., 2017, The Middle Stone Age after 50,000 years ago: New evidence from the Late Pleistocene sediments of the eastern Lake Victoria Basin, western Kenya. *PaleoAnthropology* 2017: 139-169. doi:10.4207/PA.2017.ART108.
- (43) †Beverly E. J., **Peppe D. J.**, Driese S. G., Blegen N., Faith J. T., Tryon C.A., Stinchcomb G.E., 2017, Reconstruction of Late Pleistocene paleoenvironments using bulk geochemistry of paleosols from the Lake Victoria region. *Frontiers in Earth Science* 5: 93. doi:10.3389/feart.2017.00093.
- (42) *Lukens W. E., Lehmann T., **Peppe D. J.**, Fox D. L., Driese S. G., McNulty KP., 2017, The Early Miocene critical zone at Karungu, western Kenya: An equatorial, open habitat with few primate remains. *Frontiers in Earth Science* 5: 87. doi:10.3389/feart.2017.00087.
- (41) *Lukens, W. E., Driese, S. G., **Peppe, D. J.**, and **†Loudermilk, M., 2017, Sedimentology, stratigraphy, and paleoclimate at the late Miocene Coffee Ranch fossil site in the Texas Panhandle: *Palaeogeography, Palaeoclimatology, Palaeoecology* 485: 361-376. <https://doi.org/10.1016/j.palaeo.2017.06.026>.
- (40) *Jenkins, K., *Nightingale, S., Faith, J.T., **Peppe, D.J.**, *†Michel, L.A., Driese, S.G., McNulty, K.P., Tryon, C.A., 2017, Evaluating the potential for tactical hunting in the

- Middle Stone Age: Insights from a MSA bonebed of the extinct bovid, *Rusingoryx atopocranum*: *Journal of Human Evolution* 108: 72-91. <http://dx.doi.org/10.1016/j.jhevol.2016.11.004>.
- (39) *†Davis, A.J. **Peppe, D.J.**, Atchley, S., Williamson, T.E., *†Flynn, A., 2016, Climate and landscape reconstruction of the Arroyo Chijuilita Member of the Nacimiento Formation, San Juan Basin, New Mexico: providing environmental context to early Paleocene mammal evolution: *Palaeogeography, Palaeoclimatology, and Palaeoecology* 463: 27-44. <http://dx.doi.org/10.1016/j.palaeo.2016.09.011>.
- (38) Tryon, C.A, Faith, J.T., **Peppe, D.J.**, *†Beverly, E.J., *Blegen, N., *Blumenthal, S., *Chritz, K., Driese, S.G., *Patterson, D., Sharp, W.D., 2016, The Pleistocene prehistory of the Lake Victoria Basin: *Quaternary International* 404(B): 100-114. doi:10.1016/j.quaint.2015.11.073.
- (37) Faith, J.T., *Patterson, D., *Blegen, N., *O'Neill, C.J., Marean, C.W., **Peppe, D.J.**, Tryon C.A., 2016. Size variation in *Tachyoryctes splendens* (East Africa mole-rat) and its implications for late Quaternary temperature change in equatorial East Africa: *Quaternary Science Reviews* 140: 39-48. doi:10.1016/j.quascirev.2016.03.017.
- (36) *O'Brien, H.D., Faith, J.T., Jenkins, K.R., **Peppe, D.J.**, Plummer, T.W., Jacobs, Z.L., Li, B., Joannes-Boyau, R., Price, G., Feng, Y., Tryon, C.A., 2016, Unexpected Convergent Evolution of Nasal Domes Between Pleistocene Bovids and Cretaceous Hadrosaur Dinosaurs: *Current Biology* 26(4): 503-508. doi:10.1016/j.cub.2015.12.050.
- (35) Geraads, D., Lehmann, T., **Peppe, D.J.**, McNulty, K.P., 2016, New Rhinocerotidae from the Kisingiri localities (Lower Miocene of Western Kenya): *Journal of Vertebrate Paleontology* 36(3): e1103247. doi: 10.1080/02724634.2016.1103247
- (34) Faith, J.T., Tryon, C.A., **Peppe, D.J.**, 2016, Environmental change, ungulate biogeography, and their implications for early human dispersals in equatorial East Africa, In: Jones, S.C., Stewart, B.A. (Eds.), *Africa from MIS 6-2: Population Dynamics and Paleoenvironments*. Springer: 233-245. doi:10.1007/978-94-017-7520-5_13
- (33) Driese, S.G., **Peppe, D.J.**, *†Beverly, E.J., *DiPietro, L.M., **†Arellano, L.N., Lehmann, T., 2016, Paleosols and paleoenvironments of the early Miocene deposits near Karungu, Lake Victoria, Kenya: *Palaeogeography, Palaeoclimatology, and Palaeoecology*. 443: 167-182. doi:10.1016/j.palaeo.2015.11.030
- (32) *†Beverly, E.J., Driese, S.G., **Peppe, D.J.**, **†Arellano, L.N., *Blegen, N., Faith, J.T., Tryon, C.A., 2015, Reconstruction of a semi-arid Late Pleistocene paleocatena from the Lake Victoria region, Kenya: *Quaternary Research* 84: 368-381. doi:10.1016/j.yqres.2015.08.002
- (31) *†Beverly, E.J., Driese, S.G., **Peppe, D.J.**, Johnson, C.R., *†Michel, L.A., Faith, J.T., Tryon, C.A., Sharp, W., 2015, Recurrent spring-fed rivers in a Middle to Late Pleistocene semi-arid grassland: Implications for environments of early humans in the Lake Victoria Basin, Kenya: *Sedimentology* 62(6):11611-1635. doi: 10.1111/sed.12199
- (30) *Blegen, N., Tryon, C.A., Faith, J.T., **Peppe, D.J.**, *†Beverly, E.J., Li, B., Jacobs, Z., 2015, Distal tephras of the eastern Lake Victoria basin, Equatorial East Africa:

- Correlations, chronology and a context for early modern humans: *Quaternary Science Reviews* 122: 89-111. doi:10.1016/j.quascirev.2015.04.024
- (29) Faith, J.T., Tryon, C.A., **Peppe, D.J.**, *†Beverly, E.J., *Blegen, N., *Blumenthal, S., *Chritz, K.L., Driese, S.G., *Patterson, D., 2015, Paleoenvironmental context of the Middle Stone Age record from Karungu, Lake Victoria Basin, Kenya, and its implications for human and faunal dispersals in East Africa: *Journal of Human Evolution* 83: 28-45. doi:10.1016/j.jhevol.2015.03.004
- (28) *Garrett, N.D., Fox, D.L., McNulty, K.P. Faith, J.T., Tryon, C.A., **Peppe, D.J.**, *†Van Plantinga, A., 2015, Stable isotopic paleoecology of late Pleistocene Middle Stone Age humans from the Lake Victoria Basin, Kenya: *Journal of Human Evolution* 82: 1-14. doi:10.1016/j.jhevol.2014.10.005
- (27) Brusatte, S. L., Butler, R. J., Barrett, P. M., Carrano, M. T., Evans, D. C., Lloyd, G. T., Mannion, P. D., Norell, M. A., **Peppe, D. J.**, Upchurch, P. and Williamson, T. E., 2015, The extinction of the dinosaurs: *Biological Reviews* 90(2): 628-642. doi: 10.1111/brv.12128
- (26) **Peppe, D.J.** and Hickey, L.J., 2014, Fort Union Formation fossil leaves (Paleocene, Williston Basin, North Dakota, USA) indicate evolutionary relationships between Paleocene and Eocene plant species: *Peabody Museum of Natural History Bulletin* 55(2): 171-189.
- (25) *Donovan, M.P., Wilf, P., Labandeira, C.C., Johnson, K.R., **Peppe, D.J., 2014**, Novel Insect leaf-mining after the end-Cretaceous extinction and the demise of Cretaceous leaf miners, Great Plains, USA: *PLoS ONE* 9(7): e103542. doi:10.1371/journal.pone.0103542
- (24) *Stinchcomb, G.E. and **Peppe, D.J.**, 2014. The influence of time on the magnetic properties of late Quaternary periglacial and alluvial surface and buried soils along the Delaware River, USA: *Frontiers in Earth Science* 2:17. doi: 10.3389/feart.2014.00017
- (23) Faith, J.T., Tryon, C.A., **Peppe, D.J.**, *†Beverly, E.J., *Blegen, N., 2014, Biogeographic and evolutionary implications of an extinct Late Pleistocene impala from the Lake Victoria Basin, Kenya: *Journal of Mammalogy* 21: 213-222.
- (22) Tryon, C.A., Faith, J.T., **Peppe, D.J.**, Keegan, W.F., Keegan, K.N., *Jenkins, K.H., *Nightingale, S., *Patterson, D., *†Van Plantinga, A., Driese, S., Johnson, C.R., *†Beverly, E., Fox, D.L., 2014, Sites on the landscape: Paleoenvironmental reconstruction of late Pleistocene archaeological sites from the Lake Victoria Basin, Equatorial Africa: *Quaternary International* 331: 20-30.
- (21) *†Michel, L.A., **Peppe, D.J.**, Lutz, J.A., Driese, S.G., Dunsworth, H.M., Harcourt-Smith, W.E.H., **†Horner, W.H., Lehmann, T., *Nightingale, S., McNulty, K.P., 2014, Remnants of an ancient forest provide ecological context for Early Miocene fossil apes: *Nature Communications* 5: 3236.
- (20) **Peppe, D.J.**, *†Lemons, C.R., Royer, D.L., Wing, S.L., Wright, I.J., Lusk, C.H., **Rhoden, C.H., 2014, Biomechanical and leaf-climate relationships: a comparison of ferns and seed plants: *American Journal of Botany*, 101(2): 338-47.

- (19) **†Maxbauer, D.P., **Peppe, D.J.**, Bamford, M., McNulty, K.P., Edwards, L., Harcourt-Smith, W.E.H., 2013, A morphotype catalog and paleoenvironmental interpretations of Early Miocene fossil leaves from the Hiwegi Formation, Rusinga Island, Lake Victoria, Kenya: *Palaeontologia Electronica*, 16(3.28A): 19p.
- (18) **Peppe, D.J.** and Deino, A.L., 2013, Dating rocks and fossils using the geologic record: *Nature Education Knowledge*, 4(10): 1.
(<http://www.nature.com/scitable/knowledge/library/dating-rocks-and-fossils-using-geologic-methods-107924044>)
- (17) Conrad, J.L., *Jenkins, K., Lehmann, T., Manthi, F.K., **Peppe, D.J.**, *Nightingale, S., **Cossette, A., Dunswoth, H.M., Harcourt-Smith, W.E.H., and McNulty, K.P., 2013, New specimens of *Crocodylus pigotti* (Crocodylidae) from Rusinga Island, Kenya, and generic reallocation of the species: *Journal of Vertebrate Paleontology* 33: 629-646.
- (16) Faith, J.T., Tryon, C.A., **Peppe, D.J.**, and Fox, D.L., 2013, The fossil history of Grévy's zebra (*Equus grevyi*) in equatorial East Africa: *Journal of Biogeography* 40: 359-369.
- (15) Danley, P.D., *Husemann, M., *Ding, B., *†DiPietro, L., *†Beverly, E., **Peppe, D.J.**, 2012, The impact of the geologic history and the paleoclimate of the African Great Lakes on the diversification of East African cichlids: *International Journal of Evolutionary Biology* Article ID 574851: 20 pages.
- (14) Royer, D.L., **Peppe, D.J.**, Niinemets, Ü., Wheeler, E.A., 2012, Roles of climate and functional traits in controlling toothed vs. untoothed leaf margins: *American Journal of Botany* 99(5): 915-922.
- (13) Tryon, C.A., **Peppe, D.J.**, Faith, J.T., *†Van Plantinga, A., *Nightingale, S., Ogando, J., Fox, D.L., 2012, Late Pleistocene artefacts and associated fauna from Rusinga and Mfangano islands, Lake Victoria, Kenya: *Azania: Archaeological Research in Africa* 47: 14-38. doi:10.1080/0067270X.2011.647946.
- (12) **Peppe, D.J.**, Johnson, K.R., Evans, D.A., 2011, Magnetostratigraphy and geochronology of the Lebo and Tongue River Members of the Fort Union Formation (Paleocene) in the northeastern Powder River Basin, Montana: *American Journal of Science* 311 (10): 813-850.
- (11) Faith, J.T., Choiniere, J.N., Tryon, C.A., **Peppe, D.J.**, Fox, D.L., 2011, The taxonomic status and paleoecology of Rusingoryx atopocranion (Mammalia, Artiodactyla), an extinct Pleistocene bovid from Rusinga Island, Kenya: *Quaternary Research* 75: 697-707.
- (10) **Peppe, D.J.**, Royer, D.L., *Cariglino, B., **Oliver, S.Y., **Newman, S., **Leight, E., **Enikolopov, G., *Fernandez-Burgos, M., *Herrara, F., Adams, J.M., *Correa, E., Curran, E.D., Erickson, J.M., Hinojosa, L.F., Hoganson, J.W., Iglesias, A., Jaramillo, C.A., Johnson, K.R., Jordan, G., Kraft, N.J.B., **Lovelock, E.C., Lusk, C.H., Niinemets, Ü., Peñuelas, J., Rapson, G., Wing, S.L., Wright, I.J., 2011, Sensitivity of leaf size and shape to climate: global patterns and paleoclimatic applications: *New Phytologist* 190: 724-739. doi:10.1111/j.1469-8137.2010.03615.x

- (9) **Peppe, D.J.**, 2010, Megafloral change in the early and middle Paleocene in the Williston Basin, North Dakota, USA: *Palaeogeography, Palaeoclimatology, and Palaeoecology* 28 (3-4): 224-234. doi:10.1016/j.palaeo.2010.09.027
- (8) Tryon, C.A., Faith, T.J., **Peppe, D.J.**, Fox, D.L., McNulty, K.P., *Jenkins, K., *Garrett, N., Dunsworth, H.M., Harcourt-Smith, W.E.H., 2010, The Pleistocene archaeology and environments of the Wasiriya Beds, Rusinga Island, Kenya: *Journal of Human Evolution* 59: 657-671. doi:10.1016/j.jhevol.2010.07.020.
- (7) **Peppe, D.J.**, Royer, D.L., Wilf, P., Kowalski, E.A., 2010, Quantification of large uncertainties in fossil leaf paleoaltimetry: *Tectonics* 29: TC3015, doi:10.1029/2009TC002549.
- (6) Royer, D.L., Miller, I.M., **Peppe, D.J.**, Hickey, L.J., 2010, Leaf economic traits support a weedy habitat for early angiosperms: *American Journal of Botany* 97(3): 1-8.
- (5) **Peppe, D.J.**, McNulty, K., Harcourt-Smith, W., Dunsworth, H., Cote, S., 2009, Stratigraphic interpretation of the Kulu Formation (Early Miocene, Rusinga Island, Kenya) and its implication for primate evolution: *Journal of Human Evolution* 56: 447-461.
- (4) **Peppe, D.J.**, Evans, D.A.D., and Smirnov, A.V., 2009, Magnetostratigraphy of the Ludlow Member of the Fort Union Formation (Lower Paleocene) of the Williston Basin in North Dakota: *Geological Society of America Bulletin* 121: 65-79. doi:10.1130/B26353.1
- (3) **Peppe, D.J.**, Hickey, L.J., Miller, I., Green, W., 2008, A morphotype catalogue, floristic analysis and stratigraphic distribution of the Aspen Shale Flora (Cretaceous-Albian) of southwestern Wyoming: *Peabody Museum of Natural History Bulletin* 49(2): 181-208.
- (2) **Peppe, D.J.** and Reiners, P.W., 2007, Conodont (U-Th)/He thermochronology: Initial results, potential, and problems: *Earth and Planetary Science Letters* 258 (3-4): 569-580.
- (1) **Peppe, D.J.**, Erickson, J.M. and Hickey, L.J., 2007, Fossil leaf species from the Fox Hills Formation (Upper Cretaceous: North Dakota, USA) and their paleogeographic significance: *Journal of Paleontology* 81(3): 550-567.

OTHER PUBLICATIONS (editorial review, editorial, thesis)

- (5) **Peppe, D.J.**, Royer, D.L., 2015, Can climate feel the pressure?: *Science*: 348 (6240): 1210-1211. doi: 10.1126/science.aac5264. (Invited Perspectives article)
- (4) Wing, S.L., Johnson, K.R., **Peppe, D.J.**, Green, W.A., Taylor, D.W., 2014, The multi-stranded career of Leo J. Hickey: *Peabody Museum of Natural History Bulletin* 55(2): 69-78.
- (3) **Peppe, D.J.**, 2013, Hot summers in continental interiors: The case against equability during the early Paleogene: *Geology* 41(1): 95-96. doi: 10.1130/focus012013.1. (Invited Research Focus article)

- (2) **Peppe, D.J.**, 2009, A high resolution chronostratigraphic study of the early Paleocene floral record in the northern Great Plains, PhD Dissertation, Yale University, New Haven, CT: 613 p.
- (1) **Peppe, D.J.**, 2003, Fox Hills I, a new upper Maastrichtian megafloral zone within the Williston Basin of North Dakota, B.S. Thesis, St. Lawrence University, Canton, NY: 155 p.

INVITED PRESENTATIONS

<i>Research on East African Catarrhine and Hominoid Evolution workshop,</i>	2018
National Museums of Kenya, Nairobi, Kenya	
University of Minnesota, Department of Earth Sciences	2017
University of Minnesota, Department of Earth Sciences	2017
<i>What killed the dinosaurs: A fresh look at one of Earth's greatest mysteries,</i>	2017
University of California – Berkeley and University of California Museum of Paleontology	
<i>Present, and future: Quantitative approaches to conservation and climate change biology in Africa</i> workshop, Integrative Climate Change Biology, Nairobi, Kenya	2017
Midwestern State University, Kimbell School of Geosciences	2016
Kiwanis Club, West, TX	2016
Dallas Paleontological Society	2016
<i>Latest Methods in Reconstructing Cenozoic Terrestrial Environments and Ecological Communities</i> workshop, Cleveland Museum of Natural History	2015
<i>Thursday Night Science</i> lecture series, Mayborn Museum, Baylor University	2015
University of Texas, Jackson School of Geoscience	2014
George Mason University, Department of Atmospheric, Oceanic, and Earth Sciences	2014
University of California – Riverside, Department of Earth Sciences	2014
University of North Texas, Department of Geography	2013
University of Texas – Arlington, Department of Earth and Environmental Science	2011
Texas A&M, Department of Geology and Geophysics	2011
Southern Methodist University, Roy M. Huffington Department of Earth Sciences	2010
Wesleyan University, Department of Earth and Environmental Sciences	2009
University of Minnesota, Institute of Rock Magnetism	2008
Trinity College, Department of Physics	2008
Baylor University, Department of Geology	2008
University of North Dakota, Department of Geology and Geological Engineering	2005

CONFERENCE ABSTRACTS

* graduate student author, ** undergraduate student author, †advisee

2018

- *†Baumgartner, A., **†Donahoo, M., and **Peppe, D.**, 2018, Testing the applicability of leaf physiognomic proxies for climate on equatorial African floras. *European Palaeobotany & Palynology Conference 2018*: O340
- *†Flynn, A. G., **Peppe, D. J.**, **†Abbuhl, B., 2018. Rapid Floral Change in Diverse Early Paleocene Tropical Forest from the San Juan Basin, New Mexico, USA. *European Palaeobotany and Palynology Conference 2018*: O014.

- *†Milligan, J., *†Flynn, A.G., **Peppe, D.J.**, Barclay, R., 2018, A multi proxy atmospheric CO₂ reconstruct of the Early Paleocene from the San Juan Basin, New Mexico, USA. *European Palaeobotany and Palynology Conference 2018*: O016.
- **Hillis, K.R., Michel, L.A., Fox, D.L., Driese, S.G., **Peppe, D.J.**, Lehman, T., McNulty, K.P., 2018, Paleoclimate reconstruction from pedogenic carbonates form the early Miocene Wayando Formation, Mfangano Island, Lake Victoria, Kenya and the impact on early ape evolution. *American Association of Physical Anthropologists, Conference Program*: 121.
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- **†McCollum, M.S., **Peppe, D.J.**, McNulty, K.P., Dunsworth, H.M., Harcourt-Smith, W.E.H., **†Andrews, A.L., 2013. Magnetostratigraphy of the early Miocene Hiwegi Formation (Rusinga Island, Lake Victoria, Kenya): *Geological Society of America, Abstracts with Programs* 45(3): 12.
- Williamson, T., Brusatte, S.L., **Peppe, D.J.**, Secord, R., Weil, A., 2013. No evidence for conformable contact between the Ojo Alamo Sandstone and the Nacimineto Formation. *New Mexico Geological Society Annual Meeting*.

2012

- *†Michel, L.A., **Peppe, D.J.**, McNulty, K.P., Driese, S.G., Lutz, J., *Nightingale, S., **Maxbauer, D.P., **†Horner, W.H., **†DiPietro, L.M., Lehmann, T., Dunsworth, H.M., Harcourt-Smith, W.E., Ogando, J., 2012. Paleoclimatic and paleoecological reconstruction of early Miocene terrestrial equatorial deposits, Rusinga and Mfangao Islands, Lake Victoria, Kenya: *Eos Transactions AGU*: PP31B-2036.

- Snell, K.E., **Peppe, D.J.**, Eiler, J.M., Wernicke, B.P., Koch P.L., 2012. Recent advances and ongoing challenges of estimating past elevation from climate proxy data: *EOS Transactions AGU*: T24C-07.
- *†Beverly, E.J., Faith, J.T., **Peppe, D.J.**, Tryon C.A., Driese, S.G., *Blegen, N., *Patterson, D., **†Horner, W.H., 2012. Paleoenvironmental context of Pleistocene archaeological and paleontological sites in Kenya's Lake Victoria Basin: *Geological Society of America, Abstracts with Programs* 44(7): 415.
- **†Horner, W.H., *†Michel, L.A., **Peppe, D.J.**, Driese, S., McNulty, K.P., Lehmann, T., Dunsworth, H.M., Harcourt-Smith, W.E.H., 2012. Determining depositional heterogeneity through clay mineralogy and particle size analysis of an early Miocene paleo-forest paleosol, Hiwigi Formation, Rusinga Island, Kenya: *Geological Society of America, Abstracts with Programs* 44(7): 241.
- **†McCollum, M.S., **Peppe, D.J.**, McNulty, K.P., Dunsworth, H.M., Harcourt-Smith, W.E.H., **†Andrews, A.L., 2012. Magnetostratigraphy of the early Miocene Hiwigi Formation (Rusinga Island, Lake Victoria, Kenya): *Geological Society of America, Abstracts with Programs* 44(7): 241.
- *†Michel, L.A., **Peppe, D.J.**, McNulty, K.P., Driese, S.G., Lehmann, T., *Nightingale, S., **†Horner, W.H., Dunsworth, H.M., Harcourt-Smith, W.E.H., Lutz, J.A., 2012. Seeing the apes through the trees: Paleoecological reconstruction of a *Proconsul* and *Dendropithecus* site on Rusinga Island, Kenya: *Geological Society of America, Abstracts with Programs* 44(7): 364.
- *Jenkins, K., Faith, J.T., Tryon, C.A., **Peppe, D.J.**, *Nightingale, S., Ogando, J., Roure Johnson, C., Driese, S., 2012. New excavations of a Late Pleistocene bonebed and associated MSA artifacts, Rusinga Island, Kenya: *PaleoAnthropology 2012*.
- *†Lemons, C.R., **Peppe, D.J.**, 2012. Are fen leaf economics coherent enough to use as a proxy for fossil interpretations?: *Midcontinent Paleobotanical Colloquium 2012*: 22.
- Williamson, T. E., Brusatte, S.L., **Peppe, D.J.**, Secord, R., Weil, A., 2012. Early Paleocene climate change and biotic recovery of plants and animals of the San Juan Basin, New Mexico: A preliminary report: *Geological Society of America, Abstracts with Programs* 44(6):69.
- Williamson, T. E., Brusatte, S.L., **Peppe, D.J.**, Secord, R., Weil, A. 2012. No evidence for conformable contact between the Ojo Alamo Sandstone and the Nacimiento Formation: *New Mexico Geological Society Annual Meeting*: 34.

2011

- *Stinchcomb, G. E., **Peppe, D.J.**, Driese, S.G., 2011. Time as an important soil-forming factor influencing modern and ancient magnetic susceptibility enhancement along the Deleware River Valley, USA: *Eos Transactions AGU*: GP33A-1115.
- Williamson, T.E., **Peppe, D.J.**, Secord, R., *Brusatte, S., Weil, A., 2011. A long-term terrestrial record of Early Paleocene climate and ecosystem change in the San Juan Basin, New Mexico: *Journal of Vertebrate Paleontology, Program and Abstracts, 2011*: 214-215A.
- Peppe, D.J.**, Deino, A.L., Lehmann, T., Dunsworth, H.M., Harcourt-Smith, W.E.H., McNulty, K.P., 2011. New age constraints for the early Miocene faunas of Rusinga and Mfangano Islands (Lake Victoria, Kenya): *Journal of Vertebrate Paleontology, Program and Abstracts, 2011*.
- *†Michel, L.A., **Peppe, D.J.**, Driese, S., McNulty, K.P., Lehmann, T., Dunsworth, H.M., Harcourt-Smith, W.E.H., 2011. Paleoenvironmental reconstruction of early Miocene catarrhine localities using fossil forest paleosols from Rusinga Island, Lake Victoria, Kenya: *Geological Society of America, Abstract with Programs* 43(5): 429.

- *†Lemons, C.R., **Peppe, D.J.**, Royer, D.L., Wright, I.J., Lusk, C.B., 2011. Are modern fern leaf economics coherent enough to use as a proxy for fossil interpretations?: *Geological Society of America, Abstract with Programs* 43(5): 615.
- Peppe, D.J.**, Faith, J.T., Tryon, C.A., Fox, D.L., *Garrett, N., *†Van Plantinga, A., Keegan, W., *Nightingale, S., Ogando, J., *Zaarur, S., 2011. Terrestrial evidence for late Quaternary lake level changes from the Lake Victoria Basin, Equatorial Africa: *Geological Society of America, Abstract with Programs* 43(5): 335.
- *†Lemons, C.R., **Peppe, D.J.**, Royer, D.L., Wright, I.J., Lusk, C.B., 2011. Linking ecologies past and present: fern leaf economics quantified: *Ecological Society of America Annual Meeting*.
- Peppe, D.J.**, *†Lemons, C., Royer, D.L., 2011. Fern leaf economic quantified: *Midcontinent Paleobotanical Colloquium 2011*.
- **†Maxbauer, D.P., **Peppe, D.J.**, Bamford, M, McNulty, K., Dunsworth, H., Harcourt-Smith, W.E.H., Davis, L.E., 2011. New paleoenvironmental and paleoclimatic interpretations from fossil leaves for the Early Miocene faunas of Rusinga Island (Lake Victoria, Kenya): *PaleoAnthropology 2011*.
- Tryon, C.A., Faith, J.T., **Peppe, D.J.**, *†Van Plantinga, A., Fox, D.L., *Garrett, N., Keegan, W.F., Ogando, J. 2011. Middle Stone Age hominin occupation of arid environments in the Lake Victoria basin: New evidence from Rusinga and Mfangano islands, Kenya: *PaleoAnthropology 2011*.
- Peppe, D.J.**, Deino A.L., McNulty, K.P., Lehmann, T., Harcourt-Smith, W.E.H., Dunsworth, H.M., Fox, D.L., 2011. New age constraints on the early Miocene faunas from Rusinga and Mfangano Islands (Lake Victoria, Kenya), *American Journal of Physical Anthropology*, 144(S52): 237.

2010

- *Garrett, N.D., Fox, D.L., McNulty, K.P., Tryon, C.A., **Peppe, D.J.**, 2010. Isotope paleoecology of the Pleistocene Wasiriya Beds of Rusinga Island, Kenya, *Journal of Vertebrate Paleontology* 30(3): 94A.
- Tryon, C.A., Faith, J.T., **Peppe, D.J.**, 2010. Late Quaternary mammals from Rusinga Island, Kenya: implications for environmental change and megafaunal extinctions, *Journal of Vertebrate Paleontology* 30(3).
- *†Van Plantinga, A., **Peppe, D.J.**, Tryon, C., Faith, J.T., 2010. Geoarcheology of the Pleistocene Wasiriya Beds, Rusinga Island, Kenya: *Geological Society of America, Abstract with Programs* 42(5): 578.
- Peppe, D.J.**, Tryon, C.A., Faith, J.T., *†Van Plantinga, A., *Garrett, N.D., Fox, D.L., *Nightingale, S., Ogando, J., 2010. Late Pleistocene expansion of arid grasslands in equatorial Africa: evidence from the Pleistocene Wasiriya Beds, Rusinga Island, Lake Victoria, Kenya: *Texas Association of Biological Anthropology Annual Meeting*.
- **†DiPietro, L., *†Michel, L.A., **Peppe, D.J.**, 2010. Late Pleistocene expansion of arid grasslands in equatorial Africa: evidence from the Pleistocene Wasiriya Beds, Rusinga Island, Lake Victoria, Kenya: *Texas Association of Biological Anthropology Annual Meeting*.
- *†Van Plantinga, A.A., **Peppe, D.J.**, Tryon, C., Faith, J.T., 2010. Geoarchaeology of the Pleistocene Wasiriya Beds, Rusinga Island, Kenya: *Texas Association of Biological Anthropology Annual Meeting*.
- Tryon, C., Faith, T.J., **Peppe, D.J.**, Fox, D.L., McNulty, K.P., *Jenkins, K., *Garrett, N., Dunsworth, H.M., Harcourt-Smith, W.E.H., 2010. Paleoenvironmental context for Middle Stone Age hominins in Equatorial Africa: The Pleistocene Wasiriya Beds of Rusinga Island (Kenya): *PaleoAnthropology 2010*: A34.

Dunsworth, H.M., Harcourt-Smith, W.E.H., McNulty, K.P., **Peppe, D.J.**, 2010. New catarrhine fossils from the early Miocene of Rusinga and Mfangano Islands, Kenya: *American Journal of Physical Anthropology Supplement* 47: 74.

2009 and earlier

- Peppe, D.J.**, Royer, D.L., **Oliver, S., 2009, Digital Leaf Physiognomy: Using Leaf Size and Shape to Reconstruct Early and Middle Paleocene Climate Change in the Western Interior of North America: *Eos Transactions AGU*: PP11F-06.
- Royer, D.L., **Peppe, D.J.**, Wilf, P., 2009, Paleoaltimetry from Fossil Leaves: Errors Bigger than Mountains: *Eos Transactions AGU*: T43D-2141.
- Peppe, D.J.**, Royer, D.L., **Oliver, S., 2009, Digital leaf physiognomy: using leaf size and shape to reconstruct ancient climates: *Geological Society of America, Abstract with Programs* 41(7): 568.
- Fox, D.L., **Peppe, D.J.**, McNulty, K.P., Harcourt-Smith, W., Dunsworth, H.M., Lehmann, T., **†Andrews, A.L., 2009, Geochronology, stratigraphy, and paleoenvironments of early Miocene vertebrate faunas from Mfangano and Rusinga Islands, eastern Lake Victoria, Kenya: *Geological Society of America, Abstract with Programs*, 41(7): 362.
- Tryon, C., Faith, T.J., **Peppe, D.J.**, Fox, D.L., McNulty, K.P., Dunsworth, H.M., Harcourt-Smith, W., Manthi, F.K., 2009, Paleoenvironmental context for modern human origins in equatorial Africa: introducing the Pleistocene Wasiriya Beds of Rusinga Island (Kenya): *Geological Society of America, Abstract with Programs*, 41(7): 362.
- **†Andrews, A.L., **Peppe, D.J.**, McNulty, K.P., Harcourt-Smith, W., Dunsworth, H.M., Deino, A.L., Fox, D.L., 2009, Magnetostratigraphy of the early Miocene Kulu and Hiwegi Formations on Rusinga Island (Lake Victoria, Kenya): *Geological Society of America, Abstract with Programs*, 41(7): 672.
- Royer, D.L., **Peppe, D.J.**, Miller, I.M., Hickey, L.J., 2009, Leaf economic traits from fossils support a weedy origin for angiosperms: *Geological Society of America, Abstract with Programs*, 41(7): 564.
- Peppe, D.J.** and Brandon, M.T., 2009, Paleobotanical evidence for warm tropical conditions in the Early Paleogene: *Climate and Biotic Events of the Early Paleogene International Conference*.
- Peppe, D.J.** and Hickey, L.J., 2008. Unexpected patterns of floral diversity and heterogeneity in the earliest Paleocene of the North Rocky Mountains and Great Plains: *Geological Society of America, Abstract with Programs* 40(6): 323.
- Miller, I., Brandon, M., Johnson, K.R., **Peppe, D.J.**, Dunn, R., and Ellis, B., Paleobotanical estimates of Laramide relief in the Western Interior of North America: *Geological Society of America, Abstract with Programs* 40(6): 323.
- Bowring, S.A., Johnson, K.R., Clyde, W., Ramezani, J., Miller, I., and **Peppe, D.J.**, 2008. A Paleocene timescale for the Rocky Mountains: status and potential: *Geological Society of America, Abstract with Programs* 40(6): 322.
- Royer, D.L., **Peppe, D.J.**, Cariglino, B., Wilf, P., Johnson, K., Iglesias, A., 2008. Digital leaf physiognomy: a multivariate technique for reconstructing climate from fossil leaves: *Geological Society of America, Abstract with Programs* 40(6): 100.
- Peppe, D.J.** and Hickey, L.J., 2008. Plant community response to mass extinction and climate changes in the Paleocene Williston Basin of North Dakota, USA: *International Organization of Paleobotany Conference*.
- Peppe, D.J.**, Hickey, L.J., and Evans, D.A.D., 2007. Floral change in the North American Paleocene: *Geological Society of America, Abstract with Programs* 39(6): 192.
- Peppe, D.J.** and Evans, D.A.D., 2006, Magnetostratigraphy and Magnetic Mineralogy of the Ludlow Member of the Fort Union Formation (Lower Paleocene) of the Williston Basin in North Dakota: *Eos Transactions AGU*: GP11A-070.

- Reiners, P.W., **Peppe, D.**, Bibi, F., and Nicolescu, S., 2006, He Diffusion in and (U-Th)/He Dating of Fossil Tooth Enamel and Conodonts: *Goldschmidt Conference 2006*: S10-2.
- Peppe, D.J.**, Evans, D.A.D., and Hickey, L.J., 2006, Magnetostratigraphy of the lower Paleocene in the Williston Basin of North Dakota, USA: Implications for plant and mammal biostratigraphy and biochronology, *in* Caballero, F., Apellaniz, E., Baceta, J.I., Bernaola, G., Orue-Etxebarria, X., Payros, A., and Pujalata, V., eds., Climate and Biota of the Early Paleogene 2006, Volume of Abstracts: Bilbao, Spain, CROMAN: 98.
- Peppe, D.J.** and Evans, D.A.D., 2006, Magnetostratigraphy of the Lowermost Paleocene Fort Union Formation in the Williston Basin of North Dakota: Base of a Terrestrial Reference Section for Early Cenozoic Global Change: *Eos Transactions AGU* 87(36), Joint Assembly Supplement: GP42A-01.
- Peppe, D.J.**, Evans, D.A.D. and Hickey, L.J., 2005. Magnetostratigraphy and megaflora of the lower Paleocene along the southwestern margin of the Williston Basin in North Dakota: *Geological Society of America, Abstract with Programs* 37(7): 63-11.
- Larson, D. and **Peppe, D.J.** 2005. A re-evaluation of the Taxodiaceous taxa present in a Late Paleocene deposit in central North Dakota: a scanning electron analysis of morphology and anatomy: *Geological Society of America, Abstract with Programs* 37(1): 82.
- Peppe, D.J.**, and Erickson, J.M., 2004. Coastal paleoclimate estimates from Late Maastrichtian Fox Hills I floral physiognomy, North Dakota, USA: *International Organization of Paleobotany Conference Program*: 87-88.
- Peppe, D.J.**, and Erickson, J.M., 2002. Fox Hills I: A new late Maastrichtian megafloral zone from the Missouri Valley Region, demonstrating eastward diachroneity of the Hell Creek Formation in North Dakota: *Geological Society of America, Abstract with Programs* 34(6): 429.

STUDENT ADVISING

(Baylor University unless otherwise noted)

Ph.D.

Joseph Milligan, degree expected 2021, Thesis topic: "CO₂ reconstruction of the early Paleocene"

Aly Baumgartner, degree expected 2020, Thesis topic: "Leaf Physiognomy and Climate: an African perspective"

Andrew Flynn, degree expected 2019, Thesis topic: "Early Paleocene floras of the Nacimiento Formation, San Juan Basin, New Mexico"

Caitlin Leslie, graduated May 2018, Thesis topic: "Magnetostratigraphy of the Big Bend National Park, west Texas, and sequence stratigraphy of the Paleocene Nacimiento Formation, San Juan Basin"

Emily Beverly, graduated December 2015, "Reconstruction of Late Pleistocene paleoenvironments of the Lake Victoria region using paleosols and freshwater tufa"

Lauren Michel, graduated May 2014, "Field, micromorphologic and stable isotopic comparative study of modern and ancient soils from Riesel, Texas and Rusinga Island, Kenya"

M.S.

Jennifer Wagner, degree expected 2019, "Paleogene floras from the Gulf Coastal Plain in Central Texas"

Adam Davis, degree expected 2018, Thesis Topic: "Sedimentology and stratigraphy of the Paleocene Nacimiento Formation, San Juan Basin, New Mexico, USA"

Kennedy Oginga, graduated August 2018, "Geology and paleoenvironments of the early Miocene sites at Koru, Kenya"

Alexander Van Plantinga, graduated December 2011, "Geology of the Late Pleistocene Artifact-Bearing Wasirya Beds at the Nyamita Locality, Rusinga Island, Kenya"

Casey Lemons, graduated May 2012, "Leaf economics and biomechanics in extant ferns"

Undergraduate B.S. thesis

Michaela Doanhoo, graduated May 2018, "Applying paleobotanical proxies: a case study of tropical African floras"

Drew Futcher, graduated December 2017, "Magnetostratigraphy of the early Paleocene Nacimiento Formation at Mesa de Cuba in the San Juan Basin, New Mexico, USA"

April Jeannie Freeman, graduated May 2017, "Magnetostratigraphy of the early Miocene Moroto fossil site, Uganda"

Brittany Abbuhl, graduated May 2016, "Early Paleocene fossils floras from the Nacimiento Formation, San Juan Basin, New Mexico, USA"

Michael Loudermilk, graduated December 2015, "Magnetostratigraphy of the late Miocene Cofee Ranch and Mendota Ranch sections, Ogalalla Formation, northern Texas, USA"

L. Nicky Arellano, graduated May 2015, "Using paleosols to reconstruct the paleoclimate of Late Pleistocene archeological sites in the Lake Victoria Basin, Kenya"

Curtis Fenley, graduated August 2014, "Magnetostratigraphy of the early Paleocene Nacimiento Formation, San Juan Basin, New Mexico, USA"

Dillon DeGarmo, graduated 2013, "Magnetostratigraphy of the Paleocene Tongue River Member of the Fort Union Formation, Williston Basin, USA"

Mark McCollum, graduated 2013, "Magnetostratigraphy of the Miocene Hiwigi Formation, Rusinga Island, Kenya"

Blake Taylor, graduated 2013, "Paleoenvironmental reconstruction of Late Pleistocene deposits in the Lake Victoria region using clay mineralogy"

William Horner, graduated 2012, "Assessing heterogeneity of depositional environments using clay mineralogy and particle size analysis of an early Miocene paleo-forest paleosol, Hiwigi Formation, Rusinga Island, Kenya"

Lyndsay DiPietro, graduated 2011, "Paleoclimate Interpretation Using Clay Mineralogy for Early Miocene Fossil Localities of the Hiwigi Formation on Rusinga Island, Lake Victoria, Kenya"

Committee Member

Zhao Wang, PhD

Tori Tew, MS

Will Matthaeus, PhD (Biology)

Don Esker, PhD

Logan Wiest, PhD

Kasey Bolles, PhD

Yohan Letourmay, PhD

Lyndsay DiPietro, PhD

Bill Lukens, PhD, graduated December 2017

Todd Longbottom, PhD, graduated August 2017

Christopher Skrodzki, MS, graduated May 2017

Deb Jennings, PhD, graduated May 2014
Martin Husemann, PhD, graduated August 2013
Steve Ahr, PhD, graduated December 2012
Aislyn Trendell, PhD, graduated December 2012
Gary Stinchcomb, PhD, graduated August 2012
Jason Mintz, PhD, graduated May 2011
Daniel Maxbauer, BS, St. Johns University, graduated 2011
Sofia Oliver, BS, Wesleyan University, graduated 2009

Undergraduate and High School Research

Jessie Barnett, 2011, High School Student Summer Research Program, Baylor University
Alexandra Andrews, 2009, undergraduate research project, Yale University

COURSES TAUGHT (enrollment)

Fall 2016

Geology 4331, *Evolutionary History of Plants* (4)

A survey of fossil plants from the Precambrian to the present and review of methods and techniques used for in paleoclimatology and paleoecology (lecture and lab)

Spring 2018

Geology 3442, *Field Studies in Stratigraphy and Sedimentology* (18)

A study of sediments and sedimentary rocks and the interpretation of geologic history based on outcrop investigation (lecture and lab)

Fall 2017

Geology 5389, *Earth System Science* (6)

An assessment of the Earth's four systems (atmosphere, hydrosphere, biosphere, and solid Earth), the internal and external forcing factors that influence them, and how they affect the Earth's climate both independently and by interacting together.

Geology 5338, *Advanced Studies in Paleontology: Fossil floras* (2)

A survey of methods used to describe, classify, and identify fossil floras based on their leaf architecture.

Spring 2017

Geology 5314, *Advanced Topics in Paleoclimatology: Paleoclimate Proxies* (6)

An examination of terrestrial and marine proxies used to reconstruct paleoenvironment and paleoclimate through Earth history

Fall 2016

Geology 4331, *Evolutionary History of Plants* (8)

A survey of fossil plants from the Precambrian to the present and review of methods and techniques used for in paleoclimatology and paleoecology (lecture and lab)

Spring 2016

Geology 3442, *Field Studies in Stratigraphy and Sedimentology* (19)

A study of sediments and sedimentary rocks and the interpretation of geologic history based on outcrop investigation (lecture and lab)

Spring 2015

Geology 5V90, *Advanced Topics in Geochronology* (3)

A survey of geochronologic methods used to generate absolute and relative dates in geological, paleontological, and archeological contexts.

Geology 43C1, *Senior Colloquium Capstone* (6)

Capstone course emphasizing integration of all the major core course in the geology, geophysics, and earth science majors

Fall 2014

Geology 5389, *Earth System Science* (8)

An assessment of the Earth's four systems (atmosphere, hydrosphere, biosphere, and solid Earth), the internal and external forcing factors that influence them, and how they affect the Earth's climate both independently and by interacting together.

Spring 2014

Geology 3342, *Field Studies in Stratigraphy and Sedimentology* (17)

A study of sediments and sedimentary rocks and the interpretation of geologic history based on outcrop investigation (lecture and lab)

Geology 4331, *Evolutionary History of Plants* (6)

A survey of fossil plants from the Precambrian to the present and review of methods and techniques used for in paleoclimatology and paleoecology (lecture and lab)

Fall 2013

Geology 5314, *Advanced Topics in Paleoclimatology: Climate Change, Past, Present, and Future* (6)

Survey of some of the important changes in the earth's climate through the discussion primary literature and the proxies and models used to determine and interpret the causes and effects of these changes.

Fall 2012

Geology 5314, *Advanced Topics in Paleoclimatology: Paleoclimate Proxies* (5)

An examination of terrestrial and marine proxies used to reconstruct paleoenvironment and paleoclimate through Earth history

Spring 2012

Geology 3342, *Field Studies in Stratigraphy and Sedimentology* (15)

A study of sediments and sedimentary rocks and the interpretation of geologic history based on outcrop investigation

Fall 2011

Geology 5338, *Advanced Studies in Paleontology: Paleobotany* (2)

A survey of fossil plants from the Precambrian to the present and review of methods and techniques used for in paleoclimatology and paleoecology

Geology 5V90, *Paleoecology and Biodiversity of East African Lakes from the Pliocene to the Present* (4)

An examination of the paleoclimate record of the East African great lakes and the influence of environmental change on the evolution and biodiversity of cichlids

Spring 2011

Geology 5V90, *Techniques in Paleomagnetism* (2)

A survey of methodologies and techniques used in paleomagnetism. The course was a directed study, discussion-based classes focused on topics that related to the graduate students backgrounds and interests.

Fall 2010

Geology 5338, Advanced Studies in Paleontology: Paleobotany (4)

A survey of fossil plants from the Precambrian to the present and review of methods and techniques used for in paleoclimatology and paleoecology.

Geology 5V90, Climate Change: Past, Present, and Future (7)

A detailed examination of climate change from the Precambrian to the present through discussions based on primary literature.

Spring 2010

Geology 1405, The Dynamic Earth (27)

A survey of physical geology, the processes that have shaped the earth, plate tectonics, and the dynamics of the earth's interior.

Fall 2009

Geology 5V90, Climate Change: Past, Present, and Future (4)

A detailed examination of several of the important climate change events that occur through the Cenozoic (65 Ma – present).

PROFESSIONAL SERVICE

Peer review

<i>Associate Editor, Palaios</i>	2018 – Present
<i>Academic Editor, PLOS One</i>	2018 – Present
<i>Review Editor, Frontiers in Earth Sciences</i>	2013 – Present
<i>Recommender, PCI Paleo</i>	2018 – Present
<i>Steering Committee, paleorXiv (https://paleorxiv.github.io)</i>	2017 – Present
<i>Guest Academic Editor, PLOS One</i>	2017 – 2018

Manuscript Reviews

Acta Oecologica

American Journal of Botany

Basic and Applied Ecology

Canadian Journal of Earth Science

Chemical Geology

Comptus rendus Palevol

Cretaceous Research

Earth and Planetary Science Letters

Frontiers in Earth Sciences

Frontiers in Plant Sciences

Geology

Geological Society of America Bulletin

Geological Society of America Special Publications

Global Ecology and Biogeography

Grana

Journal of Human Evolution

Journal of Paleontology

New Phytologist

Nordic Journal of Botany
Proceedings of the National Academy of Science
Palaeos
Palaeogeography, Palaeoclimatology, and Palaeoecology
Paleobiology
Paleoceanography
Paleontologia Electronica
Palaeobiodiversity and Palaeoenvironments
Peabody Museum of Natural History Bulletin
PLOS One
Proceedings of the Royal Society B
Quaternary Research
Rocky Mountain Geology
Science

Proposal and Fellowship Reviews

ACS Petroleum Research Fund
Dissertations Initiative for the Advancement of Climate Change Research Symposia
(DISCCRS)
L'Agence national de la recherche (French National Research Agency)
Leakey Foundation
National Geographic Society
New Generation of Polar Researchers Leadership Symposium (NGPR)
National Science Foundation (Antarctic Earth Science, Biological Anthropology, Graduate
Research Fellowship Program, Instrumentation and Facilities, Paleo Perspectives on
Climate Change, Sedimentary Geology and Paleobiology, Tectonics)
Netherlands Organization for Scientific Research - Council for Earth and Life Sciences

Panelist

National Science Foundation (2014, 2015, 2016)

Conference Service

Session co-convener, Geological Society of America Meeting, 2016, "Timing, drivers, and
marine and terrestrial ecosystem response to the Cretaceous-Paleogene extinction event"
Session co-convener, Geological Society of America Meeting, 2012, "Fossil plants as
paleoenvironmental recorders"
Judge, Outstanding Student Presentation Awards, AGU Fall Meeting 2011
Session co-convener, American Geophysical Union Fall Meeting, 2011, "Tectonics, erosion and
paleoclimate: Insights from geochemistry, paleobiology, geochronology, and modeling"
Session co-convener, Geological Society of America Annual Meeting, 2011, "Paleoclimate,
terrestrial ecosystems, and human evolution in Africa from the Pleistocene to the Present",
2011
Organizing Committee, SEPM-NSF Workshop, 2010, "Paleosols and soil surface analog
systems"
Session Chair, Geological Society of America Annual Meeting, 2005, "At the interface of
paleontology and geology, Paleontological Society"

Society Service

Strimple Award Committee, The Paleontological Society, 2016 – Present
Nominations Committee, The Paleontological Society, 2012 – 2016

Scientific Outreach

Interview and segment, Central Texas Living, KXXV, interview about getting young people interested in science and outreach work at Mayborn Museum:
<https://www.facebook.com/annharderkxxv/videos/1698160350228591/>

Organizer, Coordinator, and Panel Moderator, Earth Science Symposium – Climate change: Earth's past, present, and future.
Press release about event:
<https://www.baylor.edu/mediacommunications/news.php?action=story&story=187227>
Facebook Live video of panel discussion:
<https://www.facebook.com/MaybornMuseumComplex/videos/1462457880475180/>

Organizer and Coordinator, Earth Science Week activities, Mayborn Museum:
<http://baylorlariat.com/2017/10/10/mayborn-hosts-earth-science-week-celebration/>
Interview with KWBU about Earth Science week events: <http://kwbu.org/post/mayborn-museum-hosting-earth-science-week#stream/0>
Video recap of fossil, rock, and mineral identification event:
<https://www.facebook.com/baylorgeosciences/videos/849686588545525/>

Exhibitor, Sic 'Em Science Day at the Mayborn Museum.
 Designed multiple hands on activities on fossil leaves and paleoclimate for general public participation

Guest blogger, Plant Science Today, How I Work series: <http://blog.aspb.org/2016/04/13/im-plant-scientist-dan-peppe-and-this-is-how-i-work/>

Guest blogger, Rock-Head Sciences, A Day in the Life Series:
<http://rockheadsciences.com/peppe-paleoclimatology/>

Presenter, The Academic Minute, WAMC Northeast Public Radio and Inside Higher Ed:
<http://wamc.org/post/dr-dan-peppe-baylor-university-proconsul-fossils>

Interview and segment, KWBU National Public Radio, “Scientists: Asteroid caught the dinosaurs at a bad time”: <http://kwbu.org/post/scientists-asteroid-caught-dinosaurs-bad-time>

Interview and segment, KWBU National Public Radio, “Habitats of early apes”:
<http://edge.baylor.edu/media/219352/219352-audio.mp3>

Scientific consultant, National Geographic Channel, “T. Rex Autopsy”:
<http://channel.nationalgeographic.com/t-rex-autopsy/>

Scientific consultant, BBC Earth, Walking With Dinosaurs website

Contributing author, BBC Earth, Walking With Dinosaurs, WWD Features, “K-T extinction: the plants that followed dinosaurs into extinction”

Guest blogger, EGU Blogs, “What do we know about the origin of flowering plants?":
<http://blogs.ehu.eu/palaeoblog/2013/10/15/what-do-we-know-about-the-origin-of-flowering-plants/>

Scientific consultant, American Museum of Natural History Science Bulletins, Expedition Rusinga: Uncovering our Adaptive Origins: [www.amnh.org/explore/science-bulletins/\(watch\)/human/documentaries/expedition-rusinga-uncovering-our-adaptive-origins](http://www.amnh.org/explore/science-bulletins/(watch)/human/documentaries/expedition-rusinga-uncovering-our-adaptive-origins)

University Academic Service (Baylor University)

<i>Search Committee Chair</i> , Department of Geosciences, Assistant Professor of Paleobiology search	2017-2018
<i>Summer Faculty Institute, Guest Facilitator</i> , Academy for Teaching and Learning	2016
<i>Search Committee Chair</i> , Department of Geology, Computer and Instrumentation Specialist	2014-2015
<i>Geology leader</i> , Code Red Event, Baylor University’s “Invitation to Excellence”	2013
<i>Search Committee Member</i> , Department of Geology, Professor of Paleoclimatology search	2012 – 2013

<i>Committee Member</i> , Faculty Focus Group on Teaching Effectiveness	2012
<i>Member</i> , Phi Beta Kappa Society	2009 – Present
<i>Mentor</i> , Baylor University, High School Student Summer Research Program (HSSSRP)	2011
<i>Committee Member</i> , Department of Geology, Robert Foster Cherry Award For Great Teaching	2011
<i>Search Committee Member</i> , Department of Geology, Assistant/Associate Professor of Geochemistry/Paleoclimatology search	2009 – 2010
<i>Table Host</i> , Baylor University “Invitation to Excellence”	2009

PROFESSIONAL MEMBERSHIPS

American Association for the Advancement of Science, American Association of Physical Anthropologists; American Geophysical Union; Geological Society of America; International Organization of Paleobotany; National Association of Geoscience Teachers, Paleontological Society; Society of Vertebrate Paleontology