

CURRICULUM VITAE 28 August 2017

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EDUCATION

The Ohio State University	Ph.D.	1988	Botany
Ohio University	M.S.	1982	Botany
Ohio University	B.S.	1980	Botany
Shawnee State College, Portsmouth, Ohio		1975-1977	

POSITIONS HELD

Professor, School of Life Sciences 2008 – present
Curator of Fossil Plant Collections, Biodiversity Knowledge Integration Center (BioKIC)
Associate Professor, School of Life Sciences, Arizona State University 2002-2008
Associate Professor, Department of Plant Biology, Arizona State University 1994-2002
Assistant Professor, Department of Botany, Arizona State University 1988-1994
NSF-NATO Postdoctoral Fellow in Science, Department of Botany, University of Alberta,
Edmonton, Canada 1989

RESEARCH INTERESTS

Diversification and biogeography of Tertiary angiosperms and pteridophytes
Origin and early diversification of Northern Hemisphere temperate floras
Structure, ontogeny and phylogeny of isoetalean lycopods
History of botany and paleobotany
Evolution of Paleozoic and Mesozoic pteridosperms

PUBLICATIONS IN PEER REVIEWED JOURNALS

Published:

Pigg, KB, FA Bryan, and ML DeVore. *Paleoallium billgenseli* gen. et sp. nov.: fossil monocot bulbs from the latest early Eocene Republic flora, northeastern Washington State, USA. International Journal of Plant Sciences, submitted 30 July, 2017.

Pigg, KB, ML DeVore. 2016. A review of the plants of the Princeton chert (Eocene, British Columbia, Canada). Botany 94: 661-681.

Greenwood, DR, KB Pigg, ML DeVore. 2016. Eocene paleontology and geology of western North America. Canadian Journal of Earth Sciences 53: 543-547.

- Greenwood, DR, KB Pigg, JF Basinger, and ML DeVore. 2016. A review of paleobotanical studies of the early Eocene Okanogan (Okanogan) Highlands floras of British Columbia, Canada and Washington, USA. *Canadian Journal of Earth Sciences* 53: 548-564.
- DeVore, ML, and KB Pigg. 2016. Biotic processes in the Okanogan Highlands floras: possible evidence of hybridization in plants adapting to a temperate forest. *Canadian Journal of Earth Sciences* 53: 622-629.
- Ickert-Bond, SM, KB Pigg and ML DeVore 2015 *Paleochna tiffneyi* gen. et sp. nov. (Ochnaceae) from the late Paleocene Almont/Beicegel Creek flora, North Dakota, USA. *International Journal of Plant Sciences* 176: 892-900.
- DeVore, ML, W Taylor, and KB Pigg. 2015 *Nuphar carlquistii* sp. nov., (Nymphaeaceae): A water lily from the latest early Eocene, Republic, Washington, USA. *International Journal of Plant Sciences* 176: 365-377.
- Nishida H, KB Pigg, K Kudo, and JF Rigby 2014 New evidence of the reproductive organs of *Glossopteris* based on permineralized fossils from Queensland, Australia. II: Pollen-bearing organ *Ediea* gen. nov. *JPR Symposium: Palaeobotany: Old but new stories on plant diversity. Journal of Plant Research* 127: 233-240. DOI 10.1007/s10265-013-0601-3.
- Dillhoff, RM, TA Dillhoff, DR Greenwood, ML DeVore, and KB Pigg. 2013. The Eocene Thomas Ranch flora, Allenby Formation, Princeton, British Columbia, Canada. *Botany* 91:514-529.
- DeVore, ML, and KB Pigg 2013. Paleobotanical evidence for the origins of temperate hardwoods in: Special Issue: Conceptual Advances in Fossil Plant Biology Edited by G Rothwell and R Stockey, eds. *International Journal of Plant Sciences* 174: 592-601.
- Zetter R, MJ Farabee, KB Pigg, SR Manchester, ML DeVore and MD Nowak. 2011. Palynoflora of the late Paleocene silicified shale at Almont, North Dakota, USA. *Palynology* 2011: 1-33. DOI :10.1080/01916122.2010.50164
- Benedict, JC, ML DeVore, and KB Pigg. 2011 *Prunus* and *Oemleria* (Rosaceae) flowers from the late early Eocene Republic flora of northeastern Washington state, USA. *International Journal of Plant Sciences* 172: 948-958.
- Collinson, ME, ML DeVore, and KB Pigg. 2010. Paleogene floras and global change events: Introduction. *Bulletin of Geosciences* 85(1): 61-62
- DeVore, ML, and KB Pigg. 2010. Floristic composition and transitions of middle Eocene to late Eocene and Oligocene floras in North America. In: Collinson, ME, KB Pigg, and ML DeVore. Northern Hemisphere Paleogene floras and global change events. *Bulletin of Geosciences* 85 (1): 111-134, published online 2009: doi 10.3140/bull.geosci.1135
- Gensel, PG, and KB Pigg. 2010. An arborescent lycopsid from the Lower Carboniferous Price Formation, southwestern Virginia, USA and the problem of species delimitation. *International Journal of Coal Geology*, 83: 132-145; published online 2009: doi:10.1016/j.coal.2009.11.005
- Graham, LE, ME Cook, DT Hanson, KB Pigg & JM Graham. 2010a. Structural, physiological, and stable carbon isotopic evidence that the enigmatic Paleozoic fossil *Prototaxites* formed from rolled liverwort mats. *American Journal of Botany* 97(2):1-9, doi:10/3732/ajb.0900322.
- Graham, LE, ME Cook, DT Hanson, KB Pigg, and JM Graham. 2010b. Rolled liverwort mats explain major *Prototaxites* features: Response to Commentaries. *American Journal of Botany* 97(7): 1079-1086. doi 10.3732/ajb.1000172

- Pigg, KB, and ML DeVore. 2010. Floristic composition and transitions of late Paleocene to early Eocene floras in North America. In: Collinson, ME, KB Pigg, and ML DeVore. Northern Hemisphere Paleogene floras and global change events. *Bulletin of Geosciences* 85: 135-154.
- Pigg, KB, ML DeVore and MF Wojciechowski. 2008. *Paleosecuridaca curtisii* gen. et sp. nov., *Securidaca*-like samaras (Polygalaceae) from the late Paleocene of North Dakota, USA and their significance to the divergence of families within the Fabales. *International Journal of Plant Sciences* 169: 1304-1313.
- Manchester, SR, and KB Pigg. 2008. The mystery flower of McAbee, British Columbia. *Botany (formerly Canadian Journal of Botany)* 86: 1034-1038.
- Pigg, KB, SR Manchester, and ML DeVore. 2008. Fruits of Icacinaceae from the late Paleocene of western North America. *American Journal of Botany* 95: 824-832.
- Benedict, JC, KB Pigg and ML DeVore. 2008. *Hamawilsonia boglei* gen. et sp. nov. (Hamamelidaceae) from the late Paleocene Almont flora of central North Dakota, USA. *International Journal of Plant Sciences* 169: 687-700.
- DeVore ML and KB Pigg. 2007. A brief review of the fossil history of the family Rosaceae with a focus on the Eocene Okanogan Highlands of eastern Washington State, USA, and British Columbia, Canada. *Plant Systematics & Evolution* 266: 45-57.
- Ickert-Bond SM, KB Pigg, and J Wen. 2007. Comparative infructescence morphology in *Altingia* Noronha and discordance between morphological and molecular rates of evolution. *American Journal of Botany* 94: 1094-1115.
- Nishida H, KB Pigg, K Kudo, and JF Rigby. 2007. New evidence of reproductive organs of *Glossopteris* based on permineralized fossils from Queensland, Australia. I. Ovulate organ *Homevaleia* gen. nov. *Journal of Plant Research* 120: 539-549.
- Pigg KB, and ML DeVore. 2007. East meets West: the contrasting contributions of David L. Dilcher and Jack A. Wolfe to Eocene systematic paleobotany in North America, in D. M. Jarzen, G. Retallack, S. Jarzen and S. R. Manchester, eds. *Advances in Mesozoic and Cenozoic Paleobotany*, Courier Forschungsinstitut Senckenberg 258: 85-94.
- Pigg, KB, RM Dillhoff, ML DeVore, and WC Wehr. 2007. New diversity among the Trochodendraceae from the Early/Middle Eocene Okanogan Highlands of British Columbia, Canada and northeastern Washington State, USA *International Journal of Plant Sciences* 168: 521-532.
- DeVore ML, P Kenrick, KB Pigg, and RA Ketcham. 2006. Utility of high-resolution X-ray computed tomography (HRXCT) for paleobotanical studies: an example using London Clay fruits and seeds. *American Journal of Botany* 93: 1848-1851.
- Pigg KB, ML DeVore and WC Wehr. 2006. Filicalean ferns from the Tertiary of western North America: *Osmunda* L. (Osmundaceae: Pteridophyta), *Woodwardia* Sm. (Blechnaceae: Pteridophyta), and onocleoid ferns (Filicales: Pteridophyta). *Fern Gazette* 17: 279-286.
- Pigg KB, and H Nishida. 2006. The significance of silicified plant remains to the understanding of *Glossopteris*-bearing plants. *Journal of the Torrey Botanical Society* 143: 46-61.
- Taylor W, ML DeVore, and KB Pigg. 2006. *Susiea newsalemae*, gen. et sp. nov., (Nymphaeaceae): *Euryale*-like seeds from the Late Paleocene Almont flora, North Dakota, USA. *International Journal of Plant Sciences* 167: 1271-1278.
- Pigg, KB, and ML DeVore. 2005. *Paleoactaea* gen. nov. (Ranunculaceae) from the Paleogene of North Dakota and the London Clay. *American Journal of Botany* 92: 1650-1659.

- Ickert-Bond, SM, KB Pigg, and J Wen. 2005. Comparative infructescence morphology in *Liquidambar* L. (Altingiaceae) and its evolutionary significance. *American Journal of Botany* 92: 1234-1255.
- Pigg, KB, and ML DeVore. 2005. *Shirleya grahamae* gen. et sp. nov. (Lythraceae), *Lagerstroemia*-like fruits from the middle Miocene Yakima Canyon flora, central Washington state, USA. *American Journal of Botany* 92: 77-107. [
- Radtke, MG, KB Pigg, and WC Wehr. 2005. Fossil *Corylopsis* and *Fothergilla* leaves (Hamamelidaceae) from the lower-middle Eocene flora of Republic, Washington, USA and their evolutionary and biogeographic significance. *International Journal of Plant Sciences* 166: 347-356.
- DeVore, ML, KB Pigg, and WC Wehr. 2005. Systematics and phytogeography of selected Okanagan Highlands plants. *Canadian Journal of Earth Sciences* 42: 205-214.
- DeVore, ML, SM Moore, KB Pigg, and WC Wehr. 2004. Fossil *Neviusia* leaves (Rosaceae: Kerriaceae) from the lower-middle Eocene of southern British Columbia. *Rhodora* 106: 197-209.
- Manchester, SR, KB Pigg, and PR Crane. 2004. *Palaeocarpinus dakotensis* sp. nov. (Betulaceae: Coryloideae) and associated staminate catkins, pollen and leaves from the Paleocene of North Dakota. *International Journal of Plant Sciences* 165: 1135-1148.
- Nishida, H, KB Pigg, K Kudo, and J Rigby. 2004. Zooidogamy of the late Permian *Glossopteris*. *Journal of Plant Research* 117: 323-328.
- Pigg, KB, SM Ickert-Bond, and J Wen. 2004. Anatomically preserved *Liquidambar* (Altingiaceae) from the middle Miocene of Yakima Canyon, Washington state, USA, and its biogeographic implications. *American Journal of Botany* 91: 499-509
- Pigg KB, SR Manchester, and WC Wehr. 2003. *Corylus*, *Carpinus* and *Palaeocarpinus* (Betulaceae) from the middle Eocene Klondike Mountain and Allenby Formations of northwestern North America. *International Journal of Plant Sciences* 164: 807-822.
- Nishida H, KB Pigg and JF Rigby. 2003. Swimming sperm in an extinct Gondwanan plant. *Nature* 422: 396-397.
- Pigg, KB 2001. Isoetalean lycopsid evolution: from the Devonian to the present. *American Fern Journal* 91: 99-114.
- Pigg, KB, and GW Rothwell. 2001. Anatomically preserved *Woodwardia virginica* (Blechnaceae) and a new filicalean fern from the middle Miocene Yakima Canyon flora of central Washington, USA. *American Journal of Botany* 88: 777-787.
- Pigg, KB, WC Wehr, and SM Ickert-Bond. 2001. *Trochodendron* and *Nordenskioldia* (Trochodendraceae) from the middle Eocene of Washington State, USA. *International Journal of Plant Sciences* 162: 1187-1198.
- Borgardt, SJ, and KB Pigg. 1999. Petrified acorns from the Miocene of North America and their significance to the evolution of *Quercus* L. (Fagaceae). *American Journal of Botany* 86: 307-325.
- Stockey, RA, BA LePage, and KB Pigg. 1998. Permineralized fruits of *Diplopanax* (Cornaceae, Mastixioideae) from the middle Eocene Princeton chert of British Columbia. *Review of Palaeobotany and Palynology* 103: 223-234.
- Pigg, KB, and S McLoughlin. 1997. Anatomically preserved *Glossopteris* leaves from the Bowen and Sydney Basins, Australia. *Review of Palaeobotany and Palynology* 97: 339-359.

- Chitaley, SD., and KB Pigg. 1996. *Clevelandodendron ohioensis*, gen. et sp. nov., a slender upright lycopod from the Late Devonian Cleveland Shale of Ohio. *American Journal of Botany* 83: 781-789.
- Pigg, KB, and ML Trivett. 1994. Evolution of the glossopterid gymnosperms from Permian Gondwana. *Journal of Plant Research* 107: 461-477.
- Stockey, RA, and KB Pigg. 1994. Vegetative growth of *Eorhiza arnoldii* Robison and Person from the Middle Eocene Princeton chert locality of British Columbia. *International Journal of Plant Sciences* 155: 606-616.
- Pigg, KB, RA Stockey, and SL Maxwell. 1993. *Paleomyrtinaea princetonensis* gen. et sp. nov., permineralized myrtaceous fruits and seeds from the Princeton chert and related Myrtaceae from Almont, North Dakota. *Canadian Journal of Botany* 71: 1-9.
- Pigg, KB, and TN Taylor. 1993. Anatomically preserved *Glossopteris* stems with attached leaves from the central Transantarctic Mountains, Antarctica. *American Journal of Botany* 80: 500-516.
- Tidwell, WD, and KB Pigg. 1993. New species of *Osmundacaulis* emend. from Tasmania, Australia. *Palaeontographica (Festband Schweitzer, 1. Teil)* 230B: 141-158.
- Pigg, KB 1992. Evolution of isoetalean lycopsids. *Annals of the Missouri Botanical Garden* 79: 589-612.
- Ash, S, and KB Pigg. 1991. A new Jurassic *Isoetites* (Isoetales) from the Wallowa Terrane in Hells Canyon Oregon and Idaho. *American Journal of Botany* 78: 1636-1642.
- Cevallos-Ferriz, SRS, RA Stockey, and KB Pigg. 1991. The Princeton chert: Evidence for *in situ* aquatic plants. *Review of Palaeobotany and Palynology* 70: 173-185.
- Pigg, KB, and RA Stockey. 1991. Platanaceous plants from the Paleocene of Alberta, Canada. *Review of Palaeobotany and Palynology* 70: 125-146.
- Stockey, RA, and KB Pigg. 1991. Flowers and fruits of *Princetonia allenbyensis* (Magnoliopsida fam. indet.) from the Middle Eocene of British Columbia. *Review of Palaeobotany and Palynology* 70: 163-172.
- Pigg, KB 1990. Anatomically preserved *Glossopteris* foliage from the central Transantarctic Mountains. *Review of Palaeobotany and Palynology* 66: 105-127.
- Pigg, KB 1990. Anatomically preserved *Dicroidium* foliage from the central Transantarctic Mountains. *Review of Palaeobotany and Palynology* 66: 129-145.
- Pigg, KB, TN Taylor, and RA Stockey. 1987. Studies of Paleozoic seed ferns: *Heterangium kentuckyensis* sp. nov., from the Upper Carboniferous of North America. *American Journal of Botany* 74: 1184-1204.
- Pigg, KB, RA Stockey, and TN Taylor. 1986. Studies of Paleozoic seed ferns: Additional studies of *Microspermopteris aphyllum* Baxter. *Botanical Gazette* 147: 126-136.
- Pigg, KB, and GW Rothwell. 1985. Cortical development in *Chaloneria cormosa* (Isoetales), and the biological derivation of compressed lycophyte decortication taxa. *Palaeontology* 28: 545-553.
- Pigg, KB, and TN Taylor. 1985. *Cormophyton* gen. nov., a cormose lycopod from the Mazon Creek flora. *Review of Palaeobotany and Palynology* 44: 165-181.
- Pigg, KB 1983. The morphology and reproductive biology of the sigillarian cone *Mazocarpon*. *Botanical Gazette* 144: 600-613.
- Pigg, KB, and GW Rothwell. 1983a. *Chaloneria*, gen. nov., heterosporous lycophytes from the Pennsylvanian of North America. *Botanical Gazette* 144: 132-147.

Pigg, KB, and GW Rothwell. 1983b. Megagametophyte development in the Chaloneriaceae fam. nov., permineralized Paleozoic Isoetales (Lycopsida). *Botanical Gazette* 144: 295-302.

Pigg, KB, and GW Rothwell. 1979. Stem-root transition of an Upper Pennsylvanian woody lycopsid. *American Journal of Botany* 66: 914-924.

REFEREED BOOK CHAPTERS AND DICTIONARY ENTRIES

2017

Invited book chapter: Nishida, H, KB Pigg, and ML DeVore. submitted 2017. Glossopterid plant remains in permineralization: What do they tell us? in: M Krings, C Harper, NR Cúneo, and GW Rothwell eds., *Transformative Paleobotany: Papers to Commemorate the Life and Legacy of Thomas N. Taylor*. Elsevier.

Invited book chapter:

Pigg, KB, and BH Tiffney. submitted 2017. The North American fossil record of *Quercus*. The fossil history of the genus *Quercus*: E Barrón López, J Postigo, T Utescher and others. In: E. Gil-Pelegrín, JJ Peguero-Pina, and D Sancho-Knapik, eds., *Oaks Physiological Ecology. Exploring the Functional Diversity of the Genus Quercus*. Springer-Verlag.

Invited textbook chapter:

Pigg, KB, and ML DeVore. submitted 2017. Chapter U5. Visiting the "PETM" greenhouse environments, plants and animals of the Paleogene and their Neogene aftermaths. in: *Nature and Time on Earth, a collaborative course and online textbook* E Martinetto, editor. This project is in negotiation to be published by Springer.

2014

Invited book chapter:

DeVore, ML, KB Pigg, DL Dilcher and D Freile. 2014. *Catahoulea grahamii* gen. et sp. nov.: fagaceous involucre from the Oligocene Catahoula Formation, central Texas and the middle Eocene Claiborne Formation of Kentucky and Tennessee, USA. Chapter 3. p 41-50 in: Stevens, WD, OM Montiel and P Raven, (eds.) *Paleobotany and biogeography A Festschrift for Alan Graham in his 80th year*. Missouri Botanical Garden Press, St. Louis.

Invited book chapter:

Pigg, KB, ML DeVore, JC Benedict and RM Creekmore. 2014. Fruits of *Melia* (Meliaceae: Meliaceae) from the middle Miocene Yakima Canyon flora of central Washington State, USA. Chapter 11, p. 327- 337 in: Stevens, WD, OM Montiel and P Raven, (eds.) *Paleobotany and biogeography. A Festschrift for Alan Graham in his 80th year*. Missouri Botanical Garden Press, St. Louis

2007

Pigg, KB Katherine Esau. in *New Dictionary of Scientific Biography*, N. Koertge ed. vol 2: 413-416, MacMillan, New York.

1996

Trivett, ML, and KB Pigg. A survey of reticulate venation among fossil and living land plants. in: D. W. Taylor and L. J. Hickey, [eds.]. Flowering plant origin, evolution and phylogeny. Chapman and Hall, New York. p. 8-31.

1990

Pigg, KB, and TN Taylor. Permineralized *Glossopteris* and *Dicroidium* from Antarctica. in: T. N. Taylor and E. L. Taylor., [eds.] Antarctic paleobiology and its role in the reconstruction of Gondwana. Springer-Verlag, p. 164-172.

GUIDEBOOKS

2011, reprinted 2016

Pigg, KB, ML DeVore & KE Volkman. Fossil plants from Republic: a guidebook. Stonerose Interpretive Center, Republic, Washington. Second printing June, 2014.

**COMMENTARY, REVIEWS, TECHNICAL REPORTS, AND
NON-REFEREED PAPERS**

2013

Kapgate, SR Manchester, KB Pigg and WG Chaloner. Obituary for Shya Chitaley. International Organization for Paleobotany Newsletter.

Kapgate, SR Manchester, KB Pigg and WG Chaloner. Obituary for Shya Chitaley. Botanical Society of America, Paleobotanical Section Newsletter.

2009

Pigg, KB Review of "Plants and the K-T Boundary" by Douglas Nichols and Kirk Johnson. The Quarterly Review of Biology 84 (3): 309.

2005

Archibald, SB, KB Pigg, DR Greenwood, SR Manchester, L Barksdale, KR Johnson, M Sternberg, RA Stockey, ML DeVore and GW Rothwell. Wes Wehr dedication. Canadian Journal of Earth Sciences 42: 115-117.

2002

Pigg, KB, and WC Wehr. Tertiary flowers, fruits and seeds of Washington State and adjacent areas--Part III. Washington Geology 30: 3-20.

DeVore, ML, and KB Pigg. Paleobotany. Highlights Issue. Geotimes.

2000

Pigg, KB Paleobotany. Highlights Issue. Geotimes 45: 36-37.

1999

Pigg, KB Paleobotany. Highlights Issue. Geotimes 44: 43-45.

1996

Pigg, KB, and RA Stockey. The significance of the Princeton chert permineralized flora to the Middle Eocene upland biota of the Okanogan Highlands. Washington Geology 24: 32-36.

1995

Pigg, KB, WC Davis and SR Ash. Anatomically preserved plant reproductive structures from the Upper Triassic Chinle Formation in Petrified Forest National Park, Arizona. In: V. L. Santucci and L. McClelland, [eds.], National Park Service Paleontological Research, Technical Report NSP/NRPO/NRTR-95/16, Natural Resources Publication Office, Denver. p.106-108.

1993

Pigg, KB Triassic fossil plants of Arizona. In: Boas, D., and M. Dornan, eds. Proceedings of the First Annual Symposium Fossils of Arizona. Mesa Southwest Museum and Southwest Paleontological Society, Mesa, Arizona. p. 8-13.

Pigg, KB, SR Ash, and WC Davis. A new permineralized Upper Triassic flora from Petrified Forest National Park, Arizona: a preliminary report. In: Lucas, S. G., and M. Morales, eds. The Nonmarine Triassic. New Mexico Museum of Natural History & Science Bulletin No. 3, Albuquerque. p. 411-413.

Tegowski, BJ, and KB Pigg. Fossil investigations from the Middle Miocene Anderson Mine Locality, Yavapai County, Arizona. In: Boas, D., and M. Dornan, eds. Proceedings of the First Annual Symposium Fossils of Arizona. Mesa Southwest Museum and Southwest Paleontological Society, Mesa, Arizona p. 86-91.

1987

Pigg, KB, and TN Taylor. Anatomically preserved *Glossopteris* from Antarctica. VII Simposio Argentino de Palaeobotanica y Palinologica Actas, Buenos Aires: 177-180.

Pigg, KB, and TN Taylor. Anatomically preserved *Dicroidium* from the Transantarctic Mountains. Antarctic Journal of the United States (1987 Review) 22: 28-29.

1985

Pigg, KB, and TN Taylor. Anatomically preserved *Glossopteris* from the Beardmore Glacier area of Antarctica. Antarctic Journal of the United States 19: 8-10.

INVITED SYMPOSIUM PARTICIPATION**2017**

Manchester, SR, KB Pigg, ML DeVore. Floristic changes from Paleocene through Miocene time across midlatitude western North America. in New insights of the assembly and biodiversity of the flora of North America, AJ Harris and S Ickert-Bond, Organizers, Theme one: Biodiversity, Resources and Conservation, Coordinator, Hong-Wen Huang IBC 2017, XIX International Botanical Congress, Shenzhen, China. 24 July, 2017.

Abstract number: **T1-37-04**

2015

DeVore, ML and KB Pigg 2015. Ed Schneider's legacy: On integrating morphology, anatomy, and pollination ecology of Nymphaeales with the fossil record. Colloquium Celebrating More Than Three Decades of Research in Nymphaeales: A Colloquium Honoring Ed Schneider, Renessa L. Cooper and MacKenzie L. Taylor, convenors. Botany 2015 Abstract C 3003. Edmonton, Alberta, Canada, July 2015.

Manchester SR, D. Kapgate, SY Smith, KB Pigg and S Graham. 2015. Systematic affinities of the *Enigmocarpon* plant (Myrtales) from the Late Cretaceous of India. Symposium in honor of Ruth A. Stockey, Ashley A. Klymiuk, Selena Y. Smith and Stefan A. Little, convenors. Botany 2015 Abstract. Edmonton, Canada

Pigg, KB and ML DeVore 2015. Permineralized plants of the Princeton chert (Eocene BC, Canada) and their relationship to the compression/impression floras of the Okanogan (Okanagan) Highland(s) floras of British Columbia and the flora of Republic, Washington. Symposium in honor of Ruth A. Stockey, Ashley A. Klymiuk, Selena Y. Smith and Stefan A. Little, conveners. Botany 2015 Abstract SY14003. Edmonton, Canada.

2014

DeVore, ML, and KB Pigg. Invading high elevations and latitudes: how can we look at fossil floras and uncover strategies for occupying regions subjected to freezing? IX European Paleobotany and Palynology Conference, Padova, Italy. August 2014.

Manchester, SR, and KB Pigg. Mastixiaceae (Cornales) in the Cenozoic of Europe and North America. S22. Celebrating the legacies of Dieter H. Mai and Harald Walther: Cenozoic taxonomy, palaeoecology, and phytostратigraphy based on coordinated palaeobotanical investigations. IX European Paleobotany and Palynology Conference, Padova, Italy. August 2014.

Benedict, JC, SY Smith, KB Pigg, and ML DeVore. 2014. Zingiberales Late Paleocene Zingiberales fossils from North Dakota, USA, and their evolutionary and biogeographic significance. IX European Paleobotany and Palynology Conference, Padova, Italy. August 2014.

Sternberg MF, ML DeVore, KB Pigg and SB Archibald. Stonerose Interpretive Center and Eocene Fossil Site: an integrative model at the crossroads of research, public outreach and community involvement. North American Paleontology Conference (NAPC), Gainesville, FL, Feb. 2014

DeVore, ML and KB Pigg. 2014. Biotic responses of Okanogan Highlands plants to disturbed habitats in a high elevation flora. T201 Eocene northern North America: Biotic change and environmental context. SB Archibald, KB Pigg, DR Greenwood, and ML DeVore, conveners, 2014 GSA Annual Meeting in Vancouver, British Columbia (19-22 October 2014). Abstract 199-8

Pigg, KB and ML DeVore. 2014. Yakima Canyon reconsidered. In: The Miocene vegetation and environment of western North America, RM Dillhoff, C Stromberg, T Dillhoff and R Dunn, conveners. Abstract 334, Botany 2014, Botanical Society of America. Boise, ID.

Pigg, KB, DR Greenwood, JF Basinger, and ML DeVore. 2014. On some pivotal events and players in the history of paleobotanical studies of the early Eocene Okanogan Highland floras (BC and WA). T201 Eocene northern North America: Biotic change and environmental context. SB Archibald, KB Pigg, DR Greenwood, and ML DeVore, conveners, 2014 GSA Annual Meeting in Vancouver, British Columbia (19-22 October 2014). Abstract 199-2.

2013

DeVore, ML and KB Pigg. 2013. Can evolutionary mechanisms be detected in the fossil record? A case study from the Eocene Republic Flora. In: Macroevolutionary and macroecological trends. Geological Society of America, paper. 302-3. Denver.

DeVore ML, KB Pigg, EA Wheeler. The fossil record for Rosaceae and its value to divergence dating studies. In: The Critical Role of Plant Fossils in Divergence Dating Studies, Elizabeth J. Hermsen and Maria A. Gandolfo, conveners. Botany 2013, New Orleans LA, July 27-31, 2013. Abstract.

2012

DeVore ML, KB Pigg New studies of fossil Rosaceae from the upland early-middle Eocene Okanogan Highlands floras of British Columbia, Canada and Republic, Washington, USA, in Tracing the history of extant angiosperm clades with paleobotanical data, SR Manchester, KB Pigg, organizers, IPC XIII/IOPC IX 2012 International Organization of Paleobotany, Tokyo, August 2012.

DeVore ML, KB Pigg Relative distribution of *Cercidiphyllum*- and *Zizyphoides*-like plants in the Paleogene: A case for ecological niche modeling? symposium contribution to Plants as Paleoenvironmental Recorders II, Dana L. Royer and Daniel J. Peppe, conveners, Geological Society of America Annual Meeting, Charlotte, North Carolina, Nov 2012.

DeVore, ML and KB Pigg. Paleobotanical evidence for the origins of temperate hardwoods. in TN Taylor Jubilee, Gar W. Rothwell and Ruth A. Stockey, symposium organizers, International Organization of Paleobotany Conference, August 2012, Tokyo.

DeVore, ML, and KB Pigg. New studies of fossil Rosaceae from the upland early-middle Eocene Okanogan Highlands floras of British Columbia, Canada and Republic, Washington, USA, Steven R. Manchester and Kathleen B. Pigg, symposium organizers, International Organization of Paleobotany Conference, August 2012, Tokyo.

2011

DeVore, ML and KB Pigg. The Claiborne and Catahoula formations, significant floras from the Mississippian Embayment. in Geological Society of America, Southeastern Section. Symposium --60th Annual Meetings (23-25 March 2001, Wilmington NC), Paper No. 3-11, Abstract

2010

Pigg, KB, and ML DeVore. Comparative study of closely related, early Eocene London Clay and late Paleocene North American fruits using light microscopy, wafering, SEM, and HRXCT (High-Resolution X-Ray Computed Tomography) in Symposium: London Clay fossils (organized by ME Collinson, SR Manchester & V Wilde). 8th European Paleobotany-Palynology Conference, July 2010, Budapest.

Gensel, PG, and KB Pigg. An arborescent lycopsid from the Lower Carboniferous Price Formation of southwestern Virginia, previously assigned to *Lepidodendropsis* Lutz. Symposium: The whole plant concept in palaeobotany. (organized by J Pšenička, S Opluštil. 8th European Paleobotany-Palynology Conference, July 2010, Budapest.

2008

DeVore, ML, and KB Pigg. Aquatic plants of the Eocene Republic, Washington flora and their significance to interpreting ancient lacustrine environments. Geological Society of America. Symposium: What Good are (Fossil) Plants Anyway? New Methods for Investigating Old Problems. C. A. E Stromberg and M. J. Kohn, conveners. 2008 Joint Meeting of The Geological Society of America, Soil Science Society of America, American Society of Agronomy, Crop Science Society of America, Gulf Coast Association of Geological Societies with the Gulf Coast Section of SEPM (Houston, October 2008).

Pigg, KB, and ML DeVore. Late Paleocene Lagerstätten: What can they tell us about systematics? Geological Society of America. Symposium: After the Last Ammonite and before the First Horse: Patterns of Ecological and Climatic Change during the Paleocene, K.R. Johnson and I. Miller, conveners. 2008 Joint Meeting of The Geological Society of America, Soil Science Society of America, American Society of Agronomy, Crop Science Society of America, Gulf Coast Association of Geological Societies with the Gulf Coast Section of SEPM (Houston, October 2008).

Dillhoff, RM, TA Dillhoff and KB Pigg. Middle Eocene lacustrine shale floras of the Allenby Formation near Princeton, British Columbia, Canada. Symposium: Worldwide early and middle Eocene floras--the evolving picture, RM Dillhoff and SR Manchester, conveners; 8th International Organisation of Palaeobotany Conference, Bonn, Aug-Sept 2008.

Farabee, MJ, KB Pigg, R Zetter and ML DeVore. Pollen character changes in selected angiosperm taxa across the K/T Boundary and into the Paleogene in the Western Interior Basin, North America. Colloquium: The Utility of Pollen in Systematic and Morphological Studies: A Celebration of the Life of John J. Skvarla, ML DeVore and VA Funk, conveners, Botany 2008, Vancouver, BC, July 2008.

2007

Pigg, KB, TA Dillhoff, and ML DeVore. Paleoenvironment of a newly discovered Middle Miocene "bog" locality, Columbia River Basalts, near Ellensburg, WA: a preliminary report. Quaternary and Tertiary Records of Past Environments, Pacific Northwest II: In Honor of Calvin Heusser (organized by E. B. Leopold and R. Mathewes), Geological Society of America, Cordillaran Section, Bellingham, WA, May, 2007.

2006

DeVore, ML, KB Pigg, and RM Dillhoff. Eocene-Oligocene floristic transitions in North America: contrasts between eastern and western floras. Symposium: Palaeogene floras and global change events (organized by M. Collinson, K. Pigg and M. DeVore). 7th European Paleobotany-Palynology Conference, 7-11 September, Prague.

Pigg, KB, and ML DeVore. East meets West: the contrasting contributions of David L. Dilcher and Jack A. Wolfe to Eocene systematic paleobotany in North America. Advances in Paleobotany--recognizing the contributions of David L. Dilcher and Jack A. Wolfe on the occasion of their 70th birthday. S. R. Manchester, R. Spicer, H. Wang, D. Jarzen, and T. Lott, conveners. Paramount Plaza Hotel, Florida Museum of Natural History, Gainesville.

Pigg, KB, SR Manchester, and ML DeVore. Floristic changes associated with the Paleocene-Eocene transition in western North America and their European connections. Palaeogene floras and global change events (organized by M. Collinson, K. Pigg and M. DeVore). 7th European Paleobotany-Palynology Conference, 7-11 September, Prague.

2005

Pigg, KB, and ML DeVore. Late Paleocene floras of North Dakota, USA: New sites and new insights. (Keynote address: Neogene floras), XVII International Botanical Congress, Vienna, Austria, July 18-23, 2005.

2004

Pigg, KB, and H Nishida. The significance of silicified plant remains to the understanding of *Glossopteris*-bearing plants. A century of seed ferns: A symposium to celebrate paradigm shifts in the understanding of seed plant evolution. Michael T. Dunn and Gar W. Rothwell, conveners. Botany 2004, Snowbird Utah, Abstracts.

2003

Pigg, KB, WC Wehr, ML DeVore. Systematics and phytogeography of selected Okanogan Highlands plants. Symposium: The Eocene Okanogan Highlands (British Columbia/Washington State): Paleoclimate and evolutionary response. Geological Association of Canada, Vancouver 2003, Abstracts.

1999

Pigg, KB Isoetalean lycopoid evolution. (Symposium: Evolution and diversification of the lycopods, W. Carl Taylor, N. Wikstrom and Lea Grauvogel-Stamm, organizers) Abstracts, XVI International Botanical Congress, St. Louis, p. 120.

1997

Pigg, KB The fossil record of *Isoetes*-like plants. American Journal of Botany 84 (Supplement--Abstracts): 162. Symposium: Changing perceptions on quillwort. W. C. Taylor and J. R. Hickey, organizers. American Fern Society and Botanical Society of America, Montreal.

1996

Borgardt, SJ, and KB Pigg. Petrified acorns from the Miocene of North America and their significance to the evolution of *Quercus* L. (Fagaceae) Symposium: Evolution of angiosperms from the perspective of fossil reproductive organs, R. A. Stockey and E. M. Friis, organizers. International Organization of Paleobotany Conference V, Santa Barbara, Abstracts: 11.

1994

Pigg, KB Recent knowledge of reproductive organs of *Glossopteris*. Symposium: Evolution of seed plants, H. Nishida, organizer. Botanical Society of Japan, Sapporo, Japan.

Pigg, KB, WC Davis and S Ash. Anatomically preserved plant reproductive structures from the Upper Triassic Chinle Formation in Petrified Forest National Park, Arizona. Symposium on National Park Service Paleontological Research, Geological Society of America, Rocky Mountain Section, Durango, Colorado, May 1994.

1993

Pigg, KB, SR Ash, and WC Davis. A new permineralized Upper Triassic flora from Petrified Forest National Park, Arizona: a preliminary report. Nonmarine Triassic Symposium, New Mexico Museum of Natural History, Albuquerque, October, 1993

Pigg, KB, and ML Trivett. Evolution of the glossopterid gymnosperms from Permian Gondwana. Symposium: evolution of the pteridophytes and gymnosperms. XV International Botanical Congress, Yokohama. September, 1993.

Trivett, ML, and KB Pigg. Morphology and leaf architecture of glossopterids and other reticulate gymnosperm leaves. Symposium: Angiosperm origin, early evolution and phylogeny. AIBS, Botanical Society of America, Ames, Iowa, August, 1993

1989

Pigg, KB Evolution of isoetalean lycopoids. Symposium: The Lycopods. Cosponsored by Pteridological and Paleobotanical Sections, American Journal of Botany (Supplement) 767: 198.

Pigg, KB, and RA Stockey. Platanaceous plants from the Late Paleocene of Alberta, Canada. Paleobotany in Canada: Status and Prospects, National Museum of Natural Sciences, Ottawa, Ontario, Canada.

Stockey, RA, and KB Pigg. Flowers and fruits of *Princetonia allenbyensis* from the Middle Eocene Princeton chert of British Columbia. Paleobotany in Canada, Status and Prospects, National Museum of Natural Sciences, Ottawa, Ontario, Canada.

1988

Pigg, KB Workshop on Antarctic paleobotany and its relationship to reconstructions of Gondwana. Byrd Polar Research Center, The Ohio State University.

1987

Pigg, KB Structurally preserved Gondwana plants: *Glossopteris* and *Dicroidium*. IBC-87, XIV International Botanical Congress, Berlin. Abstracts, 5-32-44, p. 287. Session on Gondwana paleobotany. XIV International Botanical Congress, Berlin

RECENT INVITED TALKS, SEMINARS, AND PANELS

2017--October- K Pigg, SC Doan, FA Bryan- National Fossil Day Outreach with Middle School classes at Stonerose Interpretive Center, Presentation on fossil conifers of Republic.

2017 -April –ML DeVore and KB Pigg. Republic fossil plants, stinging and scratching friends from the past. Stonerose, Stonerose Interpretive Center, Republic, Washington Annual Membership Dig. 28 April, 2017

2017 -January -- Faculty Women's Association Panel on Promotion and Tenure

2016 – October –National Fossil Day Shannon Doan, Soon Flynn, Stonerose Interpretive Center outreach event, Republic, Washington.

Stonerose Interpretive Center, Republic, Washington Annual Membership Dig.

2016 - January - Mary Anning discussion, women's book club

2015 - October - Pigg, KB, and ML DeVore. Paleobotany in the Okanogan Highlands and why Republic, and especially Stonerose, really matter. Presentation to Stonerose Interpretive Center membership, Republic, Washington. Presentation at National Fossil Day, Stonerose Interpretive Center membership, Republic, Washington

2015 May - Presentation to the public; Stonerose Interpretive Center membership, Republic, Washington.

2012-5, 2013, 2014 (November) Paleobotany introduction and tour of Alameda facility to PhD Evolutionary Biology majors, ASU SoLS, Tempe AZ.

2010 (September) Origin and history of plants, Spirit of the Senses Salon, Tempe AZ.

(February), GELS Panel on Hybridization and Genetic Exchange, ASU Graduate Students

2008 (April). Trochodendraceae, Hamamelidaceae, Betulaceae, or... my adventures with Republic fossils. Stonerose Interpretive Center 20th Anniversary Celebration, Republic Washington.

2008 (February) ASU SoLS Seminar Series, "Science Studio" Interview with Quentin D. Wheeler.

2007 (January) ASU SoLS, Biology and Society Class, Panel on research activities, Jane Maienschein, Ann Kinzig, Instructors.

2006 (November) ASU SoLS, Philosophy of Biology Class, Lab openhouse on fossils, systematics and epistemology, Andrew Hamilton, Instructor

- (April) Ohio University, Department of Environmental and Plant Biology, Athens, Ohio, Departmental Seminar, "Tales from the Tertiary".
- 2003-6** (November) ASU SoLS, Flora of Arizona Class, Guest Lecture on fossil history of Arizona flora, Martin F. Wojciechowski, Instructor; (April) ASU Department of Geological Sciences, Paleontology Class, Guest lecture on the plant fossil record, Jack A. Farmer, Instructor
- 2004** (October) Georgia College & State University, Department of Biological and Environmental Science, Vascular Plant Morphology Class, Guest Lecture, Melanie L. DeVore, Instructor
- 2003** (Fall) Department of Plant Biology, Arizona State University, Departmental Seminar

ABSTRACTS OF PRESENTED PAPERS AND POSTERS

2017

- Doan, SC, KB Pigg & ML DeVore. Yakima Canyon, WA, USA: An anatomically preserved fossil flora from the middle Miocene. Botany 2017 Abstracts, Fort Worth, TX June 2017 (poster).
- Manchester, SR, KB Pigg, ML DeVore, Z Kvaček, and RM Dillhoff. Extinct character combinations in Trochodendraceae from the Eocene of Washington and British Columbia. Botany 2017 Abstracts, Fort Worth, TX June 2017.
- Nyandwi, A., ML DeVore and KB Pigg. Elucidation foliar features for identifying Urticaceae in the fossil record. Botany 2017 Abstracts, Fort Worth, TX June 2017.

2016

- DeVore, ML, KB Pigg. 2016. Alternative analogues for the evolutionary mechanisms driving diversification of some upland Rosaceae. Botany 2016. Abstracts, Savannah, GA.
- Pigg, KB, L Clark, TJ Hieger, MA Basham. and ML DeVore. 2016. The Last stop on the Fossil Freeway: Developing our own version of s traveling exhibit. Botany 2016, Abstracts, Savannah, GA.

2015

- Benedict, JC, SY Smith, C Specht, KB Pigg, ML DeVore, and DY Parkinson. 2015. A reexamination of the enigmatic North American zingiberalean fossil fruit and seed record. Botany 2015 Abstract 846. Edmonton, Canada.
- Clark, L, MA Basham, E Makings, LR Landrum, W Fertig, and KB Pigg. 2015. Vascular Plant and Lichen Herbaria and Fossil Plant Collections at Arizona State University have a new off campus home. Botany 2015 Abstract 1285. Edmonton, Canada.
- Scott, B. D., A Pate, G Mullins, and KB Pigg. 2015. Making the transition from traditional to online and hybrid plant biology courses in the School of Life Sciences at Arizona State University (ASU). Botany 2015 Abstract 1293 Edmonton, Canada.

2014

- Clark, L, and KB Pigg. Plant anatomy student projects online: a source of internal plant structure of plants of the desert Southwest and the cultivars of the Phoenix Metropolitan area. Poster 480, Botany 2014, Boise, ID.
- Ickert-Bond, S, J Metzgar, H Mori and KB Pigg BACK: Biodiversity Assessment using Coal "Kuglen" (Coal Balls). Poster 341, Botany 2014, Boise ID.

Scott, B, J Stromberg and KB Pigg. A clarification of terminology for plants associated with rock habitats. Poster 798, Botany 2014, Boise, ID

2013

Bryan, FA KB Pigg, and ML DeVore. Vivipary in the fossil record: a case in the Eocene Republic flora. Botany 2013, New Orleans LA, July 27-31, 2013. Abstract 458.

DeVore, ML, W Taylor, and KB Pigg. Waterlilies from Republic: *Nuphar* (Nymphaeaceae) fossil remains. Botany 2013, New Orleans LA, July 27-31, 2013. Abstract 439.

2012

Davis T, ML DeVore, and KB Pigg. Deciphering the *Prunus* fossil leaf record: Delimiting leaf types from the Eocene of Washington State. Botany 2012, Columbus, Ohio. Abstract.

2011

Bryan, FA, M, Zets, KB Pigg, ML DeVore, R Dillhoff, and R. Hebda. The "balloon flower" from the Eocene Republic, McAbee, and Thomas Ranch floras of the Okanogan Highlands: What is it? 28th Midcontinent Paleobotanical Colloquium, Raleigh, NC, abstract.

DeVore, ML, and KB Pigg. Fossil evidence for hybridization in the Rosaceae. In symposium T52. Species and Speciation in the Fossil Record II, WD Allmon and MM Yacobucci, presiding. (Paleontological Society; Society of Vertebrate Paleontology; Cushman Foundation; Paleontological Research Institution), 2011 Annual Geological Society of America meeting, Minneapolis.

DeVore, ML, KB Pigg, JW Hoganson and JC Benedict. Taxodiaceous conifer remains at a Late Paleocene vertebrate site near Medora, North Dakota. 2011 Annual Geological Society of America meeting, Minneapolis (poster).

DeVore, ML, and KB Pigg. Fossil evidence for temperate family evolution: Rosaceae from Republic, Washington and other Okanogan Highlands Eocene sites. Botany 2011.

Dillhoff, RM, TA Dillhoff, DR Greenwood, KB Pigg and ML DeVore. The Eocene Thomas Ranch flora, Allenby Formation, Princeton, British Columbia, Canada. Botany 2011.

2010

Benedict, JC, KB Pigg, and ML DeVore. Fossil flowers of *Prunus* and *Oemleria* (Rosaceae: Prunoideae) from the latest early Eocene Republic flora of northeastern Washington state, USA., Botany 2010.

Brown, C, KB Pigg, FA Bryan, & C Brown. Volunteers are essential in enabling science and education at Stonerose Interpretive Center, Republic, Washington. Paper 248-30 2010 GSA Denver Annual Meeting (31 October –3 November 2010)

DeVore, ML, CL Brown, J Hartford, M Sternberg and KB Pigg. Bringing the site to your own classroom: using the context of fossil sites to illustrate today's relevance of paleobotany. Botany 2010.

DeVore, ML, and KB Pigg. Rethinking the tropical elements of the Eocene temperate forest: the Republic flora. Botany 2010.

DeVore, ML & KB Pigg. *Zizyphoides* leaves from the latest early Eocene Republic flora of northeastern Washington State, USA. Paper 32-18. 2010 GSA Denver Annual Meeting (31 October –3 November 2010)

Pigg, KB, ML DeVore, KE Volkman, J Hartford, M Sternberg & C Brown. A Guidebook for the Republic fossil flora. Paper 190-7 2010 GSA Denver Annual Meeting (31 October –3 November 2010)

Volkman, KE, KB Pigg, & ML DeVore A reexamination of conifer diversity in the Republic flora. Paper 190-8 2010 GSA Denver Annual Meeting (31 October –3 November 2010)

2009

Brown, C., KE Volkman, M Sternberg, J Hartford, ML DeVore and KB Pigg. The Stonerose Interpretive Center of Republic, Washington: a model in public geoscience education. USA. 2009 Portland Geological Society of America Annual Meeting (18-21 October), Abstract Paper No. 29-37 (Poster).

DeVore, ML., KB Pigg, and KE Volkman. Using the Republic flora to understand aquatic ecosystems of the Eocene. USA. 2009 Portland Geological Society of America Annual Meeting (18-21 October), Abstract Paper No. 32-19 (Poster).

Pigg, KB, ML DeVore, JC Benedict, and W Taylor. The significance of tropical plant occurrence in the Republic flora. USA. 2009 Portland Geological Society of America Annual Meeting (18-21 October), Abstract Paper No. 32-18 (Poster).

Volkman, KE, KB Pigg, and ML DeVore. An historical overview of paleontological research of the Eocene Republic locality, northeastern Washington state, USA. 2009 Portland Geological Society of America Annual Meeting (18-21 October), Abstract Paper No. 32-17 (Poster).

2008

Amason, C., ML DeVore, K Manoylov and KB Pigg. Infusing Flannery O'Connor with environmental and plant sciences. Botany 2008, Vancouver, BC, July 2008.

Benedict, JC, ML DeVore, and KB Pigg. Rosaceous flowers resembling *Prunus* from the Eocene Republic flora of eastern Washington State, USA. Botany 2008, Vancouver, BC, July 2008.

Taylor, W., KB Pigg, and ML DeVore Aquatic plants from the Eocene Republic locality, eastern Washington State, USA. Botany 2008, Vancouver, BC, July 2008.

DeVore, ML, KB Pigg, JC Benedict and W Taylor. Recent contributions to the flora of the Okanogan Highlands, eastern Washington State. 25th Midcontinent Paleobotanical Colloquium, Mobile. Abstract.

Wilkins, ND, KB Pigg and JD Farmer. Bennettitaleans (cycadeoids) of the Early Jurassic Navajo Sandstone. Geological Society of America (Houston, October 2008).

2007

Benedict, JC, W Taylor, KB Pigg, and ML DeVore. Late Paleocene seeds from Beicegel Creek (McKenzie County, North Dakota, USA) with affinities to the genus *Spirematospermum* Chandler (Zingiberales). Botany 2007 (Chicago, July 2007): Abstract

DeVore, ML, KB Pigg. The value of fossils for tracking a family's spatial history: an underrated tool? Botany 2007 (Chicago, July 2007): Abstract.

Matthews, T, KB Pigg, ML DeVore, and J Rhode. Anatomically preserved *Isoetes* from the Paleocene of North Dakota: utility in ascertaining paleohabitat. Geological Society of America, Southeast Section.

Pigg, KB, ML DeVore, MJ Farabee, and R. Zetter. Pollen and spore assemblage from the Late Paleocene Almont Lagerstätten. Geological Society of America (Denver, October 2007): Abstract.

Pigg, KB, MJ Farabee, R Zetter, M. DeVore, SR Manchester and M Nowak. Studies of the pollen and spore assemblage of the Late Paleocene Almont flora of central North Dakota, USA. Botany 2007 (Chicago, July 2007): Abstract

Taylor W, KB Pigg, JC Benedict, and MJ Farabee. Juglandaceous pollen in the Late Paleocene and its relationship to *Cyclocarya*. Botany 2007 (Chicago, July 2007): Abstract.

Taylor, WT, KB Pigg, ML DeVore, and D Freile. Late Paleocene Almont and Beicegel Creek: floristic comparisons are related to depositional environments. Geological Society of America, Southeast Section.

Wilkins, ND, ML DeVore, E Barman, and KB Pigg. Anatomically preserved caterpillar coprolites from the Middle Miocene Yakima Canyon flora of central Washington State, USA. Geological Society of America (Denver, October 2007): Abstract.

Wilkins, ND, JD Farmer, and KB Pigg. Paleocology of Jurassic Navajo Sandstone interdune environments: an integrated view based on sedimentology, geochemistry, and paleontology. Geological Society of America (Denver, October 2007): Abstract.

2006

Benedict, JC, KB Pigg, and ML DeVore. *Hamamelis*-like fruits (Hamamelidaceae) from the Late Paleocene Almont flora of North Dakota, USA. Botany 2005, Austin, Aug.

Benedict, JC, KB Pigg and ML DeVore. Triloculate fruits from the Late Paleocene Kate's Butte site at Beicegel Creek (McKenzie County, North Dakota, USA) with possible affinities to *Spirematospermum* Chandler (Zingiberales). 23rd Midcontinent Paleobotanical Colloquium, Gainesville. Abstract.

Kittle, A, M DeVore, and K Pigg. A new Paleocene flora from western North Dakota. 23rd Midcontinent Paleobotanical Colloquium, Gainesville. Abstract.

Matthews, T, ML DeVore and K Pigg. Paleocene pteridophytes from the siliceous shales of western North Dakota. 23rd Midcontinent Paleobotanical Colloquium, Gainesville. Abstract.

Pigg, KB, ML DeVore, RA Ketcham, and P Kenrick. Value of HRXCT for systematic studies of pyritized fossil fruits. Geological Society of America, Abstracts.

Pigg, KB, RM Dillhoff, and ML DeVore. New diversity among the Trochodendraceae from the Early Eocene McAbee and Early/Middle One Mile Creek floras, Okanogan Highlands of British Columbia, Canada. Botany 2006: Abstract.

Taylor, W, KB Pigg, and JA Farmer. Silicified Pleistocene monocots from Clearlake, California, and their value to understanding ancient hydrothermal springs. 23rd Midcontinent Paleobotanical Colloquium, Gainesville. Abstract.

2005

Brewer, MA, ML DeVore, and KB Pigg. *Ochna*-like fruit from the Paleocene of North Dakota. Georgia Academy of Sciences. Abstracts.

DeVore, ML, P Kenrick, KB Pigg, and RA Ketcham. CT-scanning the London Clay: an excellent noninvasive technique for studying pyritized fossil fruits. Botany 2005, Austin, Aug, 2005.

DeVore, ML, and KB Pigg. Rosaceous evolution in the Okanogan Highlands, Washington, USA and British Columbia, Canada. XVII International Botanical Congress, Vienna, Austria, July 18-23, 2005 (poster).

DeVore, M, K Pigg, P Kenrick, and RA Ketcham. CT-Scanning the London Clay Flora: A noninvasive technique for revealing the 3-dimensional organization of tissues in pyritized fruits and seeds. GSA Abstracts with Programs Vol. 37, No. 7.

DeVore, ML, P Kenrick, KB Pigg, and RA Ketcham. CT-scanning the London Clay: a noninvasive technique for studying pyritized fossil fruits. Linnean Society of London,

- Palaeobotanical Specialist Group "New discoveries in old collections", October 26th, Linnean Society, Burlington House, London. Abstracts.
- Kittle, A., ML DeVore, B Wall, and K Pigg. *Acer* fruits from the Paleocene of North Dakota. Georgia Academy of Sciences Abstracts.
- Kittle, A, D Freile, M DeVore and K Pigg. Fossil floras from the Sentinel Butte formation of North Dakota: a new compression flora and new insights into modes of plant preservation. GSA Abstracts with Programs Vol. 37, No. 7 (Poster).
- Pigg, KB, ML DeVore, and MA Brewer. Late Paleocene fruits similar to *Ochna* (Ochnaceae) from the Almont/Beicegel Creek floras, North Dakota, USA. Botany 2005, Austin, Aug. 2005.
- Taylor, W, ML DeVore, and KB Pigg. Nymphaeaceous seeds from the Late Paleocene Almont flora of North Dakota, USA. Botany 2005, Austin, Aug. 2005
- Tcherepova, MA, and KB Pigg. Vitaceae: fossil seeds and wood from the Middle Miocene of Yakima Canyon, Washington, USA. Botany 2005, Austin, Aug. 2005.
- Tcherepova, M, and KB Pigg. Yakima Canyon permineralized plants: a lens into the Miocene. XVII International Botanical Congress, Vienna, Austria, July 18-23, 2005. (poster)
- Wilkins, ND, JD Farmer, and K Pigg. Exceptional paleobotanical remains preserved in Navajo Sandstone interdune deposits near Moab, Utah. GSA Abstracts with Programs Vol. 37, No. 7.

2004

- DeVore, ML, and KB Pigg. Building a link between undergraduate research and graduate school. Geological Society of America Abstracts. Paper No. 179-14
- DeVore, ML, KB Pigg, and W Taylor. Sapindalean fruits from the Middle Miocene Yakima Canyon flora of central Washington State, U. S. A. Botany 2004 Abstracts.
- DeVore, ML, AL Sullivan, and KB Pigg. Monocots from the Late Paleocene of North Dakota, U.S.A. Botany 2004. Abstracts.
- Ickert-Bond, SM, J Wen, and KB Pigg. Resolving phylogeny within the family Altingiaceae: implications from anatomy of infructescences and molecular data sets. Botany 2004. Abstracts.
- Nishida, H., KB Pigg, K Kudo, and JF Rigby. Zooidogamy of the late Permian *Glossopteris* from Queensland, Australia. International Organization of Paleobotany Conference Abstracts.
- Pigg, KB, ML DeVore and WC Wehr. Tertiary ferns from western North America: *Osmunda*, *Woodwardia* and onocleoids. International Pteridophyte Symposium Abstracts, Edinburgh, July 2004
- Pigg, KB, MF Wojciechowski, and ML DeVore. Samaras from the Late Paleocene Almont and Beicegel Creek floras of North Dakota, U.S.A., with potential affinities to *Securidaca* (Polygalaceae). Botany 2004. Abstracts.

2003

- Creekmore, RM, ML DeVore, and KB Pigg. Fossil fruits of the Ebenales from the middle Miocene Yakima Canyon flora of central Washington, USA. Georgia Academy of Science, Abstracts.

- DeVore, ML, KB Pigg, and SR Manchester. Late Paleocene plants from North Dakota: new localities and insights from the Almont flora. Geological Society of America, Abstracts. Paper 240-5.
- Freile, D, T Midkiff, M DeVore, and K Pigg. Petrographic thin section and geochemical analysis of fossil plant material and associated sediments from the Oligocene Catahoula FM, east Texas, South-Central Section (37th) and Southeastern Section (52nd), Geological Society of America Joint Annual Meeting (March 12-14, 2003) Memphis, Tennessee.
- Howell, PE, ML DeVore, EH Barman, and KB Pigg. Insect-plant interactions from the Miocene of Washington: permineralized lepidopteran coprolites. Georgia Academy of Science, Abstracts.
- Pigg, KB, and ML DeVore. Paleocene fruits with affinities to Actinidiaceae from the Almont and Beicegel Creek floras of North Dakota. Botany 2003- Abstracts.
- Pigg, KB, WC Wehr, and ML DeVore. Systematics and phylogeography of selected Okanogan Highlands plants. Geological Association of Canada, Abstracts.
- Wells, S, ML DeVore, and KB Pigg. Platanaceous remains from the middle Miocene of North America. Georgia Academy of Science, Abstracts.
- 2002**
- Coleman, AL, and KB Pigg. Taxodiaceous conifers from the middle Miocene Yakima Canyon flora, Washington State, USA. Arizona/Nevada Academy of Science, Abstracts.
- DeVore, ML, SM Moore, and KB, Pigg. Fossil fruits resembling crepe myrtle (*Lagerstroemia*) from the middle Miocene Yakima Canyon of Washington. Georgia Academy of Science Abstracts.
- DeVore, ML, KB Pigg, and E. Barman. Plant-animal interactions from the Miocene: evidence from a permineralized flora. Geological Society of America, Denver. Annual Meeting Abstract. Paper 46-8.
- DeVore, ML, KB Pigg, AM Westbrook and E Barman. Galling cynipids, larval traces, and fungal infestations from the Miocene of Washington. Botany 2002, Abstract
- Gensel, PG, and KB Pigg. Reconstruction of the *Lepidodendropsis/ Protostigmaria* plant from the Mississippian Price Formation of Virginia, USA. Botany 2002, Abstract.
- Ickert-Bond, SM, KB Pigg and J Wen. Evolution and biogeographical diversification of Altingiaceae: integrating evidence from fossil reproductive structures and extant relatives. Flowers symposium: Diversity development and evolution. Institute of Systematic Botany, The University of Zürich, Switzerland. Program and Abstract, p. 65.
- Moore, SM, ML DeVore, KB Pigg and WC Wehr. Fossil *Neviusia* (Rosaceae) from the middle Eocene of Princeton, BC, Canada. Georgia Academy of Science, Abstract.
- Pigg, KB, ML DeVore, and M Tcherepova. Late Paleocene permineralized foliicle from Almont, North Dakota with potential ranunculoid affinities. Botany 2002 Abstract
- Pigg, KB, EA Wheeler, M Tcherepova, and WC Wehr. Plants of the Middle Miocene Columbia River Basalts in central Washington State: the permineralized "bog" flora and petrified woods from Yakima Canyon and Ginkgo Petrified Forest. Geological Society of America, Cordilleran Section, Corvallis, Oregon, Abstract
- Tcherepova, M, KB Pigg and AL Coleman. Middle Miocene Yakima Canyon permineralized flora of central Washington State, USA. VI European Paleobotany-Palynology Conference, Athens, Greece.

Westbrook, AM, ML DeVore, EH Barman, and KB Pigg Permineralized acorns from the Miocene of Washington: insect and fungal associations. Georgia Academy of Science Abstracts.

2001

DeVore, ML, KB Pigg, and SJ Mouton. Permineralized fruit with malvacean affinities from the Late Paleocene Almont flora, North Dakota. Botany 2001 Abstracts: 62-63.

Hansen, A, and KB Pigg. Taxodiaceous conifers from the middle Miocene Yakima Canyon flora, Washington State, USA. Botany 2001 Abstracts: 71.

Henry, AM, and KB Pigg. Hamamelidaceous infructescences from the Late Paleocene Almont, North Dakota flora. Botany 2001 Abstracts: 72.

Pigg, KB. The role of permineralized plants in understanding plant diversity, phylogeny, and paleoenvironment: the Miocene Yakima Canyon chert. NAPC (Abstracts).

Pigg, KB, ML DeVore, DL Dilcher, and D Freile. Fagaceous infructescences from the Oligocene Catahoula Formation of Texas. Botany 2001 Abstracts: 68.

Radke, MG, KB Pigg, and WC Wehr. Fossil *Corylopsis* and other Hamamelidaceae-like leaves from the middle Eocene flora of Republic, Washington, U.S.A. Botany 2001 Abstracts: 72.

Tcherepova, M, and KB Pigg Permineralized *Nyssa* (Cornaceae) and additional endocarps of uncertain affinity from the middle Miocene Yakima Canyon flora, Washington State, USA. Botany 2001 Abstracts (poster): 72.

2000

Crimmins, C, SM Ickert-Bond, and KB Pigg. Crucifixion thorns: Convergent desert adaptation of three unrelated genera. Arizona-Nevada Academy of Science, Abstracts.

Pigg, KB, and M Tcherepova. Taxonomic, phytogeographic and ecological significance of the Yakima Canyon flora (middle Miocene, Washington state, USA). Botanical Society of America.

Pigg, KB, and WC Wehr. *Trochodendron* (Trochodendraceae) from the early middle Eocene Republic Flora, Washington, USA. Botanical Society of America.

1999

Freile, D, ML DeVore and KB Pigg. A preliminary study of the sedimentology, stratigraphy and taphonomy of the Catahoula Formation (Oligocene, Texas, USA) . Abstracts, XVI International Botanical Congress, St. Louis. p. 450.

1998

Pigg, KB and SR Manchester. Silicified heptalocular fruits from the middle Miocene Yakima Canyon flora, central Washington state. American Journal of Botany 85: 79.

1997

Bertram, KA, KB Pigg, HE Schorn, and D Erwin. Middle Miocene flora from the Virgin Valley, northwestern Nevada, USA. American Journal of Botany 84 (Supplement--Abstracts): 129.

Ickert-Bond, SM, and KB Pigg *Pinus krempfii*. American Journal of Botany 84 (Supplement---Abstracts).

Pigg, KB Anatomically preserved fruits of *Liquidambar* from the Miocene of Washington state, USA. Arizona/Nevada Academy of Science Abstracts.

Pigg, KB Anatomically preserved *Liquidambar*-like infructescences (Hamamelidaceae) from the middle Miocene Yakima Canyon flora of Washington, USA. American Journal of Botany 84 (Supplement--Abstracts): 140.

Stockey, RA, BA LePage and KB Pigg. Permineralized fruits of Cornaceae (Mastixioideae) from the Middle Eocene Princeton chert of British Columbia. *American Journal of Botany* 84 (Supplement-- Abstracts): 142.

1996

Arnone, EA, GW Rothwell, and KB Pigg. Anatomically preserved Miocene ferns from the Yakima Canyon in central Washington state. NAPC-96, Washington, DC, June 1996 (poster).

Bertram, KA, KB Pigg, DM Erwin, and HE Schorn. Petrified Miocene biota from Virgin Valley, Nevada, USA. International Organization of Paleobotany Conference V, Santa Barbara, Abstracts (poster): 10.

Ickert-Bond, SM and KB Pigg. Reinvestigation of *Pinus krempfii* Lecomte: an endemic pine from Vietnam. International Organization of Paleobotany Conference V, Santa Barbara, Abstracts 48.

Pigg, KB, J Sophy, and WC Wehr. Petrified Miocene flora from Yakima Canyon, Washington, USA. International Organization of Paleobotany Conference V, Santa Barbara, Abstracts: 80 (poster).

Rothwell, GW, EA Arnone, and KB Pigg. Miocene ferns from Central Washington State: anatomy and systematics. *American Journal of Botany* 83: (Supplement--Abstracts): 131.

1994

Pigg, KB Anatomically preserved Miocene plants from Yakima Canyon, Washington. *American Journal of Botany* 81 (supplement 6): 100.

Pigg, KB, SJ Borgardt, and WC Wehr. Anatomically preserved Miocene plants from Yakima Canyon, Washington. Botanical Society of America, August, 1994.

Pigg, KB, and WC Wehr. Petrified Miocene plants from the Columbia River Basalts, Washington State. 38th Annual Meeting of the Arizona-Nevada Academy of Science, Glendale Community College, Glendale, AZ. April, 1994.

1993

Pigg, KB, WC Davis., and SR Ash. Permineralized leaf and seed remains from the Petrified Forest. 37th Annual Meeting of the Arizona-Nevada Academy of Science, University of Nevada, Las Vegas, April 17, 1993.

1992

Pigg, KB, and S McLoughlin. Comparison of anatomically preserved glossopterid leaves from the Bowen Basin, Queensland, and Sydney Basin, New South Wales, Australia. 4th International Organization of Paleobotanists Conference, Paris, August 31-September 2, 1992.

1991

Pigg, KB Anatomically preserved *Glossopteris* stems with attached leaves from the 7Transantarctic Mountains. Botanical Society of America, San Antonio, Texas. August 1991. *American Journal of Botany* 78 (supplement): 122.

Pigg, KB, and RA Stockey. Fruits from the Princeton chert, Middle Eocene with possible myrtaceous affinities. Bot. Soc. Amer., San Antonio, Texas. August 1991. *Amer. J. Bot.* 78 (suppl.): 122.

Pigg, KB, and TN Taylor. Permineralized *Glossopteris* stems with attached leaves from Skaar Ridge, central Transantarctic Mountains, Antarctica. Eighth International Symposium on

Gondwana. University of Tasmania, Hobart, Australia. June, 1991. p. 66-67. IUGS Subcommission of Gondwana Stratigraphy.

1990

Pigg, KB, and RA Stockey. Fossil sycamores from Alberta, Canada. 34th Annual Meeting, Arizona-Nevada Academy of Science, Arizona State University, Tempe, April, 1990. J. Arizona-Nevada Acad. Sci. 25: 29.

Pigg, KB, and RA Stockey. Late Paleocene sycamores from Alberta, Canada. Bot. Soc. Amer. Richmond, Virginia, August 1990. Amer. J. Bot. 77: 92.

1988

Pigg, KB. Crystosperms from the Triassic of Antarctica: *Dicroidium*. Botanical Society of America, Davis, California. Botanical Society of America Miscellaneous Series Publication 75: 114.

Pigg, KB, and TN Taylor. Silicified glossopterid leaves from Antarctica: anatomical diversity. 3rd International Organization of Palaeobotany Conference, Melbourne, Australia, Abstracts.

1987

Pigg, KB. Anatomically preserved glossopterid remains from the Permian of Antarctica. Botanical Society of America, Columbus, Ohio. Botanical Society of America Miscellaneous Series Publication 74: 687.

Pigg, KB, and TN Taylor. Anatomically preserved *Glossopteris* from Antarctica. VII Simposio Argentino de Paleobotanica y Palinologia, Buenos Aires, Actas: 177-180.

1986

Pigg, KB, TN Taylor, and RA Stockey. On the structure and development of *Heterangium* Corda. Botanical Society of America, Amherst, Mass. Botanical Society of America Miscellaneous Series Publication 73: 709.

1985

Pigg, KB, RA Stockey. Additional studies of *Microspermopteris aphyllum* Baxter. Botanical Society of America, Gainesville, Florida. Botanical Society of America Miscellaneous Series Publication 72: 898.

Pigg, KB, and TN Taylor. Permineralized foliage of *Glossopteris* from the Permian of Antarctica. Sixth Gondwana Symposium, The Ohio State University, Abstracts, p. 73.

Pigg, KB, TN Taylor, and RA Stockey. Studies of Paleozoic pteridosperms: foliage of *Microspermopteris* and *Heterangium* from the Pennsylvanian of Kentucky. Ohio Academy of Science, Cincinnati, Ohio. Ohio Journal of Science (April Program Abstracts) 85: 19.

1984

Pigg, KB, and TN Taylor. Cormose lycopod bases from Mazon Creek and the phylogeny of the lycopods. Ohio Academy of Science, Cleveland, Ohio. Ohio Journal of Sciences (April Program Abstracts) 84: 7.

Pigg, KB, and TN Taylor. Anatomy of permineralized glossopterid foliage. Abstracts of Contributed Papers and Poster Session, Second International Organization of Palaeobotany Conference, Edmonton, Alberta.

1983

Pigg, KB. Surface and decortication features of an Upper Pennsylvanian woody lycophyte stem. Ohio Academy of Science, Bowling Green, Ohio. Ohio Journal of Science (April Program Abstracts) 83: 17.

Pigg, KB, and GW Rothwell. Development and surface configuration of the Paleozoic isoetalean *Chaloneria*. Botanical Society of America, Grand Forks, South Dakota. Botanical Society of America Miscellaneous Series Publication 70: 76.

1982

Pigg, KB. Megasporangiate *Mazocarpon* from the Upper Pennsylvanian of the Appalachian Basin. Botanical Society of America, University Park, Pennsylvania. Botanical Society of America Miscellaneous Series Publication 162: 63.

Pigg, KB, and GW Rothwell. Structure and reproductive biology of *Mazocarpon* from the Upper Pennsylvanian Appalachian Basin, Ohio Academy of Science, Columbus, Ohio. Ohio Journal of Science (April Program Abstracts) 82: 16.

1981

Pigg, KB Megagametophytes of *Valvisporites auritus* from the bisporangiate fructification of an Upper Pennsylvanian woody lycopsid. Botanical Society of America, Bloomington, Indiana. Botanical Society of America Miscellaneous Series Publication 160: 46.

Pigg, KB, and GW Rothwell. Megagametophytes of an Upper Pennsylvanian woody lycopsid. Ohio Academy of Science, Wooster, Ohio. Ohio Journal of Science (April Program Abstracts) 81: 29.

1980

Pigg, KB An anatomically preserved Upper Pennsylvanian woody lycopsid. Botanical Society of America, Vancouver, British Columbia. Botanical Society of America Miscellaneous Series Publication. 158: 88-89.

Pigg, KB, and GW Rothwell. Vegetative and fertile shoot of an Upper Pennsylvanian woody lycopsid. Ohio Academy of Science, Toledo, Ohio. Ohio Journal of Science (April Program Abstracts) 80: 17.

1979

Pigg, KB, and GW Rothwell. Rooting structures of the Carboniferous arborescent lycopsids. Ohio Academy of Science, Tiffin, Ohio. Ohio. Journal of Science (April Program Abstracts) 79: 10.

EXTERNAL RESEARCH FUNDING

2017 Pending proposal: Resubmission; NSF: Digitization TCN: Collaborative Research: PEN

2016 Pending proposal: NSF: Digitization TCN: Collaborative Research: The Pteridological Collections Consortium: An integrative approach to pteridophyte diversity over the last 420 million years. 7/1/2017-6/30/2020, University of North Carolina Chapel Hill \$32,257, submitted October 2016.—this is part of a large multi-institutional proposal to digitize fossil and living pteridophytes in fossil and herbarium collections throughout the US.

2007 NSF Office of International Science and Engineering (OISE) EAPSI (East Asia and Pacific Region Summer Institutes) Program for JAPAN: (Grant made to my PhD student John Benedict)

2004-8 NSF Geology & Paleontology: Silicified Paleocene plants from North Dakota: phylogenetic and biogeographic significance, (Collaborative grant with M. DeVore at Georgia College & State University; 3 years, with one-year no-cost extension).

- 2000-2 NSF Geology & Paleontology: Anatomically preserved middle Miocene flora at Yakima Canyon, (PI, 1 year, with one-year no-cost extension, plus 1 year REU).
- 1993-4 Petrified Forest Museum Association: Proposal to study petrified leaf and seed remains from the Petrified Forest NP (PI, 2 years)
- 1993 NSF-Systematic Biology: Analysis of *Glossopteris* leaf structure and vegetative stem affinities (PI, 2 years, with plus 1 year REU)
- 1989-92 NSF-Biological Research Resources: Support for the Arizona State University Herbarium. (co-PI with L. R. Landrum, D. J. Pinkava, & T. H. Nash III, 3 years).
- 1989-91 NSF-Systematic Biology: The pattern of vascular cambium activity of Progymnospermophyta. (Substitute PI for M. A. Cichan, 2 years).
- 1988-9 NSF-NATO Postdoctoral Research Fellowship in Science: Reproductive biology of aquatic dicots from the Middle Eocene Princeton Chert. Department of Botany, University of Alberta, Edmonton, Canada (1 year).
- 1987-8 Geological Society of America Research Grant: Anatomically preserved *Glossopteris* and *Dicroidium* from the Transantarctic Mountains, Antarctica
- 1984-8 NSF Dissertation Improvement Award: Studies of Anatomically Preserved Plants from Antarctica: *Glossopteris*, *Gangamopteris*, and *Dicroidium*.

EXTERNAL FUNDING FOR TRAVEL

- 1997 American Fern Society: Travel grant to Botanical Society of America for Quillwort Symposium
- 1994 Ministry of Science, Japan: Travel to Japan for participation in the Botanical Society of Japan Symposium: evolution of Seed Plants, and research at Chiba University,
- 1993 Botanical Society of America: Conant Travel Grant for XV International Botanical Congress, Yokohama, Japan.
- 1990 Smithsonian Institution Short Term Travel Award.
- 1987 NSF Travel Award, Botanical Society of America: Travel to XIV International Botanical Congress, Berlin, July, 1987.

INTERNAL RESEARCH, TEACHING & TRAVEL FUNDING

- 2009-present Center for Biology & Society: Support for research in Republic, Washington
- 2008 SoLS Research Incentive Program: Support for Paleobotany research, related outreach.
- 2007 Visiting Scientist Funding: Center for Biology and Society, School of Life Sciences, ASU, Funding for Melanie L. DeVore's sabbatical during Fall 2007, during which she was in residence at ASU
- 2003 School of Life Sciences Travel Award: For attendance at Geological Society of America meeting, Seattle, Washington, November 2003.
- 2002 Research Incentive Awards Program Vice Provost for Research: For NSF Proposal on Paleocene Almont Flora.
- 2001 Travel of Research Investigators to Potential Sponsors (TRIPS): For visit to NSF Geology & Paleontology to discuss proposals.
- 2000 ASU CLAS Minigrant: Combined morphological, fossil and molecular analysis of *Liquidambar* and related genera (Altingioideae, Hamamelidaceae).

- 1999 ASU CLAS Faculty Grant-in-Aid: Petrified Paleocene plant fossils from North Dakota: significance to angiosperm diversification.
- 1998 ASU CLAS College Grant Award Program to Advance the Quality of Undergraduate Education: Plant Evolution Illustrated: Improving Plant Biology Education by Interactive Computer-Assisted Learning.
- 1997 ASU CLAS International Travel Award: Miocene fossil floras of northwest US and central Europe: a collaborative project.
- 1996 ASU CLAS Minigrant: Petrified fossil plants and fungi from the Miocene of northwestern Nevada.
- 1994 ASU Faculty Grant-in-Aid: Study of petrified plants from the Miocene of central Washington state using the scanning confocal microscope.
- 1994 ASU Research Incentive: Miocene petrified fossil plants: paleogeography and evolutionary significance
- 1989 ASU CLAS Minigrant: Reconstructing petrified fossil plants from Illinois.
- 1989-90 ASU Faculty Grant-In-Aid: Anatomically preserved leaves from Antarctica: structure, function and affinities.
- 1987-8 Ohio State University Graduate Student Alumni Research Association Award: Anatomically preserved *Glossopteris* and *Dicroidium* from Antarctica.
- 1980 Ohio University John Houk Memorial Research Grant Pennsylvanian lycopsids.

PROFESSIONAL AFFILIATIONS

Museum Research Associate, Burke Museum of Natural History and Culture, Seattle, WA
Member, Friends of Stonerose Fossils and consultant to board of directors, Stonerose Interpretive Center, Republic, WA

PROFESSIONAL ORGANIZATIONS

Botanical Society of America, Paleobotanical Section, Structural and Developmental Section
International Organization of Paleobotany
IAWA (International Association of Wood Anatomists)
Geological Society of America, Cordilleran Section
American Fern Society
Paleontological Society

VISITING SCHOLARS & POSTDOCTORAL ASSOCIATES

- 2016-** Visiting Scholars: Harufumi Nishida, Chuo University, Tokyo. September 2016, *Glossopteris* reproductive structures; Patricia Gensel, University of North Carolina, Chapel Hill, and Stefanie M. Ickert-Bond, University of Alaska, Fairbanks were visitors in the lab for short periods. We have ongoing research projects with all of these colleagues. We also had a brief visit from Travis Wellman, collections manager at Stonerose Interpretive Center, Republic, Washington, in October.
- 2007-present** Visiting Scholar (and Adjunct Professor with SoLS): Melanie L. DeVore, Georgia College & State University, Fall Semester. Paleocene, Eocene and Miocene floras
- 2006-7** Visiting Scholar: Michael J. Farabee, Avondale Community College, 2006-7. Paleocene floras and palynomorph assemblages.

- 2003 -present** Visiting Scholar (and Adjunct Professor with SoLS): Stefanie M. Ickert-Bond, University of Alaska, Fairbanks Altingiaceae comparative morphology and molecular studies; review of Tertiary *Liquidambar*.
- 2006-7** Visiting Scholar: Ruchi Shulka, Lucknow University, Lucknow, India. Jack Wolfe Conifer Cone collection; Miocene Taxodiaceous conifers from Yakima Canyon, Washington
- 2002** Visiting Scholar: Midori Matsumoto, Chiba University, 2002 Miocene Yakima Canyon and Saddle Mountain cherts of Washington State, USA.
- 1991-2** Postdoctoral Associate Mary Louise Trivett Studies of *Glossopteris* from Australia.

GRADUATE STUDENT ADVISEMENT

Current ASU Students

PhD Students: Chair: Shannon Doan, Soon Flynn; Member PhD Students: Andrew Johnston, Salvatore Anzaldo, Ed Gilbert. **MS Students:** Co-chair, Jean Phillippe Solves, Cole Larson-Whittaker, **Committee Member MS Student:** Kara Barron

ASU Graduate Students Completing Degrees

Chair:

- 2012** John Benedict: Paleocene fossils from Beicegel Creek, North Dakota. PhD Dissertation, Arizona State University, Tempe (now post doc, University of Michigan)
- 2010** Taylor, Witt. *Cyclocarya brownii* from the late Paleocene of North Dakota, USA. PhD Dissertation, Arizona State University, Tempe. (teaching in the community college system of Boston).
- 2006** Bond, Richard: Flora of Clear Creek, AZ, MS Thesis, Arizona State University Puente, Raul (Co-Chair). Systematics of Nopalaes cacti MS Thesis, Arizona State University, Tempe
- 2004** Coleman, Amanda L. 2004. Anatomically preserved *Taxodium*, from the middle Miocene of Yakima Canyon, Washington. MS thesis, Arizona State University, Tempe.
- 2003** Ickert-Bond, Stefanie M. (Co-Chair). *Ephedra* systematics and evolution. PhD Thesis, Arizona State University, Tempe. (now Professor, University of Alaska, Fairbanks).
- 2001** Tcherepova, Maria (deceased 13 July 2009) Investigations of two anatomically preserved fruits (Rhamnaceae and Nyssaceae) from the middle Miocene Yakima Canyon flora of Washington state, USA. MS thesis, Arizona State University, Tempe
- 1998** Bertram, Karla A. Petrified components of a biotic community from the middle Miocene Virgin Valley Formation, Nevada, USA. MS thesis, Arizona State University, Tempe.
- 1997** Ickert-Bond, Stefanie M. (cochair) Biosystematics of *Pinus krempfii* Lecomte. MS Thesis, Arizona State University, Tempe.
- 1996** Borgardt, Sandra J. Petrified *Quercus* (Fagaceae) fruit fossils from the middle Miocene, Yakima River Canyon, Washington. MS thesis, Arizona State University, Tempe
- 1996** Uhl, Rebecca. Project on fossil plant curation. MNS, nonthesis degree (working in ASU Hayden Library as reference librarian).

Advisory Committee:

- 2016** Kamesh Regmi, Genetics (Ph Dissertation)
- 2013** Joanna Klinge, Geography (PhD Dissertation).

- 2011** Raul Gutierrez; Systematics of Martyniaceae (PhD Dissertation).
Co-Chair: 2011 Jenke, Darin. MS Student Systematic studies.
- 2009** Hugo Beraldi: Microbiological ecology (PhD Dissertation); Frank Farruggia: Systematics of *Sesbania* (Fabaceae) (PhD Dissertation); Felicity Snyder: Open access reports associated with the Embryo Project (MNS).
- 2008** Nathan Wilkens (Geology): Paleocology of the Navajo Sandstone (Jurassic) of Moab, Utah. (PhD Dissertation)
- 2003** Andrew M. Salywon. A monograph of *Mosiera* (Myrtaceae) (PhD Dissertation)
- 2001** Taly Drezner. (Geography): Saguaro distribution and the relationship with their nurse plants. (PhD Dissertation)
- 2001** Amy E. Trauth-Nare. Systematics and biogeography of the *Berberis commutata* complex (Berberidaceae) of South America. (M.S. thesis).
- 1999** William C. Davis. Ecophysiology of *Hydrothyria venosa*: An aquatic lichen. (PhD Dissertation).
- 1995** Elaine Joyal. An ethnoecology of *Sabal uresana* Trelease (Arecaceae) in Sonora, Mexico. (PhD Dissertation)
- 1995** Charlotte M. Christy: Systematics of the *Mentzelia* (Section *Bartonia*) *multiflora* (Nutt.) A. Gray Complex (Loasaceae). (PhD Dissertation)
- 1995** Jon P. Rebman Biosystematics of *Opuntia* Subgenus *Cylindropuntia* (Cactaceae), the Chollas of Lower California, Mexico. (Ph.D. dissertation)..
- 1995** Greg J. Imdorf. Flora and Vegetation of the Sierra Ancha Wilderness Area, Tonto National Forest, Gila County, Arizona. (M.S. thesis).
- 1995** Kathleen Rice Flora of the Superstition Mountains (MS thesis).

Georgia College & State University Graduate Students - Informal Advisement

- 2007** Tony Mathews - Paleocene lycopods related to *Isoetes*
2006 Alex Kittle - Late Paleocene Storm Ranch locality

HONORS STUDENTS

- 2017** Footnote 18: Anne Workman for BIO 303
2015-2017 Thesis advisor: Jean-Phillippe Solves
2015 Footnote 18: Alex Hibert for PLB 302
Approximately 10 additional Footnote 18 students prior to 2015.

UNDERGRADUATE STUDENT RESEARCHERS, WORK-STUDY STUDENTS & VOLUNTEERS (at ASU)

- 2016** Lia Clark, Databasing Plant Fossil Collection with Symbiota, BioKIC.
Giselle Patricio- Organizing Canright Lantern Slide Collection
Samuel Zirbel- Organizing Fruit and Seed Collection and Research Library
Linda L. Howard-Organizing Fossil Plant Collection
Ashley Maqueda, Hannah Mooney, Candice Kim
- 2015** Lia Clark- Preparing plant anatomy student projects
Kat Heusser-Photography of fossils
Yessie Olvera, Beatriz Peregrina- help with curation

- Eli Peremislov, Zain Youhana- main lab organization
- 2014** Lia Clark- Preparing plant anatomy student projects
- 2013** Lia Clark-Preparing plant anatomy student projects
Cris Brackenridge-Organization of prepared slide collection
Sharlie Jones-Fossil and extant *Acer* (maple) fruits
Ada Vo-Organization of wood collection of James E. Canright Morphology & Anatomy Collection
- 2012** Brach Barnes -Actinidiaceae, Paleocene Almont/Beicegel Creek flora
Kensive Nguyen- Photography of Paleocene and Eocene flowers, fruits and leaves
Lauren Tomlin - Photography of Zingiberid fruits and seeds, Late Paleocene, North Dakota.
Eric Mann- Databasing and fossil preparation, Zingiberid fruits and seeds, late Paleocene, North Dakota.
- 2008** Samuel Roll - “*Guaera*” fig-like fruits from Late Cretaceous of Montana; Shane Binus - *Cyclocarya* morphometrics from Almont flora
- 2007-8** Angela Caballaro, Tony Zapatka Paleocene plants from North Dakota; Amy Cotlow - Fossil guavas (Myrtaceae, *Paleomyrtinaea*) from Almont ND, Matthew Olson *Acer* (Sapindaceae) from Almont ND
- 2006-7** Rhonda Chapman *Spirea* leaves from Republic, WA (Eocene)
- 2005-6** Darin Janke Paleocene plants from North Dakota; John Benedict Paleocene *Hamamelis* fruits from Almont, North Dakota (published: Benedict, et al., 2008 International Journal of Plant Sciences)
- 2004** Nesrine Taylor Paleocene Almont and Beicegel Creek floral diversity.
- 2000-1** Meghan Radtke Eocene *Corylopsis* and *Fothergilla* (Hamamelidaceae) leaves (published as Radtke, et al 2005).
- 1999-2000-3** Carol Crimmins Anatomy of crucifixion thorns from the Sonoran desert Paleocene fossil plants from Almont, North Dakota **1994-5** Sara Kahn Fossils from Yakima Canyon, middle Miocene, Washington state **1991-2** Charlene Conner Anatomy of *Princetonia allenbyensis*, Eocene Princeton chert **1990-1** Suzette Maxwell Permineralized myrtaceous fruit from Eocene Princeton chert (published as Pigg et al. 1993)
- (with M. DeVore at Georgia College & State University)**
- 2004** Mark A. Brewer *Ochna* from Almont and Beicegel Creek flora, Paleocene of North Dakota; A. L. Sullivan Monocots from Beicegel Creek, Paleocene of North Dakota
- 2003** P. E. Creekmore Fossil lepidopterid trace fossils Yakima Canyon, Miocene of Washington; Sharon Wells Fossil Platanaceae from Yakima Canyon, Miocene of Washington.
- 2002** Amanda M. Westbrook Damage patterns in *Quercus* acorns from Miocene Yakima Canyon; Steven Moore *Lagerstromieia*-like fossil fruits from Yakima Canyon. Fossil *Neviusia* (Rosaceae) from One Mile Creek (Eocene) British Columbia.
- 2001** Steven Mouton Permineralized fruit from Paleocene Almont flora.
- (with G. W. Rothwell at Ohio University)**
- 1996** E. A. Arnone Fossil *Woodwardia* fern rhizomes from Yakima Canyon, Washington State

PROFESSIONAL SERVICE & OUTREACH ACTIVITIES

Panel Membership National Science Foundation: **2007-9, 2013** Geosciences: Sedimentology & Paleobiology; **2004** Division of Biology (Biological Research Collections); **2002-3** Division of Biology (Assembling the Tree of Life); **2001** Geology & Paleontology.

Ad hoc Reviews (ongoing) National Science Foundation (Divisions of Biology: Systematic Biology & Biodiversity Inventories; Biological Infrastructure; Geosciences: Earth Sciences: Sedimentary Geology & Paleontology; Polar Research: Antarctic Sciences); NASA: Exobiology/Evolutionary Biology; National Science and Engineering Research Council of Canada (NSERC); Natural Environment Research Council (UK).

Journal Reviewer (ongoing): Acta Palaeobotanica; American Midland Naturalist; American Journal of Botany; Antarctic Science; Aquatic Botany; Australian Journal of Botany; Biological Reviews; Botany; Botanical Journal of the Linnaean Society; Canadian Journal of Botany; Canadian Journal of Earth Sciences; Grana; IAWA (International Association of Wood Anatomists) Journal; International Journal of Plant Sciences; Journal of the Arizona & Nevada Academy of Science; Journal of the History of Biology; Molecular Phylogenetics & Evolution; Palaeobios, Palaeoclimates - Data and Modeling; Palaeontographica; Palaeontology; Philosophical Transactions, Plant Biology; PLOS ONE; Review of Palaeobotany and Palynology; Systematic Botany.

Textbook and Online Resource Reviewer for Plant Anatomy texts: 2005-ongoing Blackwell Scientific Press, Cambridge University Press

External Examiner for Dissertations: 2017: Gary Alan Pattemore, University of Queensland, Queensland, Australia; **2013** Rachael OKeefe, University of Melbourne, Melbourne, Australia. **2011** Robin Y. Smith, University of Saskatchewan, Saskatoon, Canada; **2005** Rosie Prevec, University of Witwatersrand, South Africa; **2004** University of Melbourne, School of Botany

Advisory Roles 2004-present Advisory Board, Stonerose Interpretive Center, Republic, Washington.

2006 Scientific Advisor, Department of Homeland Security, Immigration and Customs Enforcement (ICE), Office of Investigations, aid in identifying illegally imported fossil plants from Argentina.

Editorial Roles: 2016-present Associate Editor, Acta Palaeobotanica, **2015—2016** Co-editor of Symposium Volume on Northern Hemisphere High Paleolatitude Eocene, Canadian Journal of Earth Sciences, Canadian Journal of Earth Sciences; **2010** Co-Editor of Symposium Volume on Paleogene floras and global change events, Geosciences. **2000-2008** Consulting Editor, Paleobotany, Palaeontologia africana (Journal of South African Research)

Meetings and Symposium Organizing

2014 Symposium Co Organizer with Melanie DeVore, Bruce Archibald and David Greenwood. “Eocene Northern North America: Biotic Change and Environmental Context.” Geological Society of America Annual Meeting, Vancouver, Canada, October.

2013 Symposium CoOrganizer (with Wilson Taylor) Botany 2013, Devonian paleobotany, honoring Patricia G. Gensel. 2012 Symposium Co-Organizer (with S. Manchester) IOPC meeting, Tokoyo, August. **2006** Symposium Co-Organizer, Palaeogene floras and global change events (with M. Collinson and M. DeVore). 7th European Paleobotany-Palynology Conference; **2005** Co-host for 22nd Midcontinent Paleobotanical Colloquium, Georgia College & State University, Milledgeville

Professional Organizations Botanical Society of America: 2015 Paleobotanical Section Committee for Nominating Section Chair; Isabel Cookson Award Committee;
International Organization of Paleobotany: 2000 Student Travel Award Committee; **Arizona-Nevada Academy of Science: 1994-7** Treasurer

NATURAL HISTORY COLLECTIONS EXHIBITS

June 10 - Sept. 2, 2017- Dead Dead Live Dead exhibit by Gabriel Rico, artist-in-residence GDL>PHX (Guadalajara, Mexico and Phoenix, Arizona) Residencias Artísticas program (organized by CALA Alliance ASU Art Museum and Programa Anual de Open Studios).
December 2016 –Tour of Alameda Facility for SoLS Staff.
November 2016 Israel Leinbach Fossil Collection in the display cabinet outside the offices of the Center for Evolution and Medicine on the second floor of LSC on the request of Randy Nesse (done by my graduate student Tim Hieger). We continue to curate additional specimens for the collection.
April 2016- Exhibit at Phoenix Zoo for Earth Day
September 2016 Open house event at Alameda Facility
September-December 2015: Cruisin' the Fossil Freeway Traveling Exhibit, Burke Museum, University of Washington, Seattle. Coordination, voiceover and design for ASU Alameda Building
April 2015- Nature of Creation exhibit, Hayden Library, ASU Tempe Campus.
February 2015 -Night of the Open Door, ASU, Alameda Facility
October 2014- Grand Opening, ASU SoLS Natural History Collections at the Alameda Facility

Professionally Related Community Service:

2017-- February - Night of the Open Door participation on ASU Tempe Campus.
2017 -- January - Consultation with Science Fiction writer NNedi Okoafor through the Center for Science and the Imagination. I helped Nnedi Okoafor figure out how to deal with aspects of pollination biology, allergies and vegetation types for a short story.
2016- April - Consultation with Science Fiction writer Steven Barnes through the Center for Science and the Imagination. I have been serving as an ad hoc advisor to science fiction writers working in this program, as to the scientific feasibility of elements within their short stories. I helped Steven Barnes figure out how humans might gain the ability to photosynthesize.
2016 - April- Those Wily Republic Plants: Hybrids and bulbils and short shoots, oh my!, Presentation to Stonerose Interpretive Center, Republic, Washington Annual Membership Dig. We make presentations to the membership, many of whom are members of the public with a longtime devotion to fossil collecting and to the community of the small town of Republic. Our outreach here is very special and personal, as these are the people who collect many of the fossils that fuel our research.
2016 - May – I contributed 3 copies of an original photographic collage of Republic, Washington fossil plants as items for a benefit auction for Stonerose Interpretive Center, Republic, Washington that was held at the Burke Museum of Natural History and Culture, University of Washington, Seattle. This auction was held to supplement income lost the

- previous two years at Stonerose as a result of major forest fires in near the town of Republic, Ferry County, which is in a remote, highly wooded area of the state.
- 2016** – May-- Initial consultation with Arizona Nutritional Supplements group on use of plant anatomical structure for identifying plant supplements
- 2016** October—work at the Burke Museum, Seattle on their Eocene collections
- 2016** - Initiation of my part of work with Dian Fossey Gorilla Fund International, Karisoke with young Rwanda Scholars.
- 2016** November-- Israel Leinbach Fossil Collection in the display cabinet outside the offices of the Center for Evolution and Medicine on the second floor of LSC on the request of Randy Nesse (done by my graduate student Tim Hieger). We continue to curate additional specimens for the collection.
- 2015** Presentation of "Crusin' the Fossil Freeway" travelling exhibit from the Burke Museum, Seattle by Kirk R Johnson and Ray Troll. Coordination of exhibit loan, organization of layout and installation; hosting of SoLS Opening and three guest speakers: Peter Wilf, Penn State University; Bruce Archibald, Simon Fraser University and writer Jack Nesbit, Spokane.
- 2015** Participation in National Fossil Day activities, Stonerose Interpretive Center, Republic, WA. October
- 2015** Design and development of display for "Nature of Creation" exhibit, Hayden Library, ASU Tempe Campus (with Elizabeth Makings and Anne Basham), May-September.
- 2016** Stonerose Interpretive Center and Eocene Fossil Site: Membership Dig., April
- 2015** Participation in ASU's Night of the Open Door, February.
- 2015** Informal tours of Fossil Plant collections for various school groups, organizations, and individuals from the public.
- 2010** Development of guidebook on fossil plants of the Republic flora, for use by public
- 2008** In-class presentations at Curlew and Republic Washington high schools in collaboration with Stonerose Interpretive Center, Republic
- 2005** Intel Judge for Intel ISEF (International Science & Engineering Fair), Phoenix, May;
- 2000-5** Design of webpages for courses: Plant Fossils and Evolution (PLB 407):
- 2000** Desert Botanical Garden, Phoenix, informal talks. Various science fairs, school presentations;
- 1996-2000** Southwest Paleontological Society, Mesa Southwest Museum, Mesa, advisor.

UNIVERSITY AND DEPARTMENTAL SERVICE

University

CLAS Search Committee: Director, School of Life Sciences, 2017-2018; June, 2017: CLAS Alameda Expansion Facility Committee; February, 2017, Panelist on Workshop for Promotion and Tenure, Faculty Women's Association; University Promotion and Tenure Committee: 2013-2015

School of Life Sciences

- 2017 - Curatorial work, BioKIC - Curator of Plant Fossil Collections.
- 2017 - Associate Director for MS Plant Biology and Conservation degree program; and MS, (including 4+1) graduate program
- 2016- Search Committee: BioKIC - Lichen Collections Manager.
- 2015 Biodiversity Knowledge Integration Center (BioKIC) (formerly Natural History Collections Group). Curator of Plant Fossil Collections. Continued planning and development of the Alameda facility for teaching, research and outreach activities; several activities (see above under Professional Outreach).
- 2014** Organization of new collections space
- 2013** Reorganization of collection; move to Alameda facility
- 2012** Participation in video on SoLS Natural History Collections
- 2006** Coordinator for School of Life Science Natural History Collections Display,
- 2005-present** Participant in ASU Museums, Galleries and Collections tours for the public; Natural History Collections Group Member; Additional tours for K-12 classes;
- 2004-present** Natural History Collections Committee Co-Chair;
- 2000-present** Ask a Biologist Contributor

SoLS Committee Service

- 2015** Honors College Advisor
- 2010- 2012** Committee on Undergraduate Curriculum Reform.
- 2010-** Plant Biology Graduate committee
- 2007-2015** Human Dimensions Representative to Facilities Committee
- 2007-2008** Human Dimensions Representative to Graduate Committee
- 2006-2008** Honors Disciplinary Advisor for Plant Biology, Barrett Honors College
- 2004-7** Genomics, Evolution & Bioinformatics Representative to Graduate Committee; **2004-5** Affirmative Action Representative; **2003-4** Search Committee for Evolutionary & Systems Biologist 2003-2004

Department of Plant Biology

- 2000 Chair, Search Committee for Molecular Plant Systematist; 1999-2001 Graduate Director 1999-2000 University Committee on Committees; 1998-9 Departmental Representative, University Senate; 1998 Darkroom Coordinator; 1994-7 Personnel Committee 1997 Search Committee, Developmental Anatomist

Department of Botany

- 1991-5** Graduate Admissions Committee; **1993-4** Darkroom Coordinator
- 1995** Search Committee, Physiological Ecologist; **1990-3** Affirmative Action Representative; **1994-5** Undergraduate Biology Student Advising; **1990** Search Committee, Urban Horticulturalist