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EDUCATION

- Ph.D., 1992, University of Washington, Seattle, WA.,
Advisor: Peter D. Ward.
Thesis: "The extinction of the Inoceramidae and ecological change during the Maastrichtian."
- M.S., 1989, University of Washington, Seattle, WA.,
Advisor: Peter D. Ward.
Research: The stratigraphic distribution of Maastrichtian inoceramids.
- B.A. (Magna Cum Laude), 1986, Williams College, Williamstown, MA, Geology (Highest Honors) and Biology.
Advisor: Markes E. Johnson.
Thesis: "The ecological zonation in an incipient carbonate formation, St. John, the U.S. Virgin Islands."

WORK EXPERIENCE

- 2011-present Professor, University of Missouri.
- 2005-2011 Associate Professor, University of Missouri.
- 1999-2005 Assistant Professor, University of Missouri.
- 1998 Visiting Assistant Professor, University of North Carolina, Chapel Hill.
- 1996-1997 Researcher Associate, University of Washington.
- 1993-1999 Smithsonian Fellow/Research Associate, Smithsonian Institution.
- 1991-1992 Instructor, University of Washington Extension College.
- 1987-1992 Research Assistant/Teaching Assistant, University of Washington.
- 1986-1987 Science Teacher, Landon Middle School, Bethesda, Maryland.

RECENT COURSES TAUGHT:

Themes- Mass Extinctions (introductory/survey, non-majors), Principles of Geology (introductory physical geology), Environmental Geology (introductory environmental geology), Age of Dinosaurs (non-majors, sophomore level), Principles of Paleontology (advanced, majors), Sedimentary Facies and Environments (advanced, majors), Ancient Greenhouse Climate (graduate level), Geologic History of Atmospheric Oxygen Levels (graduate level), Geobiological stable isotope techniques (graduate level).

CURRENT FUNDED/PLANNED PROJECTS

- Testing the early Late Ordovician Cool Water Hypothesis, National Science Foundation Grant (PI), Collaborative with Dr. A. Herrmann (LSU) and Dr. S. Leslie (JMU).
- Constraining sources and circulation patterns of intermediate and deep waters during the Late Cretaceous greenhouse, National Science Foundation Grant (PI), Collaborative with Dr. E. Martin (UF) and Dr. C. Poulsen (UM).
- Tectonic, paleoclimatic and paleoceanographic history of the Mentelle Basin and Naturaliste Plateau at southern high latitudes during the Cretaceous, scheduled IODP expedition, (proponent).
- Drilling the Agulhas Plateau and Transkei Basin to reconstruct the Cretaceous - Paleocene Tectonic and Climatic evolution of the Southern Ocean Basin, IODP expedition, (proponent).

PUBLICATIONS**(papers, students in bold)**

- Quinton, P.C.**, Leslie, S.A., Herrmann, A.D., and MacLeod, K.G., in review, Effects of extraction protocols on the oxygen isotope composition of conodont elements, Chemical Geology.
- Petrizzo, M.R., Jiménez Berrocoso, Á., Falzoni, F., Huber, B.T., MacLeod, K.G., in review, First stratigraphically complete Coniacian-Santonian boundary record from the Ruvuma Basin (southern Tanzania, East Africa): planktonic foraminiferal, geochemical and paleoceanographic patterns, Sedimentology.
- Haynes, S.J.**, MacLeod, K.G., Huber, B.T., Warny, S., Kaufman, A.J., and Pancost, R.D., in review, Depositional environments, marine and terrestrial links, and exceptional preservation in the Turonian of southeastern Tanzania. Geological Society of America Bulletin.
- Quinton, P.C.**, Percival, I.G., Zhen, Y.-Y., and MacLeod, K.G., in press, Factors influencing conodont apatite $\delta^{18}\text{O}$ variability in the Ordovician: a case study from New South Wales, Australia, Stratigraphy.
- Hughes, K.P.**, MacLeod, K.G., **Haynes, S.J.**, **Quinton, P.C.**, Martin, E.E., Ethington, R. in press, A paired neodymium and oxygen isotopic perspective on paleoceanographic changes across the Dubuque/Maquoketa contact in the Late Ordovician Laurentian Seaway, Stratigraphy.
- Falzoni, F., Petrizzo, M.R., Clarke, L.J., MacLeod, K.G., and Jenkyns, H.C., in press, Long-term Late Cretaceous carbon- and oxygen-isotope trends and planktonic foraminiferal turnover: a new record from the southern mid latitudes, Geological Society of America Bulletin.
- Sessa, J.A., **Knoll, K.**, **Larina, E.**, Garb, M., Cochran, J.K., Huber, B.T., MacLeod, K.G., and Landman, N.H., 2015, Ammonite habitat revealed via isotopic composition and comparisons with co-occurring benthic and planktonic organisms, Proceedings of the National Academy of Sciences, v. 112, p. 15562-15567, doi:10.1073/pnas.1507554112.
- Ando, A., Huber, B.T., MacLeod, K.G., and Watkins, D.K., 2015, Early Cenomanian “hot greenhouse” revealed by oxygen isotope record of exceptionally well-preserved foraminifera from Tanzania, Paleoceanography, v. 30, p. 1556-1572, doi:10.1002/2015PA002854.
- Quinton, P.C.**, Herrmann, A.D., Leslie, S.A., and MacLeod, K.G., 2015, Spatial gradients in carbon cycling across the southern margin of Laurentia during the Middle to early Late Ordovician, Palaeogeography, Palaeoclimatology, Palaeoecology, doi: 10.1016/j.palaeo.2015.08.020.
- Jiménez Berrocoso, Á., Huber, B.T., MacLeod, K.G., Petrizzo, M.R., Lees, J.A., Wendler, I., Coxall, H., **Mweneinda, A.K.**, **Falzoni, F.**, **Birch, H.**, **Haynes, S.**, Bown, P.R., Robinson, S.A., and Singano, J.M., 2015, The Lindi Formation (upper Albian-Coniacian) and Tanzania Drilling Project Sites 36-40 (Lower Cretaceous to Paleogene): lithostratigraphy, biostratigraphy and chemostratigraphy, African Journal of Earth Science, v. 101, p. 282-308, doi:10.1016/j.afears.2014.09.017.
- Quinton, P.C.**, Percival, I.G., Zhen, Y.-Y., and MacLeod, K.G., 2015, Ordovician temperature trends: Constraints from $\delta^{18}\text{O}$ analysis of conodonts from New South Wales, Australia, Stratigraphy, v. 12, p. 62-65.
- Haynes, S.J.**, Huber, B.T., and MacLeod, K.G., 2015, Evolution and Phylogeny of mid-Cretaceous (Albian-Coniacian) Biseriate Planktic Foraminifera, Journal of Foraminifera Research, v. 45, p. 42-81.
- Quinton, P.C.** and MacLeod, K.G., 2014, Oxygen isotopes from conodont apatite of the mid-continent, US: Implications for Late Ordovician climate evolution, Palaeogeography, Palaeoclimatology, Palaeoecology, v. 404, p. 57-66, doi:10.1016/j.palaeo.2014.03.036
- Falzoni, F.**, Petrizzo, M.R., Huber, B.T., MacLeod, K.G., 2014, Insights into the meridional ornamentation of the planktonic foraminiferal genus *Rugoglobigerina* (Late Cretaceous) and implications for taxonomy, Cretaceous Research, v. 47, p. 87-104, doi: 10.1016/j.cretres.2013.11.011.
- MacLeod, K.G., Jiménez Berrocoso, Á., Huber, B.T., and Wendler, I., 2013, A stable and hot Turonian without glacial $\delta^{18}\text{O}$ excursions is indicated by exquisitely preserved Tanzanian foraminifera, Geology, v. 41, p. 1083-1086, doi: 10.1130/G34510.1
- Falzoni, F.**, Petrizzo, M.R., Huber, B.T., MacLeod, K.G., 2013, Santonian–Campanian planktonic foraminifera from Tanzania, Shatsky Rise and Exmouth Plateau: Species depth ecology and paleoceanographic inferences, Marine Micropaleontology, v. 103, p. 15-29, doi: 10.1016/j.marmicro.2013.07.003
- Ando, A., Woodard, S.C., Evans, H.F., Littler, K., Herrmann, S., MacLeod, K.G., Kim, S., Khim, B.-K., Robinson, S., and Huber, B.T., 2013, An emerging paleoceanographic ‘missing link’: Multidisciplinary

- study of parts of rarely found deep-sea Santonian–Campanian transition on Shatsky Rise, Journal of the Geological Society, London, v. 170, p. 381–384, doi:10.1144/jgs2012-137.
- Wendler, I., Huber, B.T., MacLeod, K.G., and Wendler, J.E., 2013, Stable oxygen and carbon isotope systematics of exquisitely preserved Turonian foraminifera from Tanzania - Understanding isotopic signatures in fossils, Marine Micropaleontology, v. 102, p. 1–33, doi:10.1016/j.marmicro.2013.04.003.
- Jimenez Berrocoso, Á., Elorza, J., MacLeod, K.G., 2013, Proximate environmental forcing in fine-scale geochemical records of calcareous couplets (Upper Cretaceous and Palaeocene of the Basque-Cantabrian Basin, eastern North Atlantic): Sedimentary Geology, v. 284–285, p. 76–90.
- MacLeod, K.G., 2012, Conodonts and the paleoclimatological and paleoecological applications of phosphate $\delta^{18}\text{O}$ measurements, in Ivany, L.C. and Huber, B.T. (eds) Reconstructing Earth's Deep-Time Climate – The State of the Art in 2012, Paleontological Society Papers, v. 18, p. 69–84.
- Owens, J.D.**, Lyons, T.W., Li, X., Gordon, G., Kuypers, M.M.M., Anbar, A., Kuhnt, W., MacLeod, K.G., and Severmann, S., 2012, Iron isotope and trace metal records of iron cycling in the proto-North Atlantic during the Cenomanian-Turonian oceanic anoxic event (OAE-2), Paleoceanography, 27, PA3223, doi:10.1029/2012PA002328.
- Jiménez Berrocoso, Á., Huber, B.T., MacLeod, K.G., Petrizzo, M.R., Lees, J.A., Wendler, I., Coxall, H., **Mweneinda, A.K.**, **Falzone, F.**, **Birch, H.**, Singano, J.M., **Haynes, S.**, **Cotton, L.**, Wendler, J., Bown, P.R., Robinson, S.A., and Gould, J., 2012, Lithostratigraphy, biostratigraphy and chemostratigraphy of Upper Cretaceous and Paleogene sediments from southern Tanzania: Tanzania Drilling Project Sites 27 to 35, African Journal of Earth Science, v. 70, p. 36–57.
- Martin, E.E., MacLeod, K.G., Jiménez Berrocoso, Á., **Bourbon, E.**, 2012, Water mass circulation on Demerara Rise during the Late Cretaceous based on Nd isotopes, Earth and Planetary Science Letters, v. 327–328, p. 111–120, doi:10.1016/j.epsl.2012.01.037
- Huber, B.T., MacLeod, K.G., Gröcke, D., and Kucera, M., 2011, Paleotemperature and paleosalinity inferences and chemostratigraphy across the Aptian/Albian boundary in the subtropical North Atlantic: Paleoceanography, v. 26, PA4221, doi:10.1029/2011PA002178.
- MacLeod, K.G., **Isaza Londoño, C.**, Martin, E.E., Jiménez Berrocoso, A., and **Basak, C.**, 2011, Changes in North Atlantic circulation at the end of the Cretaceous greenhouse interval: Nature Geoscience, v. 4, p. 779–782, doi:10.1038/ngeo1284.
- Wendler, I., Huber, B.T., MacLeod, K.G., and Wendler, J.E., 2011, Early evolutionary history of *Tubulogenerina* and *Colomia* with new species from the Turonian of East Africa: Journal of Foraminiferal Research, v. 41, p. 384–400.
- Herrmann, A.D., Leslie, S.A., and MacLeod, K.G., 2011, Did intense volcanism trigger the first Late Ordovician icehouse?: COMMENT, Geology, v. 39, p. 237, doi:10.1130/G31758C.1.
- Jiménez Berrocoso, Á., MacLeod, K.G., Martin, E.E., **Bourbon, E.**, **Bassak, C.**, and **Isaza Londoño, C.**, 2010, Nutrient trap for Late Cretaceous organic-rich black shales in the tropical North Atlantic, Geology, v. 38, pp. 1111–1114, doi:10.1130/G31195.1
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- Herrmann, A.D., MacLeod, K.G., and Leslie, S.A., 2010, Did a volcanic mega-eruption cause global cooling during the Late Ordovician?, Palaios, V. 25, pp. 831–836, doi:10.2110/palo.2010.p10-069r.
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- Huber, B.T., MacLeod, K.G. and Tur, N.A., 2008, Chronostratigraphic framework for Upper Campanian-Maastrichtian sediments on the Blake Nose (Subtropical North Atlantic), Journal of Foraminiferal Research, v. 38, p. 162-182, doi:10.2113/gsjfr.38.2.162
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- MacLeod, K.G. and Orr, W.N., 1993, The taphonomy of Maastrichtian inoceramids in the Basque region of France and Spain and the pattern of their decline and disappearance, Paleobiology, vol. 19, p. 235-250.
- MacLeod, K.G. and Hoppe, K.A., 1993, Evidence that inoceramid bivalves were benthic and harbored chemosynthetic symbionts--Reply, Geology, vol. 21, p. 95-96.
- Ward, P.D., Nelson, B.K., and MacLeod, K.G., 1992, Rapid change in strontium isotopic composition of seawater prior to the Cretaceous/Tertiary boundary--Reply, Nature, vol. 358, p. 378.
- MacLeod, K.G. and Hoppe, K.A., 1992, Evidence that inoceramid bivalves were benthic and harbored chemosynthetic symbionts, Geology, vol. 20, p. 117-120.
- Ward, P.D., Kennedy, W.J., MacLeod, K.G., and Mount, J., 1991, Ammonite and inoceramid bivalve extinction patterns in Cretaceous/Tertiary boundary sections of the Biscay region (southwestern France, northern Spain), Geology, vol. 19, p. 1181-1184.
- Nelson, B.K., MacLeod, K.G., and Ward, P.D., 1991, Rapid change in strontium isotopic composition of sea water prior to the Cretaceous/Tertiary boundary, Nature, vol. 351, p. 644-647.
- MacLeod, K.G. and Ward, P.D., 1990, Extinction pattern of *Inoceramus* (Bivalvia) based on shell fragment biostratigraphy, *in* Sharpton, V.L. and P.D. Ward (eds.). Global Catastrophes in Earth History: An Interdisciplinary Conference on Impacts, Volcanism, and Mass Mortality, GSA Special Paper 247, p. 509-518.
- Hadley, D.G., Ryder, R.T., Hill, R.H., Kulik, D.M., MacLeod, K.G., and Jeske, R.E., 1990, Mineral Resources of the McCullough Peaks Wilderness Study Area, Park County, Wyoming, U. S. Geological Survey Bulletin 1756-F, 35p.
- Johnson, M.E., Skinner, D.F., and MacLeod, K.G., 1988, Ecological zonation during the carbonate transgression of a Late Ordovician rocky shore (Northeastern Manitoba, Hudson Bay, Canada), Palaeogeography, Palaeoclimatology, Palaeoecology, vol. 65, p. 93-114.

(edited volumes)

- Koeberl, C. and MacLeod K.G. (eds.), 2002, Catastrophic Events and Mass Extinctions: Impacts and Beyond, GSA Special Paper 356, Geological Society of America, Boulder, 746p.
- Huber, B.T., MacLeod, K.G. and Wing S. (eds.), 2000, Warm climates in Earth History, Cambridge University Press, Cambridge, 462p.

(other)

- Contributions to ~30 non-refereed Initial Reports chapters and related articles reporting initial findings of ODP Legs 171B, 192, and 207.
- National coverage of finding concerning regional warming in the North Atlantic during the Maastrichtian (2005); international coverage of study of the K/T boundary on Demerara Rise (2006-2007); international coverage of study of the K/T boundary review paper (2010); international coverage of study demonstrating circulation changes in the North Atlantic during the Maastrichtian (2011).

PROFESSIONAL ACTIVITIES/SERVICE/SOCIETIES:

- Co-director of MU Biogeochemistry Isotope Laboratory (2001-present)
- Associate Editor- Geological Society of America Bulletin (2009-2017)
- IODP Distinguished Lecturer (2009-2010).
- University Service- A&S Promotion and Tenure Committee (2013-2016); MU Faculty Council (2004-2010); Advising Assessment Task Force (2008-2010); COI oversight panel (2007-present); Undergraduate Research Mentorship Program selection committee (2008-2013); many departmental committees.

other service/activities/outreach- primary and secondary school presentations (2001-2012); reviewed Missouri K-12 science standards (2003-2004, 2008-2009); member various Ocean Drilling Program Panels (2000-2005); shipboard scientist- Ocean Drilling Program Legs 171B (1997), 192 (2000), and 207 (2003); organized and chaired sessions at GSA, NAPC, workshops, reviewer for journals and funding agencies. member- Geological Society of America (Fellow); Cushman Society (Fellow); American Geophysical Society; Paleontological Society

ADVISING/MENTORING

post-docs

Gouwy, Sofie Annie (2010-2012, Università di Modena e Reggio Emilia, Italy),
Jiménez-Berrococo, Álvaro (2006-2009, University of the Basque Country, Bilbao, Spain).

graduate students- primary advisor

Bassett, Damon (present- Ph.D.), University of Missouri
Ferguson, Katherine (present- M.S.), University of Missouri
Haynes, Shannon (present- Ph.D.), University of Missouri
Quinton, Page (present- Ph.D.), University of Missouri
Haynes, Shannon (2012- M.S.), University of Missouri
Quinton, Page (2012- M.S.), University of Missouri
Putman, Kelsey (2011- M.S.), University of Missouri
Isaza-Londoño, Carolina (2009- Ph.D.) University of Missouri
Lepley, Scott (2009- Ph.D.) University of Missouri
Basnett, Daniel (2005- M.S.) University of Missouri
Isaza-Londoño, Carolina (2004- M.S.), University of Missouri
Bassett, Damon (2003- M.S.), University of Missouri
Krueger, Diane M. (2002- Ph.D.), University of Missouri

graduate students- committee member

Beaudoin, Claire (present- M.S.), University of Missouri,
Broce, Jesse (present- Ph.D.), University of Missouri,
Hale, Kelly (present- M.S.), University of Missouri,
Nicholson, Brooke (2013- M.S.), University of Missouri,
Senefeld, Laura (2013- M.S.), University of Missouri,
Rosania, Corinne (2010- M.S.), University of Missouri (Anthropology).
Judd, Amy (2005- M.S.), University of Missouri (Anthropology).
Formolo, Mike (2004- Ph.D.), University of Missouri,
Bates, Steve (2004- M.S.), University of Missouri,
Shim, MooJoon (2004- M.S.), University of Missouri.
Johnson, Aaron (2003- Ph.D.), University of Missouri.
Bright, Cammy (2002- M.S.), University of Missouri.
Zwiebel, Jennifer (1999- M.S.), University of Washington.
Maestas, Yvette (1998- M.S.), University of Washington.

undergraduate students- lab workers, independent research, and/or theses

Gretchen O'Neil (2013), Randall Bonnell (2011), Andy Moen (2010-2011), Matt Burger (2009), Martin Krueger (2009), Jacob Masters (2009), Aaron Boynton (2006-2007), Rebecca Dodds, (2005-2006), Eric Livingston (2005), Elyn Potter (2005), Patrick Stanley (2001-2004), Rachel Lee (2003-2004), Howard Davis (2004), Nikki Cruise (2000-2002)

high school intern- Nicole Ridgewell (2007)

RECENT INVITED PRESENTATIONS

2015- Oxford/ETH workshop "Mesozoic Climates- Climates of the past - lessons for the future," Ascona, Switzerland.
2014- CDP workshop on future Tanzanian drilling, speaker on "Eocene Impacts and Tanzanian Drilling Program Cores," Dar es Salaam, TZ,
AGU invited speaker in session "Dynamics of the Cretaceous Ocean," San Francisco, CA.

- 2013- EGU keynote speaker for “Mesozoic stratigraphy, paleoceanography and paleoclimate” Vienna, AU.
NSF Workshop on Continental Drilling, speaker on “Exception Preservation in Tanzanian microfossils,” Norman OK,
Louisiana State University, Baton Rouge, LA- Wilbert Lecture.
Temple University, Philadelphia, PA- departmental colloquium.
- 2012- GSA Annual Meeting/Paleontological Society Short Course invited lecture “Reconstructing Earth’s Deep-Time Climate” addressing conodonts and phosphate $\delta^{18}\text{O}$ measurements, Charlotte, NC.
Illinois State University, Normal, IL- departmental colloquium.
- 2010- IODP Distinguished Lecturer
San Francisco State University, San Francisco, CA; University of California, Riverside, Riverside, CA;
University of Houston, Houston, TX; National Evolutionary Synthesis Center, Durham, NC; Duke University, Durham, NC; Virginia Living Museum, Newport News, VA; Rhodes College, Memphis, TN; University of New Mexico, Albuquerque, NM.
Lincoln University, Jefferson City, MO- departmental colloquium.
Williams College, Williamstown, MA- Class of 1960 Lecture.

(abstracts, 2104-2015, students in bold)

- Dameron, S.**, Leckie, R.M., Clark, K., MacLeod, K.G., and Thomas, D., 2015, Biotic extinctions, dissolution, and ocean acidification prior to the Cretaceous/Paleogene (K/Pg) boundary in the tropical Pacific, GSA Abstracts with Programs, vol. 47(7).
- MacLeod, K.G., **Quinton, P.C.**, Sepúlveda, J., and Negra H., 2015, Temperature change across the Cretaceous/Paleogene boundary inferred from oxygen isotopic ratios in fish debris from El Kef, Tunisia, Midwest Geobiology Conference, Bloomington, IN.
- Quinton, P.C.**, MacLeod, K.G., Leslie, S.A., and Herrmann, A.D., 2015, Inferences on Conodont Ecology from Oxygen Isotope Paleothermometry, Midwest Geobiology Conference, Bloomington, IN.
- Haynes, S.J.** and MacLeod, K.G., 2015, Linking the depositional environment with exceptionally well-preserved calcareous marine microfossils and terrestrial organic matter in Turonian drill cores from the southeastern coastal region of Tanzania, Midwest Geobiology Conference, Bloomington, IN.
- Petrizzo, M.R., Jiménez Berrocoso, Á., Falzoni, F., MacLeod, K.G., and Huber, B.T., 2015, The Coniacian-Santonian interval in southern coastal Tanzania (East Africa): planktonic foraminiferal evolution, biostratigraphy, and depositional trends, STRATI 2015, 2nd International Congress on Stratigraphy, Graz, Austria.
- Day, J., De Vleeshouwer, D., Gouwy, S., and MacLeod, K.G., 2015, Eifelian Climatic and Environmental Change and Astronomical Forcing Inferred from Magnetic Susceptibility and Stable Isotope Records from the Subtropics of Western Laurussia: Southern Illinois Basin: Central North America, STRATI 2015, 2nd International Congress on Stratigraphy, Graz, Austria.
- Campos, L., Texeira, R., Rodrigues, R., Wang, X., MacLeod, K.G., and **Bassett, D.**, 2015, The importance of petrography and stable isotope stratigraphy of speleothems in the inference of Holocene climate changes at Cuevas de Fuentes de León, Extremadura, southwestern Iberian Peninsula, STRATI 2015, 2nd International Congress on Stratigraphy, Graz, Austria.
- MacLeod, K.G., 2015, The potential role of depositional environments in promoting exceptional preservation of Turonian foraminifera in Tanzania, Oxford/ETH workshop “Mesozoic Climates- Climates of the past - lessons for the future,” Ascona, Switzerland.
- Petrizzo, M.R., Falzoni, F., Clarke, L.J., MacLeod, K.G., and Jenkyns, H.C., 2015, Planktonic foraminiferal evolution and climate change in the Late Cretaceous, Oxford/ETH workshop “Mesozoic Climates- Climates of the past - lessons for the future,” Ascona, Switzerland.
- MacLeod, K.G. and **Hughes, K.P.**, 2015, Neodymium isotopes and the Late Ordovician evolution of the North American Mid-continental Seaway, 12th International Symposium on the Ordovician System, Harrisonburg, VA.
- Quinton, P.C.**, Herrmann, A.D., Leslie, S.A., and MacLeod, K.G., 2015, Evidence of warming during the early Katian- Conodont apatite $\delta^{18}\text{O}$ and bulk carbonate $\delta^{13}\text{C}$ records from the Upper Mississippi Valley, US, 12th International Symposium on the Ordovician System, Harrisonburg, VA.

- Quinton, P.C.**, Percival, I.G., Zhen, Y.-Y., and MacLeod, K.G., 2015, Ordovician temperature trends: constraints from $\delta^{18}\text{O}$ analysis of conodonts from New South Wales, Australia, 12th International Symposium on the Ordovician System, Harrisonburg, VA.
- Petrizzo, M.R., Falzoni, F., Huber, B.T., and MacLeod, K.G., 2015, Progress in Late Cretaceous planktonic foraminiferal stable isotope paleoecology and implications for paleoceanographic reconstructions, EGU Annual Meeting, Vienna, Austria.
- Achim's student SE GSA meeting
- MacLeod, K.G., Haynes, S.J., Kelley, C.A., Owens, J.D., Ravizza, G.E., 2014, Leads, lags, and correlations among geochemical records through the Cenomanian/Turonian Boundary Interval in Demerara Rise Black Shales, Eos, Transactions of the American Geophysical Union.
- Martin, E.E., Pugh, E., Kamerov, G., and MacLeod, K.G., 2014, Detrital sources and water mass circulation in the tropical North Atlantic during the Late Cretaceous to Paleogene, Eos, Transactions of the American Geophysical Union.
- Dameron, S.**, Leckie, R.M., MacLeod, K.G., and Thomas, D., 2014, A dissolution event in the North Pacific (Shatsky Rise) prior to the K/Pg Boundary, GSA Abstracts with Programs, vol. 46(7).
- Haynes, S.J.**, MacLeod, K.G., and Martin, E.E., 2014, Climate and ocean circulation patterns during and after the early Maastrichtian cooling event, GSA Abstracts with Programs, vol. 46(7).
- Huber, B.T., MacLeod, K.G., **Bryant, R.M.**, and **Dickie, M.**, 2014, Oxygen isotope paleotemperatures across the Cretaceous Super greenhouse at southern high latitudes (Naturaliste and Agulhas Plateau), GSA Abstracts with Programs, vol. 46(7).
- Hoppe, K.A., MacLeod, K.G., and **Quinton, P.C.**, 2014, Tracing migration patterns and climate change using isotope analyses of prehistoric bison bones and teeth, GSA Abstracts with Programs, vol. 46(7).
- Knoll, K.**, Sessa, J.A., Landman, N., MacLeod, K., Garb, M., **Larina, E.**, and Cochran, J.K., 2014, The Influence of shell microstructure on the preservation and isotopic composition of Late Cretaceous bivalve and gastropod shells, GSA Abstracts with Programs, vol. 46(7).
- Law, S.**, **Quinton, P.**, Leslie, S., MacLeod, K., and Herrmann, A., 2014, Carbonate $\delta^{13}\text{C}$ and preliminary conodont $\delta^{18}\text{O}$ from the upper Stones River Formation and lower Nashville Formation (Late Ordovician) near Gadsden, AL, GSA Abstracts with Programs, vol. 46(7).
- MacLeod, K.G., **Quinton, P.**, and Bassett, D.J., 2014, Oxygen isotopic record of dicynodont tusks across the Permo-Triassic boundary in the Karoo Basin, South Africa, GSA Abstracts with Programs, vol. 46(7).
- Quinton, P.**, Herrmann, A., Leslie, S., and MacLeod, K., 2014, Bulk carbonate $\delta^{13}\text{C}$ record from Tidwell Hollow, Alabama: A search for the GICE in the southeast US, GSA Abstracts with Programs, vol. 46(7).
- Sessa, J.A., **Knoll, K.**, **Larina, E.**, Garb, M., Cochran, J.K., Huber, B., MacLeod, K., and Landman, N., 2014, Ammonite habitat revealed via isotopic composition and comparisons with co-occurring benthic and planktonic organisms, GSA Abstracts with Programs, vol. 46(7).
- MacLeod, K.G., Koeberl, C., and Wade, B., 2014, Eocene Impacts and Tanzanian Drilling Program Cores, PRISM, A Continental Drilling Program Workshop, Dar es Salaam, TZ.

GRANT HISTORY

- Faculty International Travel (MU), 2015, University of Missouri, Research Council, funds to intend a by-invitation workshop on Mesozoic paleoclimatology "Climates of the past - lessons for the future" Ascona, Switzerland, \$1,500.
- Collaborative Research: Testing the early Late Ordovician Cool Water Hypothesis, 2013, National Science Foundation, 3 years, ~\$470,000 (MU portion ~\$225,000), (PI).
- Collaborative Research: Constraining sources and circulation patterns of intermediate and deep waters during the Late Cretaceous greenhouse, 2013, National Science Foundation, 3 years, ~\$560,000 (MU portion ~\$165,000), (PI).
- Cretaceous Greenhouse Climate: Deep Ocean Circulation Patterns and Temperature Trends, 2012, University of Missouri Research Council, \$7,500 (PI).
- The tropical temperature history of the Cretaceous greenhouse interval inferred from Tanzanian 'glassy'

- foraminifera, supplemental request, 2009, National Science Foundation, 1 year, ~\$57,000 (PI).
- Collaborative Research: The tropical temperature history of the Cretaceous greenhouse interval inferred from Tanzanian 'glassy' foraminifera, 2007, National Science Foundation, 3 years, ~\$460,000 (MU portion ~\$225,000), (PI).
- Collaborative Research: Tracking North Atlantic water column structure and circulation through the Late Cretaceous using oxygen and neodymium isotopes in fish debris, 2007, National Science Foundation, 3 years, ~\$290,000, (MU portion ~\$140,000), (PI).
- Generating a 500-year-long record of Missouri climate, 2006, University of Missouri Research Board, 2 years, ~\$26,000, (PI).
- Generation of a Late Cambrian-Early Carboniferous conodont-based $\delta^{18}\text{O}$ curve: Paleozoic climates, phosphate $\delta^{18}\text{O}$ diagenesis, and conodont paleobiology, 2006, National Science Foundation, 3 years, ~\$125,000, (PI).
- The University of Missouri conodont collection and database effort, 2006, National Science Foundation, 3 years, ~\$175,000, (PI).
- Investigating Late Cretaceous oxygen levels, benthic ecology, and organic carbon burial using samples from the tropical western Atlantic, 2004, University of Missouri Research Council, \$7,500 (PI).
- Late Cretaceous paleoceanographic implications of the Maastrichtian geochemical, paleontological, and sedimentological record on Demerara Rise, 2003, United States Science Advisory Council, 1 year, ~\$24,000 (+ ~\$26,000 related to Leg participation) (PI).
- Investigating ancient greenhouse climates using exceptionally well preserved fossils from Tanzania, 2003, MU Research Council, 1 year, \$3,720 (PI).
- Collaborative Research: Short-term Paleoceanographic Variation and Foraminiferal responses in the Maastrichtian Subtropics, 2002, National Science Foundation, 3 years, ~\$160,000 (MU portion ~\$155,000) (PI).
- Stable isotopic analyses of Campanian-Maastrichtian microfossils and implications for Late Cretaceous paleoceanography, 2001, United States Science Advisory Council, 1 year, ~\$31,000 (+ ~\$24,000 related to Leg participation) (PI).
- Request to Obtain Carbonate Device for new IRMS System, 2000, UM Research Board, 1 year, ~\$53,000 (co-PI).
- Acquisition of a Multi-use Isotope Ratio Mass Spectrometer System, 2000, National Science Foundation, 1 year, ~\$130,000 (co-PI).
- Acquisition of a Multi-use Isotope Ratio Mass Spectrometer System, 2000, MU Prime Fund, 1 year, ~\$90,000 (co-PI).
- Maastrichtian foraminiferal and paleoceanographic changes on Milankovitch time scales, 1999, University of Missouri Summer Research Fellowship, 1 year, ~\$3,500 (PI).
- Dissecting REE patterns in hemipelagic sediments, 1999, University of Missouri Research Board, 2 years, ~\$34,000 (PI).
- Investigation of depth related differences in the expression of Late Cretaceous paleoceanographic changes at ODP Sites 1049, 1050, and 1050 using integrated paleontological, geochemical, and sedimentological data, 1997, United States Science Advisory Council, 1 year, ~\$23,000 (+ ~25,000 related to Leg participation) (PI).
- Bio- and chemostratigraphy across the Permo-Triassic extinction interval in the Karoo Basin of South Africa, 1996, University of Washington Royalty Research Fund, \$44,000, 1 year, (co-PI).
- Tethyan paleoceanography during the Santonian-Maastrichtian, 1994, Smithsonian Research Initiative "Ecosystem History and Global Change", 1 year, \$28,000, (co-PI).
- Investigation of the Late Cretaceous "Greenhouse" climate, 1994, Smithsonian Institution's Walcott Fund, \$14,000, 1 year, (co-PI).
- The extinction of the Inoceramidae and Campanian-Maastrichtian Paleoceanography, 1992, National Science Foundation, 2 years, \$100,000 (co-written with PI).

Inoceramid disappearance in the Pacific and Indian Oceans, 1991, Geological Society of America, 1 year, \$1435 (PI).

Molluscan biostratigraphy at Cretaceous/Tertiary boundary sections, Western Europe, a renewal, 1989, National Science Foundation, 2 years, \$90,000 (co-written with PI).