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- Education:** Ph.D. Earth Sciences, Scripps Institution of Oceanography, University of California, San Diego, 1986.
- M.S. Oceanography, Scripps Institution of Oceanography, University of California, San Diego, 1982.
- B.A. with Honours in Geology, Oxford University, England, 1980.
- Professional Experience:**
- Assistant Professor, Florida International University, State University of Florida at Miami, 1987-1990.
- Assistant Professor, Geological and Marine Sciences, University of North Carolina, Chapel Hill, 1990-1993.
- Associate Professor, Geological and Marine Sciences, University of North Carolina, Chapel Hill, 1993-1996.
- Joseph Sloane Associate Professor of Geological and Marine Sciences, University of North Carolina, Chapel Hill, 1997-1998.
- Joseph Sloane Professor of Geological and Marine Sciences, University of North Carolina, Chapel Hill, 1998-2002.
- Chair, Department of Geological Sciences, University of North Carolina, Chapel Hill, 1998-2002.
- Professor, Department of Geosciences, Pennsylvania State University, 2003-.
- Head, Department of Geosciences, Pennsylvania State University, 2003-2011.
- Other Positions:** Shipboard biostratigrapher, Ocean Drilling Program Leg 122 (Indian Ocean, 1988), Leg 143 (Pacific Ocean, 1993), Leg 165 (Caribbean, 1995), Expedition 364 (Chicxulub, 2016). Co-chief scientist, Ocean Drilling Program Leg 198 (Pacific, 2001).
- Awards:** University College, Oxford, Open Scholarship, 1979.
Hettelman Junior Faculty Research Prize, UNC-CH, 1995.
Fulbright Senior Scholarship, University of New South Wales, 2011-12.
- Research Interests:** Paleooceanography and paleoclimatology of past warm climate intervals, origin of Cretaceous black shales, the Paleocene-Eocene thermal maximum event. Nannofossil

biostratigraphy, evolutionary dynamics of nannoplankton, the Mesozoic and Paleogene time scale. The Cretaceous/Tertiary boundary event.

Publications: <http://scholar.google.com/citations?user=q4WEgGYAAAAJ&hl=en&oi=ao>

Partial list of Professional Service (past 10 years)

- Associate Editor, *Geology*, 2004-2006.
- Associate Editor, *Marine Micropaleontology*, 1995-.
- Associate Editor, *Palaios*, 1999-2016.
- Associate Editor, *Paleoceanography*, 2001-2007.
- Associate Editor, *Terra Nova*, 2012-
- Member, Proposal Evaluation Panel, Integrated Ocean Drilling Program
- Distinguished Speaker, National Association of Geoscience Teachers (NAGT), 2011-2014
- Australian-American Fulbright Scholarship Selection Committee, 2012-5
- Advisory Board of the National Geoscience Departments Heads and Chairs, 2005-2011.
- Leader for *Preparing for an Academic Career in the Geosciences: A Workshop for Graduate Students and Post-doctoral Fellows* at Stanford University, 2006.
Convened workshop Connecting Geoscience Departments to the Future of Science: New Structures for Research and Curriculum, Carleton College, 2007.
- Organized session at Fall AGU on Marine Biotic Response to Global Warming; Past and Present, 2007.
- Organized session at Fall AGU on Building Geoscience Departments for the Future, 2007.
- Organized 50 person InTeGrate Workshop on Programs that Bring Together Geosciences and Sustainability at Stanford University, 2012

Thesis Advisor and Postgraduate-Scholar Sponsor

- M.S. Sarah Mock (Teacher, Portland, OR), John Williams (Environmental company, Portland, OR), Celeste Burns (Owner of Forestry Company, Durham, NC), Deborah Thomas (Associate Professor, Texas A&M), Linda de Romero (Independent consultant), Jason Eleson (Exxon-Mobil), Andrew Bowman (Statoil), Amanda Colosimo (Instructor, Monroe CC), Lauren Fuqua (Instructor, College of Charleston), Anna Hilting (NOAA Researcher; joint w Kump), Andrea Kalb (Environmental Company-Delaware), Jon Schueth (PhD), Caitlyn Livsey (PhD at UC Davis), Isabel Leon y Leon (current), Victoria Fortiz (current), Ashley Grey (current)
- Ph.D. D. Clay Kelly (Professor, Wisconsin-Madison), Deborah Thomas (Professor and Dean, Texas A&M), Jocelyn Sessa (AMNH, joint with Patzkowsky), Leah Levay (Staff Scientist IODP, joint with Kump), Jon Schueth (Conoco), Rosie Oakes (current), Heather Jones (current)
- Post docs Sam Gibbs (Lecturer, Southampton), Yong-Xiang Li (Assistant Professor, Nanjing Univ.), Shijun Jiang (Assistant Professor, Jinan Univ.), Fabrizio Tremolada (consultant)

Graduate Advisor: Hans R. Thierstein (ETH-Zurich)

PUBLICATIONS

- 2016 **Morgan, J.V., Gulick, S.P., Bralower, T., Chenot, E., Christeson, G., Claeys, P., Cockell, C., Collins, G.S., Coolen, M.J., Ferrière, L. Gebhardt, C., and 27 others,** The formation of peak rings in large impact craters. *Science*, v. 354(6314), p.878-882.
- 2016 **Bralower, T.J., and Self-Trail, J.M.,** Nannoplankton malformation during the Paleocene-Eocene thermal maximum and its paleoecological and paleoceanographic significance. *Paleoceanography*, v. 31, p. 1423-1439.
- 2015 **Alexander, K., Meissner, K.J. and Bralower, T.J.,** Sudden spreading of corrosive bottom water during the Paleocene-Eocene Thermal Maximum. *Nature Geosciences*, DOI: 10.1038/NGEO2430
- 2015 **Schueth, J., and Bralower, T.J.,** The relationship between environmental change and the extinction of the nannoplankton *Discoaster* in the early Pleistocene. *Paleoceanography*, DOI 10.1002/2015PA002803
- 2015 **Schueth, J., and Bralower, T.J., Jiang, S., and Patzkowsky, M.E.,** The role of regional survivor incumbency in the evolutionary recovery of calcareous nannoplankton from the Cretaceous/Paleogene (K/Pg) mass extinction. *Paleobiology*, DOI: 10.1017/pab.2015.28
- 2014 **Bralower, T. J., Kelly, D. C., Gibbs, S., Farley, K., Eccles, L., Lindemann, T. L., & Smith, G. J,** Impact of dissolution on the sedimentary record of the Paleocene–Eocene thermal maximum. *Earth and Planetary Science Letters*, v. 401, p. 70-82.
- 2014 **Bralower, T. J., Meissner, K. J., Alexander, K., & Thomas, D. J.,** The dynamics of global change at the Paleocene-Eocene thermal maximum: A data-model comparison. *Geochemistry, Geophysics, Geosystems*. DOI: 10.1002/2014GC005474
- 2014 **Meissner, K. J., Bralower, T. J., Alexander, K., Jones, T. D., Sijp, W., & Ward, M.,** The Paleocene-Eocene Thermal Maximum: How much carbon is enough? *Paleoceanography*. 10.1002/2014PA002650.
- 2014 **Schueth, J. D., Keller, K., Bralower, T. J., & Patzkowsky, M. E.,** The Probable Datum Method (PDM): a technique for estimating the age of origination or extinction of nannoplankton. *Paleobiology*, v. 40(4), p. 541-559.
- 2014 **Clyde, W. C., Wilf, P., Iglesias, A., Slingerland, R.L., Barnum, T., Bijl, P.K., Bralower, T.J. et al.,** New age constraints for the Salamanca Formation and lower Río Chico Group in the western San Jorge Basin, Patagonia, Argentina: Implications for Cretaceous-Paleogene extinction recovery and land mammal age correlations. *Geological Society of America Bulletin*: B30915-1.
- 2013 **Gosselin, D. C., C. Manduca, T. Bralower, and D. Mogk,** Transforming the Teaching of Geoscience and Sustainability, *Eos Trans. AGU*, v. 94, p. 221.
- 2013 **Schneider, L. J., Bralower, T. J., Kump, L. R., & Patzkowsky,** Calcareous nannoplankton ecology and community change across the Paleocene-Eocene

- Thermal Maximum. *Paleobiology*, v. 39(4), p. 628-647.
- 2012 **Kalb, A.L., and Bralower, T.J.**, Nannoplankton origination events and environmental changes in the late Paleocene and early Eocene. *Marine Micropaleontology*, v. 92, p. 1-15.
- 2011 **Sessa, J.A., Bralower, T.J., Patzkowsky, M.E., Handley, J.C., Ivany, L.C.**, Environmental and biological controls on the diversification and ecological reorganization of Late Cretaceous and early Paleogene marine ecosystems in the Gulf Coastal Plain. *Paleobiology*, v. 38; p. 218–239.
- 2011 **Schneider, L., Bralower, T.J., and Kump, L.R.** Global Eocene nannofossil paleoecology and the response to early Eocene ocean destratification, *Palaeo-3*, in review, doi:10.1016/j.palaeo.2011.06.018
- 2011 **Hull, P.M., Norris, R.D., Bralower, T.J., Schueth, J.D.**, A role for chance in marine recovery from the end-Cretaceous extinction, *Nature Geoscience*, DOI: 10.1038/NGEO1302.
- 2010 **Schulte, P., Alegret, L., Arenillas, I., Arz, J.A., Barton, P.J., Bown, P.R., Bralower, T.J., Christeson, G.L., Claeys, P., Cockell, C.S. and Collins, G.S., and 30 others**, The Chicxulub asteroid impact and mass extinction at the Cretaceous-Paleogene boundary. *Science*, v. 327, p.1214-121
- 2010 **Jiang, S., Bralower, T.J., Patzkowsky, M. E., Kump, L.R., and Schueth, J.D.**, Geographic controls on nannoplankton extinction across the Cretaceous-Paleogene boundary, *Nature Geosciences* DOI: 10.1038/NGEO775.
- 2010 **Bralower, T.J., Eccles, L., Kutz, J., Yancey, T., Schueth, J., Arthur, M., and Bice, D.**, Grain size of Cretaceous–Paleogene boundary sediments from Chicxulub to the Open Ocean: Implications for interpretation of the Mass Extinction Event, *Geology*, v. 38, p. 199-202.
- 2010 **Gibbs, S.J., Stoll, H., Bown, P.R., and Bralower, T.J.**, Ocean acidification and surface water carbonate production across the Paleocene-Eocene Thermal Maximum: *Earth and Planetary Science Letters*, vol. 295, p. 583-592.
- 2009 **Sessa, J.A., Patzkowsky, M.E. and Bralower, T.J.**, The impact of lithification on the diversity, size distribution, and recovery dynamics of marine invertebrate assemblages. *Geology*, v. 37, p. 115-118, doi: 10.1130/G25286A.1.
- 2009 **Kump, L.R., Bralower, T.J., and Ridgwell, A.**, Ocean Acidification in Deep Time, *Oceanography*, v. 22, p. 70-83.
- 2008 **Bralower, T. J., Feiss, P. G. and Manduca, C. A.**, Preparing a New Generation of Citizens and Scientists to Face Earth’s Future, *Liberal Education*, Spring Issue, p. 20-23.
- 2008 **Fuqua, L. M., Bralower, T. J., Arthur, M. A., and Patzkowsky, M. E.**, Evolution of calcareous nannoplankton and the recovery of food webs after the Cretaceous-Paleocene mass extinction, *Palaios*, v. 23: p. 185-194.
- 2008 **John, C. M., Bohaty, S.M., Zachos, J. C., Sluijs, A., Gibbs, S., Brinkhuis, H., and Bralower, T. J.**, Impact of the Paleocene-Eocene thermal maximum on continental

- margins and implications for the carbon cycle in near-shore environments, *Paleoceanography*, 23, PA2217, doi:10.1029/2007PA001465.
- 2008 **Hilting, A., Kump, L. R., and Bralower, T. J.**, Variations in the Oceanic Vertical Carbon Isotope Gradient and Their Implications for the Paleocene-Eocene Biological Pump, *Paleoceanography*, 23, PA3222, doi:10.1029/2007PA001458.
- 2008 **Li, Y.-X., Bralower, T. J., Montañez, I. P., Herbert, T. D., Osleger, D. A., Arthur, M. A., Bice, D. M., Erba, E., and Premoli Silva, I.**, Toward an orbital chronology for the early Aptian Oceanic Anoxic Event (OAE1a, ~120 Ma), *Earth Planet. Sci., Lett.*, v. 271, p. 88-100.
- 2008 **Lyle, M., Barron, J. A., Bralower, T. J., Huber, M. Olivarez Lyle, A., Ravelo, A. C., Rea, D. K., and Wilson, P. A.**, The Pacific Ocean and the Cenozoic Evolution of Climate, *Reviews of Geophysics*, Rev. doi:10.1029/2005RG000190.
- 2008 **Bralower, T.J., Easterling, W., Geissman, J., Savina, M., Tewksbury, B., Feiss, P.G., Macdonald, H., and Rhodes, D.**, Accreditation: Wrong path for the Geosciences, *GSA Today*, v. 19, no. 10, doi: 10-1130/GSATG25GW.1.
- 2007 **Rohl, U., Westerhold, T., Bralower, T. J., and Zachos, J. C.**, On the duration of the Paleocene-Eocene thermal maximum (PETM), *Geochemistry, Geophysics, Geosystems*, v. 8, no. 12, Q12002, doi:10.1029/2007GC001784
- 2006 **Bralower, T. J., Premoli Silva, I., and Malone, M. J. (Eds.)**, *Proc. ODP, Sci. Results*, 198: College Station, TX (Ocean Drilling Program). doi:10.2973/odp.proc.sr.198.2006.
- 2006 **Bralower, T. J., Premoli Silva, I., and Malone, M. J.**, Leg 198 synthesis: A remarkable 120-m.y. record of climate and oceanography from Shatsky Rise, northwest Pacific Ocean. In Bralower, T.J., Premoli Silva, I., and Malone, M.J. (Eds.), *Proc. ODP, Sci. Results*, 198: College Station, TX (Ocean Drilling Program), 1–47. doi:10.2973/odp.proc.sr.198.101.2006.
- 2006 **Colosimo, A. B., Bralower, T. J., and Zachos, J. C.**, Evidence for lysocline shoaling at the Paleocene/Eocene Thermal Maximum on Shatsky Rise, northwest Pacific. In Bralower, T.J., Premoli Silva, I., and Malone, M.J. (Eds.), *Proc. ODP, Sci. Results*, 198: College Station, TX (Ocean Drilling Program), 1–36. doi:10.2973/odp.proc.sr.198.112.2006
- 2006 **Bowen, G. J., Bralower, T. J., Delaney, M. L., Dickens, G. R., Kelly, D. C., Koch, P. L., Kump, L. R., Meng, J., Sloan, L. C., Thomas, E., Wing, S. L., Zachos, J. C.**, The Paleocene-Eocene thermal maximum gives insight into greenhouse gas-induced environmental and biotic change, *EOS*, v. 87, p. 165-169.
- 2006 **Gibbs, S. J., Bralower, T. J., Bown, P. R., Zachos, J. C., and Bybell, L. M.**, Shelf-open ocean calcareous phytoplankton assemblages across the Paleocene-Eocene Thermal Maximum: Implications for global productivity gradients, *Geology*, v. 34, p. 233-236.
- 2006 **Gibbs, S. J., Bown, P. R., Sessa, J. A., Bralower, T. J., and Wilson, P. A.**, Nannoplankton Extinction and Origination Across the Paleocene-Eocene Thermal Maximum, *Science*, v. 314, p. 1770-1773.
- 2006 **Tremolada F., Bornemann A., Bralower, T. J., Koeberl C., and van de Schootbrugge, B.**, Paleooceanographic changes across the Jurassic/Cretaceous boundary: The calcareous phytoplankton response. *Earth Planet Sci. Lett.*, v. 241, p. 361– 371.

- 2006 **Tremolada, F., Erba, E., and Bralower, T. J.**, Late Barremian to Early Aptian calcareous nannofossil paleoceanography and paleoecology from the Ocean Drilling Program Hole 641C (Galicia Margin). *Cretaceous Research*, v. 27, p. 887-897.
- 2006 **Zachos, J. C., Schouten, S., Bohaty, S., Quattlebaum, T., Sluijs, A., Brinkhuis, H., Gibbs S. J., and Bralower, T. J.**, Extreme warming of mid-latitude coastal ocean during the Paleocene-Eocene Thermal Maximum: Inferences from TEX86 and Isotope Data, *Geology*, v. 34, p. 737-740.
- 2005 **Gibbs, S. J., Young, J. R. Bralower, T. J. and Shackleton, N. J.**, Nannofossil evolutionary events in the mid Pliocene: an assessment of the degree of synchrony in the extinctions of *Reticulofenestra pseudoumbilicus* and *Sphenolithus abies*. *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 217, p. 155-172.
- 2005 **Mahoney, J. J., Duncan, R. A., Tejada, M. L. G., Sager, W. W., and Bralower, T. J.**, Jurassic-Cretaceous boundary age and mid-ocean-ridge-type mantle source for Shatsky Rise, *Geology*, v. 33, p 185–188.
- 2005 **Bowman, A.R., and Bralower, T. J.**, Paleoceanographic significance of high-resolution carbon isotope records across the Cenomanian-Turonian boundary in the Western Interior and New Jersey Coastal Plain, U.S.A., *Marine Geology*, v. 217, p. 305-322.
- 2005 **Snow, L. J., Duncan, R. A., and Bralower, T. J.**, Trace Element Abundances in the Rock Canyon Anticline, Pueblo, Colorado Marine Sedimentary Section and their Relationship to Ocean Plateau Construction and OAE2, *Paleoceanography*, v. 20, doi:10.1029/2004PA001093,
- 2005 **Thomas, D. J., and Bralower, T. J.**, Attempt to constrain the timing of North Atlantic Igneous Province volcanism relative to the Paleocene / Eocene thermal maximum, *Marine Geology*, v. 217, p. 233-254.
- 2005 **Bralower, T.J.**, Data report: Paleocene–early Oligocene calcareous nannofossil biostratigraphy, ODP Leg 198 Sites 1209, 1210, and 1211 (Shatsky Rise, Pacific Ocean). In Bralower, T.J., Premoli Silva, I., and Malone, M.J. (Eds.), *Proc. ODP, Sci. Results*, 198: College Station, TX (Ocean Drilling Program), 1–15. doi:10.2973/odp.proc.sr.198.115.2005
- 2005 **Eleson, J. W., and Bralower, T. J.**, Evidence of changes in surface water temperature and productivity at the Cenomanian / Turonian Boundary, *Micropaleontology*, v. 51, p. 309-334.
- 2005 **Kelly, D. C., Zachos, J. C., Bralower, T. J., and Schellenberg, S. A.**, Enhanced terrestrial weathering / runoff and surface ocean carbonate production during the recovery stages of the Paleocene-Eocene thermal maximum, *Paleoceanography*, v. 20, PA4023, doi:10.1029/2005PA001163.
- 2004 **Bralower, T. J., Kelly, D. C., and Thomas, D. J.**, Comment on “Coccolith Sr/Ca records of productivity during the Paleocene-Eocene thermal maximum from the Weddell Sea” by Heather M. Stoll and Santo Bains, *Paleoceanography*, v. 19, 1029/2003PA000953.

- 2004 **Bralower, T. J., Fullagar, P. D., McCay, T. A., MacLeod, K. G., Bergen, J., and Zapata, E.**, Strontium isotope stratigraphy of Cretaceous sediments at Sites 1183 and 1186, Ontong Java Plateau. In Fitton, J.G., Mahoney, J.J., Wallace, P.J., and Saunders, A.D. (Eds.), *Proc. ODP, Sci. Results*, 192 [Online]. Available from World Wide Web: http://www-odp.tamu.edu/publications/192_SR/106/106.htm
- 2004 **Brassell, S. C., Dimetrescu, M., and the Leg 198 Scientific Party (including T. J. Bralower)**, Recognition of alkenones in a Lower Aptian porecellanite from the west Central Pacific, *Organic Geochemistry*, v. 35, p. 181-188.
- 2004 **Goto, K., Tada, R., Tajika E., Bralower, T. J., Hasegawa, T., and Matsui, T.**, Evidence for ocean water invasion into the Chicxulub crater at the Cretaceous/Tertiary Boundary, *Meteoritics & Planetary Science*, v. 39, p. 1233-1247.
- 2004 **Tremolada, F., and Bralower, T. J.**, Nannofossil assemblage fluctuations during the Paleocene-Eocene thermal maximum at Site 213 (Indian Ocean) and 401 (North Atlantic Ocean): Paleooceanographic Implications, *Marine Micropaleontology*, v. 52, p. 107-116.
- 2003 **Mearon, S., Paytan, A., and Bralower, T. J.**, Cretaceous strontium isotope stratigraphy using marine barite, *Geology*, v. 31, p. 15-18.
- 2003 **Thomas, D. J., Bralower, T. J., and Jones, C. E.**, Neodymium isotopic reconstruction of Late Paleocene-Early Eocene thermohaline circulation, *Earth Planet Sci. Lett*, v. 209, p. 309-322.
- 2003 **Dickens, G. R., Fewless, T., Thomas, E., and Bralower, T. J.**, Excess barite accumulation during the Paleocene/Eocene Thermal Maximum: Massive input of dissolved barium from seafloor gas hydrate reservoirs, *Geological Society of America Special Paper on Paleogene Climates*, v. 369, p. 11-24.
- 2003 **de Romero, L. M., Truskowski, I. M., Bralower, T. J., Bergen, J. A., Odreman, O., Zachos, J. C., and Galea-Alvarez, F. A.**, An Integrated Calcareous Microfossil Biostratigraphic and Carbon Isotope Stratigraphic Framework for the La Luna Formation, Western Venezuela, In Bralower, T. J., and Lorente, M. -A., (Eds.) *Environments of deposition of the Upper Cretaceous La Luna Formation from Venezuela, Special Issue for Palaeis*, v. 18, p. 349-366.
- 2003 **Bralower, T. J., and Lorente, M. -A.**, Paleogeography and Stratigraphy of the La Luna Formation and Related Cretaceous Anoxic Depositional Systems, In Bralower, T. J., and Lorente, M. -A. (Eds.), *Environments of deposition of the Upper Cretaceous La Luna Formation from Venezuela, Special Issue for Palaeis*, v. 18, p. 301-304.
- 2003 **Zachos, J. C., Wara, M. W., Steven Bohaty, S., Delaney, M. L. Petrizzo, M. R., Brill, A., Bralower, T. J. and Premoli-Silva I.**, A Transient Rise in Tropical Sea Surface Temperature During the Paleocene-Eocene thermal maximum, *Science* v. 302, p. 1551-155.
- 2002 **Bralower, T. J.**, Evidence for surface water oligotrophy during the Paleocene-Eocene Thermal Maximum: Nannofossil assemblage data from Ocean Drilling Program Site 690, Maud Rise, Weddell Sea, *Paleoceanography*, v. 17, no. 2, 10.1029/2001PA000662

- 2002 **Bralower, T. J., Kelly, D. C., and Leckie, R. M.**, Biotic effects of abrupt Paleocene and Cretaceous climate events. *Legacy of the Ocean Drilling Program, JOIDES Journal*, v. 28, no. 1, p. 29-34.
- 2002 **Bralower, T. J., Premoli Silva, I., Malone, M., and the Scientific Participants of Leg 198**, New Evidence for abrupt climate change in the Cretaceous and Paleogene: An Ocean Drilling Program expedition to Shatsky Rise, northwest Pacific, *GSA Today*, v. 12, no. 11, p. 4-10.
- 2002 **Bralower, T. J., Premoli Silva, I., Malone, M., and the Scientific Participants of Leg 198**, *Proceedings of the Ocean Drilling Program, Initial Report*, v. 198. [Online]. Available from World Wide Web: http://www.odp.tamu.edu/publications/198_IR/198ir.htm.
- 2002 **Leckie, R. M., Bralower, T. J., and Cashman, R.**, Oceanic Anoxic Events and plankton evolution: Biotic response to tectonic forcing during the mid Cretaceous, *Paleoceanography* v. 17, no. 3, 10.1029/2001PA000623.
- 2002 **Thomas, D. J., Zachos, J. C., Bralower, T. J., Thomas, E., and Bohaty, S.**, Warming the Fuel for the Fire: Evidence for the thermal dissociation of methane hydrate during the Paleocene-Eocene thermal maximum, *Geology*, v. 30, p. 1067-1070.
- 2002 **Zachos, J. C., Arthur, M. A., Bralower, T. J., and Spero, H. J.**, Palaeoclimatology (Communication arising): Tropical temperatures in greenhouse episodes, *Nature* v. 419, p 897– 898.
- 2001 **Kelly, D. C., Bralower, T. J., and Zachos, J. C.**, On the Demise of the Early Paleogene *Morozovella velascoensis* Lineage: Terminal Progenesis in the Planktonic Foraminifera? *Palaaios*, v. 16, p. 507-523.
- 2000 **Thomas, E., Zachos, J. C., and Bralower, T. J.**, Ice-free to glacial world transition as recorded by benthic foraminifera, in Huber, B. T., MacLeod, K. G., and Wing, S. L., eds., *Warm Climates in Earth History*, p. 132-160
- 2000 **Kameo, K., and Bralower, T. J.**, Neogene calcareous nannofossil biostratigraphy of Sites 998, 999, and 1001, Caribbean Sea, in Sigurdsson, H., Leckie, R. M., Acton, G., and Draper, G., *Proceedings of the Ocean Drilling Program Scientific Results*, v. 165, p. 3-17.
- 2000 **Peterson, L. C., Haug, G. H., Murray, R. W., Yarincik, K. M., King, J. W., Bralower, T. J., Kameo, K., Rutherford, S. D., and Pearce, R. B.**, Late Quaternary stratigraphy and sedimentation at ODP Site 1002, Cariaco Basin (Venezuela), in Sigurdsson, H., Leckie, R. M., Acton, G., and Draper, G., *Proceedings of the Ocean Drilling Program, Scientific Results*, v. 165, p. 85-100.
- 2000 **Sigurdsson, H., Kelley, S., Leckie, R. M., Carey, S., Bralower, T., and King, J.**, History of circum-Caribbean explosive volcanism: $^{40}\text{Ar}/^{39}\text{Ar}$ dating of ODP Leg 165 tephra layers, in Sigurdsson, H., Leckie, R. M., Acton, G., and Draper, G., *Proceedings of the Ocean Drilling Program, Scientific Results*, v. 165, p. 299-316.
- 2000 **Röhl, U., Bralower, T. J., Norris, R. D., and Wefer, G.**, A New Chronology for the Late Paleocene Thermal Maximum and its Environmental Implications, *Geology*, v. 28, p. 927-930.

- 2000 **Clement, B. M., Poetisi, E., Bralower, T. J., CoBabe, E., and Longoria, J. F.**, Magnetostratigraphy of mid-Cretaceous limestones from the Sierra Madre of northeastern Mexico, *Geophysica International*, v. 123, p. 219-229.
- 1999 **Bralower, T. J., CoBabe, E., Bradford Clement, B., Sliter, W. V., Osburne, C., and Longoria, J.**, The record of global change in mid-Cretaceous (Barremian-Albian) sections from the Sierra Madre, northeastern Mexico. In Huber, B. T., Bralower, T. J., and Leckie, R. M., A memorial volume to William V. Sliter, *Journal of Foraminiferal Research*, v. 29, p. 418-437.
- 1999 **Fassell, M. L., and Bralower, T. J.**, A warm, equable mid-Cretaceous: Stable Isotopic evidence: in Barrera, E., and Johnson, C., eds., *The Evolution of Cretaceous Ocean/Climate Systems*, Geological Society of America Special Publication, v. 332, p. 121-142.
- 1999 **Huber, B. T., Leckie, R. M., Norris, R. D., Bralower, T. J., and CoBabe, E.**, Foraminiferal assemblage and stable isotope change across the Cenomanian-Turonian boundary in the Subtropical North Atlantic. In Huber, B. T., Bralower, T. J., and Leckie, R. M., A memorial volume to William V. Sliter, *Journal of Foraminiferal Research*, v. 29, p. 392-417.
- 1999 **Thomas, D. J., Bralower, T. J., and Zachos, J. C.**, New evidence for subtropical warming during the late Paleocene thermal maximum: stable isotope evidence from DSDP Site 527, Walvis Ridge, *Paleoceanography*, v. 14, p. 561-570.
- 1998 **Bralower, T. J., Whitney, D. L., Kogan, I., and Campbell, D.**, Earth, Climate, and Life through Time: A new interactive class and lab for undergraduate non-majors: *Journal of Geological Education*, v. 46, p. 24-27.
- 1998 **Bralower, T. J., Paull, C. K., and Leckie, R. M.**, The Cretaceous/Tertiary boundary cocktail: Chicxulub impact triggers margin collapse and extensive sediment gravity flows: *Geology*, v. 26, p. 331-334.
- 1998 **Bralower, T. J., Thomas, D. J., Thomas, E., and Zachos, J. C.**, High-resolution records of the late Paleocene thermal maximum and circum-Caribbean volcanism: Is there a causal link?: Reply, *Geology*, v. 26, p. 671.
- 1998 **Bralower, T. J.**, From the Paleocene to today's El Niño and beyond: Selling ancient warming in the 21st century. *JOI/USSAC Newsletter*, v. 11, p. 1-4.
- 1998 **Bralower, T. J., and Bergen, J. A.**, Cenomanian-Santonian calcareous nannofossil biostratigraphy of a transect of cores drilled across the Western Interior Seaway: in Arthur, M. A., and Dean, W. E., eds., *The Cretaceous Western Interior Drilling Program*, Society of Economic Paleontologists and Mineralogists, *Concepts in Sedimentology and Paleontology*, 6, p. 15-35.
- 1998 **Burns, C. E., and Bralower, T. J.**, Upper Cretaceous Nannofossil Assemblages Across the Western Interior Seaway: Implications for the Origins of Lithologic Cycles in the Greenhorn and Niobrara Formations: in Arthur, M. A., and Dean, W. E., eds., *The Cretaceous Western Interior Drilling Program*, Society of Economic Paleontologists and Mineralogists, *Concepts in Sedimentology and Paleontology*, 6, p. 35-58.

- 1998 **Kelly, D. C., Bralower, T. J., and Zachos, J. C.**, Evolutionary consequences of the latest Paleocene thermal maximum for tropical planktonic foraminifera: *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 141, p. 139-161.
- 1998 **Sageman, B. B., Rich, J., Arthur, M. A., Dean, W. E., Savrda, C., and Bralower, T. J.**, Spectral analysis of lithologic and paleoecologic cycles in the Bridge Creek Limestone (Cenomanian-Turonian), Western Interior Basin: in Arthur, M. A., and Dean, W. E., eds., *The Cretaceous Western Interior Drilling Program, Society of Economic Paleontologists and Mineralogists, Concepts in Sedimentology and Paleontology*, 6, p. 153-171.
- 1998 **Sigurdsson, H., Leckie, R. M., Acton, G. and ODP Leg 165 Shipboard Party (including T. J. Bralower)**, *Proceedings of the Ocean Drilling Program, Initial Reports*, v. 165, College Station, TX, 724p.
- 1997 **Bralower, T. J., and Iturralde-Vinent, M. A.**, Micropaleontological dating of the collision between North American and Caribbean plates in Western Cuba: *Palaios*, v. 12, p. 133-150.
- 1997 **Bralower, T. J., Fullagar, P. D., Paull, C. K. Dwyer, G. S., and Leckie, R. M.**, Mid-Cretaceous Strontium-Isotope Stratigraphy of Deep-Sea Sections: *Geological Society of America Bulletin*, v. 109, p. 1421-1442.
- 1997 **Bralower, T. J., Thomas, D. J., Zachos, J. C., Hirschmann, M. M., Röhl, U., Sigurdsson, H., Thomas, E., and Whitney, D. L.**, High-resolution records of the late Paleocene thermal maximum and circum-Caribbean volcanism: Is there a causal link?: *Geology*, v. 25, p. 963-967.
- 1997 **Sigurdsson, H., Leckie, R. M., Acton, G., and ODP Leg 165 Shipboard Party (including T. J. Bralower)**, *Proceedings of the Ocean Drilling Program, Initial Reports*, v. 165, College Station, TX, 865p.
- 1996 **Bralower, T. J., and Parrow, M.**, Morphometrics of the Paleocene coccolith genera *Cruciplacolithus*, *Chiasmolithus* and *Sullivania*: a complex evolutionary history: *Paleobiology*, v. 22, p. 352-385.
- 1996 **Kelly, D. C., Bralower, T. J., Zachos, J. C., Premoli Silva, I., and Thomas, E.**, Rapid diversification of planktonic foraminifera in the tropical Pacific (ODP Site 865) during the late Paleocene thermal maximum: *Geology*, v. 24, p. 423-426.
- 1996 **ODP Leg 165 Scientific Party (including T. J. Bralower)**, Deep-sea cores from the Caribbean reveal history of volcanism, tectonics, and oceanic change (progress report). *Eos*, v. 77, p. 291.
- 1995 **Bralower, T. J., and Mutterlose, J.**, Calcareous nannofossil biostratigraphy of ODP Site 865, Allison Guyot, Central Pacific Ocean: a tropical Paleogene reference section: in Winterer, E. L., Sager, W. W., Firth, J. V., et al., *Proceedings of the Ocean Drilling Program Scientific Results*, v. 143, p. 31-72.
- 1995 **Bralower, T. J., Parrow, M., Thomas, E., and Zachos, J. C.**, Data Report: Stable isotopic stratigraphy of the Paleogene pelagic cap at Site 865, Allison Guyot: in Winterer, E. L., Sager, W. W., Firth, J. V., et al., *Proceedings of the Ocean Drilling Program Scientific Results*, v. 143, p. 581-586..

- 1995 **Bralower, T. J., Zachos, J. C., Thomas, E., Parrow, M., Paull, C. K., Kelly, D. C., Premoli Silva, I., Sliter, W. V., and Lohmann, K. C.**, Late Paleocene to Eocene paleoceanography of the equatorial Pacific Ocean: stable isotopes recorded at ODP Site 865, Allison Guyot: *Paleoceanography*, v. 10, p. 841-865.
- 1995 **Bralower, T. J., Leckie, R. M., Sliter, W. V., and Thierstein, H. R.**, An integrated Cretaceous timescale: in Berggren, W. A., Kent, D. V., Aubry, M. -P., and Hardenbol, J., eds., *Geochronology Time Scales and Global Stratigraphic Correlation, Society of Economic Paleontologists and Mineralogists, Special Publication*, v. 54, p. 65-79.
- 1995 **Paull, C. K., Fullagar, P. D., Bralower, T. J., and Rohl, U.**, Seawater ventilation of mid-Pacific guyots drilled on Leg 143: in Winterer, E. L., Sager, W. W., Firth, J. V., et al., *Proceedings of the Ocean Drilling Program Scientific Results*, v. 143, p. 231-241.
- 1995 **Van Fossen, M. C., Channell, J. E. T., and Bralower, T. J.**, Geomagnetic polarity stratigraphy and nannofossil biostratigraphy at the K/T boundary section near Beloc, Haiti: *Cretaceous Research*, v. 16, p. 131-139.
- 1995 **Williams, J. R., and Bralower, T. J.**, Nannofossil assemblages, fine fraction stable isotopes, and the paleoceanography of the Hauterivian-Barremian (Early Cretaceous) North Sea Basin: *Paleoceanography*, v. 10, p. 815-839.
- 1995 **Erba, E., Premoli Silva, I., Wilson, P. A., Pringle, M. S., Sliter, W. V., Watkins, D. K., Arnaud Vanneau, A., Bralower, T. J., Budd, A. F., Camoin, G. F., Masse, J. -P., Mutterlose, J., and Sager, W. W.**, Synthesis of stratigraphies from shallow water sequences at Sites 871 through 879 in the western Pacific Ocean: in Haggerty, J. A., Premoli Silva, I., Rack, F., and McNutt, M., eds., *Proceedings of the Ocean Drilling Program Scientific Results*, v. 144: p. 873-886.
- 1994 **Bralower, T. J.**, The oceans' smaller inhabitants and their fossil record: *The Earth Scientist*, v. 11, p. 15-16.
- 1994 **Bralower, T. J., Arthur, M. A., Leckie, R. M., Sliter, W. V., Allard, D. J., and Schlanger, S. O.**, Timing and paleoceanography of oceanic dysoxia/anoxia in the Late Barremian to Early Aptian (Early Cretaceous): *Palaaios*, v. 9, p. 335-369.
- 1994 **Lidz, B. H., and Bralower, T. J.**, The timing of Late Neogene sedimentation and sea-level fluctuation, Northwest Shelf, Great Bahama Bank: *Marine Micropaleontology*, v. 23, p. 265-344.
- 1993 **Watkins, D. K., Bralower, T. J., Covington, J. M., and Fisher, C. G.**, Calcareous nannofossil studies in the Western Interior Basin, North America: in Caldwell, W. G., and Kauffman, E. G., eds., *Evolution of the Western Interior Basin, Special Paper, Geological Association of Canada*, v. 39, p. 521-538.
- 1993 **Bralower, T. J., Sliter, W. V., Arthur, M. A., Leckie, R. M., Allard, D. J., and Schlanger, S. O.**, Dysoxic/anoxic episodes in the Aptian-Albian: in Pringle, M. S., Sager, W. W., Sliter, W. V., and Stein, S., eds., *The Mesozoic Pacific: A volume in memory of Sy Schlanger, American Geophysical Union Monograph*, v. 73, p. 5-37.
- 1993 **Baudin, F., and ODP Leg 143 Shipboard Party (including T. J. Bralower)**, Atolls et guyots du Pacifique nord-ouest: résultats préliminaires du ODP Leg 143: *Comptes Rendues Academie Scientifique Paris*, v. 316, Series II, p. 505-511.

- 1993 **ODP Leg 143 Shipboard Party (including T. J. Bralower)**, Examining guyots in the mid-Pacific mountains, *Eos*, April 1993, p. 201-207.
- 1993 **ODP Leg 143 Shipboard Party (including T. J. Bralower)**, History of Pacific guyots uncovered, ODP Leg 143: *Geotimes*, January, 1993, p. 18-19.
- 1993 **Sager, W. W., Winterer, E. L., Firth, J. V., and ODP Leg 143 Shipboard Party (including T. J. Bralower)**, *Proceedings of the Ocean Drilling Program, Initial Reports*, v. 143, College Station, TX, 724p.
- 1992 **Bralower, T. J.**, Aptian-Albian calcareous nannofossil biostratigraphy of ODP Site 763 and the correlation between high- and low-latitude zonations: in Duncan, R. A., Rea, D. K., Kidd, R. B., von Rad, U., and Weissel, J. K., eds., *Indian Ocean Monograph*, v. 70, American Geophysical Union, p. 245-252.
- 1992 **Bralower, T. J.**, Stable isotopic, assemblage and paleoenvironmental investigations of juvenile-ocean sediments recovered on ODP Leg 122, Wombat Plateau, Northwest Australia: in von Rad, U., Haq, B. U., et al., eds., *Initial Reports of the Ocean Drilling Program, Scientific Results*, v. 122, p. 569-586.
- 1992 **Bralower, T. J., and Siesser, W. G.**, Cretaceous calcareous nannofossil stratigraphy of sediments recovered on ODP Leg 122, Exmouth Plateau, N.W. Australia. in von Rad, U., Haq, B. U., et al., eds., *Initial Reports of the Ocean Drilling Program, Scientific Results*, v. 122, p. 529-556.
- 1992 **Bralower, T. J., Bown, P. R., and Siesser, W. G.**, Upper Triassic calcareous nannoplankton biostratigraphy, ODP Leg 122, Wombat Plateau, N.W. Australia: in von Rad, U., Haq, B. U., et al., eds., *Initial Reports of the Ocean Drilling Program, Scientific Results*, v. 122, p. 437-452.
- 1992 **Pospichal, J. J., and Bralower, T. J.**, Calcareous nannofossils across the Cretaceous/Tertiary boundary, ODP Site 761, Northwest Australian Margin: in von Rad, U., Haq, B. U., et al., eds., *Initial Reports of the Ocean Drilling Program, Scientific Results*, v. 122, p. 735-752.
- 1992 **Siesser, W. G., and Bralower, T. J.**, Cenozoic calcareous nannofossil stratigraphy of sediments recovered on ODP Leg 122, Exmouth Plateau: in von Rad, U., Haq, B. U., et al., eds., *Initial Reports of the Ocean Drilling Program, Scientific Results*, v. 122, p. 601-632.
- 1992 **von Rad, U., and Bralower, T. J.**, A unique record of an incipient ocean basin: Early Cretaceous sediments from the southern margin of Tethys: *Geology*, v. 20, p. 551-555.
- 1992 **Siesser, W. G., Bralower, T. J., and DeCarlo, E.**, Mid-Tertiary *Braarudosphaera*-rich sediments on the Exmouth Plateau: in von Rad, U., Haq, B. U., et al., eds., *Initial Reports of the Ocean Drilling Program, Scientific Results*, v. 122, p. 653-664.
- 1992 **Siesser, W. G., Bralower, T. J., Tang, C., and Galbrun, B.**, Late Miocene-Quaternary calcareous nannofossil biomagnetostratigraphy on the Exmouth Plateau, Northwestern Australia: in von Rad, U., Haq, B. U., et al., eds., *Initial Reports of the Ocean Drilling Program, Scientific Results*, v. 122, p. 677-684.
- 1992 **Brenner, W., Bown, P. R., Bralower, T. J., Crasquin-Soleau, S., Dèpêche, F., Dumont, T., Martini, R., Siesser, W. G., and Zaninetti, L.**, Correlation of Carnian-Rhaetian (Upper Triassic) foraminiferal, calcareous nannofossil, ostracod and palynological biostratigraphy,

ODP Leg 122, Wombat Plateau: *in* von Rad, U., Haq, B. U., et al., eds., *Initial Reports of the Ocean Drilling Program, Scientific Results*, v. 122, p. 487-496.

- 1992 **Tarduno, J. A., Lowrie, W., Sliter, W. V., Bralower, T. J., and Heller, F.**, Reversed polarity characteristic magnetizations in the Albian Contessa Section, Umbrian Apennines, Italy: implications for the existence of a mid-Cretaceous mixed polarity interval: *Journal of Geophysical Research*, v. 97, p. 241-271.
- 1991 **Bralower, T. J.**, Lower Cretaceous calcareous nannofossil biostratigraphy of a North Sea borehole: implications for Boreal Cretaceous stratigraphy: *Proceedings of the Yorkshire Geological Society*, v. 48, p. 421-434.
- 1991 **Bralower, T. J., Bown, P. R., and Siesser, W. G.**, Significance of Upper Triassic calcareous nannofossils from the Southern Hemisphere (ODP Leg 122, Wombat Plateau, N.W. Australia): *Marine Micropaleontology*, v.17, p. 119-154.
- 1991 **Ogg, J. G., Hasenyager, R. W., Wimbledon, W. A., Channell, J. E. T., Bralower, T. J.**, Magnetostratigraphy of the Jurassic-Cretaceous boundary interval; Tethyan and English faunal realms, *Cretaceous Research*, v. 12 , p. 455-482.
- 1991 **Sigurdsson, H., D'Hondt, S., Arthur, M. A., Bralower, T. J., Zachos, J. C., van Fossen, M., and Channell, J. E. T.**, Glass from the Cretaceous/Tertiary boundary in Haiti: *Nature*, v. 349, p. 482-487.
- 1990 **Bralower, T. J.**, Lower Cretaceous calcareous nannofossil stratigraphy of the Great Valley Sequence, Sacramento Valley, Northern California: *Cretaceous Research*, v. 11, p. 101-123.
- 1990 **Bralower, T. J.**, A field guide to Lower Cretaceous calcareous nannofossil biostratigraphy of the Great Valley Group, Sacramento Valley, California: *in* Ingersoll, R., and Nilsen, T., eds., *Sacramento Valley Symposium and Guidebook: Pacific Society of Economic Paleontologists and Mineralogists*, v. 65, p. 31-37.
- 1990 **Bralower, T. J., Ludwig, K. R., Obradovich, J. D., and Jones, D. L.**, Berriasian (Early Cretaceous) radiometric ages from the Grindstone Creek Section, Sacramento Valley, California. *Earth and Planetary Science Letters*, v. 98, p. 62-73.
- 1990 **Paull, C. K., Freeman-Lynde, R., Bralower, T. J., Gardemal, J. M., Neumann, A. C., D'Argenio, B., and Marsella, E.**, Geology and lithology of the strata exposed on the face of the Florida Escarpment: *Marine Geology*, v. 91, p. 177-194.
- 1990 **Haq, B. U., von Rad, U., O'Connell, S., and Shipboard Party (including T. J. Bralower)**, *Proceedings of the Ocean Drilling Program, Initial Reports*, v. 122, 826p.
- 1989 **Bralower, T. J., Monechi, S., and Thierstein, H. R.**, Calcareous nannofossil stratigraphy of the Jurassic-Cretaceous boundary interval and correlation with the geomagnetic polarity timescale: *Marine Micropaleontology*, v. 14, p. 153-235.
- 1989 **Williamson, P. E., Exon, N. F., Haq, B. U., von Rad, U., and Leg 122 Shipboard Party (including T. J. Bralower)**, A north west shelf Triassic reef play: results from ODP Leg 122: *Apea Journal*, v. 29, p. 326-344.

- 1989 **Tarduno, J. A., Sliter, W. V., Bralower, T. J., McWilliams, M., Premoli Silva, I., and Ogg, J. G.**, M-sequence reversals recorded in DSDP sediment cores from the Western Mid-Pacific mountains and Magellan Rise: *Geological Society of America Bulletin*, v. 101, p. 1306-1316.
- 1988 **Bralower, T. J.**, Calcareous nannofossil biostratigraphy and assemblages of the Cenomanian-Turonian boundary interval: implications for the origin and timing of oceanic anoxia: *Paleoceanography*, v. 3, p. 275-316.
- 1987 **Bralower, T. J.**, Valanginian to Aptian calcareous nannofossil stratigraphy and correlation with the upper M-sequence magnetic anomalies: *Marine Micropaleontology*, v. 11, p. 293-310.
- 1987 **Bralower, T. J., and Thierstein, H. R.**, Organic carbon and metal accumulation in Holocene and mid-Cretaceous marine sediments: palaeoceanographic implications: in Fleet, A., and Brooks, J., eds., *Marine Petroleum Source Rocks, Special Publication of the Geological Society of London*, v. 24, p. 377-398.
- 1987 **Channell, J. E. T., Bralower, T. J., and Grandesso, P.**, Biostratigraphic correlation of Mesozoic Polarity Chrons CM1 to CM23 at Capriolo and Xausa (S. Alps, Italy): *Earth and Planetary Science Letters*, v. 85, p. 203-221.
- 1987 **Hill, M. E., and Bralower, T. J.**, Early evolution, stratigraphy and taxonomy of *Eiffellithus eximius* and closely related species: *Abhandlungen Geologischen Bundesanstalt*, v. 39, p. 89-97.
- 1984 **Bralower, T. J., and Thierstein, H. R.**, Low productivity and slow deep-water circulation in mid-Cretaceous oceans: *Geology*, v. 12, p. 614-618.