

**TIMOTHY JAMES BRALOWER**

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Pennsylvania State University  
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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:**

Professor, Department of Geosciences,  
Pennsylvania State University, 2003-.

Head, Department of Geosciences,  
Pennsylvania State University, 2003-2011; 2017-2018.

Chair, Department of Geological Sciences,  
University of North Carolina, Chapel Hill, 1998-2002.

Joseph Sloane Professor of Geological and Marine Sciences,  
University of North Carolina, Chapel Hill, 1998-2002.

Associate Professor of Geological and Marine Sciences, University of North  
Carolina, Chapel Hill, 1993-1998.

Assistant Professor, Geological and Marine Sciences, University of North  
Carolina, Chapel Hill, 1990-1993.

Assistant Professor, Florida International University,  
State University of Florida at Miami, 1987-1990.

**Ocean Drilling Program:**

Shipboard biostratigrapher, Leg 122 (Indian Ocean, 1988), Leg 143 (Pacific  
Ocean, 1993), Leg 165 (Caribbean, 1995), Expedition 364 (Chicxulub, 2016).  
Co-chief scientist, ODP Leg 198 (Pacific, 2001).

**Awards:** Hettelman Junior Faculty Research Prize, UNC-CH, 1995.  
Fulbright Senior Scholarship, University of New South Wales, 2011-12.  
Wilson Service Award, PSU, 2015; G. Montgomery and Marion Mitchell  
Award for Innovative Teaching, PSU, 2017; George W. Atherton Award for  
Excellence in Teaching, 2020.

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

### **Partial list of Professional Service (past 15 years)**

- Associate Editor, *Marine Micropaleontology*, 1995-.
- Associate Editor, *Palaios*, 1999-2016.
- Associate Editor, *Paleoceanography*, 2001-2007.
- Associate Editor, Terra Nova, 2012-2020.
- Member, Proposal Evaluation Panel, Integrated Ocean Drilling Program 2011-2014
- Councilor, Geological Society of America, 2014-2018
- 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 Workshops on (1) Programs that Bring Together Geosciences and Sustainability at Stanford University, 2012; (2) The Geosciences Workforce (2014); and (3) online teaching in the Earth sciences (2017).

### **Partial list of University Service (past 10 years)**

- University-wide P&T Committee (2014-2015)
- Immediate Tenure Committee (2015-2019)
- Department P&T Committee (2015-2017)
- Department Outreach Coordinator (2003-2019)
- EMS Fifth-year review committee (2018-2019)
- Member Materials Characterization Lab Leadership Team (2015-2018)

### **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 Hilding (NOAA Researcher; joint w Kump), Andrea Kalb (Environmental Company-Delaware), Jon Schueth (PhD; ConocoPhillips), Caitlyn Livsey (PhD at UC Davis), Isabel Leon y Leon (Environmental Company-Huntsville, AL), Victoria Fortiz (Offshore Services Company-Houston), Ashley Grey (Teacher, NYC), Adriana Rizzo (Joint with Freeman, PhD student UC Riverside).
- Ph.D. D. Clay Kelly (Professor, Wisconsin-Madison), Deborah Thomas (Professor and Dean, Texas A&M), Jocelyn Sessa (Assistant Professor, Drexel, joint with Patzkowsky), Leah Levay (Staff Scientist IODP, joint with Kump), Jon Schueth (ConocoPhillips), Rosie Oakes (Policy Advisor, UK Met. Office), Heather Jones (Post Doc, U. Bremen)
- 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)

## Teaching and Educational Leadership

### Undergraduate courses taught

**Florida International University (1987-1990):** General Education: *Physical Geology*; Core: *Paleontology; Earth History*.

**University of North Carolina (1990-2002):** General Education: *Physical Geology; Earth Climate Life*; Core/Upper Division: *Marine Geology; Earth History; Sedimentology and Stratigraphy; Micropaleontology*.

**The Pennsylvania State University (2003-2019):** General Education: *Physical Geology; Earth Futures*-blended and fully online; *Coastal Processes, Hazards and Society*-blended and fully online; Core/Upper Division: *Marine Geology; Micropaleontology*.

### Funding related to educational activities

**NSF InTeGrate Center Interdisciplinary Teaching of Geoscience for a Sustainable Future,** \$978,943 (2011-2018), T.J. Bralower, Co-PI. Penn State was the online arm of the large \$10 million national center (<https://serc.carleton.edu/integrate/index.html>). We developed five online and blended courses.

**NASA On-line Interactive Models of Climate System Dynamics to expand the Reach and Effectiveness of Climate Change Education** \$466,363 (2009-2012), T.J. Bralower co-PI with David Bice PI.

### Penn State educational leadership accomplishments

As Department Head I led the development of the *Geobiology* BS Program (2003), the Fort Valley State University 3+2 BS Program (2004), and the *Earth Science and Policy* BS Program (2009). As part of the InTeGrate program I led the development of the *Earth Sustainability* Certificate and Minor programs.

### Mentoring and outreach activities

Developed a course for post-comps graduate students at Penn State (GEOSC 587) now taught biannually since 2008.

As leader in the InTeGrate program, I mentored teams of faculty in the development of courses and programs related to sustainability.

Led *Shake Rattle Rocks*, a program that brought the entire State College Area School System 5<sup>th</sup> grade into the Geosciences Department for outreach every year 2003-2019.

### National educational activities

- Founding member of Building Strong Geosciences Departments (2004-2019) program that works to strengthen departments around the country. I conducted travelling workshops at programs in PA.
- Distinguished Speaker, National Association of Geoscience Teachers (NAGT), 2011-2014.

## BIBLIOGRAPHY

T. J. Bralower

### PUBLICATIONS (total 165; h-index 64)

- 2020 Lowery, C.M., Jones, H.L., Bralower, T.J., Perez Cruz, L., Gebhardt, C., Whalen, M.T., Chenot, E., Smit, J., Purkey Phillips, M., Konstantin, C. K., Ignacio Arenillas J. Arz, J., Garcia F., Ferrand, M., Lofi, J., Gulick, S.P.S., Exp. 364 Science Party. Early Paleocene Paleoceanography and Export Productivity in the Chicxulub Crater. *Paleoceanography and Paleoclimatology*, in revision.
- 2020 Goderis, S., Sato, H., Ferrière, L., Schmitz, B., Burney, D., Bralower, T.J., Claeys, P., de Graaff, S. J., Déhais, T., de Winter, N.J., Mikael Elfman, M., Feignon, J.-G., Gulick, S.P.S., Ishikawa, A., Kaskes, P., Koeberl, C., Kristiansson, P., Lowery, C.M., Morgan, J.V., Neal, C.R., Owens, J.D., Schulz, T., Sinnesael, M., Smit, J., Vellekoop, J., Whalen, M.T., Wittmann, A., Vanhaecke, F., Van Malderen, S., and the Expedition 364 Science Party, Iridium anomaly within the Chicxulub impact structure. *Science Advances*, in revision.
- 2020 Fortiz, V., Oakes, R.L., Jones, M.M., Leckie, R.M., Sageman, B.B., Sepulveda, J., Bralower, T.J., Oceanic Anoxic Event 2 (OAE2) in the Western Interior Seaway: High Resolution Calcareous Nannofossil Record of the Tropic Shale Formation. *Micropaleontology*, in review.
- 2020 Cockell, C.S. Coolen, M.J.L., Grice, K. Schaefer, B. Schnieders, L., Morgan, J.V., Sean P. S. Gulick, S.P.S., Wittmann, A. Lofi, J., Christeson, G., Kring, D.A., Whalen, M., Bralower, T.J., and others. Shaping of the present-day deep biosphere by the impact catastrophe that ended the Cretaceous, *Science Advances*, in review.
- 2020 Bralower, T.J., Cosmidis, J. Fantle, M., Lowery, C., Passey, B., Gulick, S., Morgan, J., Vajda, V., Whalen, M., Wittmann, A., Artemieva, N., Farley, K., Goderis, S., Hajek, E., Heaney P., Kring, D., Lyons, S., Rasmussen, C., Sibert, E., Tovar, F. Gordon Turner-Walker, G., Zachos, J., Carte, J., Chen, S., Cockell, C., Coolen, M., Freeman, K., Garber, J., Gray, J., Gonzales, M., Grice, K., Jones, H., Schaefer, B., Smit, J., and Tikoo, S. The habitat of the nascent Chicxulub crater, *AGU Advances*, <https://doi.org/10.1029/2020AV000208>
- 2020 Bralower, T.J., Cosmidis, J., Heaney, P., Kump, L.R. Morgan, J., Harper, D. Lyons, S.L., Freeman, K.H., Grice, K., Wendler, J., Zachos, J.C., Artemieva, N., Gulick, S., House, C., Jones, H.L., Lowery, C.L., Nims, C., Schaefer, B., Si, A., Thomas, E., Vajda, V. Origin of a global carbonate layer deposited in the aftermath of the Cretaceous-Paleogene boundary impact. *Earth Planetary Science Letters*, 548, 1164.
- 2020 Smith, V., Warny, S., Grice, K., Schaefer, B., Whalen, M.T., Vellekoop, J., Chenot, E., Gulick, S.P.S., Arenillas, I., Arz, J.A., Bauersachs, T., Bralower, T., Demory, F., Gattacceca, J., Jones, H., Lofi, J., Lowery, C.M., Morgan, J., Nuñez Otaño, N.B., O'Keefe, J.M.K., O'Malley, K., Rodríguez-Tovar, F.J., Schwark, L., and the Expedition 364 Scientists, Life and death in the Chicxulub impact crater: A record of the Paleocene-Eocene Thermal Maximum, *Climate of the Past*, 16, 1889-1899, <https://cp.copernicus.org/articles/16/1889/2020/>.
- 2020 Collins, G.S., Patel, N., Davison, T.M., Rae, A.S.P., Morgan, J.V., Gulick, S.P.S., Christeson, G.L., Chenot, E., Claeys, P., Cockell, C.S., Coolen, M.J.L., Ferrière, L., Gebhardt, C., Goto, K., Jones, H., Kring, D.A., Lofi, J., Lowery, C.M., Ocampo-Torres, R., Perez-Cruz, L., Pickersgill, A.E., Poelchau, M.H., Rasmussen, C., Rebolledo-Vieyra, M., Riller, U., Sato, H., Smit, J., Tikoo, S.M., Tomioka, N., Urrutia-Fucugauchi, J., Whalen, M.T., Wittmann, A.,

- Xiao, L., Yamaguchi, K.E., Artemieva, N., Bralower, T.J., Party, I.-I.E.S., Third-Party, S., 2020.** A steeply-inclined trajectory for the Chicxulub impact. *Nature Communications* 11, 1480.
- 2020 Lyons, S.L., Karp, A.T., Bralower, T.J., Grice, K., Schaefer, B., Gulick, S.P.S., Morgan, J., Freeman, K.H.** Organic matter from the Chicxulub crater exacerbated the K-Pg impact winter, *PNAS*, <https://www.pnas.org/content/117/41/25327>.
- 2020 Whalen, M.T., Gulick, S.P.S., Lowery, C.M., Bralower, T.J., Morgan, J.V., Grice K., Schaefer, B., Smit J., Ormö, J., Wittmann, A., Kring, D.A., Lyons, S., Goderis, S., Rodríguez-Tovar, F.J., and the IODP Expedition 364 Scientists.** Winding down the Chicxulub impact: the transition between impact-related and normal marine sedimentation at ground zero. *Marine Geology*, 430, 106368.
- 2020 Rodríguez-Tovar, F.J., Lowery, C., Bralower, T.J., Gulick, S., and Jones, H.** Rapid macrobenthic diversification and stabilization after the end-Cretaceous mass extinction event. *Geology*, <https://doi.org/10.1130/G47589.1>
- 2020 Kring, D.A., Tikoo, S.M., Schmieder, M., Riller, U., Rebolledo-Vieyra, M., Simpson, S.L., Osinski, G.R., Gattacceca, J., Wittmann, A., Verhagen, C.M., Cockell, C., Marco J. L. Coolen, M.J.L. Fred J. Longstaffe, F.J., Gulick, S.P.S., Morgan, J.V., Bralower, T.J., and others.** Probing the hydrothermal system of the Chicxulub Crater and its potential as a deep Earth habitat, *Science Advances*, 6, eaaz3053.
- 2020 Ajayi, S., Kump, L.R., Ridgwell, A., Kirtland Turner, Hay, S.C., and Bralower, T.J.** Evaluation of Paleocene-Eocene Thermal Maximum carbon isotope record completeness - an illustration of the potential of Dynamic Time Warping in aligning paleo-proxy records. *G-Cubed*, *Geochemistry, Geophysics, Geosystems*, 21, e2019GC008620. <https://doi.org/10.1029/2019GC008620>.
- 2020 Boudinot, F.G., Leckie, R.M., Dilda, N., Jones, M.M., Sageman, B.B., Bralower, T.J., Sepúlveda, J.** Neritic ecosystem response to Oceanic Anoxic Event 2 in the Cretaceous Western Interior Seaway. *Palaeogeography, Palaeoclimatology, Palaeoecology*, <https://doi.org/10.1016/j.palaeo.2020.10967>.
- 2020 Hull, P.M., Bornemann, A., Penman, D.E., Henahan, M.J., Norris, R.D., Wilson, P.A., Blum, P., Alegret, L., Batenburg, S.J., Bown, P.R., Bralower, T.J., and others.** On impact and volcanism across the Cretaceous-Paleogene boundary. *Science*, 367(6475), pp.266-272.
- 2020 Schaefer, B., Grice, K., Coolen, M.J.L., Summons, R.E., Cui, X, Bauersachs, T., Schwark, L., Böttcher, M.E., Bralower, T.J., Lyons, S., Freeman, K.H., Cockell, C.S., Gulick, S.P.S., Morgan, J.V., Whalen, M., Lowery, C., and IODP expedition 364 scientists.** Microbial life in the nascent Chicxulub crater. *Geology*, 48, <https://doi.org/10.1130/G46799.1>.
- 2019 Jones, H.L. Lowery, C.M., and Bralower, T.J.** Calcareous nannoplankton “boom-bust” successions in the Cretaceous-Paleogene (K-Pg) impact crater suggests ecological experimentation at “ground zero”, *Geology*, 47 (8): 753-756
- 2019 Gulick, S., Bralower, T.J., Ormö, J., Hall, B., Grice, K., Schaefer, B., Lyons, S., Freeman, K., Morgan J., Artemieva, N., Kaskes, P. de Graaff, S., Whalen, M., Goto, K., Smit, J. and others.** First Days of the Cenozoic, *PNAS*, 116, 19342-19351.

- 2019 **Lyons, S.L., Baczynski, A.A., Babila, T.J., Bralower, T.J., Hajek, E.A., Kump, L.R., Polites, E.G., Trampush, S.M., Vornlocher, J.R., Zachos, J.C., and Freeman, K.H.** Fossil carbon oxidation prolonged the Paleocene–Eocene Thermal Maximum. *Nature Geosciences*, 12(1), 54–60.
- 2019 **Oakes, R.L., Peck, V.L., Manno, C., Bralower, T.J.** Degradation of internal organic matter is the main control on pteropod shell dissolution after death. *Global Biogeochemical Cycles*, <https://doi.org/10.1029/2019GB006223>
- 2019 **Hupp, B.N., Kelly, D.C., Zachos, J.C. and Bralower, T.J.** Effects of size-dependent sediment mixing on deep-sea records of the Paleocene–Eocene Thermal Maximum. *Geology*, 4,.: 749–752.
- 2019 **Jones, M.M., Sageman, B.B, Oakes, R.L., Parker, A.L., Leckie, R.M., Bralower, T.J., Sepúlveda, J., Fortiz, V.** Astronomical pacing of relative sea level during Oceanic Anoxic Event 2: Preliminary studies of the expanded SH#1 Core, Utah. *GSA Bulletin*, 131, 1702–1722, <https://doi.org/10.1130/B32057.1>
- 2019 **Taylor, L., O’Dea, A., Bralower, T., and Finnegan, S.** Isotopes from fossil coronulid barnacle shells record evidence of migration in multiple Pleistocene whale populations. *PNAS* <https://doi.org/10.1073/pnas.1808759116>
- 2019 **Lowery, C., Morgan, J. V., Gulick, S. P. S., Bralower, T. J., Christeson, G. L., and Expedition 364 Scientists.** Ocean Drilling Perspectives on Meteorite Impacts, *Oceanography*, <https://doi.org/10.5670/oceanog.2019.133>
- 2019 **Gosselin, D. C., Manduca, C. A., Bralower, T., and Egger, A. E.** Preparing students to address societally relevant challenges in the geosciences: the InTeGrate approach. In *Interdisciplinary Teaching About Earth and the Environment for a Sustainable Future* (pp. 3–23). Springer, Cham.
- 2018 **Hantsoo, K.G., Kump, L.R., Haupt, B.J., and Bralower, T.J.** Tracking the Paleocene–Eocene Thermal Maximum in the North Atlantic: A shelf-to-basin analysis with a regional ocean model. *Paleoceanography and Climatology*. <https://doi.org/10.1029/2018PA003371>
- 2018 **Livsey, C.M. Babila, T.L., Robinson, M.M., and Bralower, T.J.** The planktonic foraminiferal response to the Paleocene–Eocene thermal maximum in the Atlantic Coastal Plain. *Marine Micropaleontology*, 146, 39–50, <https://doi.org/10.1016/j.marmicro.2018.12.001>
- 2018 **Christeson, G.L., Gulick, S.P.S., Morgan, J.V., Gebhardt, C., Kring, D.A., Le Ber, E., Lofi, J., Nixon, C., Poelchau, M., Rae, A.S.P., Rebolledo-Vieyra, M., Riller, U., Schmitt, D.R., Wittmann, A., Bralower, T.J., and others.** Extraordinary rocks from the peak ring of the Chicxulub impact crater: P-wave velocity, density, and porosity measurements from IODP/ICDP Expedition 364. *Earth and Planetary Science Letters*, 495, pp.1–11.
- 2018 **Riller, U., Poelchau, M.H., Rae, A.S.P. Schulte, F.M., Collins, G.S. , Melosh, H.J., Grieve, R.A.F., Morgan, J.V. , Gulick, S.P.S., and others including Bralower, T.J.** Rock fluidization during peak-ring formation of large impact structures, *Nature* 562:511–518, <https://doi.org/10.1038/s41586-018-0607-z>.
- 2018 **Babila, T.L., Penman, D.E., Hönisch, B., Kelly, D.C., Bralower, T.J., Rosenthal, Y. and Zachos, J.C.** Capturing the global signature of surface ocean acidification during the Palaeocene–Eocene Thermal Maximum. *Phil. Trans. R. Soc. A*, 376(2130), p.20170072.

- 2018 **Lowery, C.M., Bralower, T.J., Owens, J.D., Rodríguez-Tovar, F.J., Jones, H., Smit, J., Whalen, M.T., Claeys, P., Farley, K., Gulick, S.P.S., Morgan, J.V., and others.** Rapid Recovery of Life At Ground Zero of the End Cretaceous Mass Extinction. *Nature*, 558, 288–29.
- 2018 **Bralower, T.J., Kump, L.R., Robinson, M.M., Self-Trail, J.M., Babila, T., Ballaron, E., Freeman, K.H., Hajek, E.A., Lyons, S.L., Rush, W., Zachos, J.C.** Evidence for Shelf Acidification during the Onset of the Paleocene-Eocene Thermal Maximum. *Paleoceanography and Climatology*. <https://doi.org/10.1029/2018PA003382>
- 2018 **Leon y Leon, I., Bralower, T.J., and Self-Trail, J.M.** Ecological changes in the nannoplankton community across a shelf transect during the onset of the Paleocene-Eocene thermal maximum. *Paleoceanography and Paleoclimatology*. <https://doi.org/10.1029/2018PA003383>
2018. **Oakes, R.L., Peck, V.L., Manno, C., and Bralower, T.J.** Impact of preservation techniques on pteropod shell condition. *Polar Biology*, 42, 257-269, DOI 10.1007/s00300-018-2419-x.
- 2017 **Artemieva, N., Morgan, J., Gulick, S., Bralower, T., Chenot, E., Christeson, G., Claeys, P., Cockell, C., Collins, G.S., Coolen, M.J.L., Ferrière, L., and others.** Quantifying the release of climate-active gases by large meteorite impacts with a case study of Chicxulub. *Geophysical Research Letters*, v. 44 doi: 10.1002/2017GL074879.
- 2017 **Kring, D.A., Claeys, P., Gulick, S.P.S., Morgan, J.V., Collins, G.S., Bralower, T., Chenot, E., Christeson, G., Cockell, C., Coolen, M.J.L., Ferrière, L., and others.** Chicxulub and the exploration of large peak-ring impact craters through scientific drilling. *GSA Today* v. 27 doi: 10.1130/GSATG352A.1.
- 2017 **Lowery, C.M., Cunningham, R., Barrie, C.D., Bralower, T. and Snedden, J.W.** The Northern Gulf of Mexico During OAE2 and the Relationship Between Water Depth and Black Shale Development. *Paleoceanography and Paleoclimatology*, 32(12), pp.1316-1335.
- 2017 **Meissner, K.J. and Bralower, T.J.** Palaeoclimate: Volcanism caused ancient global warming. *Nature*, 548(7669), p.531.
- 2017 **Self-Trail, J.M., Robinson, M.M., Bralower, T.J., Sessa, J.A., Hajek, E.A., Kump, L.R., Trampush, S.M., Willard, D.A., Edwards, L.E., Powars, D.S. and Wandless, G.A.** Shallow marine response to global climate change during the Paleocene-Eocene Thermal Maximum, Salisbury Embayment, USA. *Paleoceanography*, 32, 710–728, doi:[10.1002/2017PA003096](https://doi.org/10.1002/2017PA003096)
- 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 others.** The formation of peak rings in large impact craters. *Science*, 354(6314), pp.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., 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** **Bralower, T. J., Kelly, D. C., Gibbs, S., Farley, K., Eccles, L., Lindemann, T. L., and 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., and 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. and others.** 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/NCEO1302.



- 2010 Schulte, P., Alegret, L., Arenillas, I., Arz, J.A., Barton, P.J., Bown, P.R., Bralower, T.J., Christeson, G.L., Claesys, 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.,** Paleoceanographic 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](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 porcellanite 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): Paleoceanographic 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 Palaios*, 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 Palaios*, 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://wwwodp.tamu.edu/publications/198\\_IR/198ir.htm](http://wwwodp.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? *Palaios*, 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): *Palaios*, 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.