Laurel B. Childress

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September 2022

Curriculum Vitae

and List of Publications

Education

Ph.D. Earth and Planetary Sciences, Northwestern University, 2016
M.S. Marine Geology, Minor/Certificate GIS, North Carolina State University, 2009
B.S. Marine Sciences, Cum Laude, North Carolina State University, 2006

Positions Held

Expedition Project Manager/Staff Scientist September 2017 – present
Texas A&M University, International Ocean Discovery Program
Graduate Committee Faculty, College of Geosciences September 2018 – present
Texas A&M University, Department of Geology & Geophysics
National Ocean Sciences Accelerator Mass Spectrometry Facility Postdoctoral Scholar
September 2016 – September 2017, Woods Hole Oceanographic Institution
Marine Chemistry and Geochemistry Department and National Ocean Sciences
Accelerator Mass Spectrometry Facility
Graduate Research Assistant August 2009 – August 2016
Northwestern University, Department of Earth and Planetary Sciences
Expedition Party Geochemist/Sedimentologist June – August 2013
International Ocean Drilling Program, Expedition 341, Southern Alaska Margin
Schlanger Scientific Ocean Drilling Fellowship 2012 – 2013
Northwestern University, Department of Earth and Planetary Sciences
Geographic Information Systems Student Aide January 2012 – August 2014
Northwestern University, Northwestern University Library
Graduate Teaching Assistant 2010, 2012
Northwestern University, Department of Earth and Planetary Sciences
Graduate Research and Teaching Assistant January 2007 – August 2009
North Carolina State University, Department of Marine, Earth, & Atmospheric Sciences
Research Assistant May – December 2006
North Carolina State University, Department of Marine, Earth, & Atmospheric Sciences

Professional Interests

Biogeochemical cycles, with an emphasis on transport, transformation, and burial of organic carbon; active margin sediment export and subduction; tectonic and glacial influences on carbon exhumation; geospatial biochemical patterns; big data/data mining; science outreach.

Awards and Fellowships

NSF GeoPRISMS Student Poster

Planning Workshop for the New Zealand Primary Site, Wellington, New Zealand, Honorable Mention, 2013

Schlanger Scientific Ocean Drilling Fellowship

Northwestern University, 2012 – 2013

Marion Sloss Outstanding Teaching Assistant Award

Northwestern University, Department of Earth and Planetary Sciences, 2012

NSF MARGINS Student Prize

AGU Fall Meeting, Honorable Mention, 2008

Funding and Research Awards

Ocean Sciences for Rural Communities via Informal Science Education	\$18,000
Texas A&M University Sub-Award, 2018 - 2022	
Integrated Ocean Drilling Program	\$15,000
Post Expedition (341) Activity Award, 2014 - 2015	
Integrated Ocean Drilling Program, U.S. Science Support Program	\$30,000
Schlanger Scientific Ocean Drilling Fellowship, 2012 – 2013	
National Science Foundation	\$265,535
"The Subduction Margin Carbon Cycle: A Preliminary Assessment of the Distr	ibution
Patterns of Multicycle Carbon", February 2012 – May 2016	
Supported student and co-author, under Principal Investigator Neal Blair	

Teaching

GEOS 105, Texas A&M University, Instructor, *Introduction to Environmental Geoscience* **GEOL 491, Texas A&M University, Instructor,** *Undergraduate Research*

- EARTH 390/ISEN 390, Northwestern University, Instructor, Geographic Information Systems Application in Earth/Environmental Science
- EARTH 106, Northwestern University, Teaching Assistant, The Ocean, The Atmosphere & Our Climate
- EARTH 103, Northwestern University, Teaching Assistant, Geological Hazards
- N'CAT Program, Northwestern University, Tutor, Geologic Hazards, Exploration of the Solar System
- MEA 110, North Carolina State University, Teaching Assistant, Geology I
- MEA 251, North Carolina State University, Teaching Assistant, Introduction to Coastal Environments
- MEA 450, North Carolina State University, Teaching Assistant, Introductory Sedimentary Petrology and Stratigraphy

Advisors

B.A., M.S., North Carolina State University: Elana L. Leithold
Ph.D., Northwestern University: Neal E. Blair and Steven D. Jacobsen
Postdoctoral Research at Woods Hole Oceanographic Institution: Valier Galy and Ann McNichol

Work in Progress

- Childress, L.B., Acton, G.D., Percuoco, V.P., and M. Hastedt, Mining the IODP Database for Relationships Between Lithology and Physical, Chemical, and Magnetic Properties, in preparation for submission to Frontiers.
- Childress, L.B. and K. Ridgway, Glacial and tectonic influence on terrestrial organic carbon delivery to high latitude deep marine systems: IODP Site U1417, Surveyor Fan, Gulf of Alaska, in preparation for submission to *Palaeogeography, Palaeoclimatology, Palaeoecology*.
- Childress, L.B., Blair, N.E., Leithold, E.L., Kuehl, S.A., and A. Orpin, Continental shelf organic carbon preservation in active margin system, 10 ka record: Waipaoa River, New Zealand, in preparation for submission to *Continental Shelf Research*.

Fieldwork

International Ocean Discovery Program (IODP) February – April 2022 Expedition Project Manager/Staff Scientist, Expedition 392, Agulhas Plateau Cretaceous Climate International Ocean Discovery Program (IODP) January – February 2020 Expedition Project Manager/Staff Scientist, Expedition 378, South Pacific Paleogene Climate International Ocean Discovery Program (IODP) July – August 2019 Expedition Project Manager/Staff Scientist, Expedition 379T, JR100 International Ocean Discovery Program (IODP) November – December 2018 Expedition Project Manager/Staff Scientist, Expedition 368X, Return to Hole U1503A (South China Sea) Integrated Ocean Drilling Program (IODP) May – July 2013 Sedimentologist, Expedition 341, Southern Alaska Margin New Zealand, Waipaoa River Watershed 2007, 2009, 2013 NSF MARGINS and GeoPRISMS **Cascadia In Motion (Columbia University)** June – July 2012 Active Source Seismic Experiments, Juan de Fuca Plate University-National Oceanographic Laboratory System (UNOLS) September 2011 Early Career Chief Scientist Training Cruise, Astoria Canyon

Instrumentation and Software Experience

Instrument/Hardware: Thermo Delta V Plus IRMS (Conflo III, IV), Elemental Analyzer (Flash 1112, Costech 4010), CDS Pyroprobe 5200, FTIR (Nicolet Impact 400, Bruker 37 Tensor, HYPERION Microscope), Thermo Trace GC-DSQII MS, micro-Raman Spectrometer, Beckman Coulter SA 3100, Avaatech XRF Core Scanner, freeze dryer, vacuum line Software: ArcGIS 10, GRASS, FORTAN, Python, VBA, Sigma Plot 10, Origin, PeakFit, R, Git

Workshops, Panels, and Short Courses

IODP Science Evaluation Panel
Remote COVID-19 Zoom, July 27 – 30, 2021
IODP Science Evaluation Panel
Remote COVID-19 Zoom, June 15 – 18, 2020
IODP Environmental Protection and Safety Panel
College Station, TX, February 18 – 19, 2020
IODP Environmental Protection and Safety Panel
College Station, TX, September 4 – 6, 2019
IODP Science Evaluation Panel
Edinburgh, Scotland, June 25 – 27, 2019
Scientific Exploration of the Arctic and North Pacific (SEA-NorP), USSSP Workshop
Mt. Hood, OR, September 25 – 27, 2018
IODP Environmental Protection and Safety Panel
College Station, TX, September 4 – 6, 2018
Open Source for Open Science Workshop
College Station, TX, August 31 – September 1, 2018
Data Hackathon Workshop: R & Git
College Station, TX, May 7 – 8, 2018
American Management Association; The Voice of Leadership: How Leaders Inspire, Influence
and Achieve Results
Chicago, IL, April 9 – 11, 2018
IODP Environmental Protection and Safety Panel
College Station, TX, February 20, 2018
Inaugural Site Partners Training Workshop: In Search of Earth's Secrets, A Pop-Up Science
Encounter
College Station, TX, January 29 – February 2, 2018
IODP Science Evaluation Panel
La Jolla, CA, January 9 – 11, 2018
Mini-Workshop for Early-Career Scientists/Faculty: Introduction to GeoPRISMS/MARGINS
Data Resources, Mini-Lessons, and Effective Broader Impacts
New Orleans, LA, December 10, 2017
Assessment of the JOIDES Resolution in Meeting the Challenges of the IODP Science Plan
Denver, CO, September 26 – 27, 2017

NSF-Sponsored Workshop: Thermal Analysis of Natural Organic Matter (Ramped PyrOx) Woods Hole, MA, September 15 – 16, 2016 IODP Southern Alaska Margin, Expedition 341: Post-Cruise Meeting Friday Harbor, WA, November 16 – 18, 2015 Deep Carbon Observatory Thematic Institute on "Carbon, from the Mantle to the Surface" Berkeley, California, June 30 – July 3, 2015 On the Cutting Edge: "Preparing for an Academic Career in the Geosciences" Madison, Wisconsin, May 31 – June 3, 2015 Investigating Cascadia Subduction Zone Geodynamics Through Scientific Ocean Drilling Seattle, Washington, April 29 – May 1, 2015 U.S. Advisory Committee for Scientific Ocean Drilling (USAC) Summer Meeting and Schlanger Fellowship Research Results Presentation Washington, D.C., June 30 – July 3, 2014 **UNOLS Council Meeting** Arlington, VA, March 12, 2014 IODP Southern Alaska Margin, Expedition 341: Post-Expedition Sampling Party College Station, TX, November 16 – 22, 2013 IODP Southern Alaska Margin, Expedition 341: Post-Expedition Editorial Meeting College Station, TX, November 13 – 15, 2013 Scientific Ocean Drilling Workshop: Multidisciplinary Transect Drilling During Transits College Station, TX, November 11 – 13, 2013 **GeoPRISMS Planning Workshop for the New Zealand Primary Site** Wellington, New Zealand, April 15 – 17, 2013 GeoPRISMS – EarthScope Planning Workshop for the Cascadia Primary Site Portland, OR, April 5 – 6, 2012 Short Course on Shipboard Sedimentology: Data Collection, Integration, and Synthesis College Station, TX, October 1 – 4, 2012 CIC Center for Library Initiatives Conference, Finding Our Way: Collaborative Strategies for **Developing Geospatial Services** *Minneapolis, MN, May* 15 – 16, 2012 GeoPRISMS Implementation Workshop: Subduction Cycles & Deformation (SCD) Austin, TX, January 5 – 7, 2011 Engaging Early Career Scientists in Future Scientific Ocean Drilling College Station, TX, March 30 – April 1, 2011 Towards Integration and Synthesis of MARGINS S2S Research in PNG and NZ Focus Areas Gisborne, New Zealand, April 5 – 9, 2009

Committee Membership

Lead, IODP-JRSO Geochemistry and Microbiology Lab Working Group, 2017 – present *Member,* JOIDES Resolution Facility Board Working Group on Virtual Expeditions,

August 2022 – present

Member, International working group on scientific ocean drilling science communication, November 2022 – present

Member, NASA Mars Ice Core Working Group, December 2020 – February 2021 Member, Northwestern University Library Committee, October 2012 – May 2016 Member, NCSU Park Scholarship Regional Selection Committee, 2011 - present Chair (Service), Northwestern University Graduate Student Association, 2010 – 2013

Outreach and Synergistic Activities

JOIDES Resolution Science Operator - IODP

Liaison for port call public relations, outreach, and K-16 education activities 2018 - present

U.S. Science Support Program, Onboard Outreach Officer Training
Instructor/Facilitator, August 24 – 26, 2022
In Search of Earth's Secret's, A Pop-Up Science Encounter Training Workshop
Instructor/Facilitator, Remote COVID-19 Zoom, January 10-12, 2022
JRSO Course: Introduction to R
Instructor, Remote COVID-19 Zoom, November 5 – 19, 2021
U.S. Science Support Program, Onboard Outreach Officer Training
Instructor/Facilitator, August 17 – 19, 2021
Developing Cultural Competence in the Workplace
Participant, Texas A&M University, December 16, 2020
Virtual School of Rock 2020-2021, USSSP
Webinar Speaker, Texas A&M University, November 2020
Geosciences Exploration Summer Program (GeoX)
Instructor, Texas A&M University, Remote COVID-19 Zoom, July 2020
In Search of Earth's Secret's, A Pop-Up Science Encounter Training Workshop
Instructor/Facilitator, Remote COVID-19 Zoom, March 23 – 26, 2020
Demystifying the IODP Proposal Process for Early Career Scientists:
Pacific Ocean
Webinar Speaker, International Ocean Discovery Program, Texas A&M University,
February 18, 2020
U.S. Science Support Program, Onboard Outreach Officer Training
Instructor/Facilitator, October 17 – 18, 2019
JOIDES Resolution Portcall
Tour Organization & Guide, International Ocean Discovery Program, San Diego, CA,
September 15 – 20, 2019

Under the Sea Camp Instructor, Children's Museum of the Brazos Valley, July 2019 In Search of Earth's Secret's, A Pop-Up Science Encounter (Rutgers) Webinar Speaker, International Ocean Discovery Program, Texas A&M University, June 5, 2019 STEMSEAS (Science, Technology, Engineering, and Math Student Experiences Aboard Ships) Instructor, R/V Neil Armstrong, 28 April – 10 May 2019 In Search of Earth's Secret's, A Pop-Up Science Encounter (New Rochelle, NY) Webinar Speaker, International Ocean Discovery Program, Texas A&M University, April 13, 2019 U.S. Science Support Program, Onboard Outreach Officer Training Instructor/Facilitator, March 4 – 6, 2019 **Aggieland Saturday** Facilitator, Texas A&M University, February 2019 Under the Sea Camp Instructor, Children's Museum of the Brazos Valley, July 2018 **Geosciences Exploration Summer Program (GeoX)** Instructor, Texas A&M University, June 2018 In Search of Earth's Secret's, A Pop-Up Science Encounter Training Workshop Instructor/Facilitator, International Ocean Discovery Program, Texas A&M University, February 4 – 10, 2019 In Search of Earth's Secret's, A Pop-Up Science Encounter (Rutgers) Webinar Speaker, International Ocean Discovery Program, Texas A&M University, July 9, 2018 In Search of Earth's Secret's, A Pop-Up Science Encounter (Martinsville, VA) Webinar Speaker, International Ocean Discovery Program, Texas A&M University, February 17, 2018 In Search of Earth's Secret's, A Pop-Up Science Encounter Training Workshop Instructor/Facilitator, International Ocean Discovery Program, Texas A&M University, January 29 - February 2, 2018 Falmouth High School Career Day Mentor, Woods Hole Oceanographic Institution, November 2016 **Course Design Workshop** Facilitator, Northwestern University, February 2016 Mini-Research Experience for Teachers: Climate Change & Sustainability Facilitator, Northwestern University, August 2015 **Blair Laboratory Webmaster** Northwestern University, January 2014 – August 2016 Park Scholarship Senior Retreat Mentor, North Carolina State University, August 2013 **Science Fair Judge** Chicago Public Schools, December 2012 **Creating Leaders for STEM Student Research Program** Facilitator, Northwestern University, August 2011

NASA and Chicago Public Schools Capstone Course for Space Science

Facilitator, Northwestern University, July 2010, 2011

Center for Talent Development, EXCITE Project

Facilitator and Educator, Northwestern University, 2009 – 2016

Invited Talks

Stillwater Public Library, Public Seminar Series, June 11, 2022: In Search of Earth's Secrets: Geology Under the Sea

- **Oregon State University**, Ocean Ecology and Biochemistry Department Seminar, February 9, 2018: *Turbidite carbon distribution by Ramped PyrOx, Astoria Canyon*
- **Woods Hole Oceanographic Institution,** Marine Chemistry and Geochemistry Department, February 28, 2017: *The Subduction Margin Carbon Cycle*

Texas A&M University, Department of Geology and Geophysics, International Ocean Discovery Program, July 22, 2016:

The Active Margin Carbon Cycle: Influences of Climate and Tectonics

List of Publications

Journal Publications

- Clementi, V., Rosenthal, Y., Bova, S., Thomas, E., Wright, J., Mortlock, R., Cowling, O., Godfrey, L., Childress, L. and Expedition 379T Scientists. 2022. Deep submarine infiltration of altered geothermal groundwater on the south Chilean Margin. Nature Communications, Earth & Environment, 3 (218), doi: 10.1038/s43247-022-00541-3
- Li, C., Clementi, V.J., Bova, S.C., Rosenthal, Y., Childress, L.B., Wright, J.D., Jian, Z., and Expedition 379T Scientists. 2022. The sediment green-blue color ratio as a proxy for biogenic silica productivity along the Chilean Margin. *Geochemistry, Geophysics, Geosystems*, 417, doi: 10.1029/2022GC010350
- Zindorf, M., März, C., Wagner, T., Gulick, S.P.S., Strauss, H., Benowitz, J., Jaeger, J., Schnetger, B., Childress, L., LeVay, L., van der Land, C., and M. La Rosa. 2019. Deep Sulfate-Methane-Transition and sediment diagenesis in the Gulf of Alaska (IODP Site U1417). *Marine Geology*, 417, doi: 10.1016/j.margeo.2019.105986.
- **Childress, L.B.** and S.D. Jacobsen. 2017. High-pressure high-temperature Raman spectroscopy of kerogen: relevance to subducted organic carbon, *American Mineralogist*, doi: 10.2138/am-2016-5719
- Gulick, S.P.S., Jaeger, J.M., Mix, A.C., Asahi, H., Bahlburg, H., Belanger, C.L., Berbel, G.B.B.,
 Childress, L., Cowan, E., Drab, L., Forwick, M., Fukumura, A., Ge, S., Gupta, S., et al.
 2015. Mid-Pleistocene climate transition drives net mass loss from rapidly uplifting St.
 Elias Mountains, Alaska. *Proceedings of the National Academy of Sciences*, p. 1–6, doi: 10.1073/pnas.1512549112
- Kuehl, S.A., Alexander, C., Bever, A., Blair, N., Cerovski-Darriau, C., Childress, L., Hale, R., Corbett, D.R., Harris, C.K., Leithold, L., Litchfield, N., Marsaglia, K.M., Moriarty, J., Ogston, A., Orpin, A., Pierce, L.E.R., Roering, J., and J.P. Walsh. 2015. A Source to Sink Perspective of the Waipaoa River Margin, *Earth Science Reviews*, doi:10.1016/j.earscirev.2015.10.001
- Leithold, E.L., Blair, N.E., **Childress, L.B.**, Brulet, B.R., Marden, M., Orpin, A.R., Kuehl, S.A., and C.R. Alexander. 2013. Deciphering the signals of watershed change from organic carbon buried on the continental margin seaward of the Waipaoa River, New Zealand. *Marine Geology*, doi: 10.1016/j.margeo.2013.10.007
- Blair, N.E., Leithold, E.L., Brackley, H., Trustrum, N., Page, M., and L.B. Childress. 2010. Terrestrial sources and export of particulate organic carbon in the Waipaoa sedimentary system: Problems, progress and processes. *Marine Geology*, 270: 108 – 118, doi: 10.1016/j.margeo.2009.10.016

- Childress, L.B., Leithold, E.L., Blair, N.E., and B.R. Brulet. 2010. Carbon and nitrogen stable isotopes as proxies for Late Pleistocene to Holocene environmental change in the Waipaoa Sedimentary System, New Zealand. *Geochimica et Cosmochimica Acta*, 74 (11): A175.
- Blair, N.E., Fournillier, K., Leithold, E.L., and L.B. Childress. 2010. Resolving organic carbon of differing diagenetic/catagenetic states in riverine and marine sediments. *Geochimica et Cosmochimica Acta*, 74 (11): A95.

Technical and Other Publications

- Knutz, P., Jennings, A., and L.B. Childress, 2022. South Pacific Paleogene Climate. Expedition 400 Scientific Prospectus: NW Greenland Glaciated Margin: College Station, TX (International Ocean Discovery Program). <u>https://doi.org/10.14379/iodp.sp.400.2022</u>
- Röhl, U., Thomas, D.J., Childress, L.B., and the Expedition 378 Scientists, 2022. South Pacific Paleogene Climate. Proceedings of the International Ocean Discovery Program, 378: College Station, TX (International Ocean Discovery Program). <u>https://doi.org/10.14379/iodp.proc.378.2022</u>
- Röhl, U., Thomas, D.J., Childress, L.B., Anagnostou, E., Ausín, B., Borba Dias, B., Boscolo-Galazzo, F., Brzelinski, S., Dunlea, A.G., George, S.C., Haynes, L.L., Hendy, I.L., Jones, H.L., Khanolkar, S.S., Kitch, G.D., Lee, H., Raffi, I., Reis, A.J., Sheward, R.M., Sibert, E., Tanaka, E., Wilkens, R., Yasukawa, K., Yuan, W., Zhang, Q., Zhang, Y., Drury, A.J., and Hollis, C.J., 2022. Expedition 378 summary. *In* Röhl, U., Thomas, D.J., Childress, L.B., and the Expedition 378 Scientists, *South Pacific Paleogene Climate*. Proceedings of the International Ocean Discovery Program, 378: College Station, TX (International Ocean Discovery Program). https://doi.org/10.14379/iodp.proc.378.101.2022
- Röhl, U., Thomas, D.J., Childress, L.B., Anagnostou, E., Ausín, B., Borba Dias, B., Boscolo-Galazzo, F., Brzelinski, S., Dunlea, A.G., George, S.C., Haynes, L.L., Hendy, I.L., Jones, H.L., Khanolkar, S.S., Kitch, G.D., Lee, H., Raffi, I., Reis, A.J., Sheward, R.M., Sibert, E., Tanaka, E., Wilkens, R., Yasukawa, K., Yuan, W., Zhang, Q., Zhang, Y., Drury, A.J., and Hollis, C.J., 2022. Expedition 378 methods. *In* Röhl, U., Thomas, D.J., Childress, L.B., and the Expedition 378 Scientists, *South Pacific Paleogene Climate*. Proceedings of the International Ocean Discovery Program, 378: College Station, TX (International Ocean Discovery Program). https://doi.org/10.14379/iodp.proc.378.102.2022

- Röhl, U., Thomas, D.J., Childress, L.B., Anagnostou, E., Ausín, B., Borba Dias, B., Boscolo-Galazzo, F., Brzelinski, S., Dunlea, A.G., George, S.C., Haynes, L.L., Hendy, I.L., Jones, H.L., Khanolkar, S.S., Kitch, G.D., Lee, H., Raffi, I., Reis, A.J., Sheward, R.M., Sibert, E., Tanaka, E., Wilkens, R., Yasukawa, K., Yuan, W., Zhang, Q., Zhang, Y., Drury, A.J., and Hollis, C.J., 2022. Site U1553. *In* Röhl, U., Thomas, D.J., Childress, L.B., and the Expedition 378 Scientists, *South Pacific Paleogene Climate*. Proceedings of the International Ocean Discovery Program, 378: College Station, TX (International Ocean Discovery Program). https://doi.org/10.14379/iodp.proc.378.103.2022
- Mars Ice Core Working Group, 2021. First Ice Cores from Mars, co-chairs: M.R. Albert and M. Koutnik, 74 p. white paper.
- Thomas, D.J., Röhl, U., **Childress, L.B.**, and the Expedition 378 Scientists, 2020. Expedition 378 Preliminary Report: South Pacific Paleogene Climate. International Ocean Discovery Program. https://doi.org/10.14379/iodp.pr.378.2020
- Childress, L.B., Alvarez Zarikian, C.A., Briais, A., Dadd, K.A., Deng, J.-M., Höfig, T.W., Huang, X.-L., Li, B., Lin, J., Liu, C., Liu, Z., Nirrengarten, M.F.R., Peate, D.W., Qiu, N., Satolli, S., Stock, J.M., Sun, Z., van der Zwan, F.M., Xiang, R., Yi, L., and Zhong, L., 2020. Expedition 368X summary. In Sun, Z., Jian, Z., Stock, J.M., Larsen, H.C., Klaus, A., Alvarez Zarikian, C.A., and the Expedition 367/368 Scientists, South China Sea Rifted Margin. Proceedings of the International Ocean Discovery Program, 367/368: College Station, TX (International Ocean Discovery Program). https://doi.org/10.14379/iodp.proc.368X.101.2020
- Childress, L.B., Alvarez Zarikian, C.A., Briais, A., Dadd, K.A., Deng, J.-M., Höfig, T.W., Huang, X.-L., Li, B., Lin, J., Liu, C., Liu, Z., Nirrengarten, M.F.R., Peate, D.W., Qiu, N., Satolli, S., Stock, J.M., Sun, Z., van der Zwan, F.M., Xiang, R., Yi, L., and Zhong, L., 2020. Expedition 368X methods supplement. In Sun, Z., Jian, Z., Stock, J.M., Larsen, H.C., Klaus, A., Alvarez Zarikian, C.A., and the Expedition 367/368 Scientists, South China Sea Rifted Margin. Proceedings of the International Ocean Discovery Program, 367/368: College Station, TX (International Ocean Discovery Program). https://doi.org/10.14379/iodp.proc.368X.102.2020
- Childress, L.B., Alvarez Zarikian, C.A., Briais, A., Dadd, K.A., Deng, J.-M., Höfig, T.W., Huang, X.-L., Li, B., Lin, J., Liu, C., Liu, Z., Nirrengarten, M.F.R., Peate, D.W., Qiu, N., Satolli, S., Stock, J.M., Sun, Z., van der Zwan, F.M., Xiang, R., Yi, L., and Zhong, L., 2020. Return to Site U1503. In Sun, Z., Jian, Z., Stock, J.M., Larsen, H.C., Klaus, A., Alvarez Zarikian, C.A., and the Expedition 367/368 Scientists, South China Sea Rifted Margin. Proceedings of the International Ocean Discovery Program, 367/368: College Station, TX (International Ocean Discovery Program). https://doi.org/10.14379/iodp.proc.368X.103.2020

- Bova, S.C., Rosenthal, Y., Childress, L., Aiello, I., Avila, A., Charles, C., Cheung, A., Clementi, V., DeLong, K., Dove, I., Du, X., Estes, E., Garcia-Lasanta, C., Goldstein, S., Hagemann, J., Hatfield, R., Haynes, L., Hess, A., Irvali, N., Kiro, Y., Lambert, J., Li, C., Longo, W., McGrath, S., Monteagudo, M., Riechelson, H., Robinson, R., Sarao, J., Sproson, A., Taylor, S., Wright, J., Yokoyama, Y., and Mark Yu. (2019). Expedition 379T Preliminary Report, Digging Deeper with the JR100: Extending high resolution paleoclimate records from the Chilean Margin to the Eemian. Zenodo. https://doi.org/10.5281/zenodo.5553428
- Thomas, D.J., Röhl, U., and **Childress, L.B.**, 2019. Expedition 378 Scientific Prospectus Addendum: South Pacific Paleogene Climate. International Ocean Discovery Program. https://doi.org/10.14379/iodp.sp.378add.2019
- Guizan Silva, C., Baker, P.A., Estes, E.R., and Childress, L.B., 2019. Expedition 387 Scientific Prospectus: Amazon Margin. International Ocean Discovery Program. https://doi.org/10.14379/iodp.sp.387.2019
- **Childress, L.**, and the Expedition 368X Scientists, 2019. Expedition 368X Preliminary Report: South China Sea Rifted Margin. International Ocean Discovery Program. https://doi.org/10.14379/iodp.pr.368X.2019
- Thomas, D.J., Röhl, U., and **Childress, L.**, 2018. Expedition 378 Scientific Prospectus: South Pacific Paleogene Climate. International Ocean Discovery Program. doi: 10.14379/ iodp.sp.378.2018
- Jaeger, J.M., Gulick, S.P.S., LeVay, L.J., and the **Expedition 341 Scientists**, 2014. Proc. IODP, 341: College Station, TX (Integrated Ocean Drilling Program). doi:10.2204/iodp.proc.341.2014
- Expedition 341 Scientists, 2014. Southern Alaska Margin: interactions of tectonics, climate, and sedimentation. *IODP Prel. Rept.*, 341. doi:10.2204/iodp.pr.341.2014
- **Childress, L. B.** and N. E. Blair, 2013. The Active Margin Carbon Cycle. White Paper, GeoPRISMS Planning Workshop for the New Zealand Primary Site.
- Shipboard Scientific Party, 2011. UNOLS Early Career Chief Scientist Training Cruise Report, R/V Wecoma, W1109C. NSF Grant OCE-1041068 (PI: Reimers).

Published Abstracts & Presentations

- Kulhanek, D.K., Archontikis, O.A., Herrle, J.O., Penman, D.E., Bohaty, S.M., Westerhold, T., Burkett, A.M., Sprain, C.J., Batenburg, S.J., Uenzelmann-Neben, G., Childress, L. and the IODP Expedition 392 Scientists (2022). Well-preserved calcareous nannofossils across the Paleocene–Eocene Thermal Maximum, International Ocean Discovery Program (IODP) Site U1580, central Agulhas Plateau, southwestern Indian Ocean, 12th International Conference on Climatic and Biotic Events of the Paleogene (CBEP12)
- Kulhanek, D.K., Archontikis, O.A., Herrle, J.O., Bijl, P.K., Burkett, A.M., Coenen, J.J., Dallanave, E., Sprain, C.J., Batenburg, S.J., Westerhold, T., Uenzelmann-Neben, G., Bohaty, S.M.,
 Childress, L. and the IODP Expedition 392 Scientific Party (2022). Cretaceous–Paleogene calcareous nannofossils from International Ocean Discovery Program Expedition 392 to the Agulhas Plateau, International Nannoplankton Association Conference (https://ina18.sciencesconf.org/)
- Childress, L.B., Acton, G.D., Percuoco, V.P., and M. Hastedt (2022), Relationships between lithology and chemical properties: mining the IODP database. Goldschmidt, <u>https://doi.org/10.46427/gold2022.8859</u>
- Jones, H.L., Niederbockstruck, B., Röhl, U. and the **IODP Expedition 378 Science Party** (2022). Calcareous nannoplankton community composition across multiple early Eocene hyperthermal events at International Ocean Discovery Program (IODP) Site U1553 (Campbell Plateau, SW Pacific), EGU Meeting
- King, A., Haynes, L.L., Röhl, U., and Expedition 378 Scientists (2022). Foraminifera stable isotopes as indicators of water column temperature and carbon cycling during the Eocene, GSA Northeastern Section Meeting; <u>https://doi.org/10.1130/abs/2022NE-375155</u>
- Poniatowski, E., Haynes, L., Röhl, U., and **Expedition 378 Scientists** (2022). Foraminifera population dynamics in the southern hemisphere during the Eocene hothouse, GSA Northeastern Section Meeting; <u>https://doi.org/10.1130/abs/2022NE-375180</u>
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- **Childress, L.B.** (2015), Sedimentary Organic carbon: Active margin inputs and fluxes. Deep Carbon Observatory Thematic Institute on "Carbon, from the Mantle to the Surface", Berkeley
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- Montelli, A. I., Gulick, S. S., Worthington, L. L., Mix, A., Zellers, S.D., Jaeger, J.M. and **Expedition 341 Science Party** (2014), Seismic stratigraphy of the Bering Trough, Gulf of Alaska: Late Quaternary history of Bering Glacier dynamics. AGU Fall Meeting
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- Reece, R., Gulick, S.P.S. and **IODP Expedition 341 Scientists** (2014), Deciphering the transitional tectonics of the Southern Alaskan Margin through gulf sedimentology and geophysics: IODP Expedition 341. AGU Fall Meeting
- Jaeger, J.M., Gulick, S.P.S. and **IODP Expedition 341 Scientists** (2014), Gulf of Alaska Cryosphere and Paleoceanography in the Neogene: IODP Expedition 341 Southern Alaska. AGU Fall Meeting
- Penkrot, M., Jaeger, J., LeVay, L., St-Onge, G., Mix, A., Davies-Walczak, M., Gulick, S.P. and Integrated Ocean Drilling Program Expedition 341 Scientists (2014), Northern Cordilleran Ice Sheet Dynamics in Coastal Alaska from MIS 3 to the Present: Initial Results. AGU Fall Meeting
- Moy, C.M., Addison, J., Finney, B., Bahlburg, H., **Childress, L.**, Cowan, E., Forwick, M., Mueller, J., Ribeiro, F., Ridgway, K. and the IODP Expedition 341 Science Party (2014), Late Pleistocene biogenic sedimentation in the Gulf of Alaska: A biogeochemical perspective from IODP Expedition 341. AGU Fall Meeting https://abstractsearch.agu.org/meetings/2014/FM/PP23D-04.html
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- Cowan, E.A., Forwick, M., Bahlburg H., Childress L.B., Moy, C.M., Müller, J., Ribeiro, F., Ridgway, K.D., and IODP Expedition 341 Scientific Party (2013), Southern Alaska glaciations recorded in deep-sea diamicts: Preliminary results from IODP Expedition 341. AGU Fall Meeting
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- Bahlburg, H., Childress, L.B., Cowan, E.A., Forwick, M., Moy, C.M., Müller, J., Ribeiro, F., and
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- Blair, N., Thompson, C., **Childress, L.**, and L. Leithold (2013), The fate of small active margin river POC in the marine environment. Goldschmidt Conference, Florence, Italy
- **Childress, L.B.** and N.E. Blair (2013), The Subduction Margin Carbon Cycle: A Preliminary Assessment of the Distribution Patterns of Multicycle Carbon. Poster, GeoPRISMS Planning Workshop for the New Zealand Primary Site

- Carbotte, S.M., Canales, J.P., Carton, H.D., Nedimovic, M.R., Han, S., Marjanovic, M., Gibson, J.C., Janiszewski, H.A., Horning, G., Delescluse, M., Watremez, L., Farkas, A., Gorriz, B.B., Bornstein, G., **Childress, L.B.**, and B. Parker (2012), Evolution and hydration of the Juan de Fuca crust and uppermost mantle: a plate-scale seismic investigation from ridge to trench. AGU Fall Meeting.
- Blair, N.E., **Childress, L.B.**, and E.L. Leithold (2012), A conceptual watershed model describing the riverine export of particulate organic radiocarbon. Radiocarbon Conference, Paris, France
- Blair, N.E., Leithold, E.L., **Childress, L.B.,** and K. Fournillier (2011), The role of watershed storage on exported riverine organic carbon signatures. International Symposium on Soil Organic Matter, Leuven, Belgium
- Leithold, E., Blair, N., **Childress, L.**, and B. Brulet (2010), Long-term controls on the composition of particulate carbon buried offshore from the Waipaoa River, North Island, New Zealand. AGU Fall Meeting
- **Childress, L.B.**, Blair, N.E., and E.L. Leithold (2010), Tracing Organic Carbon from the Terrestrial to Marine Environment via Coupled Stable Carbon Isotope and Lignin Analyses. Poster, AGU Fall Meeting
- Leithold, E.L., Blair, N.E., Brulet, B., **Childress, L.**, Almquist, K., and C. Hunt (2010), Picking apart the organic geochemical stratigraphic record on continental margins – An approach to deciphering the signals of terrestrial environmental change. Annual GSA Meeting, Denver
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- **Childress, L.B.**, Leithold, E.L., Blair, N.E., and B.R. Brulet (2009), Use of carbon and nitrogen stable isotopes to study Late Pleistocene to Holocene environmental change in the Waipaoa Sedimentary System, New Zealand. Poster, MARGINS S2S Synthesis and Integration Workshop, Gisborne, NZ
- Leithold, E., **Childress, L.**, Brulet, B., and N. Blair. (2009), Deciphering the biogeochemical signals of Holocene environmental change preserved in sediment fractions on the Waipaoa margin, New Zealand. MARGINS S2S Synthesis and Integration Workshop, Gisborne, NZ
- Blair, N., Leithold, L., Brulet, B., Childress, L., Canuel, E., Brackley, H., Trustrum, N., Page, M., and L. Carter (2009), The Source to Sink Evolution of Particulate Organic Carbon in the Waipaoa Sedimentary System. MARGINS S2S Synthesis and Integration Workshop, Gisborne, NZ

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- Blair, N.E., Leithold, E.L., Thompson, C.E., Lloyd, K.H., and L.B. Childress (2008), What does control the composition of POC exported from rivers? Ocean Sciences Meeting, Orlando FL
- Leithold, E.L., Blair, N.E., **Childress, L.B.**, Brulet, B., and C.E. Thompson (2008), Signals of landscape destabilization on continental margins – comparisons of organic geochemical records from the Eel and Waipaoa shelves. Ocean Sciences Meeting, Orlando FL
- **Childress, L.B.** and E. Stoddard (2003), Mapping and analysis of a diabase dike in the North Carolina Piedmont in an honors physical geology class. South-Central Section and Southeastern Section, GSA Joint Annual Meeting