

CURRICULUM VITAE

Bradley B. Sageman

Department of Earth and Planetary Sciences
Northwestern University

RESEARCH INTERESTS

Stratigraphy – sequence stratigraphy, astrochronology, chemostratigraphy
Molluscan paleoecology
Sedimentary geochemistry/biogeochemistry
Paleoclimatology/paleoceanography
Energy, Sustainability, Decarbonization

EDUCATION

Ph.D. 1985-1991	Department of Geological Sciences, University of Colorado, Boulder, CO <i>Dissertation: Stratigraphy, carbon geochemistry, and paleobiology of the Upper Cenomanian Hartland Shale Member, Greenhorn Formation, Western Interior, U.S., 572 p.</i>
B.Sc. 1975 - 1979	Department of Biology Denison University, Granville, OH

PRE-DOCTORAL AWARDS, HONORS AND FELLOWSHIPS

1987-1988	Fulbright Scholarship, Institut für Geologie und Paläontologie, Universität Tübingen, Germany
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POST-DOCTORAL AWARDS, HONORS AND FELLOWSHIPS

2019	Fulbright Scholarship, University of Birmingham, UK
2018	Outstanding Paper of the Year, <i>Journal of Sedimentary Research</i>
2016	Associated Student Government, Faculty Honor Roll
2006	Elected Fellow, Geological Society of America
2004	Hewlett Award for Curricular Development: <i>Incorporation of HyperInteractive Teaching Technology in Undergraduate Teaching</i>
2001	Outstanding Paper of the Year, <i>Journal of Sedimentary Research</i>
1997 -2000	DuPont Young Professor Award
1997	Associated Student Government, Faculty Honor Roll
1996	Associated Student Government, Faculty Honor Roll
1994	Hewlett Award for Curricular Development: EARTH 331

EMPLOYMENT

MSES Acad. Director (2019-)	Trienien's Institute for Sustainability & Energy
ISEN Co-Director (2013-)	Northwestern University (formerly ISEN)
ISEN Associate Dir. (2010-13)	
Department Chair (2005-18)	Department of Earth & Planetary Sciences
Professor (2004-24)	Northwestern University
Associate Professor (1998-04)	Evanston, IL
Assistant Professor (1992-98)	
Research Associate (1991-92)	Dept of Geosciences, Penn State University University Park, PA

RESEARCH FUNDING

I have been the lead PI, or a co-PI on grant awards totaling about \$8.8M in research funding; about \$2M of this has been awarded as direct support to my research program. The bulk of the funding has come from the National Science Foundation and the Department of Energy. Other funding sources include the American Chemical Society-Petroleum Research Fund, NASA, scientific societies such as the Geological Society of America, American Association of Petroleum Geologists, Colorado Scientific Society, Gulf Coast Association of Geologic Societies, Evolving Earth Foundation, and DOSECC, several oil companies (Mobil, Whiting, and Encana Inc.), and the Paula M. Trienen's Institute for Sustainability and Energy at Northwestern (formerly ISEN). In 2016, I contributed to an invited funding proposal by ISEN to a university trustee that resulted in a gift of \$5.5M for support of climate change and carbon science research at Northwestern (Ubben Program for Climate and Carbon Science); this award is not included above; the project has funded post-doctoral scholars and graduate students working with faculty in our department, Chemistry, and the Institute for Policy Research. In 2024, department colleague A. Jacobson and I were awarded a Trienens Demonstration grant for collaborative research on *Enhanced Rock Weathering for Carbon Dioxide Removal* with colleagues at the Chicago Botanic Garden, and a similar project was selected for funding by the DOE in 2025.

TEACHING AND ADVISING

Areas of teaching:

Introductory Physical Geology	(majors)
Stratigraphy and Sedimentology	(majors/grad students)
Field Methods in Stratigraphy	(majors/grad students)
Paleobiology/Evolutionary Theory	(non-majors; majors/grad students)
Sedimentary Geochemistry	(majors/grad students)
Energy, climate and sustainability	(majors and non-majors)

Courses taught:

EARTH 101 - *Geological Processes and Products*
 EARTH 114 – *Evolution and the Scientific Method*
 EARTH 201 – *Surface Processes (aka Earth Systems Revealed)*
 EARTH 203 - *Historical Geology*
 EARTH 330 - *Sedimentary Geology*
 EARTH 331 - *Field Problems in Sedimentary Geology*
 EARTH 340 – *Paleobiology*
 EARTH 342/ISEN 410 – *Topics in Contemporary Energy & Climate Change*
 SCS 391 - *Domination of the American Southwest*
 EARTH 450 - *Advanced Topics in Sedimentary Geology:*
 Carbon cycle and pCO₂ Reconstructions
 Advanced Quantitative Stratigraphy
 ISEN 130/230 - *Climate Change & Sustainability: Economic & Ethical Dimensions*
 SCS 370 – *Environmental Field School*

Curriculum development:

2024-25 – **EARTH 344 - *The Scientific Foundations of Decarbonization***, new course with dept. colleague Prof. A. Jacobson; I have been developing the lectures over the past few months and the course is scheduled to run in the spring quarter of 2025.

- 2024 – I filled in for colleague Jacobson (who had research leave) to teach EARTH 201, the department’s introductory physical geology course for majors.
- 2021 – I adapted EARTH 114 to an online format during the pandemic and taught it during winter quarter 2021.
- 2020 – I taught EARTH 201, a class I last taught in 2009, during Spring quarter 2020 because colleague A. Jacobson was on research leave. Due to the COVID-19 pandemic I had to adapt the course to an online format.
- 2018 – I revised EARTH 330 – *Sedimentary Geology* because I felt that students would benefit from increased feedback and some modest lab experience in preparation for the fall quarter follow-up course, EARTH 331. Past exam questions were converted to weekly homework assignments, significantly increasing the amount of grading effort required for the class.
- 2017 – I taught a new course, adopted from a faculty colleague who was on a one-year research leave. The class, EARTH 342/ISEN 410 – *Topics in Contemporary Energy & Climate Change*, is a 300/400-level version of material I present in ISEN 230, but my contribution to ISEN230 is typically only 4 lectures. As such, this class constituted a new preparation.
- 2017 – I initiated a revision of ISEN 230 this year, working to focus the course material on values and ethics related to climate change. This was the original intent of the class, and although it was thought that inclusion of economic and philosophical dimensions in one class would be enriching, we have learned it is very difficult to adequately address both in a 10-week class. The new version of the class will run in Spring 2018.
- 2016 – As EARTH department chair, I initiated an effort to revise the EARTH undergraduate curriculum, in part to perform a decadal update, but more importantly, to allow new faculty members to implement their own perspectives and have a role in shaping our curriculum. The new major requirements were approved by the WCAS Curricular Review Committee and went into effect in AY2018-19.
- 2011 – I revised ISEN 130 as part of ISEN curricular revision, changing to ISEN 230 and shifting emphasis to policy and ethics. New title - *Climate Change and Sustainability: Political, Economic and Ethical Dimensions*
- 2010 – I developed ISEN 130 - *Sustainability: Energy, Environment, and Ethics* with co-instructors Friesema and Sheldon in 2010.
- 2010 – I co-taught SCS-370 *Environmental Field School* with Yael Wolinsky; EARTH 105-online offered to high school students in AP science track during Fall quarter.
- 2009 – I initiated development of an online geoscience course for the Center for Talent Development (EARTH 105-online; *Climate Catastrophes in Earth History*); a former PhD advisee (A. Murphy) ultimately took over and taught the class.
- 2009 – I taught several lectures on *Charles Darwin and Evolutionary Theory* for the Alumnae of Northwestern continuing education program, Jan 6 – Mar 10, 2009.
- 2003 – I assumed responsibility for EARTH 201-*Surface Processes* and developed the course with a new textbook, new lab exercises, and new pedagogic approach. I also revised EARTH 114, using a new textbook and new pedagogy.
- 1999 – I developed a new 100-level course for the SERTS program (Science and Engineering Research and Teaching Synthesis): GEOL 114 – *Uniformity, Catastrophe, and the Meaning of Evolution*, taught initially in F1999 and completely revised for F2003.
- 1998 – I collaborated with NU faculty (D. Schejbal, P. Friesema) to develop and teach an innovative new course linking the Environmental Science Program and University

College: *Domination of the American Southwest*, which included a week-long field trip to the Glen Canyon National Recreation Area in southern Utah.

1997 – I was invited to participate in an IGERT grant to the National Science Foundation (Integrated Graduate Education and Research Training program) linking Departments of Environmental Engineering, Chemistry, and Geological Sciences.

1996 – I initiated a graduate level seminar series in sedimentary geology for the department.

1994 – I initiated GEOL 319 *Field Problems in Sedimentary Geology* (development of new course - supported by a Hewlett Award for curricular development).

- I initiated GEOL 317 *Paleobiology* (development of new course)

- I redesigned GEOL 313 *Sedimentary Geology* (change of existing course)

1993 – I redesigned GEOL 101 *Geological Processes and Products* (change of existing course)

Advising:

Undergraduate research advisees

F22 - : Jonathan Chen
 F21-23 : Dana Small
 S17-S18: Caroline Schuette
 W17-S18: J. Todes (w/M. Osburn)
 S15-S16: T. Kukla
 W11-S13: J. Mills
 W11-S13: A. Mayer
 F12- S13: R. Saywitz
 W07-S08: C. Carney
 S06-F06: B. Chartoff
 S98-05: A. Erhardt (nee Blecha)
 F02-S04: P. Dejtrakulwong
 F99-S02: M. Williams
 F01-S02: P. Pancoskova
 S97-F97: T. Huynh
 F96: C. Albrecht-Buehler
 F93-S95: B. Van Mooy
 F97: K. Carrigan

who left Northwestern to pursue...

currently enrolled
 PhD. candidate, U. of CA-Berkeley
 Research assistant, Lincoln Park Zoo
 PhD. candidate, U. of Chicago
 completed PhD., Stanford U.
 completed Ph.D., UC-Berkeley; Hierloom Carbon
 completed Ph.D., UC-Berkeley; LLNL
 completed Envir. Sci. major, Northwestern
 Mass spectrometry lab manager, UCSC
 Director, Data Visualization, Urban Institute
 Assoc. Prof., U of KY
 completed Ph.D. at Stanford
 completed M.S. at Ohio State U.
 completed M.S. at Northwestern
 completed M.S. at USC; Assoc. Dir. SCEC
 completed M.S. at Northwestern
 Senior scientist, WHOI-MIT
 completed med school; practicing physician

Graduate research advisees (or co-advisees):

F24 – : Aidan Burdick (PhD., Axford lead) currently enrolled
 F22 – : **Allegra Tashjian** (PhD., Jacobson lead) currently enrolled
 F21 – : **Chuyan Wan** (PhD., Jacobson lead) currently enrolled
 F18 – : **Luca Podrecca** (PhD.) currently enrolled
 F20 – 22: **Katarina Savatic** (PhD.) completed M.S.; CDM Smith Inc.
 F16 – 20 : A. Nelson (PhD., Jacobson lead) completed Ph.D.; LDGO/Cella Mnrl Storage
 F16 – 22 : **G. Kitch** (PhD., Jacobson lead) completed Ph.D.; NOAA, Wash., D.C.
 F15 – 21 : **J. Wang** (PhD.; w/Hurtgen, Jacobson) completed Ph.D.; Yale U., post doc
 F13 – 19: J. McFarlin (PhD.: Axford lead) completed Ph.D.; CU-Boulder, post-doc
 F13 – 16: J. Lazarz (Jacobsen lead) completed Ph.D., Los Alamos Natl. Lab
 F13 – 14: R. Bush (McInerney lead) completed Ph.D.; Northwestern Asst. Prof. Instr.
 F13 – 14: A. Baczynski (McInerney lead) completed Ph.D.; Penn State, post-doc
 F12 – 18: **M. Jones** completed Ph.D.; UMI-AnnArbor, post doc.
 F10 – 19: T. Bollman (vdLee lead; Ph.D.) completed Ph.D.; Chevron Corp.
 F10 – 16: B. Kristall (Hurtgen lead) completed Ph.D.; private sector
 F08 – 14: **M. Gomes** (Hurtgen lead) completed Ph.D.; J. Hopkins U. Asst. Prof.

F06 – 13: Young Ji Joo (Ph.D.)	completed Ph.D.; Pukyong Natl. U., Asst. Prof.
F05 – 11: D. Adams (Hurtgen lead; Ph.D.)	completed Ph.D.; Exxon-Mobil; EarthBridge Inc.
F04 – 11: R. Barclay (w/McElwain)	completed Ph.D.; Smithsonian Inst.
F01 – 08: J. Flaum	completed Ph.D.; Exxon; U.S. Geol. Survey
F01 – 07: J. Borges (w/Huh)	completed Ph.D.; Chevron Corp.
F01 – 07: R. Locklair	completed Ph.D.; Chevron Corp.
F02 – 04: P. Pancoskova	completed M.S.; private sector
F02 – 03: M. Fortwengler	completed M.S.; Shell Oil Co. geologist
F01 – 03: R. Shivaraj	completed M.S.; secondary education
F97 – 03: S. Meyers	completed Ph.D.; U Wisc.-Madison, Prof.
F98 – F99: S. Pimley	completed M.S.; private sector
W94 – S00: A. Murphy	completed Ph.D.; U. Phoenix instructor
F93 – S94: L. Hass	completed M.S., private sector
W96 – S00: J. Werne (w/Hollander)	completed Ph.D., U Pittsburg, Professor
W96 – S00: M. Smith (Hollander lead)	completed Ph.D., private sector
F92 – F93: J. Rich (w/Birchfield)	completed Ph.D., private sector
F93 – S97: C. Gong (Hollander lead)	completed Ph.D.; Exxon-Mobil Corp.

Pre- and Post-doctoral advisees:

- 2021-2023: **Anna Waldeck**, PhD., Harvard University, worked on geochemical assessment of ocean acidification, (co-advised with dept. colleagues A. Jacobson and M. Hurtgen); left for research associate position at Brown U.
- 2017-19: **Benjamin Linzmeier**, PhD, University of Wisconsin-Madison, working on geochemical assessment of ocean acidification, (co-advised with dept. colleagues A. Jacobson and M. Hurtgen), currently Assistant Professor, University of South Alabama.
- 2013-14: **Dorothee Husson**, Ph.D., University Pierre and Marie Curie (UPMC) working on carbon sequestration and carbon mineralization under high pressure (co-advised with my colleagues, S. Jacobsen and C. Bina)
- 1999-03: **Jiri Laurin**, Fulbright Scholar, Ph.D. candidate from Charles U., Czech Republic (I served as an outside member on his dissertation committee); currently research scientist, Czech Academy of Sciences
- 1997-99: **Dr. C.A. Ver Straeten**, Northwestern University Environmental Council post-doctoral fellow; currently research scientist, New York State Geological Survey.

SERVICE

Northwestern University

Departmental and program offices

- F22- : Director of Undergraduate Studies
- F05-S18: Department Chair
- F00-S02: Seminar Director
- F97-S03: Director of Undergraduate Studies
- F98-S03: Chair - Departmental Honors Committee
- F01-S03: Chair, Faculty Search Committee
- F98-S99: Chair, Faculty Search Committee
- W93-S96: Co-director, Graduate Admissions Committee
- F92-F96: Chair - Krumbein Lecture Committee

Departmental and program committees

- F13-18: As chair I participated ex officio on numerous faculty search committees, curriculum committees, outreach committees, and computing committees.
- F01-S07: Member – Departmental building/relocation committee
- W95-S05+W12-S13: Member - Faculty Search Committees

College or University committee office or membership

W20- : Academic Director, ISEN Master's of Science Program in Energy & Sustainability
 F13- : Co-Director, Trienen's Institute for Sustainability and Energy
 W13-21: Co-Chair, Sustainability Council
 F09-S18: Chair, ISEN curriculum committee
 W14: Member, Faculty Senate Committee on Global Warming
 W09-S18: Advisory board member, Center for Interdisciplinary Exploration & Research in Astrophysics (CIERA)
 S10-13: ISEN Associate Director of Education and Special Projects
 W-S11 : Search Committee Member, Science/Engineering sustainability position
 W-S10 : Co-Chair, Environmental Sciences Committee
 F09-S10: Member, Executive Committee, Northwestern Institute of Sustainable Practices
 F09-S10: Member, Physical Sciences and Engineering Advisory Board
 F03-S07: Member, Curricular Policies Committee
 F95-S06: Member - Environmental Sciences Program Committee
 F01-S02: Co-chair – Environmental Sciences Task Force
 F01-S02: Member – Board of College Scholars
 F00-S02: Member - Committee on Academic Standing
 S00-S01: Member - Ad hoc Committee for Promotion of Lecturer Faculty
 F99-S00: Member -Environmental Council Core Management Group
 S94: CAS Representative for Prospective Undergraduate Applicants Panel

Student relations

F94-S07: Faculty Associate, Shepard Residential College; Hosted Shepard student dinner and attended various residential college events and outings.
 F94-F06: Departmental field trip leader (Colorado-Utah '94; Iowa '00; Wisconsin '01, Big Bend and Yellowstone NP's '06; Yucatan '10)

Peer Review Activities

Books: SEPM Special Publications Columbia University Press
 GSA Special Publications Springer Verlag

Journal reviews: *American Journal of Science*, *Associate Editor* (2015-2025)

<i>Palaios</i> (Associate Editor 96-03)	<i>Nature</i>	<i>Geology</i>
<i>Paleoceanography & Paleoclimatology</i>	<i>GSA Bulletin</i>	<i>AAPG Bulletin</i>
<i>Chemical Geology</i>	<i>Sedimentology</i>	<i>Earth Sci. Rev.</i>
<i>Journal for Sedimentary Research</i>	<i>Int. Journal of Earth Sciences.</i>	<i>Science Advances</i>
<i>Scientific Reports</i>	<i>Earth & Planetary Science Letters</i>	
<i>Cretaceous Research</i>	<i>Palaeogeog, Palaeoecol., & Palaeoclim.</i>	

Funding Agencies: National Science Foundation, Earth Sciences
 Sedimentary Geology & Paleontology (Panel Member)
 Low temperature geochemistry and geobiology
 American Chemical Society, Petroleum Research Fund
 Netherlands Organization for Scientific Research
 National Geographic Society

Other Peer Review service:

Geological Society of America: L.L. Sloss Award Committee, 2005-08
 National Research Council: *Understanding Earth's Deep Past: Lessons for our Climate Future*

Professional Affiliations

Member: American Geophysical Union (AGU), Geological Society of America (GSA), Geochemical Society (GS), Society for Sedimentary Geology (SEPM), International Association of Sedimentologists (IAS).

Other Professional Service

Voting Member, Cretaceous Subcommittee of International Commission on Stratigraphy; 2011-24
 Voting Member, International Subcommission of ICS on Timescale Calibration; 2025-28

PUBLICATIONS

[H-index: Scopus-45; ResearchGate/GoogleScholar-54]

117. Podrecca, L.G., Masterson, A.L., Hurtgen, M.T., Taylor, J., Lloyd, J.M., Selby, D., and Sageman, B.B., 2025, in press, Microbial Sulfate Reduction Regulated by Relative Sea Level Change in a Pleistocene – Holocene Sedimentary Record: Insights from Loch Duart, Scotland, UK, *Chemical Geology*.
116. Taylor, J., Selby, D., Lloyd, J.M., Smeaton, C., Bendle, J., Allison, M., Ling, Y., Podrecca, L., Sageman, B.B., Austin, W., and Szidat, S., 2025, in press, Palaeoenvironmental reconstruction of a fjord catchment NW Scotland, UK since the Last Glacial Maximum: A multi-geochemical approach, *Quaternary Science Reviews*.
115. Liu, Z., Tian, H., Sageman, B.B., Wu, Y., Li, T., Wang, X., Cen, W., and Chen, J., 2024, Multiple controls on the preservation of organic matter in the lower Mississippian Luzhai Formation black shale in southern China, *Palaeogeography, Palaeoclimatology, Palaeoecology* 655: 112508.
114. Li, Y., Singer, B.S., Takashima, R., Schmitz, M.R., Podrecca, L., Sageman, B.B., Selby, D., Yamanaka, T., Mohr, M.T., Hayashi, K., Tomaru, T., Savatic, K., 2024, Radioisotopic chronology of ocean anoxic event 1a: Framework for analysis of driving mechanisms, *Science Advances* 10: eadn8365 (2024).
113. Trayler, R.B., Meyers, S.R., Sageman, B.B., and Schmitz, M.D., 2024, Bayesian integration of astrochronology and radioisotope geochronology, *Geochronology* 6: 107–123.
<https://doi.org/10.5194/gchron-6-107-2024>.
112. Fortiz, V., Oakes, R., Boudinot, F.G., Jones, M.M., Leckie, R.M., Sageman, B.B., Sepúlveda, J., and Bralower, T.J., 2024, Paleooceanographic Significance of Calcareous Nannofossil Assemblages in the Tropic Shale of Utah, during Oceanic Anoxic Event 2 at the Cenomanian-Turonian Boundary, *Micropaleontology* 70 (3): 205-224.
111. Sageman, B.B., Jones, M.M., Arthur, M.A., Niezgodzki, I. and D. Horton, 2024, Late Cenomanian Plenus Event in the Western Interior Seaway, Special Section on “11th International Cretaceous Symposium, Warsaw 2022. *The 200th Anniversary of the Cretaceous System*. Proceedings Volume”, edited by I. Walaszczyk, E.A.M. Koutsoukos, M. Machalski, J.W.M. Jagt and E. Jagt-Yazykova. *Cretaceous Research* 156: <https://doi.org/10.1016/j.cretres.2023.105798>.
110. Laurin, J., Uličný, D., Waltham, D., Toman, P., Warsitzka, M., and Sageman, B.B., 2023, Contrasting response of sea-level change to orbital eccentricity in greenhouse and icehouse climates, *Earth and Planetary Science Letters* 622: <https://doi.org/10.1016/j.epsl.2023.118421>.
109. Singer, B.S., Jicha, B.R., Sawyer, D., Walaszczyk, I., Landman, N., McKinney, K.C. and Sageman, B.B., 2023, A $^{40}\text{Ar}/^{39}\text{Ar}$ and U-Pb Time Scale for the Cretaceous Western Interior Basin, North America, in: Hart, M. B., Batenburg, S. J., Huber, B. T., Price, G. D., Thibault, N., Wagerich, M. and Walaszczyk, I. (eds), *Cretaceous Project 200 Volume 1: the Cretaceous World*, Geol. Soc. of London Spec. Pub. 544: <https://doi.org/10.1144/SP544-2023-76>.

108. Taylor, J., Selby, D., Lloyd, J., Podrecca, L., Masterson, A.L., Sageman, B.B., and Szidat, S., 2023, Palaeoenvironmental reconstruction of Loch Duart (NW Scotland, UK) since the Last Glacial Maximum: Implications from a multiproxy approach, *Journal of Quaternary Science*. DOI: 10.1002/jqs.3566.
107. Wang, J., Jacobson, A.D., Sageman, B.B., and Hurtgen, M.T., 2023, Application of the $\delta^{44/40}\text{Ca}$ - $\delta^{88/86}\text{Sr}$ multi-proxy to Namibian Marinoan cap carbonates. *Geochimica Cosmochimica Acta* 353: 13-27: https://www.researchgate.net/publication/370416107_Application_of_the_d4440Ca-d8886Sr_multi-proxy_to_Namibian_Marinoan_cap_carbonates.
106. Jones, M.M., Sageman, B.B., Jacobson, A.D., and Selby, D., 2023, Abrupt Episode of mid-Cretaceous ocean acidification triggered by massive volcanism, *Nature Geoscience* 16: 169–174. <https://doi.org/10.1038/s41561-022-01115-w>.
105. Kitch G.D., Jacobson A.D., Sageman B.B., Coccioni, R., Chung-Swanson, T., Ankney, M.E., and Hurtgen M.T., 2022, Calcium isotope ratios of malformed foraminifera reveal biocalcification stress preceded Oceanic Anoxic Event 2, *Comm.-Earth and Environment*, <https://doi.org/10.1038/s43247-022-00641-0>.
104. Linzmeier, B.J., Jacobson, A.D., Sageman, B.B., Hurtgen, M.T., Ankney, M.E., Masterson, A. and N.H. Landman, 2022, Isotope systematics of subfossil, historical, and modern *Nautilus macromphalus* from New Caledonia, *PLoS One* 17 (12), e0277666. <https://doi.org/10.1371/journal.pone.0277666>.
103. McDonald, B.S., Partin, C.A., Sageman, B.B., and C. Holmden, 2022, Uranium stable isotope reconstruction of ocean deoxygenation during OAE 2 hampered by uncertainties in local scale fractionation and U cycling, *Geochim. Cosmo. Acta*. 331: 143-164.
102. Bryant, R., Leckie, R. Mark, Bralower, T.J., Jones, M.M., and Sageman, B.B., 2021, Microfossil and geochemical records reveal high-productivity paleoenvironments in the Cretaceous Western Interior Seaway during Oceanic Anoxic Event 2, *Palaeogeography, Palaeoclimatology, Palaeoecology* 584: 110679.
101. Walaszczyk, I., Čech, S., Crampton, J.S., Dubicka, Z., Ifrim, C., Jarvis, I., Kennedy, W.J., Lees, J.A., Lodowski, D., Pearce, M., Peryt, D., Sageman, B.B., Schiøler, P., Todes, J., Uličný, D., Voigt, S., Wiese, F., 2021, The Global Boundary Stratotype Section and Point (GSSP) for the base of the Coniacian Stage (Salzgitter-Salder, Germany) and its auxiliary sections (Słupia Nadbrzeżna, central Poland; Střeleč, Czech Republic; and El Rosario, NE Mexico), *Episodes* 45(2): 181-220. <https://doi.org/10.18814/epiiugs/2021/021022>.
100. Kitch, G.D., Jacobson, A.D., Harper, D.T., Hurtgen, M.T., Sageman, B.B., and Zachos, J.C., 2021, Calcium isotope composition of *Morozovella* over the late Paleocene–early Eocene, *Geology* 49 (6): 723–727.
99. Wang, J., Jacobson, A.D. Sageman, B.B., and Hurtgen, M.T., 2021, Stable Ca and Sr isotopes support volcanically triggered biocalcification crisis during Oceanic Anoxic Event 1a. *Geology* 49 (5): 515–519.
98. Boudinot, F.G., Dildar, N., Leckie, R.M., Parker, A., Jones, M.M., Sageman, B.B., Bralower, T.J., Sepúlveda, J., 2020, Neritic ecosystem response to Oceanic Anoxic Event 2 in the Cretaceous Western Interior Seaway, USA, *Palaeogeography, Palaeoclimatology, Palaeoecology* 546: 1-12.
97. Chen, X., Sageman, B., Yao, H., Liu, S., Zou, Y., Han, K., and Wang, C., 2020, Zinc isotope and pCO₂ proxy evidence for paleoenvironmental change during Cretaceous Oceanic Anoxic Event 2, *Geology* 49 (4): 412–416.

96. Jones, M.M., Sageman, B.B., Selby, D., Jicha, B.R., and Singer, B.S., 2020, Regional chronostratigraphic synthesis of the Cenomanian-Turonian OAE2 interval, Western Interior Basin (USA): New Re-Os chemostratigraphy and $^{40}\text{Ar}/^{39}\text{Ar}$ geochronology: *Geol. Soc. America Bulletin* 133: 1090-1104.
95. Joo, Y.J., Sageman, B.B., and Hurtgen, M.T., 2020, Data-model comparison reveals key environmental changes leading to Cenomanian-Turonian Oceanic Anoxic Event 2, *Earth Science Reviews* 203: 103-123.
94. Linzmeier, B.J., Jacobson, A.D., Sageman, B.B., Hurtgen, M.T., Ankney, M.E., Petersen, S.V., Tobin, T.S., Kitch, G.D., and Wang, J., 2020, Calcium isotope evidence for environmental variability before and across the Cretaceous – Paleogene mass extinction, *Geology* 48: 34–38.
93. Liu, Z., Horton, D.E., Tabor, C., Sageman, B.B., Percival, L.M. E., Gill, B.C., and Selby, D., 2019a, Assessing the Contributions of Comet Impact and Volcanism Towards the Climate Perturbations of the Paleocene-Eocene Thermal Maximum, *Geophysical Research Letters* #2019GL084818RR.
92. Liu, Z., Selby, D., Zhang, H., Zheng, Q., Shen, S., Sageman, B.B., Grasby, S.E., and Beauchamp, B., 2019b, Osmium-isotope evidence for volcanism across the Wuchiapingian–Changhsingian boundary interval, *Chemical Geology* 529; <https://doi.org/10.1016/j.chemgeo.2019.119313>.
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- Locklair, R. and SageMan, B., 2002, Origin, character, and stratigraphic hierarchy of organic-rich siltstones in deep-water facies, Upper Permian (Guadalupian) Brushy Canyon Formation, west Texas, Annual Meeting, Society for Organic Petrology, Houston, Texas, March 3-6, 2002.
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- SageMan, B.B., Meyers, S.R., and Hinnov, L.A., 2001, Use of Orbital Time Scale to Evaluate Molluscan Biozones and Evolutionary Rates during the Late Cenomanian-Early Turonian, Western Interior Basin (USA), *Eos*, Transactions of American Geophysical Union, Fall Meeting Abstracts, San Francisco, CA, Dec. 9-14, 2001, p. 1140.

- Laurin, J., and *SageMan, B.B., 2000, Test case for evaluating relative roles of eustasy, tectonics and sediment supply in a foreland basin, Abstracts with Program, Annual Geological Society of America Meeting, Reno NV, Nov. 9-18, 2000, p. A155.
- Meyers, S. R., and SageMan, B. B., 2000, Quantitative cyclostratigraphic analysis of late Cenomanian-early Turonian deposits of the Cretaceous Western Interior (North America), Abstracts with Program, Annual Geological Society of America Meeting, Reno NV, Nov. 9-18, 2000, p. A145.
- SageMan, B.B., 2000, Recent advances in the study of ancient marine source rocks, Gordon Research Conference on Organic Geochemistry, Holderness School, Plymouth, New Hampshire, Aug 13-18, 2000.

Workshops/Research Group Meetings

- Invited speaker, 12th International Cretaceous Symposium, August 2025, Hannover, Germany
- Invited speaker, NSF-EARTHTIME workshop, Oct. 2016, Denver Federal Center: *Stratigraphic integration of geochronologic data*.
- Invited speaker, Rocky Mountain Section, Society for Sedimentary Geology, monthly luncheon lecture, Feb 28, 2014. *Development of Cenomanian-Campanian chronostratigraphy for the resource-rich facies and basins of the Western Interior region*.
- Invited Participant, NSF EARTHcube Workshop, Oct. 1-3, 2013, University of Wisconsin-Madison.
- Co-organizer, NSF-SEES workshop, *Natural and Engineered Carbon Sequestration*, in assoc. with Geol. Soc. Amer. Meeting, Minneapolis, MN, October 7-8, 2011.
- Co-organizer, NSF-workshop, *An Internet Resource for Integrating Plate Tectonic and Paleogeographic Mapping with On-line Earth Science Databases*, Field Museum, July 19-21, 2011.
- Invited Participant, NSF Sponsored Workshop on Earth-Time Program, Sept. 11-12, 2006, Santa Fe Institute, Santa Fe, New Mexico.
- Invited speaker, Colorado Energy Research Institute and Colorado School of Mines, Meeting of Research Consortium in Shale Gas, May 9, 2006,
- Invited speaker, presented *Causal Factors for Cretaceous OAE's: Insights From the Cenomanian-Turonian*, COE Program for Neo-Science of Natural History, OAE Symposium, University of Hokkaido, Sapporo, Japan, Sept. 21-23, 2005.
- Invited speaker, presented *The temporal record of C-cycling and black shales; Orbital Time Scales and Proxy Records from Cretaceous OAE's*, NSF-Sponsored Workshop on Proxies, December 10-11, 2005, Hotel Nikko, San Francisco.
- Session co-chair for session T6. *Marine Anoxia over Geologic Time—Where, When, Why, and Cause and Effect Relationships to the Evolving Biosphere*, Earth System Processes II Meeting, Calgary, August 8-11, 2005, with T. Lyons, T.M. and A. Anbar.
- Invited Participant, NSF Deep-Time GeoSystems Workshop, Sept. 9-11, 2004, NSF Headquarters, Arlington, VA.
- Invited Participant, First NSF Deep-Time Paleoclimate Workshop, May 15-17, 2003, NSF Headquarters, Arlington, VA.

Organizer/host/speaker for first Midcontinent Mini-conference on “Innovations in Stratigraphic, Biogeochemical, and Geomicrobiological Studies,” July 14-15, 2000, Department of Geological Sciences, Northwestern University; workshop supported by NU Environmental Council.

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