# **CURRICULUM VITAE**

# Bradley B. Sageman

Professor and Department Chair Department of Earth and Planetary Sciences Northwestern University

## RESEARCH INTERESTS

Stratigraphy – sequence stratigraphy, cyclostratigraphy, chemostratigraphy

Molluscan paleoecology

Sedimentary geochemistry/biogeochemistry

Paleoclimatology/paleoceanography

Energy and Sustainability

#### **EDUCATION**

Ph.D. Department of Geological Sciences, 1985-1991 University of Colorado, Boulder, CO

Dissertation: Stratigraphy, carbon geochemistry, and paleobiology of the Upper Cenomanian Hartland Shale Member, Greenhorn Formation, Western Interior, U.S., 572 p.

B.Sc. Department of Biology

1975 - 1979 Denison University, Granville, OH

# PRE-DOCTORAL AWARDS, HONORS AND FELLOWSHIPS

1987-1988 Fulbright Scholarship, Institut für Geologie und Paläontologie,

Universität Tübingen, Germany

# POST-DOCTORAL AWARDS, HONORS AND FELLOWSHIPS

2016	Associated Student Government, Faculty Honor Roll		
2006	Elected Fellow, Geological Society of America		
2004	Hewlett Award for Curricular Development: Incorporation of		
	HyperInteractive Teaching Technology in Undergraduate Teaching		
2001	Outstanding Paper of the Year, Journal of Sedimentary Research		
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:		
	Field Problems in Sedimentary Geology		

#### **EMPLOYMENT**

Co-Director	(2013 - )	Institute for Sustainability & Energy at Northwestern
Associate Director	(2010-13)	Initiative for Sustainability & Energy at Northwestern
Department Chair	(2005 - )	Department of Earth & Planetary Sciences
Professor	(2004 - )	Northwestern University
Associate Professor	(1998-04)	Evanston, IL
Assistant Professor	(1992-98)	
Research Associate	(1991-92)	Department of Geosciences
		Penn State University
		University Park, PA

# **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

EARTH 203 - Historical Geology

EARTH 330 - Sedimentary Geology

EARTH 331 - Field Problems in Sedimentary Geology

EARTH 340 – Paleobiology

EARTH 342 - Topics in Contemporary Energy and Climate Change

SCS 391 - Domination of the American Southwest

EARTH 450 - Advanced Topics in Sedimentary Geology:

Carbon cycle and pCO<sub>2</sub> Reconstructions Advanced Quantitative Stratigraphy

ISEN 130/230 - Climate Change & Sustainability: Political, Economic & Ethical Dimensions

SCS 370 – Environmental Field School

#### Advising History:

Selected undergraduate research advisees: who are currently...

S15-S16: T. Kukla Ph.D. candidate, Stanford U. Ph.D. candidate, UC-Berkeley W11-S13: J. Mills W11-S13: A. Mayer Ph.D. candidate, UC-Berkeley private sector employment F12- S13: R. Saywitz private sector employment W07-S08: C. Carney

S06-F06: B. Chartoff H.S. teacher

completed Ph.D. at Stanford S98-05: A. Blecha F02-S04: P. Dejtrakulwong completed Ph.D. at Stanford F99-S02: M. Williams completed M.S. at Ohio State U. completed M.S. at Northwestern F01-S02: P. Pancoskova

S97-F97: T. Huynh completed M.S. at USC

F96: C.Albrecht-Buehler completed M.S. at Northwestern F93-S95: B. Van Mooy research scientist USGS/WHOI-MIT

F97: K. Carrigan practicing physician

Graduate research advisees (or co-advisees, with lead advisor in paren.s):

F15 – : Jiuyuan Wang (PhD.) currently enrolled

F13 – : John Lazarz (w/Jacobsen; Ph.D.) currently enrolled F12 – : Matthew Jones (Ph.D.) currently enrolled F10 - : Trevor Bollman (w/vdLee; Ph.D.) currently enrolled F13 – 16: Brian Kristall (w/Hurtgen) completed Ph.D.; seeking post doc F13 –14: Maya Gomes (w/Hurtgen) completed Ph.D.; Asst. Prof., J. Hopkins U. completed Ph.D.; NU, advisor/lecturer F13–14: Rosemary Bush (w/McInerney) F13–14: Allie Baczynski (w/McInerney) completed Ph.D.; Penn State, post-doc F06 – 13: Young Ji Joo (Ph.D.) completed Ph.D.; U. Oklahoma, post-doc F05 – 11: Derek Adams (w/Hurtgen) completed Ph.D.; Exxon-Mobil Corp completed Ph.D.; post doc Smithsonian F04 – 11: Rich Barclay (w/McElwain) F01 - 08: Jason Flaum (PhD.) completed Ph.D.; Exxon-Mobil Corp. F01 – 07: Joniell Borges (w/Huh) completed Ph.D.; Chevron Corp. F01 – 07: Robert Locklair (PhD.) completed Ph.D.; Chevron Corp. F02 – 04: Petra Pancoskova completed M.S.: lab manager, NU F02 – 03: Michael Fortwengler completed M.S.; geologist-Shell Oil Co. F01 – 03: Ramya Shivaraj completed M.S.; secondary education F97 – 03: Steve Meyers completed Ph.D.; Assoc. Prof. U Wisc. F98 – F99: Shana Pimley completed M.S.; private sector W94 – S00: Adam Murphy completed Ph.D.; instructor U. Phoenix F93 - S94: Lotte Hass completed M.S., private sector W96 – S00: Josef Werne (w/Hollander) completed Ph.D., Professor, U Pittsburg W96 – S00: M. Smith (w/Hollander) completed Ph.D., private sector F92 - F93: Jonathan Rich (w/Birchfield) completed Ph.D., private sector F93 – S97: C. Gong (w/Hollander) completed Ph.D.; Exxon-Mobil Corp.

# Pre and post-doctoral advisees:

2013-14: post-doc Dorothée Husson, Ph.D., University Pierre and Marie Curie (UPMC) working on carbon sequestration and carbon mineralization under high pressure (coadvised with colleagues, S. Jacobsen and C. Bina)

1999-03: pre-doc Jiri Laurin, Fulbright Scholar, Ph.D. candidate from Charles U., Czech Republic (I served as outside member of committee); currently research scientist, Czech Academy of Sciences

1997-99: post-doc C.A. Ver Straeten, PhD., Univ. of Rochester; supported by Northwestern Environmental Council; currently research scientist, New York State Geological Survey.

Departmental Advising: F97 – 03, Director of Undergraduate Studies

#### **SERVICE**

# Northwestern University

Departmental and program offices

F05-S18: Department Chair

F00-S02: Seminar Director

F98-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

F13-15: As chair I have served ex officio on 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

# WCAS or University committee office or membership

F13 -17: Co-director, Institute for Sustainability and Energy

S10-13: Associate Director, ISEN Education and Special Projects

F09-S17: Chair, ISEN curriculum committee

W13-17: Co-chair, Sustainability Council (w/ Prof. E. Masanet)

W-S10: Co-chair, Environmental Sciences Review Committee

W14: Member, Faculty Senate Committee on Global Warming

W09-S17: Member, Advisory board for Center for Interdisciplinary Exploration & Research in Astrophysics (CIERA)

W-S11: Search Committee Member, Science/Engineering sustainability position

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

Journals: *American Journal of Science, Associate Editor* (Jan.1, 2015-2019)

Palaios (Associate Editor 96-03)NatureGeologyPaleoceanographyGSA BulletinAAPG BulletinChemical GeologyEarth & Planetary Science LettersJournal for Sedimentary ResearchPalaeogeog, Palaeoecol., & Palaeoclim.

Canadian Journal of Earth Sciences

Funding Agencies: National Science Foundation, Earth Sciences

Sedimentary Geology & Paleontology (Panel Member)

Low temperature geochemistry and geobiology American Chemical Society, Petroleum Research Fund Netherlands Organisation 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 Affliations**

Member: American Geophysical Union (AGU) Member: Geological Society of America (GSA)

Member: Geochemical Society (GS)

Member: Society for Sedimentary Geology (SEPM)

Member: International Association of Sedimentologists (IAS)

## **Professional Organizations**

Voting Member, Cretaceous Subcommittee of International Commission on Stratigraphy

# **RESEARCH FUNDING**

I have been the lead PI, or a co-PI on grant awards that total about \$3.8M in research funding; about \$1.9M of this has been awarded in direct support to my research program. The bulk of the funding has come from the National Science Foundation. 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 Institute for Sustainability and Energy at Northwestern (ISEN). Most recently I contrinuted 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; this award is not included in the numbers cited above. It will fund post doctoral scholars and graduate stduents working with faculty in our department, the Dept. of Chemistry, and the Institute for Policy Research.

Updated: November 2017