ETHAN L. GROSSMAN

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Google scholar profile: http://scholar.google.com/citations?user=CxAqDYYAAAAJ&hl=en
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EDUCATION: Ph.D. (Geochemistry), University of Southern California, 1982, Stable Isotopes in Live Benthic Foraminifera from the Southern California Borderland (Teh-Lung Ku, dissertation advisor)
B.S. (Geology; magna cum laude), State University of New York at Albany, 1976

AREA OF SPECIALIZATION:

Stable isotope geochemistry; clumped isotopes; global change and paleoclimates; river paleohydrology; biogeochemistry and geomicrobiology of aquifer systems

PROFESSIONAL ASSOCIATIONS:

American Association for the Advancement of Science (Fellow)
American Geophysical Union
European Geosciences Union
The Geochemical Society (Theme Chair for 2010 Goldschmidt Conference)
The Geological Society of America (Fellow; Associate Editor of GSA Bulletin, 1995-2003; "Exceptional Reviewer")
Sigma Xi (TAMU Awards Committee)
Society for Sedimentary Geology (SEPM) (Associate Editor, Palaios, 1998-2016)

AWARDS AND HONORS, GROSSMAN:

Recognized as a 2021 "Exceptional Reviewer" for the GSA journal Geology (https://www.geosociety.org/GSA/pubs/exceptional_reviewers.aspx)
Elected Fellow of the American Association for the Advancement of Science (2018)
Co-author of paper receiving the Smithsonian Secretary's 2017 Research Award (O'Dea et al., 2016, Science Advances)
2nd Place, Gordon I. Atwater Award for poster: Hendricks, Yancey, Flis, Flis, and Grossman, Formation of Barrel Concretions around Methane Seepage Pathways in Upper Middle Eocene Shelf Sediments, Stone City Bluff, Texas," 2012 GCAGS Convention in Austin, TX (2012)
Awarded Michel T. Halbouty Chair in Geology (2010, renewed in 2015 and 2020)
Elected Fellow of the Geological Society of America (2007)
Dean's Distinguished Achievement Award for Faculty Research, College of Geosciences (2005)
Awarded Mollie B. and Richard A. Williford Professorship (2002-2010)

New York State Earth Science Teachers Award (for academic excellence in high school Earth Science) (1972)
New York State Regents Scholarship (1972)

AWARDS AND HONORS, STUDENTS (*Grossman's students; ^Co-author of others' students):

2nd Place, Ph.D. students, Geology and Geophysics Graduate Society Symposium, Zeyang Sun* (Ph.D. student, 2024)
1st Place, Graduate Student Poster, Life on a Dynamic Planet Symposium, TAMU College of Arts & Sciences, Melanie Brewer* (MS student, 2023)
1st Place, Water Daze Poster Competition, TAMU, Melanie Brewer* (MS student, 2023)
2nd Place, MS students, Geology and Geophysics Graduate Society Symposium, Melanie Brewer* (MS student, 2023)
2nd Place, PhD students, Geology and Geophysics Graduate Society Symposium, Matthew Dorsey^ (PhD student, 2023)
2022 Best Paper Award, Department of Geology and Geophysics, Bryce Barney* (MS, 2020; current PhD student)
University-wide Association of Former Students Distinguished Graduate Student Research Award, W. Cory Beck* (M.S., 2004)
University-wide Association of Former Students Distinguished Graduate Student Research Award, Takuro Kobashi* (M.S., 2001)

PROFESSIONAL EXPERIENCE:

8/2022-2/2025	Director, Stable Isotope Geosciences Facility, TAMU
2017-present	Director, Mass Spectrometry Isotope Analyses subunit, TAMU Mass Spectrometry Collaborative Core
2016-2022	Co-Director, Stable Isotope Geosciences Facility, TAMU
2010-present	Michel T. Halbouty Chair in Geology, Dept. of Geology & Geophysics
6/2008-8/2008	Acting Deputy Director of Science Services, Integrated Ocean Drilling Program (IODP)-US Implementing Organization (USIO)
8/2007-8/2008	Acting Executive Associate Dean and Associate Dean for Research, College of Geosciences
2002-2010	Mollie B. and Richard A. Williford Professor, Dept. of Geology & Geophysics
Fall, 2001	Visiting Professor (sabbatical), Pennsylvania State University, Dept. of Geosciences and the EMS Environment Institute (climate modeling with David Pollard)
1994-present	Professor, Texas A&M University, Dept. of Geology & Geophysics
1988-94	Associate Professor, Texas A&M University, Department of Geology
1982-88	Assistant Professor, Texas A&M University, Department of Geology
1981-82	Instructor (part-time), California State University at Northridge, Department of Geosciences
1977-78	Teaching Assistant, Petrology and Oceanography, University of Southern California
1976-77, 1979-82	Research Assistant, Supervisor of Stable Isotope Laboratory, University of Southern California

Summer, 1976 Field assistant in Newfoundland drilling ophiolites with Norm Watkins (URI) and graduate student

INTERVIEWS AND PRESS COVERAGE

9/19/2024 Interview by Ray Zhong**,** climate reporter for the **NY Times** regarding paper being published in Science, A 485-million-year history of Earth's surface temperature by Judd, Tierney, et al. (https://www.nytimes.com/2024/09/19/climate/prehistoric-earth-temperatures.html)

7/31/2023 **College of Arts & Sciences News**, TAMU, Texas A&M Chemists, Geologists Bond Over NSF-Funded Study Of Clumped Isotopes (https://artsci.tamu.edu/news/2023/07/texas-aandm-chemists-geologists-bond-over-nsf-funded-study-of-clumped-isotopes.html).

2/1/2021 Interview by Jennifer Chu (**MIT Press**) regarding recent paper by Kristin Bergmann. https://news.mit.edu/2021/geologists-produce-new-timeline-earths-paleozoic-climate-changes-0201

5/7/2019 Paul Voosen, **Science Magazine**. Interviewed regarding our work on Earth temperature history stemming from Smithsonian Workshop. Quoted in article in Science Magazine (Project traces 500 million years of roller-coaster climate: Sharp temperature swings pose warning for humanity, 24May19)

10/2018 Chelsea Katz, **Bryan-College Station Eagle**. Interviewed about the Ions@Work Mass Spectrometry Symposium. Article featured in Region section (10/6/18)

1/2011 Richard Kerr, **Science Magazine**, http://news.sciencemag.org/sciencenow/2011/01/how-to-read-a-prehistoric-thermo.html.

7/2009 Free-lance **Associate Press** reporter Paul Byrne (http://www.youtube.com/watch?v=K7AGvaGyxGE&feature=channel_page)

6/2001 On carbon dioxide through time. Reporter for **German Public Radio** at the Earth System Processes meeting in Edinburgh sponsored by the Geological Society of America and Geological Society of London

4/1989 **Geotimes**, p. 19-20 in *News notes*, "Methane and ground water". Piece highlighting our work on the origin of groundwater methane in Texas published in the journal Geology.

12/1988 **Bryan-College Station Eagle**, article entitled "Researchers find bacterial causes methane in Texas groundwater"

TEACHING, ADVISING, AND ADMINSTRATIVE RESPONSIBILITIES

Courses since 1999 (Acting Associate Dean, Fall 07-Spring 08, no teaching) (*New courses developed)

CHEM 685. Molecular View of the Environment, Information Technology in Science (ITS) Center for Teaching and Learning, TAMU (course for high school science teachers) (Summer, 2003, 2004, 2005, 2006)

GEOL 101 (4). Principles of Geology (4 credits) (Fall 99, Spring 01, Spring 02, Fall 04, Spring 06, Fall 09, Fall 12)

GEOL 311 (1). Principles of Geologic Writing (Spring 10, Fall 11, Fall 12, Fall 13, Spring 14)

GEOL 351* (3) Geochemistry (Fall 21, Fall 22, Fall 23)
GEOL 450 (3). Geology Senior Projects (Spring 19, Fall 19, Spring 20, Fall 20, Spring 21, Spring 23, Fall 24, Spring 25)
GEOL 451 (3). Introduction to Geochemistry (Spring 99; Spring 00, Spring 03, Spring 16)
GEOL 485 (3). Research (Dustin Collier, Fall 98; Graciella Lake, Fall 99; Jordan Noret, Undergraduate Research Scholar, Fall 08; Stephanie Wood, Undergraduate Research Scholar, Spring 11; Corbin McCollock, Timothy Wuenscher, Spring 16)
GEOL 648* (3). Stable Isotope Geology (3; Spring 99, Fall 00, Spring 02, Fall 03, Spring 05, Spring 07, Spring 09, Fall 10, Spring 12, Fall 13, Spring 17, Fall 18, Spring 20, Spring 22, Spring 24)
GEOL 658* (3). Earth Systems through Deep Time (3; lead in team taught course; Fall 02, Fall 04, Fall, 06, Fall 08, Spring 10, Fall 11, Spring 13, Fall 14, Fall 16, Spring 18, Fall 19, Fall 23)
GEOL 681. Seminar (1). Climate Transitions in the Phanerozoic (with Lucien Nana Yobo and Shuang Zhang, Spring 24)
GEOL 681. Seminar (1). Clumped Isotopes (Fall 23)
GEOL 681. Seminar (1). Clumped Isotope Geochemistry (Fall 17)
GEOL 681. Seminar (1). Clumped Isotope Geochemistry (Fall 17)
GEOL 681. Seminar (1). Geologic, Biologic, Paleoceanographic, and Climatic Evolution of Tropical America (Spring 15)
GEOL 681. Seminar (1). Stable Isotope Methods and Research (Fall 12)
GEOL 681. Seminar (1). Stable Isotope Geosciences (Spring 10)
GEOL 681. Seminar (1). Advanced Stable Isotope Methods (Fall 05)
GEOL 681. Seminar (1). CO_2 and Global Warming: The Geologic Perspective (Fall 00)
GEOL 681. Seminar (1). Microbial Geochemistry and Microbiology of Geologic Systems (Fall 97)
GEOL 685. Directed Studies (Fall 03)
GEOL 685* (Geochemistry; Fall 21)
GEOL 689* (3). Special Topics in Geochemical Characterization of Natural Systems (3; team taught; Fall, 04, Spring 07)
GEOS 105* (3). Introduction to Environmental Geoscience (3) (Team taught; Chaired committee that organized course) (Fall 02, Spring 03, Fall 03, Fall 04)
GEOS 405 (3) Environmental Geoscience (Fall 14, Spring 15 [Panama research trip], Spring 16 [Panama research trip], Spring 20, Fall 20, Spring 23, Spring 2025)
GEOS 442/GEOG 642 (3) Past Climates (Spring 21, Spring 23)

Other Courses (Prior to 1999) (*New courses developed)

GEOL 103 (3). Introductory Geology (approximate title; no lab)
GEOL 104 (3). Physical Geology
GEOL 209 (3). Introduction to Field Methods
GEOL 642* (3). Chemical and Isotopic Evolution of Groundwater (3)
GEOL 681 (1). Seminar (varied)

Field Trips with Students

Multiple short trips with GEOL 450 and GEOS 405 research teams as part of student-driven research projects.

Class field trip to Waco Shale Pit to collect fossils for GEOL 450 research project (3/22/19)

Class field trip to Bocas del Toro and Panama City, Panama as part of independent research projects by GEOS 405 students (3/7/16-3/15/16)

Class field trip to Bocas del Toro and Panama City, Panama as part of independent research projects by GEOS 405 students (3/13/15-3/24/15).

Multiple GEOL 101 field trips to Lake Somerville Spillway section (stratigraphy exercise) and Eocene section at the Highway 21 and the Brazos River (fossil exercise) prior to 2013.

PRESENT AND FORMER STUDENTS AND POST-DOCS (*CURRENT)

#Association of Former Students Distinguished Graduate Student Research Award

Ph.D. (12):

Bryce Barney*

Anindito Satrio Baskoro (’22, Beicip-Franlab Asia)

Queen Kalu*

Horng-sheng Mii ('96, Professor and Vice President of General Affairs, National Taiwan Normal University)

Christopher Romanek ('91, Research Professor, Furman University [formerly Associate Professor, University of Georgia, and University of Kentucky])

Joyanto Routh ('98, Professor, Linköping University, Sweden)

Josiah Strauss (’10, Neptronic Corp., Louisville, Colorado)

Zeyang Sun (’24, post-doc, TAMU)

Kai Tao (’12)

Alexander van Plantinga (’15, U.S. Consumer Product Safety Commission)

Ximeng Wang*

Chuanlun Zhang ('94, Chair Professor, Department of Ocean Science and Engineering, Southern University of Science and Technology)

M.S. (20): David Adlis ('86, The Aerospace Corporation), Bryce Barney (’20, Ph.D. student, TAMU), W. Cory Beck (’04, Chesapeake Energy^), Keith Bowers ('86; Bowers Management Analytics), Melanie Brewer (’24, TAMU^), Judy Canova ('88, South Carolina Department of Health and Environmental Control), B. Keith Coffman ('88, Conoco-Philips), Meagan Depugh (‘19, Adjunct Professor, San Jacinto College), Ryan Flake (’11, JLL Technologies), D. Keith Gentry ('06, Surge Energy America), Lauren Graniero (’14, Visiting Assistant Professor, UNC Wilmington), David Katz ('97, Phillips Petroleum^), Takuro Kobashi (’01, Ph.D. Scripps Institution of Oceanography, Associate Professor, Tohoku University), Horng-sheng Mii ('92, National Taiwan Normal University), Howard “Nate” Naylor (’18, SM Energy), Andrew Roark (’15, Chevron), DS (’20), Jeannette Schlichenmeyer ('96, Terracon), Brock Shenton (’14, Exxon-Mobil), Huayu Wang ('98, Emerson Process Management), Chuanlun Zhang ('89, Southern University of Science and Technology, China)

^last known employer

Undergraduate theses (2): Jordan Noret (BS '08, Ph.D., SMU; Geologist, Scout Energy Partners), Stephanie Noonan (Wood) (BS '11, MS, University of Texas, Oxy Offshore Gulf of Mexico)

Post-docs/Visiting Scientists (8): Peter Bruckschen ('97, formerly of Ruhr University), William Defliese '17-19, Lecturer, University of Queensland), Blanca Figuerola ('18-19; joint with Aaron O'Dea, Institute of Marine Sciences (ICM-CSIC), Pg. Marítim de la Barceloneta), D. Jeffrey Over ('91-92, Professor, SUNY College at Geneseo), Paola Rachello-Denmon ('15-16), John Robbins ('11-13, Southern Methodist University), Hideki Wada ('87, Shizuoka University), Yasheng Wu ('02-03, Chinese Academy of Sciences, Beijing)

Visiting students (4): Can Cui ('19, Nanjing Institute of Geology and Paleontology), Micha Horacek ('03, formerly of Erlangen University), Wenkun Qie ('11, China University of Geosciences, Wuhan), Jackson White ('24, University of Queensland)

SYNERGISTIC AND OUTREACH ACTIVITIES (Innovations in teaching, database development, editorships, invited conference talks, symposia organized, etc.):

Lead for 1st (and only) relational database for stable isotope data for fossils and microfossils, StabisoDB (https://stabisodb.org), launched at the October 2020 Geological Society of America meeting. This database is populated with oxygen and carbon isotope data, but boron, sulfur, strontium, and carbonate clumped-isotope data will be added over the next year.

Invited speaker, Special Session: A Remarkable Legacy of Advancements in Stable Isotope Geochemistry: Session in honor of Karlis Muehlenbachs, Goldschmidt Conference, Chicago (8/24)

Citationist, Clarke Medal, Goldschmidt Conference, Honolulu (7/22)

Mentor, Goldschmidt Conference. In-person breakfast meetings with two students at conference, and online meeting with one student (7/22).

Presentation and demonstration, Mussels-on-the-Brazos, Homeschool History Day, Washington-on-the-Brazos State Historical Site (5/22).

Guest Editor (one article), Proceedings of the National Academy of Sciences (2021)

Co-Organizer, Ions @ Work Symposium: Texas A&M University's Mass Spectrometry Core Facility. College Station, 2/20.

Invited "Opposition" committee member for dissertation defense of Thomas Leutert, University of Bergen (1/20)

Review panelist, National Science Foundation, Geobiology and Low Temperature Geochemistry (11/19)

College of Geosciences Coordinator and Presenter (Heavy oxygen, fossils, and paleotemperatures; Why our drinking water tastes like Alka-Seltzer), Chemistry Week Open House (10/19)

Organized session, Carboniferous and Permian Palaeoceanography, Plate Tectonics, and the Evolution of Relief, 19th international Congress on the Carboniferous and Permian, Cologne, Germany (7/19).

Invited short course, Paleotemperature Reconstruction in Deep Time, Nanjing Institute of Geology and Palaeontology, Chinese Academy of Sciences (Three 3-hour sessions with Michael Joachimski; 6/19)

Invited speaker, PP11F: Toward a Phanerozoic History of Earth's Surface Temperature, American Geophysical Union Meeting, Washington, DC (12/18).
Invited speaker, T118. Paleoenvironmental Reconstructions from Biogenic Carbonates I. Geological Society of America Meeting, Indianapolis (11/18)
College of Geosciences Coordinator and Presenter (Why our drinking water tastes like Alka-Seltzer), Chemistry Week Open House (10/18)
Co-Organizer, Ions @ Work Symposium: Texas A&M University's Mass Spectrometry Core Facility. College Station, 10/5/18.
Invited speaker, Earth's Temperature History Research Workshop, Dept. of Paleobiology, Smithsonian National Museum of Natural History, Washington, DC (invited, 3/18)
College of Geosciences Coordinator and Presenter (Why our drinking water tastes like Alka-Seltzer), Chemistry Week Open House (10/17)
Co-convener: Session 14d. Phanerozoic Mass Extinctions and the Biogeochemical Co-evolution of the Earth-Ocean System. Goldschmidt Conference, Paris, Lau, Zhang, Henkes, Finnegan, Grossman, Payne (our session was combined with other sessions) (8/17).
Invited speaker: T148. Cenozoic Evolution of Tropical Biota and Environments: A session honoring the contributions of Ann F. Budd, 2015 GSA Meeting (11/15)
Co-organizer and speaker of Panama Paleontology Project Synthesis Analysis Workshop, National Museum of Natural History, Washington, DC (10/15)
Invited keynote speaker, Sclerochronology: the future, 3rd International Sclerochronology Conference, Caenarfon, Wales (5/13)
Invited speaker, Applying Oxygen Isotope Paleothermometry in Deep Time at the Paleontology Society short course on Reconstructing Earth's Deep-Time Climate, 2012 GSA Meeting.
Associate Editor, Palaios (Journal of the Society for Sedimentary Geology) (10/98 to 12/16)
Invited speaker, Marine Time Series Research Group Colloquium, Smithsonian Tropical Research Institute, Bocas del Toro, Panama (9/11).
Co-organizer (E.L. Grossman, M.M. Joachimski, and H-S. Mii), Theme Session on Paleotemperature, Paleocirculation, and Chemistry of Carboniferous and Permian Oceans**,** XVII Intl. Congress on the Carboniferous and Permian, Perth, Australia (7/11)
Co-chair, Reconstruction of Paleoclimate Theme, 2010 Goldschmidt Conference Organizing Committee (2009-10)
Corresponding member, IUGS Subcommission on Carboniferous Stratigraphy (2006-present)
Invited speaker, 1st International Sclerochronology Conference, St. Petersburg, FL (7/07)
Invited plenary speaker, XVI Intl. Congress on the Carboniferous and Permian, Nanjing, China (6/07)
Co-organizer (E.L. Grossman and H-S. Mii), Theme Session on Isotopic Geochemistry and Geobiology in the Permo-Carboniferous, XVI Intl. Congress on the Carboniferous and Permian, Nanjing, China (6/07)
Member, Internal Coordinating Committee, NSF-funded CHRONOS Project (11/04 - 2006)
Steering Committee and speaker, NSF-sponsored workshop on Environmental Proxies, San Francisco ("Geoinformatics: What emerging IT systems can do for you") (12/05)
Participant, Cyberinfrastructure for Scientific Ocean Drilling and Related Geoscience Programs, JOI-sponsored, College Station, TX (11/05)
Participant, CHRONOS Strategic Planning meeting, Ames, IA (9/05)

Co-organizer (G.S. Soreghan, E.L. Grossman, J.M. McArthur), Theme Session, GeoSystems and CHRONOS: Probing Earth's Deep-Time Climate and Linked Systems, Earth System Processes II, Calgary, Canada (8/05)

Participant, CHRONOS Investigators meeting, Chicago, IL (8/05)

Participant, CHRONOS Project (responsible for sedimentary geochemistry database and tools) (8/02 – 12/06)

Review panelist, National Science Foundation, Geology and Paleontology, Geobiology and Environmental Geochemistry (2002 - 2005)

Invited speaker, CHRONOS Mesozoic-Cenozoic Paleoceanography and Paleogeography Workshop: University of South Florida, St. Petersburg (10/04)

Invited speaker, GeoSystems Workshop, Arlington, VA ("Geochemical Approaches for Characterizing Deep-Time Climate and Global Change: Opportunities and Obstacles") (9/04)

Invited speaker, CHRONOS Investigator Retreat, Ames, IA (8/04)

Co-organizer (E. Grossman, J. McArthur, and C. Cervato) and speaker, CHRONOS–Geochemical Cycles Workshop, San Antonio (NSF supported) (6/04)

Invited participant, Workshop on Linking Information Systems in Marine and Terrestrial Geosciences: Sediment Geochemistry, Washington, DC (6/04).

Associate Editor, Bulletin of the Geological Society of America (1/95-12/03)

Invited participant at Calibration of the Geological Timescale Workshop, National Museum of Natural History, Washington, DC, 10/3-10/4/03.

Invited participant, CHRONOS Investigator Retreat, Ames, IA (8/03)

Invited to Editorial Board of Palaeogeography, Palaeoclimatology, Palaeoecology (Elsevier). Declined because of other commitments (7/03)

Invited participant, Geochemical Earth Reference Model (GERM) Workshop, Lyon (4/03).

Invited participant, Chronostratigraphic Information System Workshop, College Park, Maryland, sponsored by NSF, organized by AGI (8/02).

Invited speaker, Biostratigraphic Basing for Stage Boundaries of Carboniferous System in Eastern Europe, Ekaterinburg, Russia (8/02)

Invited speaker, Paleoceanography of Warm and Cold Climates during the Cenozoic Cooling Trend, AGU Ocean Sciences Meeting, Honolulu (2/02)

Co-organizer (E. Grossman, P. McA. Rees), Theme Session, Global Change in the Late Paleozoic, Earth System Processes, Geological Society of America-Geological Society of London Joint Meeting, Edinburgh, Scotland (6/01)

Co-organizer (M. Engel, E. Grossman), Special session, Secular variations in the stable isotope composition of organic matter and carbonates, Goldschmidt Conference, Roanoke, VA (5/01)

Participant, International Global Correlation Programme (IGCP) Project 386, Response of the Ocean/Atmosphere System to Past Global Changes (1997-2001)

Review panelist, NSF Life in Extreme Environments (LExEn) (6/00)

Interim Member, Council of Principal Investigators, Texas A&M University (10/98 to 7/99)

Review panelist, Department of Energy Environmental Management Science Program (EMSP) (6/99)

Invited speaker, IGCP Project 386 special session, Goldschmidt Conference, Toulouse, France (9/98)

Invited speaker, Special Session on the Mississippian of North America and the World, Canadian Society of Petroleum Geologists-SEPM Joint meeting, Calgary (6/97)

Review panelist, Department of Energy Natural and Accelerated Bioremediation Research (NABIR) Program (5/97)
Invited speaker, Special session on Microbial Processes in Subsurface Environments, AGU Spring Meeting, San Francisco (12/96)
Invited poster, Special session on Isotopic Tracers of Hydrologic and Biogeochemical Processes, AGU Spring Meeting, Baltimore (5/94).
Invited speaker, DOE Subsurface Science Program (Origins Subprogram) Investigators Meeting, Annapolis (12/93).
Invited co-chair, co-organizer, and keynote speaker of a special session on Pangean Ocean Geochemistry, Isotopes and Paleoceanography; Canadian Society of Petroleum Geologists/Global Sedimentary Geology Program meeting, Calgary (8/93).
Invited plenary speaker, International Union of Geological Sciences Global Sedimentary Geology Program Workshop for Project Pangea, Lawrence, KS (5/92).
Invited "Online" contribution, Isotope studies of Paleozoic paleoceanography–opportunities and pitfalls: Palaios, v. 7, p. 241-243 (1992)
Invited speaker, DOE Deep Subsurface Microbiology Program Workshop on Origin of Deep Subsurface Microbes, Lewes, DE (10/91).
Invited speaker, AGU Chapman Conference on Continental Isotopic Indicators of Climate in Jackson Hole, WY (6/91).
Organizer, Geochemical Society Symposium: "Oxygen and carbon isotopes in Paleozoic and early Mesozoic marine sediments: Toward a global isotope stratigraphy", GSA meeting, Dallas, TX (10/90).
Invited speaker, symposium: "Middle and Late Pennsylvanian Chronostratigraphic Boundaries in North-Central Texas", South-Central GSA meeting, Arlington, TX (3/89).
Invited speaker, special session on Microbial Impacts on Groundwater Geochemistry at the 1988 Fall AGU (12/88).
Invited speaker, Fifth International Symposium on Biomineralization: "Evolution of Ocean Chemistry and its Significance for Biomineralization", Arlington, TX (5/86).
Invited speaker, Conference on Biomineralization Processes and the Fossil Record, Warrington, VA (4/85).

SELECT INTERNAL SERVICE

Director, Stable Isotope Geosciences Facility, TAMU (2022-25)
Member and former Chair, Tenure and Promotion Committee, Department of Geology and Geophysics (Member 1994-2001, Chair 2001-2007, Member 2012-2015, 2019-2024)
Member, Awards Committee, Department of Geology and Geophysics (2021-present)
Co-Director, Stable Isotope Geosciences Facility, TAMU (2016-2022)
Chair, Professional Development Review Committee (#2; Post-tenure review) (member, 2021-22; chair, 2022-present)
Chair, Professional Development Review Committee (#1; Post-tenure review) (2020-present)
Chair, Review Committee, Center for Geospatial Science, Applications & Technology (GeoSAT), College of Geosciences (2021-22)
Member, Review Committee, Center for Atmospheric Chemistry and the Environment, College of Geosciences (2021)

Member, Environmental Programs Advisory Committee, College of Geosciences (circa 2000-02, 2007-2010, 2014-17, 2020-22)
Subunit Director, Mass Spectrometry Collaborative Core Steering Committee, TAMU (2016-2023)
Chair (unofficial), GeoBio Mass Spectrometry Group, TAMU (2016-22). Lead in negotiating $1.5M purchase of 7 mass spectrometers for three facilities and two colleges.
Member (2020-22) and Executive Committee (2021-22), Council of Principle Investigators, TAMU
Member, Review Committee, Geochemical and Environmental Research Group (GERG), College of Geosciences (2019-20)
Chair (*de facto*), Search Committee, Director of Environmental Programs in Geosciences, CLGE (2017)
Member and Secretary, College of Geosciences Faculty Advisory Committee (2014-16)
Member, Paleontology Search Committee, Department of Geology & Geophysics (2016-17)
Chair, Chairs/Professorships Committee, Department of Geology & Geophysics (2012-15)
Member, Review Committee, Geochemical and Environmental Research Group (GERG), College of Geosciences (2011)
Member, Sigma Xi Distinguished Scientist Awards Committee, TAMU (2009-2011)
Chair, Organization of Committee, GEOS 101
Member, Organizing Committee, Environmental Programs in Geosciences, College of Geosciences (circa 2000)
Member, Advisory Council, Texas Center for Climate Studies, TAMU (1997-2002)
Member, Sigma Xi Awards Committee, TAMU (97-2000)
Member, Council of Principle Investigators, TAMU (circa 1992-94)

RECENT INVITED DEPARTMENTAL AND PROGRAM TALKS (2000 to present)

Department of Geosciences, Texas Tech University (3/25)
Department of Civil and Environmental Engineering, Texas A&M University (9/24)
Department of Geology and Geophysics, Texas A&M University (9/23)
Department of Geology and Geophysics, Texas A&M University (9/22)
Department of Earth Science, University of Bergen, Norway (1/20)
Department of Earth Science, Nanjing University, China (6/19)
Nanjing Institute of Geology and Palaeontology, Chinese Academy of Sciences (3-day short course with Michael Joachimski; 6/19)
Geo-Bio Mass Spectrometry Group, Texas A&M University (4/19)
Ions@Work Mass Spectrometry Symposium, Texas A&M University (10/18)
Carbonate Group, Chevron (4/17)
Geo-Bio Mass Spectrometry Group, Texas A&M University (3/17)
Department of Earth, Planetary, and Space Sciences, UCLA (11/16)
Geology and Planetary Sciences, Geochemistry Group, Caltech (8/16)
National Taiwan Normal University (7/16, two talks)
Department of Geological Sciences, UT San Antonio (10/15)
Department of Geology and Geophysics, Texas A&M University (10/15)
Baylor University (2/10)
Southern Methodist University (10/09)
Smithsonian Tropical Research Institute, Panama (7/09)
University of Cincinnati (4/08)

University of Texas at Arlington (4/08)
University of Arkansas (11/06)
Colorado School of Mines (9/05)
Information Technology and Science Center, TAMU (talk for High School science teachers; 7/05)
Department of Earth and Atmospheric Sciences, University at Albany (4/05)
Texas A&M University, Department of Geology and Geophysics (3/04)
U.S. Geological Survey, Reston, VA (12/01)
Department of Geosciences, Pennsylvania State University (12/01)
Department of Geosciences, Pennsylvania State University (10/01)
Institute of Coastal and Marine Studies, Rutgers University (10/01)
Savannah River Ecology Laboratory, University of Georgia (1/01)
Department of Geology, University of Georgia (1/01)
Southern Methodist University (two talks; 4/00)

GRANTS (total ≈ $6.2 million; $4.8 million as Project Director)

Targeted Proposal Teams (TPT), Texas A&M University, Arsenic sources and its mobilization from sediments carried by the Brahmaputra River. 4/1/25-3/31/26, Peter Knappett, Garrett McKay, et al. (11 co-investigators), $45,000.

National Science Foundation (EAR-2241039) Into the icehouse: Dramatic changes at the Devonian-Mississippian Climate Transition (DMCT), 3/23-2/26. **Ethan L. Grossman**, Lucien Nana Yobo, and Shuang Zhang (OCNG), $586,098 (~$267,500 to ELG)

National Science Foundation (EAR-1915647). Clumped isotope reordering kinetics in carbonate minerals: The key to accurate ocean paleotemperatures and basin thermal histories, 7/19-1/23, **Ethan L. Grossman**, Sarbajit Banerjee (CHEM), $340,620 ($290,000 for ELG).

Research Development Fund – Recurring Funds, TAMU, Proposal for Research Development Fund –Recurring Funds, 9/1/19-8/31/24, **Grossman**, Roark, Slowey, Zhang, $98,251.

Seed Grants for Water Research, Texas A&M Engineering Experiment Station and the College of Engineering. Development of a Low-cost Compact In-water Isotope Gas Sensing Instrument Deployable on Autonomous or Remote-Operated Underwater Vehicles, 9/17-8/18, Han, Lin, Roark, and **Grossman**, $100,000 ($10,000 for ELG).

Mass Spectrometry Collaborative Core Steering Committee Proposal, Mass Spectrometry Isotope Analyses Subunit, Mass Spectrometry for Geosphere and Biosphere Exploration, TAMUS Research Development Fund, **Grossman,** Maupin, Roark, Slowey, Zhang, Boutton, Hyodo, West, Fitzsimmons, Marcantonio, Miller, Roark, Romero, Thomas, 4/2017-3/2018 (CLGE ~$400,000).

SENACYT (Secretaría Nacional de Ciencia, Tecnología e Innovación), Passport to the Caribbean past: Historical ecology of microgastropods, A. O'Dea, **E. Grossman**, J. Todd, F. Rodriguez, 3/1/17-2/28/19, $118,053 (TAMU ~$5,000).

TAMUS Research Development Fund, Stable Isotope Partnership for Ecology, Environment, and Energy Research (SIPEEER), **E.L. Grossman,** J. Vogel, E.B. Roark, T. Boutton, N. Slowey, J. West, A. Hyodo, co-PIs, 8/1/2016-7/31/2020, $1,040,000 (SIGF $507,506).

College of Geosciences, TAMU, Enhancing Environmental and Biogeochemistry Research Experiences thru Field- and Laboratory-based Research Projects, E.B. Roark, **E.L. Grossman**, N. Slowey, co-PIs, 2015-17, $45,000.

National Science Foundation (EAR-1325683). Elements of extinction: Dissecting the role of environmental change in the delayed Caribbean extinction with stable isotopes and trace elements. **E.L. Grossman**, and A. O'Dea (Smithsonian Tropical Research Institute), co-PIs, 9/1/13-8/31/16, $290,714 (TAMU $246,371).

National Science Foundation (EAR-1226918). Constraining rates of C-O bond reordering in biogenic calcite: Implications for clumped isotope thermometry. B. Passey (Johns Hopkins University), **E. L. Grossman**, A. Pérez-Huerta (U. Alabama), 9/1/12-8/31/15, $274,879 (TAMU $71,048).

National Science Foundation (EAR-0821455). MRI: Acquisition of a High Resolution Inductively Coupled Plasma Mass Spectrometer for Earth and Environmental Science Research at Texas A&M University. F. Marcantonio, **E.L. Grossman**, B.V. Miller, M.W. Schmidt, D.J. Thomas, 8/1/08-7/31/11, $450,000.

National Science Foundation (EAR-0643309). Carboniferous chemostratigraphy: Do epicontinental seas reflect global ocean conditions? D. Thomas, **E. Grossman,** B. Miller, T. Olszewski, T. Yancey, 1/1/08-12/31/13, $290,801.

Texas Higher Education Coordinating Board (Advanced Research Program (010366-0053-2007). Stable isotopes of mollusk shells as proxies for river discharge and hypoxia on the Texas shelf. **E.L. Grossman**, 5/15/08-5/14/10, $101,924.

Devon Energy Corporation. The Wilcox Study Group - a research project to research the Paleocene-Eocene Wilcox Group strata in the outcrop and shallow subsurface. T. Yancey, A. Bouma, **E. Grossman**, A. Raymond, Y-F. Sun, 9/1/07-8/30/09, $247,000.

National Science Foundation (EAR-0524285). The *CHRONOS System*: Geoinformatics for Deep-time Earth Processes, Subcontract through Iowa State University, **E. Grossman**, 8/1/05-8/31/08, $35,000 (C. Cervato, PI with 7 subcontractors; total = $1.1M).

National Science Foundation (EAR-03152216). CHRONOS Network for Earth System History: Development of Integrated Databases, Portals and Toolkits, Subcontract through Iowa State University, **E. Grossman**, 8/1/03-7/31/07, $50,194 (C. Cervato, PI with 14 co-PIs; total = $1.7M) (Also received $35,000 to organize CHRONOS's Geochemical Cycles Workshop).

National Science Foundation (EAR-0321278). MRI: Acquisition of Stable Isotope Facilities for Geologic Research at Texas A&M University **E. Grossman**, 8/15/03 - 7/31/05, $252,907.

National Science Foundation (EAR-0126311). Collaborative Research: Constraining Tertiary temperatures, salinities, and ocean chemistry: An isotopic and trace-metal study of serially-sampled mollusks. **E. Grossman**, Y. Rosenthal, and C. Lear, 1/1/02-12/31/05, $79,005 (TAMU; Total = $132,943).

National Science Foundation (EAR-0003596). Constraining Late Paleozoic climate, CO2 levels, and ice sheet volumes: Integration of oxygen isotopes with climate and ice sheet models, 5/15/01-1/31/04, $80,400, **E. Grossman** and W. Hyde.

Interdisciplinary Research Initiatives, TAMU. Social status, diet, and health of ancient Maya at Tikal, Guatemala, 9/98-8/99, $24,318, L. Wright and **E. Grossman**.

U.S. Geological Survey. Geochemical and microbiological influences on terminal electron accepting processes and its relation to the biodegradation of pollutants in the subsurface: A study of an aquifer contaminated by landfill leachate, 9/97-2/2001, $86,278, **E. Grossman** and L. Cifuentes, TAMU PIs, with J. Suflita (OU) and G. Breit (USGS).

TARP. Texas Advanced Research Program (010366-199). Geochemistry of Sedimentary and Dissolved Organic Matter in Aquifer Systems: Relation to Microbial Activity, 1/96-8/98, $87,627, **E. Grossman,** P.I.

Department of Energy, Subsurface Science Program (DE-FGO3-93ER61636). The microbial methane cycle in subsurface sediments: Its role in microbial survival (renewal), 7/96-8/97, $119,652, **E. Grossman,** P.I., J. Ammerman, co-P.I.

Department of Energy, Subsurface Science Program (DE-FGO3-93ER61636). Supplement to: The microbial methane cycle in subsurface sediments: Its role in microbial survival, 4/95-9/96, $74,159, **E. Grossman,** P.I., J. Ammerman, co-P.I.

National Science Foundation (EAR-9316937). Acquisition of an automated carbonate reaction system for a Finnigan MAT 251 mass spectrometer at Texas A&M University, 8/94-7/96, $35,000, **E. Grossman,** PI, and N. Slowey, co-P.I.

Battelle Pacific Northwest Laboratory. Field sampling budget and pilot study for: "Microbial methane cycle in subsurface sediments" (DOE project), 10/93-9/95, $44,924, **E. Grossman**, P.I., J. Ammerman, and J. Suflita, co-P.I.'s.

National Science Foundation (EAR-9304815). Stable Isotope Record for Global and Regional Change in the Late Paleozoic, 7/93-6/95, $119,556, **E. Grossman** and T. Yancey, co-P.I.'s.

Department of Energy, Subsurface Science Program (DE-FGO3-93ER61636). The microbial methane cycle in subsurface sediments: Its role in microbial survival, 7/93-6/96, $411,321, **E. Grossman,** P.I., J. Ammerman, and J. Suflita, co-P.I.'s.

National Science Foundation (EAR-9018325). Carbon isotopic fractionation in magnesian calcite: Effects of precipitation rate and Mg content, National Science Foundation, 1/91-8/92, $28,401, **E. Grossman**, P.I.

National Science Foundation (EAR-9018378). Request for support for international participation in the Geochemical Society Symposium on Global Isotope Stratigraphy, 8/90-6/92, $2,400, **E. Grossman**, P.I.

National Science Foundation (EAR-9005030). Isotopic studies of Late Paleozoic cyclical sedimentary deposits, National Science Foundation, 7/90-6/92, $110,000, **E. Grossman** and T. Yancey, co-P.I.'s.

TARP. Texas Advanced Research Program (010366-086). Methanogenic bacteria in deep aquifers: distribution and impact on groundwater chemistry, 1/90-12/91, $100,000, **E. Grossman** and J. Ammerman, co-P.I.'s.

National Science Foundation Research Experiences for Undergraduates (REU) supplement to EAR-8720886. Isotopic study of organic and inorganic carbon from Pennsylvanian shales, National Science Foundation, 1/90-7/90, $3,969, **E. Grossman** and T. Yancey, co-P.I.'s.

SLERO. Reservoir mineralogy, texture, and cementation: Controls on porosity, State Lands Energy Resource Optimization Center, 10/89-9/93, $180,042 (estimate), T. Tieh, W. Ahr, **E. Grossman**, and S. Dorobek, Investigators, submitted summer, 1989, awarded, 8/89.

Kansas Geological Survey. Determining isotope stratigraphy from brachiopod shells in Late Pennsylvanian cyclic deposits in Kansas, T.E. Yancey and **E.L. Grossman**, P.I.'s, 7/89-6/90, $863.

ERAP. Energy Recovery Applications Program, State of Texas. Reservoir Characterization of the Clearfork Dolomite, Dollarhide Field, West Texas, S. Dorobek, **E.L. Grossman**, and T. Tieh, P.I.'s, 2/89-1/93, $95,700.

National Science Foundation (EAR-8720886). Isotopic studies of Late Paleozoic cyclical sedimentary deposits, **E.L. Grossman** and T.E. Yancey, P.I.'s, 2/87-6/90, $98,000.

Texas Water Resources Research Enhancement Program. Isotopic study of gaseous hydrocarbons in Texas ground water, **E.L. Grossman**, P.I., 1/87-6/88, $32,000.

Texas A&M International Enhancement Grant. Isotopic stratigraphy from fossils in late Carboniferous shales, **E.L. Grossman**, P.I., 3/86, $700.

National Science Foundation (EAR-8511187). Isotopic equilibrium in calcite and aragonite: inorganic precipitate studies, **E.L. Grossman**, P.I., J.W. Morse, co-P.I., 11/85-10/87, $75,482.

Center for Energy and Mineral Resources, Texas A&M University. Origin and factors controlling distribution of gaseous hydrocarbons in the Sparta Aquifer, **E.L. Grossman** and S.J. Fritz, co-P.I.'s, 9/84-8/85 and 9/85-8/86, $10,400 and $7000.

Petroleum Research Fund--American Chemical Society (15035-G2). Isotopic stratigraphy of calcareous nannofossils and foraminifera, **E.L. Grossman**, P.I., 9/83-9/85, $15,000.

Texas A&M University Faculty-Staff Mini-Grant. Stable isotopic study of diagenesis of carbonate rocks, **E.L. Grossman**, P.I., 11/82, $450.

National Science Foundation (OCE-8111948). Studies of stable isotopes in live benthic foraminifera, T-L. Ku, P.I., **E.L. Grossman**, co-investigator, 9/81-8/82, $42,000.

National Science Foundation (OCE-7815937). Oxygen and carbon isotopic composition on live benthic foraminifera from California Borderland: Temperature scales, T-L. Ku, P.I., **E.L. Grossman**, co-investigator, 9/78-8/80, $62,888

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PUBLICATIONS, REFEREED (*Student author; #post-doc author, ^corresponding author if not 1st author or second author behind student) (Citation profile: Web of Science (18MAR25) 6,635 (excluding six book chapters and other publications), h-index 31; Google Scholar (18MAR25) 10,736, h-index 44)

Chrpa, M., Raymond, A., Lamb, W., Laya, J.C., **Grossman, E.L.,** Thomka, J., and Pigg, K., 2025, Echinoderm archive of ancient seawater Mg/Ca from the western Late Paleozoic Midcontinent Sea, GSA Bull. (submitted 11/23/24).

Baskoro*, A.S., Ganguly, E., Yu, A., Misra, S., and **Grossman, E. L**., 2023, Basin-wide lithofacies identification using unsupervised machine learning: Applied to the unconventional Wolfcamp Play, Permian Delaware Basin. Unconventional Resources (submitted 9/1/22, in revision [moderate]).

Li., S., Shen, J., **Grossman, E.L**., and Zhang, S., 2025, Erosion-driven delayed warming and marine anoxia on the eve of the end-Permian mass extinction. Science Advances (submitted 1/24/25).

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