# ELLEN ECKELS MARTIN Professor of Geology University of Florida

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## Education

1993	Ph.D., Oceanography, Scripps Institution of Oceanography	
	University of California, San Diego	
1987	M.S., Geology, Duke University, Durham, North Carolina	
1981	B.A., Earth Science, Wesleyan University, Connecticut	

# **Employment**

2022-	Chair- Department of Geological Sciences, UF
2016 - 2020	Co-Director of the Florida Climate Institute, UF and statewide
2009-present	Full Professor- Department of Geological Sciences, UF
2001 - 2009	Associate Professor- Department of Geological Sciences, UF
1994–2001	Assistant Professor- Department of Geological Sciences, UF
1993-1994	Post-Doctoral Research Fellow- University of California, Santa Cruz
1987-1993	Research and Teaching Assistant- UCSD
1985-1987	Teaching Assistant- Duke University
1984-1985	Exploration Geologist- Harper Oil Company, Denver, Colorado
1981-1984	Exploration Geologist- Amoco Production Company, Denver, Colorado

#### **Honors and Awards**

Fellow of the American Geophysical Union (2023-)

Fellow of the Geological Society of America (2018-)

University of Florida Term Professorship (2018-2021)

Benjamin Meaker Visiting Professorship, Institute for Advanced Studies, University of Bristol, UK (March - April, 2018)

University of Florida Research Foundation (UFRF) Professor (2015-2017)

Florida Climate Institute Faculty Fellow, University of Florida (2013-2016)

Colonel Allan R. and Margaret G. Crow Term Professor (2009-2010)

Distinguished Slepecky Lecturer for Undergraduate Research, Syracuse University (2009)

Distinguished Lecturer, Consortium for Ocean Leadership (2007-2008)

Editors' Citation for Excellence in Refereeing for Paleoceanography (2004)

University of Florida Teaching Award (2000)

University of Florida Productivity Award (1999)

NSF CAREER Award (1997-2001)

NSF Earth Science Postdoctoral Research Fellowship (1993-1994)

ARCS Graduate Fellowship- Scripps Institution of Oceanography (1992-1993)

# **University Governance and Service**

- Faculty Mentor- Amy Williams and Rob Hatfield (2019-)
- Chair, search and screen committee for Climate Change position (2019-2021)

- Geological Sciences Executive Committee (2019-)
- Chair, Geological Sciences, Diversity, Equity and Inclusion Committee (2019-)
- Faculty Advisor, student-run Sustainable Ocean Alliance at UF (2019-)
- Dean's Blue Ribbon Tenure & Promotion Criteria Evaluation Panel (2019)
- Member, UF Water Institute (2018-)
- CLAS Tenure and Promotion Committee (2018-2021)
- CLAS Faculty Council (2018-2020)
- UF Quest Curriculum Committee (2018)
- Liaison, CLAS Diversity and Inclusion Steering Committee (2018-)
- Member, search and screen committee for Geochemistry position (2016-2018)
- Member, search and screen committee for FLMNH Micropaleo position (2016-2017)
- Chair, Geological Sciences Merit Review Committee (2015-2019)
- CLAS Diversity and Inclusion Steering Committee (2015- 2018)
- CLAS Nominating Committee (2014-2016)
- UF Environmental Science General Education Course Committee (2014)
- UF Graduate Council Committee review panel for PhD Mentor Awards (2013)
- Developed Climate Science Concentration with Florida Climate Institute(2012-2013
- Search Committee for CLAS Associate Dean (2012)
- Florida Climate Institute, Faculty Advisory Committee, (2012-)
- UF Graduate Council (2013-2016)
- CLAS Tenure and Promotion Committee (2011-2012)
- Member, search and screen committee for Thompson Chair Endowed Professorship, Florida Museum of Natural History (2011)
- Faculty Mentor, Andrea Dutton (2010-2019)
- CIMAS Fellow, Cooperative Institute for Marine and Atmospheric Sciences (2010-2017)
- Geological Sciences Visibility Committee (2010-2017)
- Florida Climate Institute, Steering Committee (2010-2013)
- CLAS Faculty Council (2010-2012)
- Chair, search and screen committee for Climate position (2009-2010)
- Member, search and screen committee for Geodynamics position (2007-2008)
- Member, search committee for Office Manager, Geological Sciences (2007)
- Associate Chair, Geological Sciences, University of Florida (2002 2007)
- UF Search Committee for Dean of Libraries (2006-2007)
- Chair, search committee for Program Assistant and Senior Secretary, Geol Sci (2006)
- Executive Committee for External Review, Geological Sciences (2005-2006)
- Travel Committee, College of Liberal Arts and Sciences (2004-2005)
- Laboratory host for the Annual Florida Junior Science, Engineering and Humanities Symposium (2004- 2013)
- UF Provost's General Education Foundation Courses Committee for Physical/Biological Sciences (2002-2003)
- Organizer, CLAS Graduate Women in Science Retreat (2002)
- Graduate Coordinator, Dept. of Geological Sciences, University of Florida (2001-2002)
- Member, search and screen committee for Geochemistry position, Department of Geological Sciences (2000-2001)

- Organizer, Women in Geoscience Meetings for Dept of Geological Sciences (1999-)
- Assistant Graduate Coordinator, Dept. of Geological Sciences, UF (1999 2001)
- Advisory Board of the University Center for Excellence in Teaching, (1998 2002)
- Academic Senate, University of Florida (1995-1996, 1997-1999)
- Minority Mentor- University of Florida (1997-1999)

# **Service to the Profession**

- Strategic Advisory Committee-Center for Ocean Leadership- Committee Member (2022

   2024)
- External Review- Department of Geological and Atmospheric Sciences, Iowa State University (March 2020)
- Arctic Circle Assembly, participant, Reykjavik, Iceland (Oct. 2019)
- National Science Foundation Panel- Marine Geology and Geophysics (Nov.14-16, 2017)
- Panel member and speaker for Imaging Climate Change Conference, UF, Feb. 2016
- National Science Foundation Committee of Visitors for the 2015 review of the OCE Division (June, 2016)
- National Science Foundation Infrastructure Workshop, participant, Chicago (2014)
- External Review Committee Member, University of Kentucky, Earth and Environmental Sciences (February 2013)
- Review Panel to screen applicants for the 2013 Marine Geoscience Leadership Symposium sponsored by Ocean Leadership (January 30, 2013)
- External Review Committee Member, Kent State, Dept. of Geology (October 2011)
- Science Advisory Committee for International Congress on Paleoceanography, San Diego, CA (2010)
- National Science Foundation Panel- OCE Marine Geology and Geophysics (Nov. 16-19, 2009)
- Science Advisory Committee for "Past and Present Ocean Chemistry" session, Goldschmidt Conference, Davos, Switzerland, 2009
- National Science Foundation Panel- OCE Major Instrumentation and Facilities (May 14-15, 2007)
- Congressional Visit Day with the Coalition for National Science Funding as a representative for Joint Oceanographic Institutions (September, 2007)
- U.S. Science Advisory Committee (USSAC) for Joint Oceanographic Institutionsmember (2004-2006)
- ODP (Ocean Drilling Program) Scientific Measurements Panel Member (2001-2003)
- National Science Foundation Committee of Visitors to review the Faculty Early Career Development Program (CAREER) (2001)
- Project Kaleidoscope- member (2000 -)
- National Science Foundation Panel- CAREER (Faculty Early Career Development) (2000)
- National Science Foundation POWRE (Professional Opportunities for Women in Research and Education) panel (1999)

## **Professional Affiliations**

American Geophysical Union Geological Society of American Geochemical Society
National Association of Geoscience Teachers
Association for Women Geoscientists

# **Courses Taught**

Introduction to Global Change (GLY1073)
Introduction to Oceanography (OCE1005)
Physical Geology (GLY2010)
Historical Geology (GLY2100)
Oceans and Global Climate Change (GLY3074)
Marine Geology (GLY5736)
Global Climate Change (GLY6075)
Field Geology of the Bahamas (GLY5786)
Sea Level Rise and Coastal Ecology (GLY6930)

## **Invited Talks**

- 2020: \* Significance of Ice-Loss to landscapes in the Arctic: SILA (Inuit Spirit of Sky, Wind and Weather), Part 1, Oak Hammock, Institute for Learning in Retirement, January 15, 2020.
- 2019: \* Challenges and benefits of collaborations between US and Greenlandic Researchers, Arctic Circle Assembly, Reykjavik, Iceland, October 10, 2019.
- 2018: \*Challenges in reconstructing seawater Nd and Pb isotopic records, Imperial College, London, UK, April 5, 2018.
  - \*Neglected Fluxes: Understanding the Evolution of Weathering as the Greenland Ice Sheet Retreats, School of Erath Sciences, Bristol University, UK, March 22, 2018. \*Pb isotopes as tracers if chemical weathering in glacial regions, IsoGlace workshop, Bristol University, UK, March 23, 2018.
- 2017: \* Neglected Fluxes: Understanding the Evolution of Weathering as the Greenland Ice Sheet Retreats, GEUS, Danish Geological Survey, Copenhagen, Denmark, Oct. 5, 2017.
  - \* Neglected Fluxes: Understanding the Evolution of Weathering as the Greenland Ice Sheet Retreats, Center for Permafrost, University of Copenhagen, Denmark, Oct.11.
  - \* Neglected Fluxes: Understanding the Evolution of Weathering as the Greenland Ice Sheet Retreats, Dept. of Geology, Lund University, Sweden, Oct. 17, 2017.
  - \* Understanding the Role of Ocean Circulation in Global Climate Change: Past and Future, Oak Hammock Retirement Community, Jan. 23, 2017
- 2016: \*Weathering in Greenland: Why does it matter? Marine and Coastal Sciences, Rutgers University, April 18, 2016.
  - \*Sea Level Rise and the Future of Florida, University Women's Club, UF, March, 17, 2016.
  - \*The Day After Tomorrow: Using Past Ocean Circulation to Imagine the Future, Imagining Climate Change Conference, UF, Feb. 18, 2016
  - \**Imagining Climate Change* Plenary Session of the 5<sup>th</sup> Biennial Symposium of the UF Water Institute, Feb. 17, 2016.
  - \*Weathering in Greenland: Why does it matter? Retired Faculty, UF, Harn Museum, Jan. 20, 2016
- 2015: \**Understanding ancient climate change and ice sheet retreat*, UF Coffee Talk for Contracts and Grants, March 2, 2015.

- 2014: \*Detrital sources and water mass circulation in the tropical North Atlantic during the Late Cretaceous to Paleogene, Fall Meeting AGU, San Francisco CA., Dec 15-19, 2014.
  - \*Antarctic Weathering during the Middle Miocene Climatic Optimum and Climate Transition, Goldschmidt Conference on Geochemistry, Sacramento, CA, June 12, 2014.
- 2013: \* Climate CSI: A geologist reports from Greenland's melting ice sheet, Sciencewriters 2013, Gainesville, FL, Nov. 4, 2013.
  - \*Ocean circulation and weathering: Interpreting climate feedbacks with radiogenic isotopes, Florida State University, April 8, 2013.
  - \*Ocean circulation and weathering: Interpreting climate feedbacks with radiogenic isotopes, Texas A&M, April 29, 2013.
- 2011: \* *Pb isotopes as a proxy for continental weathering*, "Assessing the history of the Greenland Ice Sheet through Ocean Drilling" workshop sponsored by the Consortium for Ocean Leadership, Corvallis OR, November 7-9, 2011.
- 2010: \* Circulation and carbon sequestration in the North Atlantic during the Late Cretaceous, Duke University, April 2, 2010.
  - \* Why so Few- Where are the women in STEM disciplines? American Association of University Women meeting, Gainesville, Oct. 9, 2010.
  - \* Why so Few- A discussion of the recent AAUW report on women in STEM disciplines, Department of Geological Sciences, UF, Oct. 28, 2010.
  - \* Why So Few- A discussion of the recent AAUW report on women in STEM disciplines, Institute for Learning in Retirement Seminar Series on Women in Science, Oak Hammock, Nov. 5, 2010.
- 2009: \* Circulation in the North Atlantic during the late Cretaceous based on Nd isotopes, Goldschmidt Conference on Geochemistry, Davos, Switzerland, June 2009.
  - \* Growth of Ice Sheets on Antarctica: Climate Change 40 million years ago, Syracuse University Slepecky Lecture, April 21, 2009.
- 2008: \* Nd isotopes across Oceanic Anoxic Event 2 (Cenomanian/Turonian) in the Northern Tropical Atlantic, University of Michigan, October 3, 2008.
  - \* Growth of Ice Sheets on Antarctica: Climate Change 40 million years ago, Miami Science Museum, September 5, 2008.
  - \* Tales from Tiny Fish teeth: Carbon sequestration in the Late Cretaceous, Vassar College, January 28, 2008.
  - \* Development of Cretaceous Oceanic Anoxic Event 2: Tales from tiny fish teeth, University of New Hampshire, May 1, 2008.
  - \* Development of Cretaceous Oceanic Anoxic Event 2: Tales from tiny fish teeth, University of Massachusetts, Amherst, May 2, 2008.
- 2007: \* Evolution of South Atlantic circulation following the opening of Drake Passage based on Nd isotopes, 9th International Congress on Paleoceanography, Shanghai, September 5, 2007.
  - \* Bottom Water Circulation and the Development of OAE2: Tales from Tiny Fish Teeth, UNC, Charlotte, October 19, 2007.
  - \* Bottom Water Circulation and the Development of OAE2: Tales from Tiny Fish Teeth, University of Kentucky, October 25, 2007.
  - \* Development of Oceanic Anoxic Event 2 in the Cretaceous Based on Nd isotopes from Fossil Fish Teeth, Northwestern University, October 26, 2007.

- \* Evolution of South Atlantic circulation following the opening of Drake Passage based on Nd isotopes, Yale University, November 12, 2007.
- \* Development of Cretaceous Oceanic Anoxic Event 2 based on Nd isotopes in fossil fish teeth, Wesleyan University, November 13, 2007.
- 2006: \* Bottom Water circulation and the development of OAE2, American Geophysical Union International Meeting, San Francisco, California
- 2005: \* New insights into Atlantic sector paleoceanography from Nd isotopes, American Geophysical Union International Meeting, San Francisco, California \* Global warming and climate change, Oak Hammock Seminar Series on Natural Disasters, Oak Hammock, Gainesville, Florida
- 2004: \* Tracking warm, saline deep water on Maud Rise using Nd isotopes, American Geophysical Union International Meeting, San Francisco, California
- 2003: \* The opening of Drake Passage- A record from Nd isotopes preserved in fossil fish teeth, Louisiana State University, Baton Rouge, Louisiana
- 2001: \* Seawater Nd isotopes: Recorders of ocean circulation and continental weathering, University of Florida, Gainesville, Florida
- 1999: \* Active inquiry, web-based oceanography exercises, Geological Society of America National Meeting, Denver, Colorado
- 1996: \* Nd isotopes in fish teeth as paleoceanographic indicators, University of South Florida, St. Petersburg, Florida 
  \* Nd isotopes in fish teeth as paleoceanographic indicators, University Florida, Gainesville, Florida
- 1994: \* Seawater Sr isotopes as a record of continental weathering, University of Santa Cruz, California

## **Invited Workshops**

- 2018: IsoGlace Workshop: Novel isotope systems in glaciated environments, Bristol University, UK, March 23, 2018.
- 2016: Antarctic's Cenozoic Ice and Climate History, International Ocean Discovery Program, Texas A&M, May 9-11, 2016.
- 2013: Exploring the Cretaceous Greenhouse through Scientific Drilling, London, May 15-17, 2013.
- 2011: Assessing the history of the Greenland Ice Sheet through Ocean Drilling Consortium for Ocean Leadership. Oregon State University, Corvalis, OR, November 7-9, 2011.
- 2009: Leader for NAGT (National Association of Geoscience Teachers) Preparing for an Academic Career in the Geosciences, workshop leader, University of Nevada, Las Vegas
- 2008: Leader for NAGT (National Association of Geoscience Teachers) Preparing for an Academic Career in the Geosciences, workshop leader, University of Oklahoma
- 2006: JOI/USSSP (Joint Oceanographic Institutions) Workshop: Tectonics, circulation, and climate in the Caribbean gateway, Austin, Texas
- 2005: JOI/USSSP (Joint Oceanographic Institutions) Workshop: Southern Ocean Synthesis, Boulder, Colorado
- 1999: JOI (Joint Oceanographic Institutes) COMPLEX, Conference for multi-platform exploration, ocean drilling post-2003, Vancouver, British Columbia
- 1998: National Science Foundation Workshop on "Effective teaching strategies", Williamsburg, Virginia

#### **Post-Doctoral Researchers**

- Cassandra Stirpes, 2023-
- Madison Flint, 2021 -
- Tom Williams, 2018- 2021, now a Fellow at University of Tasmania
- Andrea Pain, 2018 2020, now an Assistant Professor at University of Maryland, Horn Point Marine Lab
- Kelly Deuerling, 2017, now an Assistant Professor at University of Nebraska, Omaha
- Carys Cook, 2013-2016, now working in Industry
- Amanda Waite, 2012- 2013, 2014-2016, now working for Angora Foundation, Miami, FL
- Keiji Horikawa, 2009-2010, now a Professor at Nagoya University, Japan

## **Graduate Students**

- Jenifer Tatiana Salinas Reyes, started in 2021, PhD
- Paloma Olarte, started in 2019, PhD
- Megan Black, started in 2019, Water Institute Graduate Fellow, PhD
- Shauna Flynn, 2018, MS, Weathering During Glacial-Interglacial cycles based on Pb isotopes at Orphan Knoll, NW Atlantic
- Masoud A. Rostami, 2018, Development of Northern Component Water During the Latest Cretaceous, MS
- Kelly Deuerling, 2016, Continental Ice Sheet Retreat, Chemical Weathering, and Solute and Isotope Fluxes: Examples from Western Greenland, PhD
- Andrea Portia, 2014, Sediment Provenance in the Gulf of Mexico: A Test of the Regolith Hypothesis, MS.
- Cecilia Scribner, 2014, Exposure age and climate controls of weathering in deglaciated watersheds of Western Greenland, MS.
- Pugh, Emily R., 2012, Verification of water mass Nd isotopic signature in North Atlantic sediments during the Late Cretaceous, MS.
- Newkirk, Derrick N., 2012, The Impact of Climate Change and Tectonic Events on Ocean Circulation in the Miocene to Pliocene, PhD.
- Basak, Chandranath, 2011, Deep ocean circulation and continental weathering regimes during climate transitions using Sr, Nd, and Pb isotopes in sedimentary archives, PhD.
- Sergio Restrepo, 2008, Long-term morphotectonic evolution and denudation chronology of the Antiqueño Plateau, Central Cordillera, Columbia, PhD.
- Bourbon, Elodie, 2008, Nd isotopes throughout the North Atlantic in the late Cretaceous and across Ocean Anoxic Event 2, MS.
- Newkirk, Derrick R., 2007, A Nd isotopic study of ocean circulation during the middle to late Miocene carbonate crash, MS.
- Blair, Susanna W., 2006, Nd isotopes: Investigation of Cretaceous Ocean Anoxic Event 2 and a systematic study of Fe-Mn oxide coatings, MS.
- Scher, Howie D., 2005, Paleogene deep water circulation in the Atlantic sector of the Southern Ocean revealed from Nd isotopes, PhD.
- Haase, Alisa A., 2001, Variations in Nd isotopes of the Eastern Indian Ocean: Implications for changing weathering, ocean circulation, and eolian inputs during the Cenozoic, MS.

• Haley, Brian A., 1998, Nd and Sr in fossil fish teeth, MS.

# **Undergraduate Students**

- Christina Bennett, 2022-, Research Assistant, CLAS Scholar,
- Emily An, 2019-. Research Assistant, University Scholar, Undergraduate Sr Thesis
- Jamie Good, 2018-, Research Assistant
- Sydney Beim, 2017-2018, Research Assistant
- Hailey Hall, 2017-2018, Research Assistant
- Maria Pulgar, 2017-, Research Assistant, University Scholar
- Philip Ackerman, 2017-2019, Co-author on a published paper.
- Fabio DePrat, 2016-, Research Assistant, Undergraduate thesis/University Scholar: Weathering in the Greenland Foreland of Southern and Western Greenland
- Blayke Polselli, 2016-2017, Research Assistant, Undergraduate thesis: *Tracking Provenance of Sediments in the Kattegat Region of the Baltic Sea using Strontium, Lead and Neodymium Isotopes*
- Cheyenne Everhart, 2014-2016, Research Assistant, Undergraduate thesis/University Scholar: *Implications for the Extent of Weathering in Greenland Moraine Sequences Based on Pb and Sr Isotopes*
- Lucy Miller, 2014-2015, Research Assistant
- Adam Marshall, 2013-2014, Undergraduate thesis/University Scholar: Chemical Weathering of Different Watersheds in Western Greenland
- Marko Steiger, 2013, Research Assistant
- Nikki Biller, 2012, Undergraduate thesis: Evidence for Meltwater Pulse 1a in the Gulf of Mexico based on radiogenic isotopes of leachates
- Chelsea Fenn, 2012, Undergraduate thesis/University Scholar: Seawater and Detrital Marine Pb Isotopes as Monitors of Antarctic Weathering Following Ice Sheet Initiation
- Allison Ned, 2011, Undergraduate thesis: *Miocene Seawater and Residue Nd and Pb isotopes from Ceara Rise*
- Elle Yudelman, 2010, Research Assistant, Sr isotopes in the Cretaceous.
- Bailey Trump, 2009, Research Assistant.
- Tracy King, 2006, Research Assistant.
- Jessica Lyons, 2004, University Scholar: Nd isotopes in Ferromanganese Coatings
- Wendell Philips, 2001, Research Assistant.
- Melina Faurve, 1998- McNair Fellow: Fish teeth as Archives of Nd Isotopes
- Ryan Bitely, 1997 University Scholar
- Nicole Anderson 1997, Research Assistant.
- Daniel Kuncicky, 1996, Research Assistant.
- Nicky Harvy, 1995, Research Assistant.

## **Funding History**

National Science Foundation (MG&G) "Collaborative Research: Determining climate related changes in water mass structure, paleoventilation, and paleocirculation in the

- Southeastern Indian and Southern Oceans." PIs E.L. Sikes (Rutgers University) and E.E. Martin; \$906,250 total, \$349,692 to UF (2/1/2023 1/31/2026).
- National Science Foundation (ANS) "Collaborative Research: The role of ice sheet instability in marine carbon and nutrient cycling in the Eurasian Arctic." PI: A.C. Tessin and E.E. Martin; \$468,125 total, \$198,117 to UF (5/1/2023 4/30/2026).
- National Science Foundation (Education) "Collaborative Research: GeoGaze: Gazedriven adaptive multimedia to augment geoscience learning for neurodiverse learners", Pasha Antonenko (PI), Ellen Martin- Senior Personnel (\$1,039,920) (2021-2024).
- National Science Foundation (ARCSS) "Significance of Ice-loss to Landscapes in the Arctic: SILA (Inuit concept of the physical world and weather)" \$2,165,372, PI: J.B. Martin, Co-PIs: C.L. Barnett, B.C. Christner, E.E. Martin (all UF) (2020-2024).
- National Science Foundation (MG&G) Subaward to UF from Rutgers for a six month extension of Postdoc salary, \$42, 378 to UF August 2020 February 2021.
- International Network for Terrestrial Research and Monitoring in the Arctic (INTERACT-Transnational Access), Greenland Atmospheric, Isotopic and Nutrient Fluxes (GrAIN Fluxes). Funding through the European Union for travel and field logistics, \$21,000, PIs Jon Martin, Ellen Martin, Andrea Pain (July-August, 2019).
- UF Water Institute Graduate Fellowships (WIGF, *High Latitude Hydrology: Water in a Changing World*, 11 UF PI's, ~\$1,082,916 to provide 5 UF Alumni Fellowships.
- National Science Foundation (EAR-IF) "Early Career: Acquisition of a MC-ICP-MS for Research and Education in U-series Geochemistry and Applications in Geosciences," \$773,000, PI- Dutton, Co-PIs: David Foster, Ellen Martin, Paul Mueller, Michael Perfit (all UF) (3/1/17-2/28/18)
- National Science Foundation (MG&G), "Coring in the Southeast Indian and Southern Oceans to examine climate-driven changes in watermass paleoventilation, sources, and structure," \$749,948, PIs- Elizabeth Sikes (Rutgers University). Ellen Martin (\$321,012) (2016–2019)
- National Science Foundation (ANS), "Neglected fluxes: Understanding the evolution of weathering as continental ice sheets retreat", \$820,295 PI's Ellen Martin and Jon Martin (2016-2019)
- US Science Support Program, "Gateways, circulation, and salinity in the Baltic Sea during the Holocene and Weichselian," \$14,935 (2014-2015)
- US Science Support Program, Participation in Expedition 347, Consortium for Ocean Leadership, \$26,993 (2014)
- National Science Foundation (MG&G), "Collaborative Research: Sources and circulation of intermediate and deep waters and their role in Campanian-Maastrichtian global cooling", \$559,228, PIs- Ellen Martin (\$198,659), Ken MacLeod (Univ. Missouri) and Chris Poulsen (Univ. Michigan) (3/13 3/17)
- National Science Foundation (Arctic Research Projects), "Weathering of western Greenland: Influences on oceanic fluxes of radiogenic isotopes", \$484,439, co-PI with Jon Martin (UF), (1/13-12/15)
- Faculty Enhancement Opportunity, University of Florida, Research in Greenland and collaborations in Denmark, \$40,734 (2012).

- Gulf Coast Association of Geological Societies, "Source of Terrestrial Material Delivered to the Gulf of Mexico During Melt Water Pulse 1A", \$2000, (2011-2012) awarded to Nikki Biller, an undergraduate major working under my supervision.
- Geological Society of America Student Research Grant, "Tracking the source of Δ14C depleted water observed off Baja California during the last deglaciation", \$1640, awarded to Chandranath Basak, a Ph.D. student working under my supervision.
- National Science Foundation (MG&G), "Pb isotopes in the Southern Ocean: A study of Pb systematic and weathering during the Eocene/Oligocene transition", \$295,809, sole PI (8/09 8/12)
- National Science Foundation (MG&G), "Collaborative Research: Tracking North Atlantic water column structure and circulation through the Late Cretaceous using oxygen and neodymium isotopes," \$300,136, PIs Ellen Martin (\$153,119) and Ken MacLeod, University of Missouri (\$147,017) (3/07-3/10).
- American Chemical Society-Petroleum Research Fund, "Warm saline deep water production in the middle Eocene to early Oligocene," \$79,400, sole PI (6/05-6/07).
- National Science Foundation (MG&G), "Deep water circulation during the Miocene carbonate crash," \$186,500, sole PI (3/05-3/07).
- National Science Foundation SGER Award, "Evaluation of Fe-Mn oxide coatings as ideal archives of deep water Nd isotopes on Cenozoic timescales," \$48,620, sole PI (3/04-3/05).
- Integrated Ocean Drilling Program, "Late Neogene-Quaternary climate records in a paleointensity-assisted chronology (PAC) for the North Atlantic," Jim Channell (PI), J.S. Stoner, G.C. Bond, D.A. Hodell, E.E. Martin (co-PIs).
- National Science Foundation, CAREER Award, "Nd isotope investigation of North Atlantic Deep Water production over the past 25,000 yrs and education in geology," \$293,168, sole PI (9/96-9/01).
- CLAS Research Award, "Sr and Nd systematics in Cenozoic fish teeth: Implications for the isotopic evolution of seawater," \$13,854, sole PI (5/99-5/00).
- American Chemical Society-Petroleum Research Fund, "Sr and Nd isotopes in the Miocene ocean: Implications for weathering rates and the Sr isotopic budget of the global ocean," \$20,000, sole PI (6/96-6/98).
- National Science Foundation, "An investigation of U-Pb systematics in conodonts," \$17,967, sole PI (6/96-12/97).
- University of Florida Graduate Research Assistantship Program, sole PI, \$7,194, (5/96-12/96)
- National Science Foundation, "Acquisition of a new TIMS for ocean and earth sciences at the University of Florida," \$361,720, Paul Mueller (PI), E.E. Martin, D. A. Hodell, M.R. Perfit and J.B. Martin, (co-PI) (6/95).
- University of Florida DSR Research Development Award, "An investigation of the uptake of Nd isotopes by fossil fish teeth," \$18,000, sole PI (5/95-5/96).

#### **Refereed Publications**

- \* Indicates graduate student author
- <sup>+</sup> Indicates undergraduate student author
- **# Indicates postdoctoral author**

# **Book Chapters**

Hine, A.C., Martin, E.E., Jaeger, J.M., and Brenner, M., 2017, Paleoclimate in Florida, *In* Chassignet, E.P., Jones, J.W., Misra, V., Obeysekera, J., *Florida's Climate: Changes, Variations, and Impact,* Florida Climate Institute, 457-484.

#### **Journal Articles**

- 52. Martin, J.B., Pain, A.J., and Martin, E.E., 2024, Geochemistry of glacial, proglacial, and deglaciated environments. In: Weis, D. and Anbar, A. (eds.) *Treatise of Geochemistry, 3rd edition, Vol. 3, Hydrosphere*, pp. 251-299. doi.org/10.1016/B978-0-323-99762-1.00110-8
- 51. Beaudon, E., Sheets, J.M., Martin, E.E., Sierra-Hernandez, E.R., Mosley-Thompson, E., Thompson, L.G. (2022) Aeolian dust preserved in the Guliya ice cap (Northwestern Tibet): A promising paleo-environmental messenger, *Geosciences*, *12*, *366*. <a href="https://doi.org/10.3390/geosciences12100366">https://doi.org/10.3390/geosciences12100366</a>
- 50. Adebayo, S.B., Cui, M., Williams, T.J., Martin, E.E., Johannesson, K.H. (2022) Evolution of rare earth element and ɛNd compositions of Gulf of Mexico seawater during interaction with Mississippi sediment, *Geochim. Cosmochim. Acta.* 335, 231-242. https://doi.org/10.1016/j.gca.2022.08.024
- 49. Robinson, S., Ivanovic, R., van de Flierdt, T., Blanchet, C.L., Tachikawa, K., Martin, E.E., Falco, C.P. \*#, Williams, T., Gregoire, L., Plancherel, Y., Jeandel, C., Arsouze, T. (2021) Global continental and marine detrital ε<sub>Nd</sub>: an updated compilation for use in understanding marine Nd cycling, *Chemical Geology*, 567, 120119. <a href="https://doi.org/10.1016/j.chemgeo.2021.120119">https://doi.org/10.1016/j.chemgeo.2021.120119</a>
- 48. Williams, T.J. \*, Martin, E.E., Sikes, E.L., Starr, A., Umling, N.E., and Glaubke, R. (2021) Neodymium isotope evidence for coupled Southern Ocean circulation and Antarctic climate throughout the last 118,000 years. *Quaternary Science Reviews*, 260, 106915. https://doi.org/10.1016/j.quascirev.2021.106915
- 47. Portier, A.M.\*, Thierens, M., Martin, E.E., Hemming, S.R., Gombiner, J.H., and Raymo, M.E. (2021) Testing the Regolith Hypothesis: the long-terms evolution of the Laurentide Ice Sheet substrate as recorded in the Northern Gulf of Mexico. *Geology*, 36, e2020PA004082. https://doi.org/10.1029/2020PA004082
- 46. Williams, T.J.\*, Wagner, A.J., Sikes, E.L., and Martin, E.E., 2021, Evolution of the oceanic <sup>13</sup>C Suess effect in the Southeastern Indian Ocean between 1944 and 2018, *Geochem. Geophys. Geosystems*, 22, e2020GC009402. https://doi.org/10.1029/2020GC0090402
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# **Data Reports**

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### Abstracts

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