Stanford



Rob Dunbar

W.M. Keck Professor in the School of Earth Sciences, Professor of Oceans, Senior Fellow at the Woods Institute for the Environment and Professor, by courtesy, of Earth System Science

Curriculum Vitae available Online

Bio

BIO

My research and teaching interests include Climate Dynamics, Oceanography, Marine Ecology, and Biogeochemistry. I am interested in environmental policy directed towards problem-solving. My research group studies global environmental change with a focus on air-sea interactions, tropical marine ecosystems, polar climate, and biogeochemistry. In October, 2001, I became the founding director of the Interdisciplinary Graduate Program in Environment and Resources (now E-IPER), a position I maintained until 2005. In January, 2003, I was appointed the Victoria P. and Roger W. Sant Director of the Earth Systems Program, the largest undergraduate and co-terminal masters program in the School of Earth Sciences, an appointment that ran through 2012. In January, 2004, I was named the J. Frederick and Elisabeth B. Weintz University Fellow in Undergraduate Education in recognition of teaching and mentoring of Stanford undergraduate students. I was awarded the William M. Keck Professorship in 2008, the same year that I moved from the Department of Geological and Environmental Sciences to the newly created Department of Environmental Earth System Science. In 2009, I was elected as a Trustee for the Consortium for Ocean Leadership in Washington D.C. where I am active in promoting the Integrated Ocean Drilling Program and the Ocean Observatories Initiative. I am currently serving as the Chairperson of OL's Board of Trustees. In 2004 I helped start the Palmyra Atoll Research Consortium (PARC) to promote research and conservation of Pacific coral reefs.

ACADEMIC APPOINTMENTS

- Professor, Oceans
- Senior Fellow, Stanford Woods Institute for the Environment
- Professor (By courtesy), Earth System Science
- Member, Bio-X
- Faculty Affiliate, Institute for Human-Centered Artificial Intelligence (HAI)
- Senior Fellow, Stanford Woods Institute for the Environment

ADMINISTRATIVE APPOINTMENTS

- Lecturer in Earth Sciences, University of California, San Diego, (1979-1980)
- Visiting Assistant Professor of Earth Sciences, University of California, San Diego, (1981-1982)
- Assistant/Associate Professor of Geology, Rice University, (1982-1994)
- Visiting Research Fellow, School of Earth Sciences, Victoria University of Wellington, New Zealand, (1988-1988)
- Visiting Scientist, Geology Department, University of New Mexico, Albuquerque, New Mexico, (1988-1988)
- Master of Baker College, Rice University, (1989-1994)
- Visiting Scientist, National Geophysical Data Center, (1994-1996)

- Professor of Geology and Geophysics, Rice University, (1994-1997)
- Adjunct Professor of Geology and Geophysics, Rice University, (1997-2004)
- Professor of Geological and Environmental Sciences, Stanford University, (1997-2007)
- Senior Fellow Freeman Spogli Institute of International Studies, Stanford University, (1998-2010)
- Associate Chair, Geological and Environmental Sciences, Stanford University, (2000-2004)
- Founding Director, Interdisciplinary Graduate Program in Environment and Resources, Stanford University, (2001-2005)
- Victoria P. and Roger W. Sant Director of the Earth Systems Program, Stanford University, (2003-2012)
- J. Frederick and Elisabeth B. Weintz University Fellow in Undergraduate Education, Stanford University, (2004- present)
- Senior Fellow, Woods Institute for the Environment, Stanford University, (2004- present)
- Professor of Environmental Earth System Science, Stanford University, (2007- present)
- W.M. Keck Sr. Professor of Earth Sciences, Stanford University, (2008- present)
- Trustee, Consortium for Ocean Leadership, (2009- present)
- Adjunct Professor Victoria, University of Wellington, New Zealand, (2010- present)
- Chairman of the Board of Trustees, Consortium for Ocean Leadership, (2013- present)

HONORS AND AWARDS

- Antarctic Service Medal, The United States of America (1988)
- Best Paper Award, Coral Reefs Journal, 1995, International Society for Reef Studies (1996)
- S.T. Lee Lecturer in Antarctic Studies, Victoria University of Wellington, New Zealand (2003)
- J. Frederick and Elisabeth Brewer Weintz University Fellowship, Stanford University (2004)
- W.M. Keck Sr. Professorship in Earth Sciences, Stanford University (2008)
- Richard W. Lyman Award, Stanford University (2009)
- TED Speaker, TED (Technology, Entertainment, Design) (2010)
- SCAR Medal for Excellence in Antarctic Research, Scientific Committee for Antarctic Research (2016)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Participant and Writer, Scientific Committee on Antarctic Research Horizon Scan (2014 - present)
- Chair, Board of Trustees, Consortium for Ocean Leadership (2013 - present)
- Committee Member, NAS/NRC Panel on "Future Science Opportunities in the Antarctic and Southern Ocean" (2013 - present)
- Member, Audit Committee, Consortium for Ocean Leadership (2013 - present)
- Invited Speaker, NASA/GISS (2013 - 2013)
- Re-elected to Board of Trustees, Consortium for Ocean Leadership (2012 - present)
- U.S. Member, Science Implementation and Planning Committee, (SIPCOM),Intergated Ocean Drilling Program (2012 - 2014)
- Co-Leader, GSA/UT Austin Geologic Field Trip to Antarctica (2012 - 2013)
- Invited Plenary Speaker, 5th Scientific Committee on Antarctic Research Open Sciences Conference (2012 - 2012)
- Invited participant, US-Korean-Italian Workshop on Time Series Observation in the Ross Sea, Incheon, Korea (2012 - 2012)
- Invited speaker, SETI Institute (2012 - 2012)
- Keynote speaker, Ecopoesis Conference, California College of the Arts (2012 - 2012)
- Keynote speaker, UC Davis Graduate Ecology Symposium (2012 - 2012)
- Member, Past Antarctic Ice Sheet Dynamics (PAIS) development team, Scientific Committee on Antarctic Research (2012 - 2012)

- Member, Coral Reefs and Climate Change Working Group, Center for Ocean Solutions (2011 - present)
- Member, HOLOCLIP project team, European Union (2011 - present)
- Mentor, Jefferson High School Science Teacher, NASA Mentoring Program, Stanford University (2011 - present)
- Chair, Public Policy Committee, Consortium for Ocean Leadership (2011 - 2013)
- Member, Committee on Undergraduate Standards and Policy (C-USP), Stanford University (2011 - 2013)
- Member, Faculty Search Committee for an appointment to “The Douglas Chair”, Stanford University (2011 - 2013)
- Vice-Chair, Board of Trustees, Consortium for Ocean Leadership (2011 - 2013)
- Coordinator, EESS weekly seminar series for Spring, 2012, Stanford University (2011 - 2012)
- Invited Speaker, Northern Illinois University, Livermore Valley Association, Kennedy Middle School (2011 - 2011)
- Session Chair and Keynote Speaker, International Symposium on Antarctic Earth Sciences, Edinburgh (2011 - 2011)
- U.S. Member, Science Planning Committee (SPC), Intergated Ocean Drilling Program (2011 - 2011)
- Member, Working Group on Sea Level Rise and the Pacific Small Island and Developing States, Earth Justice and U.N. Foundation (2010 - present)
- Member, Sample Allocation Committee, IODP Expedition 318 (2010 - present)
- Member, Vice-Provost’s “critical engagement” focus group, Stanford University (2010 - present)
- Chair, Scientific Ocean Drilling Subcommittee, Consortium for Ocean Leadership (2010 - 2013)
- Member, Advisory Board, Haas Center for Public Service, Stanford University (2010 - 2013)
- Member, Freshman and Sophomore Programs Advisory Committee, Stanford University (2010 - 2013)
- Chair, NSF-UNOLS Polar Research Vessel Committee (2010 - 2012)
- Member, New Ship Acquisition and Funding Committee, Consortium for Ocean Leadership (2010 - 2012)
- Mentor of Middle School Science Teacher through NASA Mentoring Program, Stanford University (2010 - 2011)
- Invited Participant, US-Italian Workshop on Time Series Observation in the Ross Sea, Ischia Italy (2010 - 2010)
- Invited Speaker, Victoria University of Wellington, New Zealand, Los Altos Earth Day Event, Bohemian Grove, Steve Schneider Symposium (Monterey), Cal Academy of Arts and Sciences, Ocean Leadership (DC) (2010 - 2010)
- Invited Speaker, TED Mission Blue (2010 - 2010)
- Member, Visiting Review Committee, Ocean Sciences Program, Texas A&M University, Corpus Christi (2010 - 2010)
- Presenter, Woods Institute, Oceans Salon, California Academy of Sciences (2010 - 2010)
- Trustee, Trustee, Consortium for Ocean Leadership (2009 - present)
- Member, Committee of Visitors evaluating Office of Polar Programs at the US National Science Foundation (2009 - 2010)
- Member, Committee of Visitors, Public evaluation of effectiveness of Office of Polar Research, US National Science Foundation (2009 - 2010)
- Member, External Revue Panel, Department of Marine Sciences, University of Otago, Dunedin, New Zealand (2009 - 2010)
- Member, Faculty Search Committee for Director of Center for Ocean Solutions, Stanford University (2009 - 2010)
- Invited Lecturer, Stanford University, IAEA ENSO Workshop, Lima , Peru, ACE Science Conference, Granada, Spain, ANDRILL Workshop, Wellington, New Zealand, SF Exploratorium, Stanford Club of Monterey (2009 - 2009)
- Invited Participant, INVEST Workshop on the Future of Ocean Drilling (2009 - 2009)
- Member, Program Committee, Antarctic Climate Evolution Conference, Granada, Spain (2009 - 2009)
- Member, Visiting Review Committee, Oceanography Department, Texas A&M University, College Station, Texas (2009 - 2009)
- Member, Visiting Review Committee, Department of Marine Sciences, University of Otago, Dunedin, New Zealand (2009 - 2009)
- Participant, McMurdo Ice Shelf Drilling Project Workshop, Wellington, New Zealand (2009 - 2009)
- Speaker, Oceans Forum, Copenhagen Conference on Climate Change (COP-15) (2009 - 2009)
- Chair, Palmyra Atoll Research Consortium Finance Commitee (2008 - present)

- Member, Center for Ocean Solutions Management Committee (2008 - present)
- Proponent and Shipboard Participant, Integrative Ocean Drilling Program Expedition 318 to Antarctica (2008 - present)
- Member, Y2E2 Building Management Committee, Stanford University (2008 - 2012)
- Member, Faculty Search Committee in area of Chemical Oceanography, Stanford University (2008 - 2010)
- Member, External Revue Panel, College of Geoscience, Oceanography Department Texas A&M University (2008 - 2009)
- Invited Lecturer, Stanford University, for Stanford Development Office (events in NYC and LA), San Francisco State University, British Antarctic Survey, SCAR-OSC, St. Petersburg, Russia (2008 - 2008)
- Invited Speaker Stanford Admit Weekend, Stanford University (2008 - 2008)
- Invited Speaker, Stanford Parents Day, Stanford University (2008 - 2008)
- Peer Review Team Member, Department of Oceanography, Texas A&M University (2008 - 2008)
- Stanford representative, Consortium for Ocean Leadership (2007 - present)
- Member, Program Committee, 2008 SCAR Open Sciences Congress, St. Petersburg (2007 - 2008)
- Chief Scientist, Deep Sea Coral Collectiion by Submersibles, RV KOK, Pisces V 2007 | Leader, Coral Coring expedition to Palmyra (2007 - 2007)
- Co-Chief Scientist, Stanford@SEA, RV Robert Seamans (2007 - 2007)
- Expert Panelist, Site visit for Foundation for Research, Science, and Technology review of Crown Research Institutes, New Zealand (2007 - 2007)
- Invited Lecturer, University of Toronto, The Nature Conservancy, Australian National University, Stanford University (2007 - 2007)
- Invited Speaker, Stanford Homecoming (2007 - 2007)
- Invited Speaker, Stanford Admit Weekend, Stanford University (2007 - 2007)
- Member, Woods Institute Research Committee (2007 - 2007)
- Participant, Southern McMurdo Sound ANDRILL Project (2007 - 2007)
- Invited Speaker, Stanford Parents Day, Stanford University (2006 - 2007)
- Member, Search Committee for a faculty hire in Physical Oceanography, Stanford University (2006 - 2007)
- Off-ice designated scientist, ANDRILL McMurdo Ice Shelf Project (2006 - 2007)
- Scientist, Marine Biology, Biogeochemistry, and Ocean Physics, Ross Sea, Antarctica, R/V Nathaniel Palmer (2006 - 2007)
- Faculty Leader, Stanford Travel Study Trip to New Guinea, Stanford University (2006 - 2006)
- Invited Lecturer, U.S. Geological Survey, Hopkins Marine Station, University of Queensland, Australian National University (2006 - 2006)
- Invited Speaker, End of Oil Symposium, Stanford (2006 - 2006)
- Invited Speaker, Stanford Club of San Diego (2006 - 2006)
- Invited Speaker, End of Oil Public Lecture Series, SES, Stanford University (2006 - 2006)
- Keynote Plenary Speaker, SCAR Open Sciences Conference, Hobart, Australia (2006 - 2006)
- Leader, IAEA sampling mission to Raja Ampat archipelago, West Papua, Indonesia (2006 - 2006)
- Leader, Lake coring trip to Lago Fagnano, Tierra del Fuego, Argentina (2006 - 2006)
- Member, American Geophysical Union Program Committee for 2006 Joint Meeting in Baltimore (2006 - 2006)
- Member, Program Committee, 2006 SCAR (Scientific Committee for Antarctic Research) biannual Open Science Conference, Hobart Australia (2006 - 2006)
- Plenary Speaker, SCAR Open Sciences Congress, Hobar (2006 - 2006)
- Scientist, Coral Reef Control Volume Experiment, Heron Island, Australia (2006 - 2006)
- Seminar speaker, Heron Island Marine Station, Australia, and at the University of Queensland, Brisbane, Australia (2006 - 2006)
- Speaker, Stanford Alumni Clubs in San Diego, Los Angeles (2006 - 2006)
- Elected Chair, International Atomic Energy Agency Cooperative Reserach Porject Isotopic Studies of El Nino (2005 - 2014)

- Participant, ANDRILL (Antarctic Drilling) McMurdo Sound Drilling Program (2005 - 2013)
- Co-Chair, Faculty search committee for a new hire in the area of Climate Science, Stanford University (2005 - 2009)
- Chair, Antarctic Research Vessel Oversight Committee (2005 - 2008)
- Member, AGU Program Committee, AGU 2006 Joint Meeting, Baltimore (2005 - 2006)
- Scientist, Marine Biology, Biogeochemistry, and Ocean Physics, Ross Sea, Antarctica, R/V Nathaniel (2005 - 2006)
- Chief Scientist, Deep submerisble diving expedition from Samoa to Hawaii (2005 - 2005)
- Co-Chief Scientist, coral coring expedition to Palmyra Atoll, Stanford University (2005 - 2005)
- Faculty Leader, Stanford Travel Study Trip to Antarctica, Stanford University (2005 - 2005)
- Faculty Leader, Stanford Travel Study Trip to Russian Far East, Stanford University (2005 - 2005)
- Invited Participant, East Antarctic Margin Drilling Workshop, Spoleto, Italy (2005 - 2005)
- Invited Speaker, Stanford Club of Wyoming, Stanford Club of Monterey, Stanford Club of Philadelphia (2005 - 2005)
- Invited Testimony, National Academy of Sciences Panel on future U.S. Polar Researh Vessel Needs (2005 - 2005)
- Leader, Expedition to easter Island for coral coring and lake sediment coring (2005 - 2005)
- Co-Chair, Interdisciplinary Grants Committee, Stanford's Institute for the Environment, Stanford University (2004 - 2006)
- Member, Program Committee, 2008 SCAR Open Sciences Congress, Hobart, Australia (2004 - 2006)
- Chair Science Committee, Palmyra Atoll Research Consortium (2004 - 2005)
- Invited Participant, SCAR (Scientific Committee on Antarctic Research) meeting (2004 - 2005)
- Member, Faculty search committee in the area of Paleobiology, Stanford University (2004 - 2005)
- Chief Scientist, Deep submerisble diving in the Hawaiian Islands and at Cross Seamount, DSRV Pisces V and RV Kanaloa o Kamaikai (2004 - 2004)
- Faculty Leader, Stanford Travel Study Trip to Alaska, Stanford University (2004 - 2004)
- Invited Participant, SCAR (Scientific Committee on Antarctic Research) meeting, Bremen (2004 - 2004)
- Invited Speaker, International Conference on Isotopes in Environmental Studies, Monoco (2004 - 2004)
- Invited Speaker, Isotopes as climate tracers short course, IAEA, Trieste (2004 - 2004)
- Lecturer, Instituto de Verano, Universidad de Concepcion, Chile (2004 - 2004)
- Member, Palmyra Atoll Consortium Leadership Committee (2003 - present)
- Director, Earth Systems Program, Stanford University (2003 - 2012)
- Faculty Leadership Committee, Stanford Institute for the Environment, Stanford University (2003 - 2009)
- Member, Next Generation Polar Research Vessel Design Committee (2003 - 2008)
- Governor, Joint Oceanographic Insitutions, Inc. (2003 - 2007)
- Member. Scheduling Committee, AGU Ocean Sciences Meeting (2003 - 2004)
- Faculty Leader, Stanford Travel Study Trip to Antarctica, Stanford University (2003 - 2003)
- Invited Participant, Scientific Planning Committee, Integrated Ocean Drilling Program transition meeting, Sapporo (2003 - 2003)
- Invited speaker, Holocene Climate Workshop, Eikom, Norway (2003 - 2003)
- Leader, Lake coring team in Patagonia, Stanford University (2003 - 2003)
- Member, Antarctic Research Vessel Oversight Committee (2002 - 2008)
- Member, Scientific Experts Group, IMAGES (2002 - 2008)
- Secretary, Paleoceanography and Paleoclimatology Focus Group, AGU (2002 - 2004)
- Alternate Governor, Joint Oceanographic Institutions (2002 - 2003)
- Chief Scientist, Marine Geology and Geophysics, Antarctic Peninsula, RV L.M. Gould (2002 - 2002)

- Co-convener, IMAGES Southern Ocean Working Group conference, Barcelona, Spain (2002 - 2002)
- Co-convener, IMAGES Southern Ocean Working Group conference II, Barcelona (2002 - 2002)
- Invited Participant, Antarctic Climate Evolution Data/Model Integration Workshop, Amherst, MA (2002 - 2002)
- Invited Participant, National Science Foundation Earth System History RFP panel, Washington D.C. July (2002 - 2002)
- Invited Speaker, Climate Change in the Antarctic Peninsula Workshop, Hamilton, New York (2002 - 2002)
- Invited participant, Conference on U.S. Participation (CUSP) in the Integrated Ocean Drilling Program, Washington D.C. (2002 - 2002)
- Member of review panel, National Science Foundation Integrated Global C cycle (2002 - 2002)
- Member, CEE faculty search committee, Stanford University (2002 - 2002)
- Provost's Lecturer, SUNY Stony Brook (2002 - 2002)
- Scientist, Expedition to Eilat Israel to instrument coral reef for global change studies (2002 - 2002)
- Scientist, Deep submerisble diving expedition to the Gulf of Alaska, DSRV Alvin and RV Atlantis (2002 - 2002)
- Director, Interdisciplinary Ph.D. Program in Environment and Resources, Stanford University (2001 - 2005)
- Distinguished Lecture Speaker, Ocean Drilling Program: Portland State University, Columbus State University, SUNY Albany, Duke University, SUNY Stonybrook (2001 - 2002)
- Co-convener, IMAGES Southern Ocean Working Group conference, Bremerhaven, June (2001 - 2001)
- Convener, First ARTS (Annual Records of Tropical Systems) Open Science Meeting, Noumea, New Caledonia, November (2001 - 2001)
- Invited Speaker, ANTOSTRAT symposium, Erice, Italy, September (2001 - 2001)
- Member, Steering Committee, ACE (Antarctic Climate Evolution), a new SCAR project (2001 - 2001)
- Member, American Geophysical Union Paleoceanography and Paleoclimatology Focus Group (2000 - 2008)
- Associate Chair, Geological and Environmental Sciences, Stanford University (2000 - 2004)
- Editor (with Jack Ditullio), American Geophysical Union, Antarctic Research Series monograph on Biogeochemistry of the Ross Sea Shelf (2000 - 2003)
- Member, University Committee on Admissions and Financial Aid, Stanford University (2000 - 2003)
- Elected representative, Academic Senate, Stanford University (2000 - 2002)
- Chief Scientist, PISCO (Paleoenvironmental Investigations of Sediment in the Coastal Ocean), RVIB L.M. Gould, April/May (2000 - 2000)
- Invited Speaker, University of California, Santa Barbara (2 talks); California Institute of Technology; University of California, Berkeley (2 talks), University of Idaho, Joint Global Ocean Flux Study Biogeochemistry Conference in Brest, France (2000 - 2000)
- Invited participant and speaker, International Marine Geosciences Sampling (IMAGES) executive committee meeting, Woods Hole, MA; Shallow Water Drilling Workshop, St. Petersburg, FL; (2000 - 2000)
- Session chair, Paleoclimate (2 sessions) (2000 - 2000)
- Member, Earth Sciences Advisory Council, Stanford University (1999 - 2012)
- Member, Provost's Committee on Environmental Science, Technology and Policy, Stanford University (1999 - 2008)
- Leader, Annual Records of Tropical Systems (International Geosphere Biosphere Program IGBP/PAGES) (1999 - 2003)
- Chair, Ion Microprobe Faculty Search Committee (1999 - 2000)
- Invited Speaker, Gordon Conference on Polar Marine Processes, Ventura; Dean's Seminar Series, School of Earth Sciences, Stanford; Institute for the Study of Planet Earth, University of Arizona, Tuscon; Peninsula Geological Society Seminar Series, Stanford (1999 - 1999)
- Invited participant and speaker, AESOPS Workshop, US Joint Global Ocean Flux Study, Keystone, Colorado, August (1999 - 1999)
- Participant, Marine Geology and Geophysics cruise, Palmer Deep and Antarctic Peninsula, R/V Nathaniel B. Palmer March-April (1999 - 1999)
- Session chair, COMPLEX workshop on the future of Ocean Scientific Drilling, Vancouver, Canada, May (1999 - 1999)
- Academic advisor to 19 Earth Systems students, 3 GES, and 2 IDM undergraduates, Stanford University (1998 - present)
- Chair, Ad-hoc committee on development of Oceans curricular track, Stanford University (1998 - present)
- Director, Stable Isotope Biogeochemistry Lab, Stanford University (1998 - present)

- Member of CESP faculty (Center for Environmental Science and Policy), Stanford University (1998 - 2007)
- Elected alternate representative, electoral unit 2, faculty senate, Stanford University (1998 - 1999)
- Chief Scientist, ROAVERRS (Research on Ocean Atmosphere Variability and Ecosystem Response in the Ross Sea, RVIB N.B. Palmer, October-December, 1998) (1998 - 1998)
- Co-leader, Submerged coral drilling, Galapagos Islands, RV Samba, June, 1998 (1998 - 1998)
- Invited Speaker, American Quaternary Association Annual Meeting, Puerto Vallarta, Mexico; American Geophysical Union/American Society Limnology and Oceangraphy biennial meeting, San Diego; EastFest '98, Stanford; Stanford Parents Day Lectures; ENRON Corp (1998 - 1998)
- Invited participant, PAGES Open Sciences Meeting, London; Sclerosponges as Paleoclimate indicators workshop, Miami (1998 - 1998)
- Session organizer and chair, History of El Nio, PAGES Pole-Equator-Pole Americas Transect Workshop, Merida, Venezuela (1998 - 1998)
- Lead adviser to 24 M.S. or Ph.D. students, Stanford University (1997 - present)
- Earth Systems Program Steering Committee, Stanford University (1997 - 2012)
- Graduate Student Admissions Committee, G&ES, Stanford University (1997 - 2000)
- Executive Committee member, USSAC, the U.S. National Committee for Ocean Drilling (1997 - 1999)
- Consulting member, search committee, New sedimentology faculty, Lehigh University (1997 - 1998)
- Member, Oceans Faculty Search Committee, SES, Stanford University (1997 - 1998)
- Chief Scientist Positions, ROAVERRS (Research on Ocean-Atmosphere Variability and Ecosystem Response in the Ross Sea), RVIB Palmer; Lake Titicaca piston coring, RV Neecho, May, 1997; Submersible Diving off Hawaii, RV Kaimikai O Kanaloa, DSRV Pisces V, Au (1997 - 1997)
- Invited lecturer, Geophysical Fluid Dynamics Laboratory, Princeton; Princeton University, Department of Geology; Department of Mathematics and Applied Statistics, Rice University, Houston, Texas; Princeton University, Department of Ocean Sciences, UC San Diego (1997 - 1997)
- Invited participant, Workshop on cross-validation of high-resolution climate proxies and instrument records, University of Washington; Warm Climates of the Tropics, International Center for Theoretical - Physics (ICTP), Trieste, Italy (1997 - 1997)
- Leader, Research on Ocean/Atmosphere Variability and Ecosystem Response in the Ross Sea (ROAVERRS) Program (1996 - 2002)
- Member, U.S. Science Advisory Council, Ocean Drilling Program (1996 - 1999)
- Ocean Drilling Program Fellowship Proposal Review Panel, NSF-USSAC (1996 - 1998)
- Co-leader, Annual Records of Tropical Systems Activity (PAGES) (1995 - 1998)
- Member, steering committee, PEP-1 (Pole-Equator-Pole transects) (1995 - 1998)
- Proposal Review Panel, Earth Systems History Program, NSF (1995 - 1997)
- Committee Member, American Geophysical Union, Paleoceanography (1994 - 2000)

PROGRAM AFFILIATIONS

- Center for Latin American Studies

PROFESSIONAL EDUCATION

- Ph.D., University of California, San Diego , Oceanography (1981)
- B.S., University of Texas, Austin , Geology (1975)

LINKS

- Stable Isotope Biogeochemistry Lab: http://pangea.stanford.edu/research/sibl/
- Climate Change and Ocean Chemistry: http://pangea.stanford.edu/research/sibl/
- Personal Website: http://dunbar.stanford.edu

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Research

My group specializes in high resolution studies of climatic and oceanic variability during modern times as well as over the past 50 to 12,000 years. Our most productive archives for this work include the skeletons of long-lived corals from the tropics and the deep sea, as well as sediments from lakes and marine environments. We use chemical, isotopic, and morphological measurements of these materials to investigate the timing and rates of change associated with past climate and C cycle excursions. Current field areas include the American Samoa, Antarctica, the Line Islands, Easter Island, Chile, Patagonian Argentina, and Palau. We also collect deep sea corals to better understand their ecology as well as their self-contained records of change in the deep sea. We do this work using deep diving research submersibles in the Gulf of Alaska and the central tropical and north Pacific. We dive with the Hawaii Undersea Research Lab, using their two submersibles Pisces IV and Pisces V. We are currently working on several projects in Antarctica to assess the impacts of climate change on Southern Ocean ecosystems and C-system chemistry. Much of this work focuses on the Ross Sea where we are studying the modern uptake of carbon dioxide by the ocean and the sensitivity of primary production to changes in nutrients, temperature, sea ice cover, and CO2. We are also using sediment cores from fjords and shelf basins of East Antarctica and the Antarctic Peninsula to study past and changes in the Antarctic Ice Sheet. My lab participated in the ANDRILL program as shore-based and field-based scientists exploring the history of Antarctic climate at Windless Bight (McMurdo Ice Shelf Drilling) and Southern McMurdo Sound. I am also a proponent and participant on the 2010IODP Expedition 318 to Wilkes Land, Antarctica.

We have recently engaged in an extensive collaboration with colleagues in Civil and Environmental Engineering at Stanford to develop instrumentation and methodologies for directly measuring C system transformations (production/ respiration and calcification/ dissolution) in coastal marine systems. We are instrumenting coral reefs at several Pacific locations as well as a kelp forest in Monterey Bay. In parallel with our studies of field-scale variability in carbon system chemistry we have also been engaged in a series of efforts to understand the controls on carbonate biomineralization in organisms ranging from reef-building corals to clams from the deep sea. We hope that a better understanding of this process leads to better predictions for the impact of global environmental change on marine organisms.

Teaching

I teach both undergraduate and graduate courses in climate and global change, geochemistry, oceanography, marine geology, and paleoclimatology. I am particularly intrigued with teaching in the field and have taken over 250 Stanford students to remote locations such as Antarctica and the Line Islands to participate in educational and research expeditions.

PROJECTS

- Understanding Coral Reef Resilience to Advance Science and Conservation
- Collaborative Research: Developing a Continuous Reconstruction of Tropical Pacific Climate over the Last 500-700 Years: Analysis of Massive Porites Corals from American Samoa
- Collaborative Research: TRacing the fate of Algal Carbon Export in the Ross Sea (TRACERS)
- Collaborative Research: An Ultra-High Resolution Holocene Climate Record from a Varved Sediment Sequence from the Adelie Coast, Antarctica (IODP Exp 318)
- Holocene Climate Change in Southwestern Patagonia: New Insights from Large Lake Paleolimnology
- Observations and modeling of the C system dynamics at Palmyra Atoll: In support of the development of management strategies for ocean acidification impacts in the tropics
- Research Project - Stanford
- Research project - Stanford
- Research project - Stanford
- Research project - Stanford

- Research project - Stanford

Teaching

COURSES

2026-27

- Approaching Palau: Preparation and Research Ideation and Development: OCEANS 40 (Spr)
- Coral Reefs, Geopolitics, and Small Island Livelihoods: Lessons from Palau: OSPGEN 53 (Sum)
- Innovating for Climate and Sustainability: EARTHSYS 213 (Win)
- Planet Ocean: BIO 71, ESS 71, OCEANS 71 (Win)

2024-25

- Designing Environmental Research: ENVRES 320 (Win)
- Innovation for Climate and Sustainability: EARTHSYS 213 (Win)
- Planet Ocean: BIO 71, ESS 71, OCEANS 71 (Win)

2023-24

- Get to Know Your Oceans: OCEANS 300A (Aut)
- Hacking for Climate and Sustainability: EARTHSYS 213 (Win)
- Planet Ocean: BIO 71, ESS 71, OCEANS 71 (Win)
- Stanford at Sea: BIO 182H, BIO 323H, EARTHSYS 323, ESS 323, OCEANS 182H, OCEANS 323H (Spr)
- The Worst Journey in the World: The Science, Literature, and History of Polar Exploration: EARTHSYS 38N, EPS 38N, ESS 38N (Aut)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Madolyn Kelm

Doctoral Dissertation Advisor (AC)

Matthew Illing, Andrew Olivero

Master's Program Advisor

Erika Hill

Postdoctoral Research Mentor

Alexy Khrizman

Publications

PUBLICATIONS

- **Quantifying metabolic functioning of coral reefs: a 3-year study in Palau** *CORAL REEFS*
  Khrizman, A., Boles, E. L., Mucciarone, D. A., Hamilton, J., Volaric, M., Monismith, S. G., Dunbar, R. B.
  2026
- **Predator-mediated trophic connectivity between reef and oceanic habitats in Palau.** *Ecological applications : a publication of the Ecological Society of America*
  Arnoldi, N. S., Carlisle, A., Dunbar, R. B., Friedlander, A. M., Golbuu, Y., Lindfield, S., Micheli, F.
  2026; 36 (6): e70284
- **CoralCache: a virtual coral core repository for transparent and reproducible annual growth rate analyses** *EARTH SYSTEM SCIENCE DATA*

DeCarlo, T. M., Jasnos, O., Strange, A., Andersson, A., Bautista, A. T., Bloomer, S., Bolden, I. W., Bosman, M., Brachert, T. C., Braz, G. B., Cardoso, G. O., Carricart-Ganivet, J. P., Carilli, et al
2026; 18 (5): 3341-3353

- **A three-coral Ba/Ca network provides a regional river discharge reconstruction in the Gulf of Chiriqui, Panama throughout the 20th century** *PALAEOGEOGRAPHY PALAEOCLIMATOLOGY PALAEOECOLOGY*
  Brenner, L. D., Linsley, B. K., Huang, W., Humphries, C., Calcio, M., Dunbar, R. B.
  2026; 683
- **Measuring Metabolic Fluxes on Shallow, Wavy Coral Reefs** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS*
  Boles, E., Khrizman, A., Hamilton, J., Mucciarone, D., Koseff, J., Dunbar, R., Monismith, S.
  2026; 131 (2)
- **Zinc stimulation of phytoplankton in a low-carbon-dioxide, coastal Antarctic environment: evidence for the Zn hypothesis** *BIOGEOSCIENCES*
  Kell, R. M., Subhas, A. V., Schanke, N. L., Lees, L. E., Chmiel, R. J., Rao, D., Brisbin, M. M., Moran, D. M., Mcilvin, M. R., Bolinesi, F., Mangoni, O., Casotti, R., Balestra, et al
  2025; 22 (20): 5877-5896
- **Reef Community Productivity and Calcification - Spatial and Temporal Variability in Recovering Coral Reefs** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS*
  Khrizman, A., Lindhart, M., Mucciarone, D. A., Takeshita, Y., Monismith, S. G., Boles, E. L., Dunbar, R. B.
  2025; 130 (3)
- **Morphologically driven sedimentation patterns on a coral reef** *CORAL REEFS*
  Sartori, G., Boles, E. L., Monismith, S. G., Mumby, P. J., Dunbar, R. B., Khrizman, A., Tatebe, L., Capozzi, R.
  2025
- **High metabolic zinc demand within native Amundsen and Ross sea phytoplankton communities determined by stable isotope uptake rate measurements** *BIOGEOSCIENCES*
  Kell, R. M., Chmiel, R. J., Rao, D., Moran, D. M., Mcilvin, M. R., Horner, T. J., Schanke, N. L., Sugiyama, I., Dunbar, R. B., Ditullio, G. R., Saito, M. A.
  2024; 21 (24): 5685-5706
- **Bottom Stress and Drag on a Shallow Coral Reef** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS*
  Boles, E., Khrizman, A., Hamilton, J., Mucciarone, D., Dunbar, R., Koseff, J., Monismith, S.
  2024; 129 (11)
- **Comparative clumped isotope temperature relationships in freshwater carbonates** *DEPOSITIONAL RECORD*
  Arnold, A., Mering, J., Santi, L., Roman-Palacios, C., Li, H., Petryshyn, V., Mitsunaga, B., Elliott, B., Wilson, J., Lucarelli, J., Boch, R., Ibarra, D., Li, et al
  2024
- **Zinc stimulation of phytoplankton in a low carbon dioxide, coastal Antarctic environment.** *bioRxiv : the preprint server for biology*
  Kell, R. M., Subhas, A. V., Schanke, N. L., Lees, L. E., Chmiel, R. J., Rao, D., Brisbin, M. M., Moran, D. M., McIlvin, M. R., Bolinesi, F., Mangoni, O., Casotti, R., Balestra, et al
  2024
- **Shortened food chain length in a fished versus unfished coral reef.** *Ecological applications : a publication of the Ecological Society of America*
  Young, H. S., McCauley, F. O., Micheli, F., Dunbar, R. B., McCauley, D. J.
  2024: e3002
- **Meteoric water and glacial melt in the southeastern Amundsen Sea: a time series from 1994 to 2020** *CRYOSPHERE*
  Hennig, A. N., Mucciarone, D. A., Jacobs, S. S., Mortlock, R. A., Dunbar, R. B.
  2024; 18 (2): 791-818
- **Evaluating the reproducibility and paleo-hydroclimate potential of coral skeletal Ba/Ca in the Gulf of Chiriqui, Panama** *CONTINENTAL SHELF RESEARCH*
  Brenner, L., Linsley, B., Cassese, C., Huang, W., Dunbar, R., Wellington, G.
  2023; 267
- **Remote reef cryptobenthic diversity: Integrating autonomous reef monitoring structures and in situ environmental parameters** *FRONTIERS IN MARINE SCIENCE*

Steyaert, M., Lindhart, M., Khrizman, A., Dunbar, R. B., Bonsall, M. B., Mucciarone, D. A., Ransome, E., Santodomingo, N., Winslade, P., Head, C. E. I.

2022; 9

- **Southern Hemisphere Westerly Winds have modulated the formation of laminations in sediments in Lago Fagnano (Tierra del Fuego, Argentina) over the past 6.3 ka** *BOREAS*

  Vizcaino, A., Jimenez-Espejo, F. J., Dunbar, R. B., Mucciarone, D., Garcia-Alix, A., Neugebauer, I., Ariztegui, D.

  2022

- **Beryllium isotope variations recorded in the Adelie Basin, East Antarctica reflect Holocene changes in ice dynamics, productivity, and scavenging efficiency** *QUATERNARY SCIENCE ADVANCES*

  Behrens, B. C., Yokoyama, Y., Miyairi, Y., Sproson, A. D., Yamane, M., Jimenez-Espejo, F. J., McKay, R. M., Johnson, K. M., Escutia, C., Dunbar, R. B.

  2022; 7

- **Limited biogeochemical modification of surface waters by kelp forest canopies: Influence of kelp metabolism and site-specific hydrodynamics** *LIMNOLOGY AND OCEANOGRAPHY*

  Traiger, S. B., Cohn, B., Panos, D., Daly, M., Hirsh, H. K., Martone, M., Gutierrez, I., Mucciarone, D. A., Takeshita, Y., Monismith, S. G., Dunbar, R. B., Nickols, K. J.

  2021

- **Towards an ocean-based large ocean states country classification** *MARINE POLICY*

  Hume, A., Leape, J., Oleson, K. L. L., Polk, E., Chand, K., Dunbar, R.

  2021; 134

- **The last glacial termination in northwestern Patagonia viewed from the Lago Fonk (similar to 40 degrees S) record** *QUATERNARY SCIENCE REVIEWS*

  Henriquez, C. A., Moreno, P., Dunbar, R. B., Mucciarone, D. A.

  2021; 271

- **Sensitivity of Holocene East Antarctic productivity to subdecadal variability set by sea ice** *NATURE GEOSCIENCE*

  Johnson, K. M., McKay, R. M., Etourneau, J., Jimenez-Espejo, F. J., Albot, A., Riesselman, C. R., Bertler, N. A. N., Horgan, H. J., Crosta, X., Bendle, J., Ashley, K. E., Yamane, M., Yokoyama, et al

  2021

- **Isoscape Models of the Southern Ocean: Predicting Spatial and Temporal Variability in Carbon and Nitrogen Isotope Compositions of Particulate Organic Matter** *GLOBAL BIOGEOCHEMICAL CYCLES*

  Glew, K., Espinasse, B., Hunt, B. P., Pakhomov, E. A., Bury, S. J., Pinkerton, M., Nodder, S. D., Gutierrez-Rodriguez, A., Safi, K., Brown, J. C. S., Graham, L., Dunbar, R. B., Mucciarone, et al

  2021; 35 (9)

- **Autonomous submersible multiport water sampler** *HARDWAREX*

  Mucciarone, D. A., DeJong, H. B., Dunbar, R. B., Takeshita, Y., Albright, R., Mertz, K.

  2021; 9

- **Autonomous submersible multiport water sampler.** *HardwareX*

  Mucciarone, D. A., DeJong, H. B., Dunbar, R. B., Takeshita, Y., Albright, R., Mertz, K.

  2021; 9: e00197

- **Multi-decadal trends in Antarctic sea-ice extent driven by ENSO-SAM over the last 2,000 years** *NATURE GEOSCIENCE*

  Crosta, X., Etourneau, J., Orme, L. C., Dalaiden, Q., Campagne, P., Swingedouw, D., Goosse, H., Masse, G., Miettinen, A., McKay, R. M., Dunbar, R. B., Escutia, C., Ikehara, et al

  2021

- **Mid-Holocene Antarctic sea-ice increase driven by marine ice sheet retreat** *CLIMATE OF THE PAST*

  Ashley, K. E., McKay, R., Etourneau, J., Jimenez-Espejo, F. J., Condron, A., Albot, A., Crosta, X., Riesselman, C., Seki, O., Mass, G., Golledge, N. R., Gasson, E., Lowry, et al

  2021; 17 (1): 1–19

- **Drivers of Biogeochemical Variability in a Central California Kelp Forest: Implications for Local Amelioration of Ocean Acidification** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS*

  Hirsh, H. K., Nickols, K. J., Takeshita, Y., Traiger, S. B., Mucciarone, D. A., Monismith, S., Dunbar, R. B.

2020; 125 (11)

- **A review of a decade of lessons from one of the world's largest MPAs: conservation gains and key challenges** *MARINE BIOLOGY*
  Hays, G. C., Koldewey, H. J., Andrzejaczek, S., Attrill, M. J., Barley, S., Bayley, D. T. I., Benkwitt, C. E., Block, B., Schallert, R. J., Carlisle, A. B., Carr, P., Chapple, T. K., Collins, et al
  2020; 167 (11)

- **Automated multiport flow-through water pumping and sampling system.** *HardwareX*
  Mucciarone, D. A., Dunbar, R. B.
  2020; 8: e00147

- **Autonomous underwater pumping system** *HARDWAREX*
  Mucciarone, D. A., DeJong, H. B., Dunbar, R. B.
  2020; 8

- **Automated multiport flow-through water pumping and sampling system** *HARDWAREX*
  Mucciarone, D. A., Dunbar, R. B.
  2020; 8

- **Autonomous underwater pumping system.** *HardwareX*
  Mucciarone, D. A., DeJong, H. B., Dunbar, R. B.
  2020; 8: e00154

- **Marine geological investigation of Edward VIII Gulf, Kemp Coast, East Antarctica** *ANTARCTIC SCIENCE*
  Dove, I. A., Leventer, A., Metcalf, M. J., Brachfeld, S. A., Dunbar, R. B., Manley, P., Shevenell, A. E., Murray, R. W., Hommeyer, M., Kryc, K. A., McLenaghan, N., Taylor, F., Huber, et al
  2020; 32 (3): 210–22

- **Estimating Carbon Flux From Optically Recording Total Particle Volume at Depths Below the Primary Pycnocline** *FRONTIERS IN MARINE SCIENCE*
  Bochdansky, A. B., Dunbar, R. B., Hansell, D. A., Herndl, G. J.
  2019; 6

- **Living coral tissue slows skeletal dissolution related to ocean acidification** *NATURE ECOLOGY & EVOLUTION*
  Kline, D., Teneva, L., Okamoto, D. K., Schneider, K., Caldeira, K., Miard, T., Chai, A., Marker, M., Dunbar, R. B., Mitchell, B., Dove, S., Hoegh-Guldberg, O.
  2019; 3 (10): 1438–44

- **Coral carbon isotope sensitivity to growth rate and water depth with paleo-sea level implications** *NATURE COMMUNICATIONS*
  Linsley, B. K., Dunbar, R. B., Dassie, E. P., Tangri, N., Wu, H. C., Brenner, L. D., Wellington, G. M.
  2019; 10

- **Recent history of persistent organic pollutants (PAHs, PCBs, PBDEs) in sediments from a large tropical lake** *JOURNAL OF HAZARDOUS MATERIALS*
  Feliciano Ontiveros-Cuadras, J., Carolina Ruiz-Fernandez, A., Sanchez-Cabeza, J., Sericano, J., Hascibe Perez-Bernal, L., Paez-Osuna, F., Dunbar, R. B., Mucciarone, D. A.
  2019; 368: 264–73

- **Chemistry of the consumption and excretion of the bumphead parrotfish (Bolbometopon muricatum), a coral reef mega-consumer** *CORAL REEFS*
  Goldberg, E., Raab, T. K., Desalles, P., Briggs, A. A., Dunbar, R. B., Millero, F. J., Woosley, R. J., Young, H. S., Micheli, F., Mccauley, D. J.
  2019; 38 (2): 347–57

- **Flow and Drag in a Seagrass Bed** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS*
  Monismith, S. G., Hirsh, H., Batista, N., Francis, H., Egan, G., Dunbar, R. B.
  2019; 124 (3): 2153–63

- **Keeping an Eye on Antarctic toe Sheet Stability** *OCEANOGRAPHY*
  Escutia, C., DeConto, R. M., Dunbar, R., De Santis, L., Shevenell, A., Naish, T.
  2019; 32 (1): 32–46

- **Author Correction: Coral carbon isotope sensitivity to growth rate and water depth with paleo-sea level implications.** *Nature communications*
  Linsley, B. K., Dunbar, R. B., Dassié, E. P., Tangri, N. n., Wu, H. C., Brenner, L. D., Wellington, G. M.
  2019; 10 (1): 2940
- **Coral carbon isotope sensitivity to growth rate and water depth with paleo-sea level implications.** *Nature communications*
  Linsley, B. K., Dunbar, R. B., Dassié, E. P., Tangri, N. n., Wu, H. C., Brenner, L. D., Wellington, G. M.
  2019; 10 (1): 2056
- **ENSO's Shrinking Twentieth-Century Footprint Revealed in a Half-Millennium Coral Core From the South Pacific Convergence Zone** *PALEOCEANOGRAPHY AND PALEOCLIMATOLOGY*
  Tangri, N., Dunbar, R. B., Linsley, B. K., Mucciarone, D. M.
  2018; 33 (11): 1136-1150
- **Early life history connectivity of Antarctic silverfish (Pleuragramma antarctica) in the Ross Sea** *FISHERIES OCEANOGRAPHY*
  Brooks, C. M., Caccavo, J., Ashford, J., Dunbar, R., Goetz, K., La Mesa, M., Zane, L.
  2018; 27 (3): 274–87
- **Iceberg Alley, East Antarctic Margin: Continuously laminated diatomaceous sediments from the late Holocene** *MARINE MICROPALEONTOLOGY*
  Alley, K., Patacca, K., Pike, J., Dunbar, R., Leventer, A.
  2018; 140: 56–68
- **Acetoclastic Methanosaeta are dominant methanogens in organic-rich Antarctic marine sediments** *ISME JOURNAL*
  Carr, S. A., Schubotz, F., Dunbar, R. B., Mills, C. T., Dias, R., Summons, R. E., Mandernack, K. W.
  2018; 12 (2): 330–42
- **Taking the metabolic pulse of the world's coral reefs** *PLOS ONE*
  Cyronak, T., Andersson, A. J., Langdon, C., Albright, R., Bates, N. R., Caldeira, K., Carlton, R., Corredor, J. E., Dunbar, R. B., Enochs, I., Erez, J., Eyre, B. D., Gattuso, et al
  2018; 13 (1): e0190872
- **Improving Characterization of Anthropogenic Methane Emissions in the United States Introduction** *IMPROVING CHARACTERIZATION OF ANTHROPOGENIC METHANE EMISSIONS IN THE UNITED STATES*
  White, J. W. C., Allen, D., Amar, P. K., Bogner, J., Bruhwiler, L., Cooley, D., Frankenberg, C., George, F., Hanle, L., Hristov, A. H., Kebreab, E., Leytem, A., Mastalerz, et al
  2018: 21–36
- **Late summer frazil ice-associated algal blooms around Antarctica** *Geophysical Research Letters*
  DeJong, H. B., Dunbar, R. B., Lyons, E. A.
  2018: 1-8
- **Porites coral response to an oceanographic and human impact gradient in the Line Islands** *LIMNOLOGY AND OCEANOGRAPHY*
  Carilli, J. E., Hartmann, A. C., Heron, S. F., Pandolfi, J. M., Cobb, K., Sayani, H., Dunbar, R., Sandin, S. A.
  2017; 62 (6): 2850–63
- **Dissolved organic carbon in the Ross Sea: Deep enrichment and export** *LIMNOLOGY AND OCEANOGRAPHY*
  Bercovici, S. K., Huber, B. A., DeJong, H. B., Dunbar, R. B., Hansell, D. A.
  2017; 62 (6): 2593–2603
- **Air-Sea CO2 Exchange in the Ross Sea, Antarctica** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS*
  DeJong, H. B., Dunbar, R. B.
  2017; 122 (10): 8167–81
- **Reproducibility of Ba/Ca variations recorded by northeast Pacific bamboo corals** *PALEOCEANOGRAPHY*
  Marks, G., LaVigne, M., Hill, T. M., Sauthoff, W., Guilderson, T. P., Roark, E. B., Dunbar, R. B., Horner, T. J.
  2017; 32 (9): 966-979
- **Macro-nutrient concentrations in Antarctic pack ice: Overall patterns and overlooked processes** *ELEMENTA-SCIENCE OF THE ANTHROPOCENE*

Fripiat, F., Meiners, K. M., Vancoppenolle, M., Papadimitriou, S., Thomas, D. N., Ackley, S. F., Arrigo, K. R., Carnat, G., Cozzi, S., Delille, B., Dieckmann, G. S., Dunbar, R. B., Fransson, et al
2017; 5

- **Net community production and carbon export during the late summer in the Ross Sea, Antarctica** *GLOBAL BIOGEOCHEMICAL CYCLES*
  DeJong, H. B., Dunbar, R. B., Koweek, D. A., Mucciarone, D. A., Bercovici, S. K., Hansell, D. A.
  2017; 31 (3): 473-491
- **Examining the utility of coral Ba/Ca as a proxy for river discharge and hydroclimate variability at Coiba Island, Gulf of Chirquí, Panamá.** *Marine pollution bulletin*
  Brenner, L. D., Linsley, B. K., Dunbar, R. B.
  2017
- **A coupled wave-hydrodynamic model of an atoll with high friction: Mechanisms for flow, connectivity, and ecological implications** *OCEAN MODELLING*
  Rogers, J. S., Monismith, S. G., Fringer, O. B., Koweek, D. A., Dunbar, R. B.
  2017; 110: 66-82
- **A year in the life of a central California kelp forest: physical and biological insights into biogeochemical variability** *BIOGEOSCIENCES*
  Koweek, D. A., Nickols, K. J., Leary, P. R., Litvin, S. Y., Bell, T. W., Luthin, T., Lummis, S., Mucciarone, D. A., Dunbar, R. B.
  2017; 14 (1): 31-44
- **Carbonate "clumped" isotope signatures in aragonitic scleractinian and calcitic gorgonian deep-sea corals** *BIOGEOSCIENCES*
  Kimball, J., Eagle, R., Dunbar, R.
  2016; 13 (23): 6487-6505
- **Thermodynamics and hydrodynamics in an atoll reef system and their influence on coral cover** *LIMNOLOGY AND OCEANOGRAPHY*
  Rogers, J. S., Monismith, S. G., Koweek, D. A., Torres, W. I., Dunbar, R. B.
  2016; 61 (6): 2191-2206
- **Science-based management in decline in the Southern Ocean.** *Science*
  Brooks, C. M., Crowder, L. B., Curran, L. M., Dunbar, R. B., Ainley, D. G., Dodds, K. J., Gjerde, K. M., Sumaila, U. R.
  2016; 354 (6309): 185-187
- **Accretion rates in coastal wetlands of the southeastern Gulf of California and their relationship with sea-level rise** *HOLOCENE*
  Carolina Ruiz-Fernandez, A., Sanchez-Cabeza, J., Serrato de la Pena, J. L., Hascibe Perez-Bernal, L., Cearreta, A., Flores-Verdugo, F., Luisa Machain-Castillo, M., Chamizo, E., Garcia-Tenorio, R., Queralt, I., Dunbar, R., Mucciarone, D., Diaz-Asencio, et al
  2016; 26 (7): 1126-1137
- **Coral delta O-18 evidence for Pacific Ocean mediated decadal variability in Panamanian ITCZ rainfall back to the early 1700s** *PALAEOGEOGRAPHY PALAEOCLIMATOLOGY PALAEOECOLOGY*
  Brenner, L. D., Linsley, B. K., Dunbar, R. B., Wellington, G.
  2016; 449: 385-396
- **Bubble Stripping as a Tool To Reduce High Dissolved CO2 in Coastal Marine Ecosystems** *ENVIRONMENTAL SCIENCE & TECHNOLOGY*
  Koweek, D. A., Mucciarone, D. A., Dunbar, R. B.
  2016; 50 (7): 3790-3797
- **Wave dynamics of a Pacific Atoll with high frictional effects** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS*
  Rogers, J. S., Monismith, S. G., Koweek, D. A., Dunbar, R. B.
  2016; 121 (1): 350-367
- **High-resolution physical and biogeochemical variability from a shallow back reef on Ofu, American Samoa: an end-member perspective** *CORAL REEFS*
  Koweek, D. A., Dunbar, R. B., Monismith, S. G., Mucciarone, D. A., Woodson, C. B., Samuel, L.
  2015; 34 (3): 979-991
- **Six Month In Situ High-Resolution Carbonate Chemistry and Temperature Study on a Coral Reef Flat Reveals Asynchronous pH and Temperature Anomalies** *PLOS ONE*
  Kline, D. I., Teneva, L., Hauri, C., Schneider, K., Miard, T., Chai, A., Marker, M., Dunbar, R., Caldeira, K., Lazar, B., Rivlin, T., Mitchell, B. G., Dove, et al

2015; 10 (6)

- **Frictional wave dissipation on a remarkably rough reef** *GEOPHYSICAL RESEARCH LETTERS*
  Monismith, S. G., Rogers, J. S., Koweek, D., Dunbar, R. B.
  2015; 42 (10): 4063-4071
- **Identification of frequent La Nina events during the early 1800s in the east equatorial Pacific** *GEOPHYSICAL RESEARCH LETTERS*
  Druffel, E. R., Griffin, S., Vetter, D., Dunbar, R. B., Mucciarone, D. M.
  2015; 42 (5): 1512-1519
- **Environmental and ecological controls of coral community metabolism on Palmyra Atoll** *CORAL REEFS*
  Koweek, D., Dunbar, R. B., Rogers, J. S., Williams, G. J., Price, N., Mucciarone, D., Teneva, L.
  2015; 34 (1): 339-351
- **Field observations of wave-driven circulation over spur and groove formations on a coral reef** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS*
  Rogers, J. S., Monismith, S. G., Dunbar, R. B., Koweek, D.
  2015; 120 (1): 145-160
- **Carbonate saturation state of surface waters in the Ross Sea and Southern Ocean: controls and implications for the onset of aragonite undersaturation** *BIOGEOSCIENCES*
  DeJong, H. B., Dunbar, R. B., Mucciarone, D., Koweek, D. A.
  2015; 12 (23): 6881-6896
- **Orbital forcing of the East Antarctic ice sheet during the Pliocene and Early Pleistocene** *NATURE GEOSCIENCE*
  Patterson, M. O., McKay, R., Naish, T., Escutia, C., Jimenez-Espejo, F. J., Raymo, M. E., Meyers, S. R., Tauxe, L., Brinkhuis, H., IODP Expedition 318 Scientists
  2014; 7 (11): 841-847
- **Positive and Negative Effects of a Threatened Parrotfish on Reef Ecosystems** *CONSERVATION BIOLOGY*
  McCauley, D. J., Young, H. S., Guevara, R., Williams, G. J., Power, E. A., Dunbar, R. B., Bird, D. W., Durham, W. H., Micheli, F.
  2014; 28 (5): 1312-?
- **Long-range atmospheric transport of persistent organic pollutants to remote lacustrine environments.** *The Science of the total environment*
  Ruiz-Fernández, A. C., Ontiveros-Cuadras, J. F., Sericano, J. L., Sanchez-Cabeza, J., Liong Wee Kwong, L., Dunbar, R. B., Mucciarone, D. A., Pérez-Bernal, L. H., Páez-Osuna, F.
  2014; 493: 505-520
- **Retreat history of the East Antarctic Ice Sheet since the Last Glacial Maximum** *QUATERNARY SCIENCE REVIEWS*
  Mackintosh, A. N., Verleyen, E., O'Brien, P. E., White, D. A., Jones, R. S., McKay, R., Dunbar, R., Gore, D. B., Fink, D., Post, A. L., Miura, H., Leventer, A., Goodwin, et al
  2014; 100: 10-30
- **A community-based geological reconstruction of Antarctic Ice Sheet deglaciation since the Last Glacial Maximum** *QUATERNARY SCIENCE REVIEWS*
  Bentley, M. J., Cofaigh, C. O., Anderson, J. B., Conway, H., Davies, B., Graham, A. G., Hillenbrand, C., Hodgson, D. A., Jamieson, S. S., Larter, R. D., Mackintosh, A., Smith, J. A., Verleyen, et al
  2014; 100: 1-9
- **A 215-yr coral delta O-18 time series from Palau records dynamics of the West Pacific Warm Pool following the end of the Little Ice Age** *CORAL REEFS*
  Osborne, M. C., Dunbar, R. B., Mucciarone, D. A., Druffel, E., Sanchez-Cabeza, J.
  2014; 33 (3): 719-731
- **Oxygen and carbon isotope fractionation in calcitic deep-sea corals: Implications for paleotemperature reconstruction** *CHEMICAL GEOLOGY*
  Kimball, J. B., Dunbar, R. B., Guilderson, T. P.
  2014; 381: 223-233
- **Seasonal radiocarbon and oxygen isotopes in a Galapagos coral: Calibration with climate indices** *GEOPHYSICAL RESEARCH LETTERS*
  Druffel, E. R., Griffin, S., Glynn, D. S., Dunbar, R. B., Mucciarone, D. A., Toggweiler, J. R.

2014; 41 (14): 5099-5105

- **Conservation management options and actions: Putative decline of coral cover at Palmyra Atoll, Northern Line Islands, as a case study** *MARINE POLLUTION BULLETIN*
  Gardner, J. P., Bartz, R. J., Brainard, R. E., Cohen, J. D., Dunbar, R. B., Garton, D. W., Powell, S.
  2014; 84 (1-2): 182-190

- **Sedimentology of lower Pliocene to Upper Pleistocene diamictons from IODP Site U1358, Wilkes Land margin, and implications for East Antarctic Ice Sheet dynamics** *ANTARCTIC SCIENCE*
  Orejola, N., Passchier, S., Brinkhuis, H., Escutia Dotti, C., Klaus, A., Fehr, A., Williams, T., Bendle, J. A., Bijl, P. K., Bohaty, S. M., Carr, S. A., Dunbar, R. B., Flores, et al
  2014; 26 (2): 183-192

- **(submitted) Nature's last stand: Locating and protecting the planet's most remote and biodiverse sites** *Nature*
  McCauley, D. J., , D. J., McInturf, A., , A., Young, H. S., , H. S., Dunbar, R. B., , R. B., Hastie, T., , T., Mazumder, R., , R., Viladomat, et al
  2014

- **COMPOUND-SPECIFIC C-14 DATING OF IODP EXPEDITION 318 CORE U1357A OBTAINED OFF THE WILKES LAND COAST, ANTARCTICA** *RADIOCARBON*
  Yamane, M., Yokoyama, Y., Miyairi, Y., Suga, H., Matsuzaki, H., Dunbar, R. B., Ohkouchi, N.
  2014; 56 (3): 1009-1017

- **(submitted) 32Si dating of the upper Adelie Drift sediment core U1357C to resolve the 14C reservoir age** *Geochimica Cosmochimica Acta*
  Morgenstern, U., Dunbar, R., Ditchburn, R., McKay, R., Crosta, X., Masse, G., Elod, J., Jimenez-Espejo, F., Escutia, C.
  2014

- **(submitted) Seasonal radiocarbon and oxygen isotopes in a Galapagos coral: Calibration with climate indices** *Geophysical Research Letters*
  Druffel, E., Griffin, S., Glynn, D., Dunbar, R., Mucciarone, D.
  2014

- **A 215 year coral δ18O time series from Palau records dynamics of the West Pacific Warm Pool (WPWP) following the end of the Little Ice Age (LIA)** *Coral Reefs*
  Osborne, M., Dunbar, R., Mucciarone, D., Druffel, E., Sanchez-Cabeza, J.
  2014

- **(In Press) Dynamic coral community metabolism and its controls on Palmyra Atoll** *Coral Reefs*
  Koweek, D., Dunbar, R. B., Rogers, J., Williams, G., Price, N., Mucciarone, D., Teneva, L.
  2014

- **(submitted) Reef exposure metrics of environmental stress based on diel and seasonal trends in carbonate chemistry and temperature** *PLOS ONE*
  Kline, D., Teneva, L., Schneider, K., Hauri, C., Miard, T., Chai, A., Marker, M., Dunbar, R., Caldeira, K., Lazar, B., Rivlin, T., Mitchell, B., Dove, et al
  2014

- **Pushing back against paper-park pushers – Reply to Craigie et al.** *Biological Conservation*
  McCauley, D., Power, E., Bird, D., Dunbar, R., Durham, W., Micheli, F., Young, H.
  2014; 173

- **(submitted) Biological controls on coral reef seawater chemistry and potential capacity for offsetting future ocean acidification** *Limnology and Oceanography*
  Teneva, L., Dunbar, R., Koweek, D., Mucciarone, D.
  2014

- **(In Press) A community-based reconstruction of Antarctic Ice Sheet deglaciation since the Last Glacial Maximum** *Quaternary Science Reviews*
  Bentley, M., Consortium, R., Dunbar, R.
  2014

- **(In Press) Compound-specific 14C dating of IODP Expedition 318 Core 1357A obtained off the Wilkes Land Coast, Antarctica** *Radiocarbon*
  Yamane, Y., Yokoyama, Y., Miyairi, Y., Suga, H., Matsuzaki, H., Dunbar, R., Ohkouchi, N.
  2014

- **Conservation management options and actions: Putative decline of coral cover at Palmyra Atoll, Northern Line Islands, as a case study** *Marine Pollution Bulletin*
  Gardner, J., Bartz, J., Brainard, R., Collen, J., Dunbar, R., Garton, D., Powell, S.
  2014
- **(In Press) Underwater elephants: functionally important species and the importance of ecosystem functioning** *Conservation Biology*
  McCauley, D. J., Young, H. S., Guevara, R., Power , E., Dunbar, R. B., Bird, D., Durham , W., Williams, G. J., Micheli, F.
  2014
- **Retreat history of the East Antarctic Ice Sheet since the Last Glacial Maximum** *Quaternary Science Reviews*
  Mackintosh, A. N., Verleyen, E., O'Brien, P. E., White, D., McKay, R., Gore, D. B., Dunbar, R. B., Fink, D., Jones, R. S., Post, A. L., Miura, H., Leventer, A., Goodwin, et al
  2014; 85
- **Oxygen and carbon isotope fractionation in calcitic deep-sea corals: Implications for paleotemperature reconstruction** *Chemical Geology*
  Kimball, J. B., Dunbar, R. B., Guilderson, T. P.
  2014; 381: 223-233
- **(in Press) Long-range atmospheric transport of persistent organic pollutants to remote lacustrine environments** *Science of the Total Environment*
  Ruiz-Fernández, A. C., Ontiveros-Cuadras, J. F., Luis Sericano, J., Sánchez-Cabeza, J. A., Wee-Kwon, L. L., Dunbar, R. B., Mucciarone, D., Pérez-Bernal, H. L., Páez-Osuna, F.
  2014
- **Regional calibration of coral-based climate reconstructions from Palau, West Pacific Warm Pool (WPWP)** *PALAEOGEOGRAPHY PALAEOCLIMATOLOGY PALAEOECOLOGY*
  Osborne, M. C., Dunbar, R. B., Mucciarone, D. A., Sanchez-Cabeza, J., Druffel, E.
  2013; 386: 308-320
- **Spatial and temporal variations in variable fluoresence in the Ross Sea (Antarctica): Oceanographic correlates and bloom dynamics** *DEEP-SEA RESEARCH PART I-OCEANOGRAPHIC RESEARCH PAPERS*
  Smith, W. O., Tozzi, S., Long, M. C., Sedwick, P. N., Peloquin, J. A., Dunbar, R. B., Hutchins, D. A., Kolber, Z., DiTullio, G. R.
  2013; 79: 141-155
- **Dynamic behaviour of the East Antarctic ice sheet during Pliocene warmth** *NATURE GEOSCIENCE*
  Cook, C. P., van de Flierdt, T., Williams, T., Hemming, S. R., Iwai, M., Kobayashi, M., Jimenez-Espejo, F. J., Escutia, C., Jairo Gonzalez, J., Khim, B., McKay, R. M., Passchier, S., Bohaty, et al
  2013; 6 (9): 765–69
- **High-resolution carbon budgets on a Palau back-reef modulated by interactions between hydrodynamics and reef metabolism** *LIMNOLOGY AND OCEANOGRAPHY*
  Teneva, L., Dunbar, R. B., Mucciarone, D. A., Dunckley, J. F., Koseff, J. R.
  2013; 58 (5): 1851-1870
- **delta N-15 values of settling biogenic particles in the eastern Bransfield Basin (west Antarctic) and their records for the surface-water condition** *GEOSCIENCES JOURNAL*
  Khim, B., Dunbar, R., Kim, D.
  2013; 17 (3): 255-265
- **Conservation at the edges of the world** *BIOLOGICAL CONSERVATION*
  McCauley, D. J., Power, E. A., Bird, D. W., McInturff, A., Dunbar, R. B., Durham, W. H., Micheli, F., Young, H. S.
  2013; 165: 139-145
- **Bacterial abundance and composition in marine sediments beneath the Ross Ice Shelf, Antarctica** *GEOBIOLOGY*
  Carr, S. A., Vogel, S. W., Dunbar, R. B., Brandes, J., Spear, J. R., Levy, R., Naish, T. R., Powell, R. D., Wakeham, S. G., Mandernack, K. W.
  2013; 11 (4): 377-395
- **Eocene cooling linked to early flow across the Tasmanian Gateway** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Bijl, P. K., Bendle, J. A., Bohaty, S. M., Pross, J., Schouten, S., Tauxe, L., Stickley, C. E., McKay, R. M., Roehl, U., Olney, M., Sluijs, A., Escutia, C., Brinkhuis, et al

2013; 110 (24): 9645-9650

- **Relative sea-level rise around East Antarctica during Oligocene glaciation** *NATURE GEOSCIENCE*
  Stocchi, P., Escutia, C., Houben, A. J., Vermeersen, B. L., Bijl, P. K., Brinkhuis, H., DeConto, R. M., Galeotti, S., Passchier, S., Pollard, D., Brinkhuis, H., Escutia, C., Klaus, et al
  2013; 6 (5): 380-384

- **Reorganization of Southern Ocean plankton ecosystem at the onset of Antarctic glaciation.** *Science*
  Houben, A. J., Bijl, P. K., Pross, J., Bohaty, S. M., Passchier, S., Stickley, C. E., Röhl, U., Sugisaki, S., Tauxe, L., van de Flierdt, T., Olney, M., Sangiorgi, F., Sluijs, et al
  2013; 340 (6130): 341-344

- **Reorganization of Southern Ocean Plankton Ecosystem at the Onset of Antarctic Glaciation** *SCIENCE*
  Houben, A. J., Bijl, P. K., Pross, J., Bohaty, S. M., Passchier, S., Stickley, C. E., Roehl, U., Sugisaki, S., Tauxe, L., van de Flierdt, T., Olney, M., Sangiorgi, F., Sluijs, et al
  2013; 340 (6130): 341-344

- **The roles of productivity and ecosystem size in determining food chain length in tropical terrestrial ecosystems** *ECOLOGY*
  Young, H. S., McCauley, D. J., Dunbar, R. B., Hutson, M. S., Ter-Kuile, M., Dirzo, R.
  2013; 94 (3): 692-701

- **Diatom evidence for the onset of Pliocene cooling from AND-1B, McMurdo Sound, Antarctica** *PALAEOGEOGRAPHY PALAEOCLIMATOLOGY PALAEOECOLOGY*
  Riesselman, C. R., Dunbar, R. B.
  2013; 369: 136-153

- **Provenance of Pleistocene sediments from Site U1359 of the Wilkes Land IODP Leg 318-evidence for multiple sourcing from the East Antarctic Craton and Ross Orogen** *ANTARCTIC PALAEOENVIRONMENTS AND EARTH-SURFACE PROCESSES*
  Pant, N. C., Biswas, P., Shrivastava, P. K., Bhattacharya, S., Verma, K., Pandey, M., Brinkhuis, H., Dotti, C., Klaus, A., Fehr, A., Williams, T., Bendle, J. A. P., Bijl, et al
  edited by Hambrey, M. J., Barker, P. F., Barrett, P. J., Bowman, Davies, B., Smellie, J. L., Tranter, M.
  2013; 381: 277–97

- **Early Bomb Radiocarbon Detected in Palau Archipelago Corals** *Radiocarbon*
  Glynn, D., Druffel, E., Griffin, S., Dunbar, R., Osborne, M., Sanchez-Cabeza, J.
  2013

- **EARLY BOMB RADIOCARBON DETECTED IN PALAU ARCHIPELAGO CORALS** *RADIOCARBON*
  Glynn, D., Druffel, E., Griffin, S., Dunbar, R., Osborne, M., Sanchez-Cabeza, J. A.
  2013; 55 (2-3): 1659-1664

- **Late Holocene variations in Pacific surface circulation and biogeochemistry inferred from proteinaceous deep-sea corals** *BIOGEOSCIENCES*
  Guilderson, T. P., McCarthy, M. D., Dunbar, R. B., Englebrecht, A., Roark, E. B.
  2013; 10 (9): 6019-6028

- **Reorganization of Southern Ocean Plankton Ecosystem at the Onset of Antarctic Glaciation** *Science*
  Houben, A.J.P., Bijl, P.K., Pross, J., Bohaty, S.M., Passchier, S., Stickley, C.E., Röhl, U., Sugisaki, S., Tauxe, L., van de Flierdt, T., Olney, M., Sangiorgi, F., Sluijs, et al
  2013; 340: 341-344

- **Relative sea-level rise around East Antarctica during Oligocene glaciation** *Nature Geoscience*
  Stocchi, P., Escutia, C., Houben, A.J.P., Vermeersen, B.L.A., Bijl, P.K., Brinkhuis, H., DeConto, R.M., Galeotti, S., Passchier, S., Pollard, D., Klaus, A., Fehr, A., Williams, et al
  2013; 6: 380-384

- **High-resolution carbon budgets on a Palau back-reef modulated by interactions between hydrodynamics and reef metabolism: insights for ocean acidification impacts** *Limnology and Oceanography*
  Teneva, L., Dunckley, J. F., Dunbar, R. B., Mucciarone, D. A., Koseff, J. R.
  2013; 58 (5): 1851-1870

- **Neogene tectonic and climatic evolution of the Western Ross Sea, Antarctica - Chronology of events from the AND-1B drill hole** *GLOBAL AND PLANETARY CHANGE*
  Wilson, G. S., Levy, R. H., Naish, T. R., Powell, R. D., Florindo, F., Ohneiser, C., Sagnotti, L., Winter, D. M., Cody, R., Henrys, S., Ross, J., Krissek, L., Niessen, et al
  2012; 96-97: 189-203

- **Assessing the effects of large mobile predators on ecosystem connectivity.** *Ecological applications*
  McCauley, D. J., Young, H. S., Dunbar, R. B., Estes, J. A., Semmens, B. X., Micheli, F.
  2012; 22 (6): 1711-1717

- **Assessing the effects of large mobile predators on ecosystem connectivity** *ECOLOGICAL APPLICATIONS*
  McCauley, D. J., Young, H. S., Dunbar, R. B., Estes, J. A., Semmens, B. X., Michel, F.
  2012; 22 (6): 1711-1717

- **A NEW US POLAR RESEARCH VESSEL FOR THE TWENTY-FIRST CENTURY** *OCEANOGRAPHY*
  Dunbar, R. B., Alberts, J., Ashjian, C., Asper, V., Chayes, D., Domack, E., Ducklow, H., Huber, B., Lawver, L., Oliver, D., Russell, D., Smith, C. R., Vernet, et al
  2012; 25 (3): 204-207

- **Persistent near-tropical warmth on the Antarctic continent during the early Eocene epoch** *NATURE*
  Pross, J., Contreras, L., Bijl, P. K., Greenwood, D. R., Bohaty, S. M., Schouten, S., Bendle, J. A., Roehl, U., Tauxe, L., Raine, J. I., Huck, C. E., van de Flierdt, T., Jamieson, et al
  2012; 488 (7409): 73-77

- **Seasonally laminated diatom-rich sediments from Dumont d'Urville Trough, East Antarctic Margin: Late-Holocene Neoglacial sea-ice conditions** *HOLOCENE*
  Maddison, E. J., Pike, J., Dunbar, R.
  2012; 22 (8): 857-875

- **Chronostratigraphic framework for the IODP Expedition 318 cores from the Wilkes Land Margin: Constraints for paleoceanographic reconstruction** *PALEOCEANOGRAPHY*
  Tauxe, L., Stickley, C. E., SUGISAKI, S., Bijl, P. K., Bohaty, S. M., Brinkhuis, H., Escutia, C., Flores, J. A., Houben, A. J., Iwai, M., Jimenez-Espejo, F., McKay, R., Passchier, et al
  2012; 27

- **Resilience of cold-water scleractinian corals to ocean acidification: Boron isotopic systematics of pH and saturation state up-regulation** *GEOCHIMICA ET COSMOCHIMICA ACTA*
  McCulloch, M., Trotter, J., Montagna, P., Falter, J., Dunbar, R., Freiwald, A., Foersterra, N., Lopez Correa, M., Maier, C., Ruggeberg, A., Taviani, M.
  2012; 87: 21-34

- **A short-term in situ CO2 enrichment experiment on Heron Island (GBR)** *SCIENTIFIC REPORTS*
  Kline, D. I., Teneva, L., Schneider, K., Miard, T., Chai, A., Marker, M., Headley, K., Opdyke, B., Nash, M., Valetich, M., Caves, J. K., Russell, B. D., Connell, et al
  2012; 2

- **From wing to wing: the persistence of long ecological interaction chains in less-disturbed ecosystems** *SCIENTIFIC REPORTS*
  McCauley, D. J., DeSalles, P. A., Young, H. S., Dunbar, R. B., Dirzo, R., Mills, M. M., Micheli, F.
  2012; 2

- **Antarctic and Southern Ocean influences on Late Pliocene global cooling** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  McKay, R., Naish, T., Carter, L., Riesselman, C., Dunbar, R., Sjunneskog, C., Winter, D., Sangiorgi, F., Warren, C., Pagani, M., Schouten, S., Willmott, V., Levy, et al
  2012; 109 (17): 6423-6428

- **Radiocarbon and stable isotopes in Palmyra corals during the past century** *GEOCHIMICA ET COSMOCHIMICA ACTA*
  Druffel-Rodriguez, K. C., Vetter, D., Griffin, S., Druffel, E. R., Dunbar, R. B., Mucciarone, D. A., Ziolkowski, L. A., Sanchez-Cabeza, J.
  2012; 82: 154-162

- **Control of phytoplankton bloom inception in the Ross Sea, Antarctica, by Ekman restratification** *GLOBAL BIOGEOCHEMICAL CYCLES*
  Long, M. C., Thomas, L. N., Dunbar, R. B.

2012; 26

- **Integrated biomagnetostratigraphy of the Wilkes Land Margin for reconstruction of 53 Ma of Antarctic Margin paleoceanography: New results from IODP Expedition 318** *Paleoceanography*
  Tauxe, L., Stickley, C., Sugisaki, S., Bijl, P., Bohaty, S., Brinkhuis, H., Escutia, C., Flores, J., Iwai, M., Jiménez-Espejo, F. J., McKay, R., Passchier, S., Pross, et al
  2012; 27

- **Stazioni di Ricerca in Antartide, 20.1, Il sito di ricerca Mooring A, Ross Sea, Antarctica** *La rete Italiana per la ricerca ecologica lungo termine (LTER-Italia)*
  Ravaioli, M., Giglio, F., Langone, L., Capotondi, L., Bergami, C., Chiarini, F., Dunbar, R., Aliani, S., Paschini, E., Meloni, R., Focaccia, P.
  edited by Bertoni, R.
  ARACNE.2012

- **Seasonally-laminated diatom-rich sediments from Dumont d'Urville Trough, East Antarctic Margin: Late Holocene Neoglacial sea-ice conditions** *The Holocene*
  Maddison, E. J., Pike, J., Leventer, A., Dunbar, R.
  2012; 22: 1-19

- **Persistent near-tropical warmth on the Antarctic continent during the early Eocene epoch** *Nature*
  Pross, J., Contreras, L., Bijl, P.K., Greenwood, D.R., Bohaty, S.M., Schouten, S., Bendle, J.A., Röhl, U., Tauxe, Dunbar, R., et. al.
  2012; 488: 73-77

- **Early season depletion of dissolved iron in the Ross Sea polynya: Implications for iron dynamics on the Antarctic continental shelf** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS*
  Sedwick, P. N., Marsay, C. M., Sohst, B. M., Aguilar-Islas, A. M., Lohan, M. C., Long, M. C., Arrigo, K. R., Dunbar, R. B., Saito, M. A., Smith, W. O., DiTullio, G. R.
  2011; 116

- **Effects of diagenesis on paleoclimate reconstructions from modern and young fossil corals** *GEOCHIMICA ET COSMOCHIMICA ACTA*
  Sayani, H. R., Cobb, K. M., Cohen, A. L., Elliott, W. C., Nurhati, I. S., Dunbar, R. B., Rose, K. A., Zaunbrecher, L. K.
  2011; 75 (21): 6361-6373

- **Vertical structure, seasonal drawdown, and net community production in the Ross Sea, Antarctica** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS*
  Long, M. C., Dunbar, R. B., Tortell, P. D., Smith, W. O., Mucciarone, D. A., DiTullio, G. R.
  2011; 116

- **Holocene mass-wasting events in Lago Fagnano, Tierra del Fuego (54 degrees S): implications for paleoseismicity of the Magallanes-Fagnano transform fault** *BASIN RESEARCH*
  Waldmann, N., Anselmetti, F. S., Ariztegui, D., Austin, J. A., Pirouz, M., Moy, C. M., Dunbar, R.
  2011; 23 (2): 171-190

- **Retreat of the East Antarctic ice sheet during the last glacial termination** *NATURE GEOSCIENCE*
  Mackintosh, A., Golledge, N., Domack, E., Dunbar, R., Leventer, A., White, D., Pollard, D., DeConto, R., Fink, D., Zwartz, D., Gore, D., Lavoie, C.
  2011; 4 (3): 195-202

- **A geochemical and sedimentary record of high southern latitude Holocene climate evolution from Lago Fagnano, Tierra del Fuego** *EARTH AND PLANETARY SCIENCE LETTERS*
  Moy, C. M., Dunbar, R. B., Guilderson, T. P., Waldmann, N., Mucciarone, D. A., Recasens, C., Ariztegui, D., Austin, J. A., Anselmetti, F. S.
  2011; 302 (1-2): 1-13

- **The atmospheric lead record preserved in lagoon sediments at a remote equatorial Pacific location: Palmyra Atoll, northern Line Islands** *MARINE POLLUTION BULLETIN*
  Collen, J. D., Baker, J. A., Dunbar, R. B., Rieser, U., Gardner, J. P., Garton, D. W., Christiansen, K. J.
  2011; 62 (2): 251-257

- **Iron limitation of springtime bacterial and phytoplankton community in the Ross Sea: Implications for vitamin B12 nutrition** *Frontiers in Microbiology*
  Bertrand, E. M., Saito, M. A., Lee, P. A., Dunbar, R. B., DiTullio, G. R.
  2011; 2

- **Iron limitation of a springtime bacterial and phytoplankton community in the Ross Sea: implications for vitamin B-12 nutrition** *FRONTIERS IN MICROBIOLOGY*
  Bertrand, E. M., Saito, M. A., Lee, P. A., Dunbar, R. B., Sedwick, P. N., DiTullio, G. R.
  2011; 2
- **Iron limitation of a springtime bacterial and phytoplankton community in the ross sea: implications for vitamin b(12) nutrition.** *Frontiers in microbiology*
  Bertrand, E. M., Saito, M. A., Lee, P. A., Dunbar, R. B., Sedwick, P. N., DiTullio, G. R.
  2011; 2: 160-?
- **Holocene climate variability at high-southern latitudes: an integrated perspective (HOLOCLIP) (not peer-reviewed)** *PAGES newsletter*
  Stenni, B., Crosta, X., Oerter, H., Dotti, E. C., Renssen, H., Goosse, H., Pike, H., Dunbar, R. B.
  2011; 19 (1): 37
- **Early-season iron depletion in the Ross Sea polynya: Implications for iron dynamics on the Antarctic continental shelf** *Journal of Geophysical Research*
  Sedwick, P. N., Marsay, C. M., Aguilar-Islas, A. M., Lohan, M. C., Sohst, B., Long, M. C., Arrigo, K. R., Bruland, K. W., DiTullio, G. R., Dunbar, R. B., Saito, M. A., Smith, W. O.
  2011; 116
- **Holocene climatic fluctuations and positioning of the Southern Hemisphere westerlies in Tierra del Fuego (54 degrees S), Patagonia** *JOURNAL OF QUATERNARY SCIENCE*
  Waldmann, N., Ariztegui, D., Anselmetti, F. S., Austin, J. A., Moy, C. M., Stern, C., Recasens, C., Dunbar, R. B.
  2010; 25 (7): 1063-1075
- **Stable isotope composition of dissolved inorganic carbon and particulate organic carbon in sea ice from the Ross Sea, Antarctica** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS*
  Munro, D. R., Dunbar, R. B., Mucciarone, D. A., Arrigo, K. R., Long, M. C.
  2010; 115
- **Poleward decrease in the isotope effect of nitrate assimilation across the Southern Ocean** *GEOPHYSICAL RESEARCH LETTERS*
  DiFiore, P. J., Sigman, D. M., Karsh, K. L., Trull, T. W., Dunbar, R. B., Robinson, R. S.
  2010; 37
- **Uranium-series dating and growth characteristics of the deep-sea scleractinian coral: Enallopsammia rostrata from the Equatorial Pacific** *GEOCHIMICA ET COSMOCHIMICA ACTA*
  Houlbreque, F., McCulloch, M., Roark, B., Guilderson, T., Meibom, A., Kimball, J., Mortimer, G., Cuif, J., Dunbar, R.
  2010; 74 (8): 2380-2395
- **Interactive effects of iron, irradiance and CO2 on Ross Sea phytoplankton** *DEEP-SEA RESEARCH PART I-OCEANOGRAPHIC RESEARCH PAPERS*
  Feng, Y., Hare, C. E., Rose, J. M., Handy, S. M., DiTullio, G. R., Lee, P. A., Smith, W. O., Peloquin, J., Tozzi, S., Sun, J., Zhang, Y., Dunbar, R. B., Long, et al
  2010; 57 (3): 368-383
- **Plants cause ecosystem nutrient depletion via the interruption of bird-derived spatial subsidies** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Young, H. S., McCauley, D. J., Dunbar, R. B., Dirzo, R.
  2010; 107 (5): 2072-2077
- **Niche partitioning among and within sympatric tropical seabirds revealed by stable isotope analysis** *MARINE ECOLOGY PROGRESS SERIES*
  Young, H. S., McCauley, D. J., Dirzo, R., Dunbar, R. B., Shaffer, S. A.
  2010; 416: 285-294
- **Coconut palm causes ecosystem nutrient depletion via the interruption of bird derived spatial subsidies** *Proceedings National Academy of Sciences*
  Young, H. S., McCauley, D. J., Dunbar, R. B., Dirzo, R.
  2010
- **Interactive Effects of CO2, Irradiance and Iron on Ross Sea Phytoplankton** *Deep Sea Research, Part I*

Feng, Y., Hare, C. E., Rose, J. M., Handy, S. M., DiTullio, G. R., Lee, P. A., Smith, W. O. Jr., Peloquin, J., Tozzi, S., Sun, J., Zhang, Y., Dunbar, R. B., Long, et al
2010; 57: 368-383

- **The Coral Proto - Free Ocean Carbon Enrichment System (CP-FOCE): Engineering and Development** *IEEE Engineering and Development, OCEANS' 10*
  Marker, M. D., Kline, I., Kirkwood, W. J., Headley, K., Brewer, P. G., Peltzer, E. T., Miard, T., Chai, A., James, M., Schneider, K., Silverman, J., Caldeira, K., Koseff, et al
  2010
- **Upper ocean nitrogen fluxes in the Polar Antarctic Zone: Constraints from the nitrogen and oxygen isotopes of nitrate** *GEOCHEMISTRY GEOPHYSICS GEOSYSTEMS*
  DiFiore, P. J., Sigman, D. M., Dunbar, R. B.
  2009; 10
- **Late 20th century warming and freshening in the central tropical Pacific** *GEOPHYSICAL RESEARCH LETTERS*
  Nurhati, I. S., Cobb, K. M., Charles, C. D., Dunbar, R. B.
  2009; 36
- **Extreme longevity in proteinaceous deep-sea corals** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Roark, E. B., Guilderson, T. P., Dunbar, R. B., Fallon, S. J., Mucciarone, D. A.
  2009; 106 (13): 5204-5208
- **Strontium-86 labeling experiments show spatially heterogeneous skeletal formation in the scleractinian coral Porites porites** *GEOPHYSICAL RESEARCH LETTERS*
  Houlbreque, F., Meibom, A., Cuif, J., Stolarski, J., Marrocchi, Y., Ferrier-Pages, C., Domart-Coulon, I., Dunbar, R. B.
  2009; 36
- **Synergistic effects of iron and temperature on Antarctic phytoplankton and microzooplankton assemblages** *BIOGEOSCIENCES*
  Rose, J. M., Feng, Y., DiTullio, G. R., Dunbar, R. B., Hare, C. E., Lee, P. A., Lohan, M., Long, M., Smith, W. O., Sohst, B., Tozzi, S., Zhang, Y., Hutchins, et al
  2009; 6 (12): 3131-3147
- **Climate Change in Southern South America During the Last Two Millennia** *PAST CLIMATE VARIABILITY IN SOUTH AMERICA AND SURROUNDING REGIONS: FROM THE LAST GLACIAL MAXIMUM TO THE HOLOCENE*
  Moy, C. M., Moreno, P. I., Dunbar, R. B., Kaplan, M. R., Francois, J., Villalba, R., Haberzettl, T.
  edited by Vimeux, F., Sylvestre, F., Khodri, M.
  2009; 14: 353–93
- **Climate change in southern South America during the last two millennia** *Past climate variability from the Last Glacial Maximum to the Holocene in South America and Surrounding Regions*
  Moy, C. M., Moreno, P. I., Dunbar, R. B., Francois, J. P., Kaplan, M. R., Villalba, R., Haberzettl,, T.
  edited by Vimeux, F., Sylvestre, F., Khodri, M.
  Springer.2009 : 353–393
- **Recent advances in understanding Antarctic climate evolution** *ANTARCTIC SCIENCE*
  Siegert, M. J., Barrett, P., Decont, R., Dunbar, R., Cofaigh, C. O., Passchier, S., Naish, T.
  2008; 20 (4): 313-325
- **Isotopic evidence for hydrologic change related to the westerlies in SW Patagonia, Chile, during the last millennium** *QUATERNARY SCIENCE REVIEWS*
  Moy, C. M., Dunbar, R. B., Moreno, P. I., Francois, J., Villa-Martinez, R., Mucciarone, D. M., Guilderson, T. P., Garreaud, R. D.
  2008; 27 (13-14): 1335-1349
- **Persistence of depleted abalones in marine reserves of central California** *BIOLOGICAL CONSERVATION*
  Micheli, F., Shelton, A. O., Bushinsky, S. M., Chiu, A. L., Haupt, A. J., Heiman, K. W., Kappel, C. V., Lynch, M. C., Martone, R. G., Dunbar, R. B., Watanabe, J.
  2008; 141 (4): 1078-1090
- **Compositional variations at ultra-structure length scales in coral skeleton** *GEOCHIMICA ET COSMOCHIMICA ACTA*

Meibom, A., Cuif, J., Houlbreque, F., Mostefaoui, S., Dauphin, Y., Meibom, K. L., Dunbar, R.
2008; 72 (6): 1555-1569

- **Seismic stratigraphy of Lago Fagnano sediments (Tierra del Fuego, Argentina) - A potential archive of paleoclimatic change and tectonic activity since the Late Glacial** *GEOLOGICA ACTA*
  Waldmann, N., Ariztegui, D., Anselmetti, F. S., Austin, J. A., Dunbar, R., Moy, C. M., Recasens, C.
  2008; 6 (1): 101-110

- **CO2 sensitivity of Southern Ocean phytoplankton** *GEOPHYSICAL RESEARCH LETTERS*
  Tortell, P. D., Payne, C. D., Li, Y., Trimborn, S., Rost, B., Smith, W. O., Riesselman, C., Dunbar, R. B., Sedwick, P., DiTullio, G. R.
  2008; 35 (4)

- **Antarctic records of precession-paced insolation-driven warming during early Pleistocene Marine Isotope Stage 31** *GEOPHYSICAL RESEARCH LETTERS*
  Scherer, R. P., Bohaty, S. M., Dunbar, R. B., Esper, O., Flores, J., Gersonde, R., Harwood, D. M., Roberts, A. P., Taviani, M.
  2008; 35 (3)

- **Multidecadal- to century-scale and episodes on the northern Altiplano during the middle Holocene** *PALAEOGEOGRAPHY PALAEOCLIMATOLOGY PALAEOECOLOGY*
  Theissen, K. M., Dunbar, R. B., Rowe, H. D., Mucciarone, D. A.
  2008; 257 (4): 361-376

- **Sedimentary sterols as biogeochemical indicators in the Southern Ocean** *16th Annual V M Goldschmidt Conference*
  Villinski, J. C., Hayes, J. M., Brassell, S. C., Riggert, V. L., Dunbar, R. B.
  PERGAMON-ELSEVIER SCIENCE LTD.2008: 567–88

- **Multi-decadal to century scale arid episodes on the northern Altiplano during the middle Holocene** *Palaeogeography, Palaeoclimatology, Palaeoecology*
  Theissen, K., Dunbar, R. B., Rowe, H. R., Mucciarone, D. A.
  2008; 257: 361–376

- **Response of southern ocean phytoplankton to CO2** *Geophysical Research Letters*
  Tortell, P. D., Payne, C. D., Li, Y., S. Trimborn, B. Rost, Smith, W. O., Riesselman, C., Dunbar, R. B., Sedwick, P., DiTullio, G. R.
  2008; 35

- **Sedimentary sterols as biogeochemical indicators in the Southern Ocean** *Organic Geochemistry*
  Villinski, J. C., Hayes, J. M., Brassell, S., Riggert, V., Dunbar, R. B.
  2008; 39: 569-588

- **Chemical variations at ultra-structure length-scales in coral skeleton: Towards an understanding of 'vital' effects** *Geochimica et Cosmochimica Acta*
  Meibom, A., Cuif, J.-P., Mostefaoui, S., Dauphin, Y., Houlbreque, F., Meibom, K., Dunbar, R.
  2008

- **Seasonal rhythms of net primary production and particulate organic carbon flux to depth describe the efficiency of biological pump in the global ocean** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS*
  Lutz, M. J., Caldeira, K., Dunbar, R. B., Behrenfeld, M. J.
  2007; 112 (C10)

- **Oceanic climate and circulation changes during the past four centuries from radiocarbon in corals** *GEOPHYSICAL RESEARCH LETTERS*
  Druffel, E. R., Griffin, S., Beaupre, S. R., Dunbar, R. B.
  2007; 34 (9)

- **High apex predator biomass on remote Pacific islands** *CORAL REEFS*
  Stevenson, C., Katz, L. S., Micheli, F., Block, B., Heiman, K. W., Perle, C., Weng, K., Dunbar, R., Witting, J.
  2007; 26 (1): 47-51

- **East African soil erosion recorded in a 300 year old coral colony from Kenya** *GEOPHYSICAL RESEARCH LETTERS*
  Fleitmann, D., Dunbar, R. B., McCulloch, M., Mudelsee, M., Vuille, M., McClanahan, T. R., Cole, J. E., Eggins, S.
  2007; 34 (4)

- **Reconstruction of seasonal temperature variability in the tropical Pacific Ocean from the shell of the scallop, Comptopallium radula** *GEOCHIMICA ET COSMOCHIMICA ACTA*
  Thebault, J., Chauvaud, L., Clavier, J., Guarini, J., Dunbar, R. B., Fichez, R., Mucciarone, D. A., Morize, E.
  2007; 71 (4): 918-928
- **Biological forcing controls the chemistry of reef-building coral skeleton** *GEOPHYSICAL RESEARCH LETTERS*
  Meibom, A., Mostefaoui, S., Cuif, J., Dauphin, Y., Houlbreque, F., Dunbar, R., Constantz, B.
  2007; 34 (2)
- **The history of soil erosion in Kenya recorded in a 300 year-long coral** *Geophysical Research Letters*
  Fleitmann, D., Dunbar, R. B., McCulloch, M., Mudelsee, M., Vuille, M., McClanahan, T., Cole, J., Andrews, C., Mucciarone, D. A.
  2007
- **Recent Advances in understanding Antarctic Climate Evolution (not peer-reviewed)** *PAGES Newsletter*
  Siegert, M. J., Barrett, P. J., DeConto, R., Dunbar, R. B., Cofaigh, O., Passchier, S., Naish, T. R.
  2007; 15: 9-11
- **High resolution stable isotope and carbonate variability during the early Oligocene climate transition: Walvis Ridge (ODP Site 1263)** *USGS OF-2007-1047, Short Research Paper 095*
  Riesselman, C. R., Dunbar, R. B., Mucciarone, D. A., Kitasei, S. S.
  U.S. Geological Survey and The National Academies.2007
- **Solar forcing and El Niño-Southern Oscillation (ENSO) influences on productivity cycles interpreted from a late-Holocene high-resolution marine sediment record, Adélie Drift, East Antarctic Margin** *USGS OF-2007-1047, Short Research Paper 036*
  Costa, E., Dunbar, R. B., Kryc, K. A., Mucciarone, D. A., Brachfeld, S., Roark, E. B., Manley, P. L., Murray, R. W., Leventer, A.
  U.S. Geological Survey and The National Academies.2007
- **Lago Fagnano (Tierra del Fuego, Argentina) - A continuous archive of paleoclimatic change and tectonic activity since the Late Glacial** *Geologica Acta*
  Waldmann, N., Ariztegui, D., Anselmetti, F. S., Jr., Austin, J. A., Dunbar, R., M. Moy, C. M., Recasens, C.
  2007; 5: 1-10
- **Post-glacial seasonal diatom record of the Mertz Glacier Polynya, East Antarctica** *MARINE MICROPALEONTOLOGY*
  Maddison, E. J., Pike, J., Leventer, A., Dunbar, R., Brachfeld, S., Domack, E. W., Manley, P., McClennen, C.
  2006; 60 (1): 66-88
- **Vital effects in coral skeletal composition display strict three-dimensional control** *GEOPHYSICAL RESEARCH LETTERS*
  Meibom, A., Yurimoto, H., Cuif, J., Domart-Coulon, I., Houlbreque, F., Constantz, B., Dauphin, Y., Tambutte, E., Tambutte, S., Allemand, D., Wooden, J., Dunbar, R.
  2006; 33 (11)
- **Glacial morphology and sediment formation in the Mertz Trough, East Antarctica** *32nd International Geological Congress*
  McMullen, K., Domack, E., Leventer, A., Olson, C., Dunbar, R., Brachfeld, S.
  ELSEVIER SCIENCE BV.2006: 169–80
- **Radiocarbon-based ages and growth rates of Hawaiian deep-sea corals** *MARINE ECOLOGY PROGRESS SERIES*
  Roark, E. B., Guilderson, T. P., Dunbar, R. B., Ingram, B. L.
  2006; 327: 1-14
- **Sediment colour analysis from digital images and correlation with sediment composition** *Geological Society, London, Special Publications*
  Nederbragt, A. J., Dunbar, R. B., Osborn, A. T., Palmer , A., Thurow, J. W., Wagner, T.
  2006; 267: 113-128
- **East Antarctic Margin Marine Sediment Record of Deglaciation** *GSA Today*
  Leventer, A., Domack, E., Dunbar, R., Pike, J., Stickley, C., Maddison, E., Brachfeld, S., Manley, P., McClennen, C.
  2006; 16: 4-10
- **Deglacial ocean and climate seasonality in laminated diatom sediments, Mac.Robertson Shelf, Antarctica** *PALAEOGEOGRAPHY PALAEOCLIMATOLOGY PALAEOECOLOGY*
  Stickley, C. E., Pike, J., Leventer, A., Dunbar, R., Domack, E. W., Brachfeld, S., Manley, P., McClennan, C.

2005; 227 (4): 290-310

- **Coral skeletal delta N-15 reveals isotopic traces of an agricultural revolution** *MARINE POLLUTION BULLETIN*
  Marion, G. S., Dunbar, R. B., Mucciarone, D. A., Kremer, J. N., Lansing, J. S., Arthawiguna, A.
  2005; 50 (9): 931-944

- **Shell of the Great Scallop Pecten maximus as a high-frequency archive of paleoenvironmental changes** *GEOCHEMISTRY GEOPHYSICS GEOSYSTEMS*
  Chauvaud, L., Lorrain, A., Dunbar, R. B., Paulet, Y. M., Thouzeau, G., Jean, F., Guarini, J. M., Mucciarone, D.
  2005; 6

- **A comparative analysis of the nutritional and elemental composition of macroalgae from the western Antarctic Peninsula** *PHYCOLOGIA*
  Peters, K. J., Amsler, C. D., Amsler, M. O., McClintock, J. B., Dunbar, R. B., Baker, B. J.
  2005; 44 (4): 453-463

- **Record of redox status in laminated sediments from Lake Titicaca: A sulfur K-edge X-ray absorption near edge structure (XANES) study** *CHEMICAL GEOLOGY*
  Bostick, B. C., Theissen, K. M., Dunbar, R. B., Vairavamurthy, M. A.
  2005; 219 (1-4): 163-174

- **Intrabasin comparison of surface radiocarbon levels in the Indian Ocean between coral records and three-dimensional global ocean models** *GLOBAL BIOGEOCHEMICAL CYCLES*
  Grumet, N. S., Duffy, P. B., Wickett, M. E., Caldeira, K., Dunbar, R. B.
  2005; 19 (2)

- **Radiocarbon-based ages and growth rates of bamboo corals from the Gulf of Alaska** *GEOPHYSICAL RESEARCH LETTERS*
  Roark, E. B., Guilderson, T. P., Flood-Page, S., Dunbar, R. B., Ingram, B. L., Fallon, S. J., McCulloch, M.
  2005; 32 (4)

- **Pronounced occurrence of long-chain alkenones and dinosterol in a 25,000-year lipid molecular fossil record from Lake Titicaca, South America** *GEOCHIMICA ET COSMOCHIMICA ACTA*
  Theissen, K. M., Zinniker, D. A., Moldowan, J. M., Dunbar, R. B., Rowe, H. D.
  2005; 69 (3): 623-636

- **Cenozoic ice sheet history from East Antarctic Wilkes Land continental margin sediments** *Joint Assembly of the EGS/AGU/EUG*
  Escutia, C., De Santis, L., Donda, F., Dunbar, R. B., Cooper, A. K., Brancolini, G., Eittreim, S. L.
  ELSEVIER SCIENCE BV.2005: 51–81

- **Record of Redox Status in Sediment Laminations from Lake Titicaca: A Sulfur K-edge X-ray Absorption Near Edge Structure (XANES) Study** *Chemical Geology*
  Bostick, B. C., Theissen, K. T., Dunbar, R., Fendorf, S., Vairavamurthy, M. A.
  2005; 219: 163-174

- **Distribution of magnesium in coral skeleton** *GEOPHYSICAL RESEARCH LETTERS*
  Meibom, A., Cuif, J. P., Hillion, F. O., Constantz, B. R., Juillet-Leclerc, A., Dauphin, Y., Watanabe, T., Dunbar, R. B.
  2004; 31 (23)

- **Hydrologic-energy balance constraints on the Holocene lake-level history of lake Titicaca, South America** *CLIMATE DYNAMICS*
  Rowe, H. D., Dunbar, R. B.
  2004; 23 (3-4): 439-454

- **delta C-13 variation in scallop shells: Increasing metabolic carbon contribution with body size?** *GEOCHIMICA ET COSMOCHIMICA ACTA*
  Lorrain, A., Paulet, Y. M., Chauvaud, L., Dunbar, R., Mucciarone, D., Fontugne, M.
  2004; 68 (17): 3509-3519

- **Coral radiocarbon records of Indian Ocean water mass mixing and wind-induced upwelling along the coast of Sumatra, Indonesia** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS*
  Grumet, N. S., Abram, N. J., Beck, J. W., Dunbar, R. B., Gagan, M. K., Guilderson, T. P., Hantoro, W. S., Suwargadi, B. W.
  2004; 109 (C5)

- **Synthetic seismograms linking ODP sites to seismic profiles, continental rise and shelf of Prydz Bay, Antarctica** *Proc. ODP, Sci. Results*

Handwerger, D. A., Cooper, A. K., O'Brien, P. E., Williams, T., Barr, S. R., Dunbar, R. B., Leventer, A., Jarrard, R. D., Cooper (ed.), A. K., O'Brien (ed.), P. E., Richter (ed.) , C.
2004; 188

- **Seismic stratigraphic correlations between ODP Sites 742 and 1166: implications for depositional paleoenvironments in Prydz Bay, Antarctica** *Proc. ODP, Sci. Results*
  Erohina, T., Cooper, A., Handwerger, D., Dunbar, R., Cooper (ed.), A. K., O'Brien (ed.), P. E., Richter (ed.), C.
  2004; 188: 21pp

- **The Pleistocene evolution of the East Antarctic Ice Sheet in the Prydz bay region: stable isotopic evidence from ODP site 1167** *GLOBAL AND PLANETARY CHANGE*
  Theissen, K. M., Dunbar, R. B., Cooper, A. K., Mucciarone, D. A., Hoffmann, D.
  2003; 39 (3-4): 227-256

- **Physical control of chlorophyll a, POC, and TPN distributions in the pack ice of the Ross Sea, Antarctica** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS*
  Arrigo, K. R., ROBINSON, D. H., Dunbar, R. B., Leventer, A. R., Lizotte, M. P.
  2003; 108 (C10)

- **Late Quaternary lake-level changes constrained by radiocarbon and stable isotope studies on sediment cores from Lake Titicaca, South America** *GLOBAL AND PLANETARY CHANGE*
  Rowe, H. D., Guilderson, T. P., Dunbar, R. B., Southon, J. R., Seltzer, G. O., Mucciarone, D. A., Fritz, S. C., Baker, P. A.
  2003; 38 (3-4): 273-290

- **A Late Quaternary diatom record of tropical climatic history from Lake Titicaca (Peru and Bolivia)** *Workshop on Paleoclimates of the Central Andes*
  Tapia, P. M., Fritz, S. C., Baker, P. A., Seltzer, G. O., Dunbar, R. B.
  ELSEVIER SCIENCE BV.2003: 139–64

- **Monthly Strontium/Calcium oscillations in symbiotic coral aragonite: Biological effects limiting the precision of the paleotemperature proxy** *GEOPHYSICAL RESEARCH LETTERS*
  Meibom, A., Stage, M., Wooden, J., Constantz, B. R., Dunbar, R. B., Owen, A., Grumet, N., Bacon, C. R., CHAMBERLAIN, C. P.
  2003; 30 (7)

- **Sediment trap records of glacimarine sedimentation at Muller Ice Shelf, Lallemand Fjord, Antarctic Peninsula** *ARCTIC ANTARCTIC AND ALPINE RESEARCH*
  Gilbert, R., Chong, A., Dunbar, R. B., Domack, E. W.
  2003; 35 (1): 24-33

- **Global change - Leads, lags and the tropics** *NATURE*
  Dunbar, R. B.
  2003; 421 (6919): 121-122

- **Decadal timescale shift in the C-14 record of a central equatorial Pacific coral** *RADIOCARBON*
  Grottoli, A. G., Gille, S. T., DRUFFEL, E. R., Dunbar, R. B.
  2003; 45 (1): 91-99

- **Non-Redfield production and export of marine organic matter: a recurrent part of the annual cycle in the Ross Sea, Antarctica** *Biogeochemistry of the Ross Sea*
  Dunbar, R. B., Arrigo, K. R., DiTullio, G. D., Leventer, A., Lizotte, M. P., Van Woert, M. L., Robinson, D. H.
  edited by DiTullio, G., Dunbar, R.
  American Geophysical Union.2003: 179–196

- **Biogeochemistry of the Ross Sea: An Introduction** *Biogeochemistry of the Ross Sea*
  DiTullio, G. D., Dunbar, R. B.
  edited by DiTullio, G. D., Dunbar, R. B.
  American Geophysical Union.2003: 1–4

- **Biogeochemistry of the Ross Sea** *Antarctic Research Series Monograph*
  edited by DiTullio, G. D., Dunbar, R. B.
  American Geophysical Union.2003; 78

- **Stable isotope record of El Nino-Southern Oscillation events from Easter Island** *Easter Island: Scientific exploration into the world's environmental problems in microcosm*
  Mucciarone, D. A., Dunbar, R. B.
  edited by Loret, J., Tanacredi, J. T.
  Kluwer Academic/Plenum Publishers, LTD. London/New York.2003: 113–132

- **The Ross Sea circulation during the 1990s** *Biogeochemistry of the Ross Sea*
  Van Woert, M. L., Johnson, E. S., Langone, L., Worthen, D. L., Monaghan, A., Bromwich, D. H., Meloni, R., Dunbar, R. B.
  edited by DiTullio, G., Dunbar, R.
  American Geophysical Union.2003: 5–34

- **Rapid sinkimg of biogenic material during the late austral (Summer) in the Ross Sea, Antarctica** *Biogeochemistry of the Ross Sea*
  Langone, L., Dunbar, R. B., Mucciarone, D. A., Ravaioli, M., Meloni, R., Nittrouer, C. A.
  edited by DiTullio, G., Dunbar, R.
  American Geophysical Union.2003: 221–234

- **Biogeochemistry of the Ross Sea: A Summary** *Biogeochemistry of the Ross Sea*
  DiTullio, G. D., Dunbar, R. B.
  edited by DiTullio, G., Dunbar, R.
  American Geophysical Union.2003: 355–358

- **Stable isotopic measurements of sedimentary organic matter and N. pachyderma (s.) from Site 1166, Prydz Bay continental shelf** *Proc. ODP, Sci. Results*
  Theissen, K. M., Dunbar, R. B., Cooper, A. K., Cooper (ed.), A. K., O'Brien (ed.), P. E., Richter (ed.), C.
  2003; 188: 1-11

- **Oceanographic versus bathymetric control of benthic megafaunal communities in the SW Ross Sea, Antarctica** *Biogeochemistry of the Ross Sea*
  Barry, J. P., Grebmeier, J. M., Smith, J., Dunbar, R. B.
  edited by DiTullio, G., Dunbar, R.
  American Geophysical Union.2003: 327–354

- **Antarctic Climate Evolution (ACE) Research Initiative** *Terra Antarctica*
  Florindo, F., Dunbar, R., Siegert, M., DeConto, R., Barrett, P., Cooper, A., Escutia, C., Janecek, T., Larter, R., Naish, T., Powell, R.
  2003; 9: 127-132

- **Global Change: Leads, lags, and the tropics** *Nature*
  Dunbar, R. B.
  2003; 421: 121-122

- **Sediment trap records of glaciomarine sedimentation at Miller Ice Shelf, Lallemand Fjord, Antarctic Peninsula, Arctic** *Antarctic and Alpine Research*
  Gilbert, R., Chong, A., Dunbar, R. B., Domack, E. W.
  2003; 35: 24-33

- **Early deglaciation in the tropical Andes - Response** *SCIENCE*
  Seltzer, G. O., Rodbell, D. T., Baker, P. A., Fritz, S. C., Tapia, P. M., Rowe, H. D., Dunbar, R. B.
  2002; 298 (5591)

- **Taxon-specific differences in C/P and N/P drawdown for phytoplankton in the Ross Sea, Antarctica** *GEOPHYSICAL RESEARCH LETTERS*
  Arrigo, K. R., Dunbar, R. B., Lizotte, M. P., ROBINSON, D. H.
  2002; 29 (19)

- **Meridional transport in the Indian Ocean traced by coral radiocarbon** *JOURNAL OF MARINE RESEARCH*
  Grumet, N. S., Guilderson, T. P., Dunbar, R. B.
  2002; 60 (5): 725-742

- **Regional variability in the vertical flux of particulate organic carbon in the ocean interior** *GLOBAL BIOGEOCHEMICAL CYCLES*
  Lutz, M., Dunbar, R., Caldeira, K.

2002; 16 (3)

- **Early warming of tropical South America at the Last Glacial-interglacial transition** *SCIENCE*
  Seltzer, G. O., Rodbell, D. T., Baker, P. A., Fritz, S. C., Tapia, P. M., Rowe, H. D., Dunbar, R. B.
  2002; 296 (5573): 1685-1686
- **Particulate barium fluxes in the Ross Sea** *MARINE GEOLOGY*
  McManus, J., Dymond, J., Dunbar, R. B., Collier, R. W.
  2002; 184 (1-2): 1-15
- **Late-Quaternary lowstands of Lake Titicaca: evidence from high-resolution seismic data** *PALAEOGEOGRAPHY PALAEOCLIMATOLOGY PALAEOECOLOGY*
  D'Agostino, K., Seltzer, G., Baker, P., Fritz, S., Dunbar, R.
  2002; 179 (1-2): 97-111
- **Insolation, moisture balance and climate change on the South American Altiplano since the last glacial maximum** *CLIMATIC CHANGE*
  Rowe, H. D., Dunbar, R. B., Mucciarone, D. A., Seltzer, G. O., Baker, P. A., Fritz, S.
  2002; 52 (1-2): 175-199
- **Coral radiocarbon as a tracer for meridional transport in the Indian Ocean** *Journal of Marine Research*
  Grumet, N. S., Guilderson, T. P., Dunbar, R. B.
  2002; 60: 725-742
- **Multisite Record of Climate Change from Indian Ocean Corals** *9th International Coral Reef Symposium*
  Grumet, N. S., Dunbar, R. B., Cole, J. E.
  2002: 359–364
- **Late Quaternary seismic stratigraphy of Lake Titicaca (Peru/Bolivia)** *Palaeogeography, Palaeoclimatology, Palaeoecology*
  D'Agostino, K., Seltzer, G. O., Baker, P. A., Fritz, S. C., Dunbar, R. B.
  2002; 179: 97-111
- **Pre-bomb radiocarbon variability inferred from a Kenyan coral record** *RADIOCARBON*
  Grumet, N. S., Guilderson, T. P., Dunbar, R. B.
  2002; 44 (2): 581-590
- **Late quaternary climate and hydrology of tropical South America inferred from an isotopic and chemical model of Lake Titicaca, Bolivia and Peru** *QUATERNARY RESEARCH*
  Cross, S. L., Baker, P. A., Seltzer, G. O., Fritz, S. C., Dunbar, R. B.
  2001; 56 (1): 1-9
- **The history of South American tropical precipitation for the past 25,000 years** *SCIENCE*
  Baker, P. A., Seltzer, G. O., Fritz, S. C., Dunbar, R. B., Grove, M. J., Tapia, P. M., Cross, S. L., Rowe, H. D., Broda, J. P.
  2001; 291 (5504): 640-643
- **Chronology of the Palmer Deep site, Antarctic Peninsula: a Holocene palaeoenvironmental reference for the circum-Antarctic** *HOLOCENE*
  Domack, E., Leventer, A., Dunbar, R., Taylor, F., Brachfeld, S., Sjunneskog, C.
  2001; 11 (1): 1-9
- **Geologic and paleontologic features of rock samples in the cooperative Monterey organic geochemistry study, Naples Beach and Lions Head sections, California** *The Monterey Formation: From Rocks to Molecules*
  Isaacs, C. M., Pollastro, R. M., Barron, J. A., Ingle, J. C., Bukry, D., Dunba, R. B., Keller, M. A., Tomson, J. H., Lewan, M.
  edited by Dsaacs, C. M., Rullkotte, J.
  Columbia University Press, New York.2001: 373–392
- **The biological, chemical, and physical limnology of Lake Titicaca, Bolivia/Peru** *The Great Lakes of the World (GLOW): Food-web, Health, and Integrity*
  Pawley, A., Fritz, S. C., Baker, P. A., Seltzer, G. O., Dunbar, R. B.
  edited by Munawar, M., Hecky, R. e.
  Backhuys Publishers, Leiden, Netherlands.2001: 195–215
- **ODP Leg 178 Scientific Party, 2001, Holocene Climate Variability in the Antarctic Peninsula** *The Holocene*

Domack, E., Leventer, A., Dunbar, R., Taylor, F., Brachfeld, S.
2001; 11: 1-9

- **El Nino - Clues from corals** *NATURE*
  Dunbar, R. B.
  2000; 407 (6807): 956-959
- **Carbon 13 Carbon 12 ratios of sedimentary organic matter from the Ross Sea, Antarctica: A record of phytoplankton bloom dynamics** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS*
  Villinski, J. C., Dunbar, R. B., Mucciarone, D. A.
  2000; 105 (C6): 14163-14172
- **El Nino Southern Oscillation (ENSO) and decadal-scale climate variability at 10 degrees N in the eastern Pacific from 1893 to 1994: A coral-based reconstruction from Clipperton Atoll** *PALEOCEANOGRAPHY*
  Linsley, R. K., Ren, L., Dunbar, R. B., Howe, S. S.
  2000; 15 (3): 322-335
- **Phytoplankton taxonomic variability in nutrient utilization and primary production in the Ross Sea** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS*
  Arrigo, K. R., DiTullio, G. R., Dunbar, R. B., Robinson, D. H., VanWoert, M., Worthen, D. L., Lizotte, M. P.
  2000; 105 (C4): 8827-8845
- **Rapid and early export of Phaeocystis antarctica blooms in the Ross Sea, Antarctica** *NATURE*
  DiTullio, G. R., Grebmeier, J. M., Arrigo, K. R., Lizotte, M. P., ROBINSON, D. H., Leventer, A., Barry, J. B., VanWoert, M. L., Dunbar, R. B.
  2000; 404 (6778): 595-598
- **Tropical Pacific forcing of decadal SST variability in the western Indian Ocean over the past two centuries** *SCIENCE*
  Cole, J. E., Dunbar, R. B., McClanahan, T. R., Muthiga, N. A.
  2000; 287 (5453): 617-619
- **New views of tropical paleoclimates from corals** *1st PAGES Open Science Meeting*
  Gagan, M. K., Ayliffe, L. K., Beck, J. W., Cole, J. E., DRUFFEL, E. R., Dunbar, R. B., Schrag, D. P.
  PERGAMON-ELSEVIER SCIENCE LTD.2000: 45–64
- **On the origin of carbonaceous matter, fullerenes, and elemental sulfur in rocks of the Whitewater Group, Susbury Impact Structure, Ontario, Canada** *Special Publications 339: Large Meteorite Impacts and Planetary Evolution II*
  Heymann, D., Dressler, B. O., Buseck, P. R., Knell, J., Thiemens, M. H., Dunbar, R. B., Mucciarone, D., Sharpton, V. L.
  edited by Dressler, B. O.
  Geological Society of America .2000: 345–360
- **Holocene climate variability: an update, 2000** *The Way the Wind Blows: Climate, History, and Human Action*
  Dunbar, R. B.
  edited by McIntosh, R. E., McIntosh, S. K., Tainter, J. E.
  Columbia University Press.2000: 45–88
- **New views of tropical paleoclimate from Corals** *Quaternary Science Reviews*
  Gagan, M.K., Ayliffe, L.K., Beck, J.W., Cole, J.E., Druffel, E.R.M., Dunbar, R.B., Schrag, D.P.
  2000; 19: 167-182
- **ENSO and decadal-scale climate variability at 10 Deg N in the eastern Pacific from 1893 to 1994: A coral-based reconstruction from Clipperton Atoll** *Paleoceanography*
  Linsley, B. K., Ren, L., Dunbar, R. B., Howe, S. H.
  2000; 15: 322-335
- **A new estimate of the Holocene lowstand level of Lake Titicaca, central Andes, and implications for tropical palaeohydrology** *HOLOCENE*
  Cross, S. L., Baker, P. A., Seltzer, G. O., Fritz, S. C., Dunbar, R. B.
  2000; 10 (1): 21-32
- **The vertical flux of biogenic and lithogenic material in the Ross Sea: Moored sediment trap observations 1996-1998** *DEEP-SEA RESEARCH PART II-TOPICAL STUDIES IN OCEANOGRAPHY*
  Collier, R., Dymond, J., Honjo, S., Manganini, S., Francois, R., Dunbar, R.

2000; 47 (15-16): 3491-3520

- **Paleoclimate reconstruction along the Pole-Equator-Pole transect of the Americas (PEP 1)** *1st PAGES Open Science Meeting*
  Markgraf, V., Baumgartner, T. R., Bradbury, J. P., Diaz, H. F., Dunbar, R. B., Luckman, B. H., Seltzer, G. O., Swetnam, T. W., Villalba, R.
  PERGAMON-ELSEVIER SCIENCE LTD.2000: 125–40
- **Assessing between-colony oxygen isotope variability in the coral Porites lobata at Clipperton Atoll** *CORAL REEFS*
  Linsley, B. K., Messier, R. G., Dunbar, R. B.
  1999; 18 (1): 13-27
- **Phytoplankton community structure and the drawdown of nutrients and CO2 in the Southern Ocean** *SCIENCE*
  Arrigo, K. R., ROBINSON, D. H., Worthen, D. L., Dunbar, R. B., DiTullio, G. R., VanWoert, M., Lizotte, M. P.
  1999; 283 (5400): 365-367
- **Annual Records of Tropical Systems** *PAGES Workshop Report Series*
  Dunbar, R.B. and , R. B., Cole, J.E., J. E.
  1999; 99 (1)
- **Water column sediment fluxes in the Ross Sea, Antarctica: Atmospheric and sea ice forcing** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS*
  Dunbar, R. B., Leventer, A. R., Mucciarone, D. A.
  1998; 103 (C13): 30741-30759
- **Experimental dendroclimatic reconstruction of the Southern Oscillation** *BULLETIN OF THE AMERICAN METEOROLOGICAL SOCIETY*
  Stahle, D. W., D'Arrigo, R. D., Krusic, P. J., Cleaveland, M. K., Cook, E. R., Allan, R. J., Cole, J. E., Dunbar, R. B., Therrell, M. D., Gay, D. A., Moore, M. D., Stokes, M. A., Burns, et al
  1998; 79 (10): 2137-2152
- **High-resolution seismic reflection profiles from Lake Titicaca, Peru-Bolivia: Evidence for Holocene aridity in the tropical Andes** *GEOLOGY*
  Seltzer, G. O., Baker, P., Cross, S., Dunbar, R., Fritz, S.
  1998; 26 (2): 167-170
- **The relationship between new production and vertical flux on the Ross Sea Continental Shelf** *Journal of Marine Systems*
  Smith, W. O. Jr., Dunbar, R. B.
  1998; 17: 445-457
- **Factors influencing the distribution of diatoms and other algae in the Ross Sea** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS*
  Leventer, A., Dunbar, R. B.
  1996; 101 (C8): 18489-18500
- **Lateral transport of settling particles in the Ross Sea and implications for the fate of biogenic material** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS*
  Jaeger, J. M., Nittrouer, C. A., DeMaster, D. J., Kelchner, C., Dunbar, R. B.
  1996; 101 (C8): 18479-18488
- **Cycling of organic carbon and biogenic silica in the Southern Ocean: Estimates of water-column and sedimentary fluxes on the Ross Sea continental shelf** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS*
  Nelson, D. M., DeMaster, D. J., Dunbar, R. B., Smith, W. O.
  1996; 101 (C8): 18519-18532
- **Calibration of stable oxygen isotope signatures in Galapagos corals** *PALEOCEANOGRAPHY*
  Wellington, G. M., Dunbar, R. B., Merlen, G.
  1996; 11 (4): 467-480
- **ENVIRONMENTAL CONTROLS ON URANIUM IN REEF CORALS** *GEOCHIMICA ET COSMOCHIMICA ACTA*
  Shen, G. T., Dunbar, R. B.
  1995; 59 (10): 2009-2024
- **BENTHIC AND PELAGIC FORAMINIFERA OF THE MACOMA LAYER, SANTA-BARBARA BASIN** *JOURNAL OF FORAMINIFERAL RESEARCH*
  Burke, S. K., Dunbar, R. B., Berger, W. H.
  1995; 25 (2): 117-133

- **STABLE ISOTOPIC SIGNATURE OF EL-NINO SOUTHERN OSCILLATION EVENTS IN EASTERN TROPICAL PACIFIC REEF CORALS** *CORAL REEFS*
  Wellington, G. M., Dunbar, R. B.
  1995; 14 (1): 5-25

- **A CORAL-BASED RECONSTRUCTION OF INTERTROPICAL CONVERGENCE ZONE VARIABILITY OVER CENTRAL-AMERICA SINCE 1707** *JOURNAL OF GEOPHYSICAL RESEARCH-OCEANS*
  Linsley, B. K., Dunbar, R. B., Wellington, G. M., Mucciarone, D. A.
  1994; 99 (C5): 9977-9994

- **THE LATE PLEISTOCENE HISTORY OF SURFACE-WATER DELTA-C-13 IN THE SULU SEA - POSSIBLE RELATIONSHIP TO PACIFIC DEEP-WATER DELTA-C-13 CHANGES** *PALEOCEANOGRAPHY*
  Linsley, B. K., Dunbar, R. B.
  1994; 9 (2): 317-340

- **EASTERN PACIFIC SEA-SURFACE TEMPERATURE SINCE 1600-AD - THE DELTA-O-18 RECORD OF CLIMATE VARIABILITY IN GALAPAGOS CORALS** *PALEOCEANOGRAPHY*
  Dunbar, R. B., Wellington, G. M., COLGAN, M. W., Glynn, P. W.
  1994; 9 (2): 291-315

- **DIATOM EVIDENCE FOR LATE HOLOCENE CLIMATIC EVENTS IN GRANITE HARBOR, ANTARCTICA** *PALEOCEANOGRAPHY*
  Leventer, A., Dunbar, R. B., DeMaster, D. J.
  1993; 8 (3): 373-386

- **COLLECTION OF CO2 FOR C-13-C-12 MEASUREMENTS AND SIMULTANEOUS C, H, N, AND S ANALYSIS USING AN ELEMENTAL ANALYZER** *JOURNAL OF SEDIMENTARY PETROLOGY*
  Mucciarone, D. A., Dunbar, R. B.
  1992; 62 (4): 731-733

- **EXTREME CLIMATIC CONDITIONS RECORDED IN SANTA-BARBARA BASIN LAMINATED SEDIMENTS - THE 1835-1840 MACOMA EVENT** *MARINE GEOLOGY*
  Schimmelmann, A., Lange, C. B., Berger, W. H., Simon, A., Burke, S. K., Dunbar, R. B.
  1992; 106 (3-4): 279-299

- **Late Pliocene-Quaternary biosiliceous sedimentation at site 798, Japan Sea** *Proceedings of the Ocean Drilling Program, Scientific Results, 127/128*
  Dunbar, R., deMenocal, P., Burckle, L.
  Ocean Drilling Program.1992: 439–456

- **Diagenetic reactions in deeply buried sediments of the Japan Sea: a synthesis of interstitial water chemistry results from Leg 127 and Leg 128** *Proceedings of the Ocean Drilling Program, Scientific Results, 127/128*
  Murray, R., Brumsack, H., von Breymann, M., Sturz, A., Dunbar, R., Gieskes, J.
  Ocean Drilling Program.1992: 1261–1274

- **PALEOCHEMISTRY OF MANGANESE IN CORALS FROM THE GALAPAGOS-ISLANDS** *CORAL REEFS*
  Shen, G. T., Campbell, T. M., Dunbar, R. B., Wellington, G. M., COLGAN, M. W., Glynn, P. W.
  1991; 10 (2): 91-100

- **Eastern tropical Pacific corals monitor low latitude climate during the past 400 years** *Proceedings of the Seventh Annual Pacific Climate (PACLIM) Workshop, April 1990*
  Dunbar, R., Wellington, G., Colgan, M., Glynn, P.
  California Department of Water Resources.1991: 183–198

- **OCEAN DRILLING PROGRAM - EVOLUTION OF THE JAPAN SEA** *NATURE*
  Anonymous
  1990; 346 (6279): 18-20

- **CENOZOIC MARINE SEDIMENTATION IN THE SECHURA AND PISCO BASINS, PERU** *4TH INTERNATIONAL CONGRESS ON PACIFIC NEOGENE STRATIGRAPHY / MEETING OF THE INTERNATIONAL WORKING GROUP OF THE INTERNATIONAL GEOLOGICAL CORRELATION PROGRAMME*
  Dunbar, R. B., MARTY, R. C., Baker, P. A.

ELSEVIER SCIENCE BV.1990: 235–61

- **ODP in the Japan Sea: Results of Leg 128** *Geotimes*
  Scientific Party, L.
  1990: 25-27
- **Reef-building corals and identification of ENSO warming episodes** *Global ecological consequences of the 1982-83 El Nino-Southern Oscillation*
  Druffel, E., Dunbar, R., Wellington, G., Minnis, S.
  Elsevier.1990: 233–254
- **BIOGENIC SEDIMENTATION IN MCMURDO SOUND, ANTARCTICA** *MARINE GEOLOGY*
  Dunbar, R. B., Leventer, A. R., STOCKTON, W. L.
  1989; 85 (2-4): 155-179
- **Reply to Comment on.... Late Eocene diatomite from the Peruvian coastal desert** *Geology*
  Marty, R., Dunbar, R., Baker, P., Martin, J.
  1989; 17: 958-959
- **LATE EOCENE DIATOMITE FROM THE PERUVIAN COASTAL DESERT, COASTAL UPWELLING IN THE EASTERN PACIFIC, AND PACIFIC CIRCULATION BEFORE THE TERMINAL EOCENE EVENT** *GEOLOGY*
  Marty, R., Dunbar, R., Martin, J. B., Baker, P.
  1988; 16 (9): 819-822
- **EL-NINO AND LITTLE ICE-AGE EFFECTS ON UPWELLING IN THE EASTERN TROPICAL PACIFIC**
  Shen, C. T., Dunbar, R. B., COLGAN, M. W., Glynn, P. W.
  ELSEVIER SCIENCE BV.1988: 198–98
- **RECENT DIATOM RECORD OF MCMURDO SOUND, ANTARCTICA: IMPLICATIONS FOR HISTORY OF SEA ICE EXTENT** *PALEOCEANOGRAPHY*
  Leventer, A., Dunbar, R. B.
  1988; 3 (3): 259-274
- **A cooperative study of upper ocean particulate fluxes in the Weddell Sea** *Proceedings of the Ocean Drilling Program, Initial Reports, 113*
  Biggs, D., Berkowitz, S., Altabet, M., Bidigare, R., DeMaster, D., Dunbar, R., Leventer, A., Macko, S., Nittrouer, C., Ondrusek, M.
  1988: 77–86
- **Phosphatic sediments of the Pisco Basin** *Cenozoic Geology of the Pisco Basin*
  Allen, M., Dunbar, R.
  IGCP.1988: 109–126
- **Geology of Quebrada Huaracangana** *Cenozoic Geology of the Pisco Basin*
  Stock, C., Wright, R., Dunbar, R.
  IGCP.1988: 79–98
- **Geologic setting, stratigraphy, and biogenic sediments of the Pisco Basin** *Cenozoic Geology of the Pisco Basin*
  Dunbar, R., Baker, P., Marty, R., Cruzado, J.
  IGCP.1988: 7–41
- **Geology of Quebrada Huaracangana** *Cenozoic Geology of the Pisco Basin*
  Stock, C., Wright, R., Dunbar, R.
  IGCP.1988: 79–98
- **Geologic setting, stratigraphy, and biogenic sediments of the Pisco Basin** *Cenozoic Geology of the Pisco Basin*
  Dunbar, R., Baker, P., Marty, R., Cruzado, J.
  IGCP.1988: 7–41
- **DIATOM FLUX IN MCMURDO SOUND, ANTARCTICA** *MARINE MICROPALEONTOLOGY*
  Leventer, A., Dunbar, R. B.
  1987; 12 (1): 49-64

- **The role of suspended sediment transport, sedimentation, and resuspension in controlling water quality in Lake Houston, Texas** *Environmental Geology*
  Matty, J., Anderson, J., Dunbar, R.
  1987; 10: 175-186
- **Role of sediment in the persistence and transport of enteric viruses in the estuarine environment** *Viruses in soils, sediments, and sludges*
  Ellender, R., Anderson, J., Dunbar, R.
  CRC Press.1987: 37–55
- **STABLE ISOTOPIC VARIATION IN PTEROPODS AND ATLANTIDS FROM NORTH PACIFIC SEDIMENT TRAPS** *MARINE MICROPALEONTOLOGY*
  Grossman, E. L., Betzer, P. R., Dudley, W. C., Dunbar, R. B.
  1986; 10 (1-3): 9-22
- **Oceanographic influences on sedimentation along the Antarctic continental shelf** *Oceanology of the Antarctic Shelf*
  Dunbar, R., Anderson, J., Domack, E., Jacobs, S.
  American Geophysical Union.1985: 291–312
- **STABLE ISOTOPE FRACTIONATION IN BENTHIC FORAMINIFERA FROM THE PERUVIAN CONTINENTAL-MARGIN** *MARINE GEOLOGY*
  Dunbar, R. B., Wefer, G.
  1984; 59 (1-4): 215-225
- **A DEAD CENTRAL AMERICAN CORAL-REEF TRACT - POSSIBLE LINK WITH THE LITTLE ICE-AGE** *JOURNAL OF MARINE RESEARCH*
  Glynn, P. W., DRUFFEL, E. M., Dunbar, R. B.
  1983; 41 (3): 605-637
- **Stable isotope record of upwelling and climate from Santa Barbara Basin, California** *Coastal Upwelling: Its Sediment Record*
  Dunbar, R.
  Plenum Press.1983: 217–246
- **Stable isotopes in foraminifera off Peru recording high fertility and change in upwelling history** *Coastal Upwelling: Its Sediment Record*
  Wefer, G., Dunbar, R., Suess, E.
  Plenum Press.1983: 295–310
- **STABLE ISOTOPES IN A BRANCHING CORAL MONITOR SEASONAL TEMPERATURE-VARIATION** *NATURE*
  Dunbar, R. B., Wellington, G. M.
  1981; 293 (5832): 453-455
- **A sediment trap intercomparison study in Santa Barbara Basin** *Earth and Planetary Science Letters*
  Dymond, J., Fischer, K., Clauson, M., Cobbler, R., Gardner, W., Sullivan, L., Soutar, A., Berger, W., Dunbar, R.
  1981; 53
- **A SEDIMENT TRAP INTERCOMPARISON STUDY IN THE SANTA-BARBARA BASIN** *EARTH AND PLANETARY SCIENCE LETTERS*
  Dymond, J., Fischer, K., Clauson, M., COBLER, R., Gardner, W., Richardson, M. J., Berger, W., Soutar, A., Dunbar, R.
  1981; 53 (3): 409-418
- **Fecal pellet flux to modern bottom sediments of Santa Barbara Basin (California) based on sediment trapping** *Geological Society of America Bulletin*
  Dunbar, R., Berger, W.
  1981; 92
- **FECAL PELLET FLUX TO MODERN BOTTOM SEDIMENT OF SANTA BARBARA BASIN (CALIFORNIA) BASED ON SEDIMENT TRAPPING** *GEOLOGICAL SOCIETY OF AMERICA BULLETIN*
  Dunbar, R. B., Berger, W. H.
  1981; 92 (4): 212-218