

**CURRICULUM VITAE**  
(updated May 14th, 2023)

**SCOTT C. DONEY**

***Joe D. and Helen J. Kington Professor in Environmental Change***

Department of Environmental Sciences

University of Virginia

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UVA Faculty website: <http://www.evsc.virginia.edu/doney-scott/>

UVA Group website: <https://uva.theopenscholar.com/scott-doney-computational-biogeochemistry-lab>

***Assistant Director for Ocean Climate Science and Policy***

White House Office of Science and Technology Policy

Executive Office of the President

Eisenhower Executive Office Building

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202-881-9196

On loan from UVA through Intergovernmental Personnel Act from August, 2022 to present

**EDUCATION**

Postdoctoral Fellow, 1991-1993, Advanced Study Program, National Center for Atmospheric Research, Boulder, CO 80307 (Dr. William Large and Dr. James McWilliams, advisors)

Ph.D. Chemical Oceanography, September 1991, Massachusetts Institute of Technology-Woods Hole Oceanographic Institution Joint Program in Oceanography, Woods Hole, MA 02543

Thesis titled: "A Study of North Atlantic Ventilation Using Transient Tracers" (Dr. William J. Jenkins, advisor) <https://dspace.mit.edu/handle/1721.1/52947>  
<http://hdl.handle.net/1721.1/52947>

B.A. Chemistry (*magna cum laude*), 1986, Revelle College, University of California at San Diego, La Jolla, CA 92093

**PROFESSIONAL EXPERIENCE**

White House Office of Science and Technology Policy (OSTP), Executive Office of the President, Washington, DC

- Assistant Director for Ocean Climate Science and Policy (2022-present) (on IPA loan from UVA)

University of Virginia (UVA), Dept. of Environmental Sciences, Charlottesville VA

- Joe D. and Helen J. Kington Professor in Environmental Change (inaugural Kington Chair), (2017-present)

Woods Hole Oceanographic Institution (WHOI), Dept. of Marine Chemistry and Geochemistry, Woods Hole, MA:

- Adjunct Scientist (2017-2021)
- Senior Scientist (tenured) (2005-2017); Associate Scientist with tenure (2002-2005)
- Department Chair (2014-2017)
- Director of WHOI Ocean and Climate Change Institute (2012-2014)

Nominated by President Obama to be Chief Scientist, National Oceanic and Atmospheric Administration; Presidential Appointment with Senate Confirmation position; nominated August 4<sup>th</sup>, 2010 in 111<sup>th</sup> Congress; renominated January 26<sup>th</sup>, 2011 in 112<sup>th</sup> Congress; nomination withdrawn January 24<sup>th</sup>, 2012

National Center for Atmospheric Research, Climate and Global Dynamics Division, Boulder, CO:

- Scientist III (tenured) (1999-2002); Scientist II (1997-1999); Scientist I (1993-1997)

University of Colorado, Boulder, Adjunct faculty: Geology (1997-2002), Aerospace Engineering (1998-2002), Environmental Sciences (2000-2002)

Louisville Fire Department, Louisville Colorado: Volunteer Firefighter (1993-2002); Colorado Firefight I, Emergency Medical Technician EMT-Basic, and HazMat certifications

Massachusetts Institute of Technology/Woods Hole Oceanographic Institution Joint Program, Cambridge and Woods Hole, MA: NSF Graduate Fellow (1987-1990); Graduate Research Assistant WHOI and MIT (1986-1987; 1990-1991).

Friday Harbor Laboratories, Student Participant in Ocean Circulation and Biogeochemical Cycles, summer short-course, instructors J. Sarmiento and P. Rhines, (1990).

University of California at San Diego, Chemistry Department, La Jolla, CA: Grader (1984-1985); Teaching Assistant, Organic Chemistry (1985-1986).

Goddard Institute for Space Studies, NASA, New York, NY: Summer Intern (1985).

Sea Education Association, Woods Hole, MA: Student Class W-76 (1984).

## **PROFESSIONAL AFFILIATIONS**

- American Geophysical Union (AGU)
- The Oceanography Society (TOS)
- American Meteorological Society (AMS)
- Association for the Sciences of Limnology and Oceanography (ASLO)
- American Association for the Advancement of Science (AAAS)

## **RESEARCH INTERESTS**

- Marine biogeochemistry and ecosystem dynamics
- Ocean acidification
- Global carbon cycle
- Climate change
- Ocean data analysis and numerical modeling

## **ACADEMIC HONORS**

Dept. of Environmental Sciences, University of Virginia

- Tice Prize for Research Excellence, 2022
- Maury-Tice Prize for Research Excellence, 2019

University of Virginia, Vice President for Research and Provost

- Outstanding Researcher, 2022
- Research Award, 2020

Fellow, Association for the Sciences of Limnology and Oceanography (ASLO), Class of 2021  
National Oceanographic Partnership Program 2016 Excellence in Partnering award for "*National Marine Sanctuaries as Sentinel Sites for a Demonstration Marine Biodiversity Observation Network (MBON)*" <http://www.nopp.org/2017/sanctuaries-mbon-receives-2016-excellence-in-partnering-award/>

A.G. Huntsman Award for Excellence in Marine Science, Royal Society of Canada and Hunstman Foundation at the Bedford Institute of Oceanography, Canada, 2013

Fellow, American Association for the Advancement of Science (AAAS), 2010

W. Van Alan Clark Sr. Chair, Woods Hole Oceanographic Institution, 2007  
American Geophysical Union, Editor's Citation for Excellence in Refereeing, *Global Biogeochemical Cycles*, 2005  
Fellow, Aldo Leopold Leadership Program, 2004  
Ocean and Climate Change Institute (OCCI) Fellow, Woods Hole Oceanographic Institution 2003-2006  
James B. Macelwane Medal, American Geophysical Union, "for significant contributions to the geophysical sciences by an outstanding young scientist", 2000  
Fellow, American Geophysical Union, 2000  
Outstanding Student Poster Award, American Geophysical Union, 1990  
National Science Foundation Graduate Fellowship, 1987-1990  
Urey Award, Dept. of Chemistry, University of California at San Diego, 1986  
Phi Beta Kappa, 1986  
University of California at San Diego Alumni Scholarship, 1983-1984

#### Recognition for Research Paper Citations and Bibliometrics

Google Scholar Classic Papers (total of 2)  
Atmospheric Sciences 2006 (2)  
Web of Science Group, Clarivate Analytics  
Highly Cited Researcher (multiple papers in top 1% of citations)  
<https://clarivate.com/highly-cited-researchers/>  
2014-2020, cited each year in two separate disciplines: Geosciences and Environment/Ecology  
2021-2022, cited in Cross-Field  
Hot Paper in Geosciences (2)  
Highly Cited Papers (total of 33): Plant & Animal Science (2), Geosciences (19), Environment/Ecology (11), Microbiology (1)  
Research.com Earth Science in United States Leader Award, 2023,  
<https://research.com/u/scott-c-doney>

#### **PUBLIC SERVICE**

White House Office of Science and Technology Policy (OSTP) (2022-present),  
<https://www.whitehouse.gov/ostp/>  
OSTP Climate and Environment Team, team member  
OSTP Assistant Director for Ocean Climate Science and Policy  
U.S. Ocean Climate Action Plan (OCAP) Workgroup, Co-Chair and OSTP Lead on OCAP

- NOAA OCAP website [https://www.noaa.gov/interagency-ocean-policy/OCAP\\_Information](https://www.noaa.gov/interagency-ocean-policy/OCAP_Information)
- Ocean Climate Action Plan, a Report by the Ocean Policy Committee, March 2023  
[https://www.whitehouse.gov/wp-content/uploads/2023/03/Ocean-Climate-Action-Plan\\_Final.pdf](https://www.whitehouse.gov/wp-content/uploads/2023/03/Ocean-Climate-Action-Plan_Final.pdf)

Ocean Science and Technology Subcommittee (OST/SOST), Co-Chair (interim),  
<https://www.noaa.gov/ocean-science-and-technology-subcommittee>

#### **EXTERNAL PROFESSIONAL ACTIVITIES**

National and International Science Program Leadership  
Center for Chemical Currencies of a Microbial Planet (C-CoMP), NSF Science & Technology Center, co-PI and Executive Committee member, 2021-2022

RCN Steering Committee Member, SWISLR - Saltwater Intrusion and Sea Level Rise in rural landscapes: Assessing Risk and Identifying Mitigation and Adaptation Options for Rural Coastal Plain Communities (NSF Award 2108286), 2021-2022

American Association for the Advancement of Science (AAAS), Secretary of Atmospheric and Hydrospheric Sciences (Section W), <https://www.aaas.org/Section-W>, 2018-2022

Ocean Carbon and Biogeochemistry (OCB) Program (NSF, NASA & NOAA):  
 Scientific Steering Committee: Chair (inaugural) 2006-2011; SSC member 2006-2022  
 PI OCB Project Office, 2006-2017

Long Term Ecological Research (LTER) program

- Palmer, Antarctica team (PAL-LTER), 2008-2022
- Virginia Coastal Reserve team (VCR-LTER), 2018-2022

U.S. GO-SHIP (Global Ocean Ship-based Hydrographic Investigations Program) Executive Council, previously the CLIVAR/CO<sub>2</sub> Repeat Hydrography Scientific Steering Committee, (NOAA & NSF) 2002-2022

US Biogeochemical Argo Subcommittee (OCB, NSF, NASA & NOAA), 2017-2021

NASA North Atlantic Aerosols and Marine Ecosystems Study (NAAMES), Team Member & Ocean Modeling Group Lead, 2015-2020

North American Carbon Program Science Implementation Plan, Processes and Attribution author team, 2018-2020

Community Climate/Earth System Model (CCSM/CESM) (NSF & DOE):  
 Co-Chair Biogeochemistry Working Group, 1998-2007  
 CCSM Scientific Steering Committee, 2002-2010  
 Community Earth System Model Advisory Board (CAB), 2012-2020

National Climate Assessment (USGCRP), Convening Lead Author for Oceans and Marine Resources Chapter, 2011-2014

C-MORE, Center for Microbial Oceanography, Research, and Education (NSF Science and Technology Center):  
 Science Team Member, 2006-2016; Theme IV (Modeling) Team Leader, 2006-2016  
 Executive Committee, 2006-2010

Climate Decision Making Center (CDMC), Carnegie Mellon University (NSF Decision Making Under Uncertainty, DMUU), 2010-2015

US CLIVAR - OCB Working Group on *Oceanic Carbon Uptake in the CMIP5 Models*, 2012-2014

National Center for Ecological Analysis and Synthesis (NCEAS) Working Group, A framework to assess ecosystem health in support of ecosystem-based management of coastal-marine systems, leads K. McLeod, L. Crowder, A. Rosenberg, and M. Fogarty, 2010-2012

U.S. Carbon Cycle Science Program (USGCRP & Interagency Working Group):  
 Scientific Steering Group, 2002-2011  
 Chair of Ocean Carbon and Climate Change (OCCC) Scientific Steering Group, 2005-2011  
 Chair of Ocean Implementation Group, 2002-2004

Ocean Acidification Task Force (OATF) formed by the Ocean Research and Resources Advisory Panel (ORRAP) (a United State Federal Advisory Committee), taskforce member, 2010-2011

World Ocean Circulation Experiment (WOCE) (NSF & NOAA), U.S. Scientific Steering Committee, 1997-2002

Joint Global Ocean Flux Study (JGOFS) (NSF, NOAA & NASA):  
 U.S. Synthesis and Modeling Project, Co-coordinator, 1997-2005  
 U.S. Scientific Steering Committee, 1993-2003  
 U.S. and International North Atlantic Planning Groups, 1994-1996  
 U.S. Time-Series Oversight Committee, 1996

### Editorial Service

EGU *Ocean Science*, Editorial Advisory Board, 2009-2019

American Institute of Physics *Physics Today*, Advisory Committee Member, 2009-2012

Faculty of 1000, Member Ecology Section, [www.facultyof1000.com](http://www.facultyof1000.com), 2004-2012

AAAS *Science* magazine, Board of Reviewing Editors, 2007-2011

Journal Editor:

*Journal of Geophysical Research-Biogeosciences*, Associate Editor, 2004-2011

*Global Biogeochemical Cycles*, Associate Editor, 2002-2004

*Reviews of Geophysics*, Associate Editor, 1997-2001

Guest Editor for Special Issues:

The Future of Ocean Biogeochemistry in a High CO<sub>2</sub> World, *Oceanography*, **22**(4), 2009

Surface Ocean CO<sub>2</sub> Variability and Vulnerabilities, *Deep-Sea Res. II*, **56**(8-10), 2009

U.S. JGOFS Synthesis and Modeling III, *Deep-Sea Res. II*, **53**(5-7), 2006

U.S. JGOFS Synthesis and Modeling II, *Deep-Sea Res. II*, **50**(22-26), 2003

U.S. JGOFS Synthesis and Modeling, *Deep-Sea Res. II*, **49**(1-3), 2002

### National Climate Assessment (NCA), U.S. Global Change Research Program

Convening lead author, Oceans and Marine Resources chapter, NCA3, 2014

Contributing author, Our Changing Climate chapter, NCA3, 2014

### National Science Foundation

Advisory Committee for Environmental Research and Education (AC-ERE), 2014-2017

Advisory Committee for Geosciences (AC-GEO), 2012-2016; Chair AC-GEO Facilities Subcommittee, 2013-2014

Geosciences Directorate, GEO Vision working group, 2006-2008

Geosciences Directorate Assistant Director Search Committee, 2007 & 2016

Ocean Information Technology Initiative working group, 2003-2004

Ocean Carbon Cycle Research (OCCR) planning group, 2001-2003

Ocean Carbon Transport, Exchanges and Transformations planning group, 1999-2000

### National Oceanic and Atmospheric Administration

Global Ocean Monitoring and Observing (GOMO) Council, Ocean Observing and Monitoring Division, NOAA Climate Program Office, 2018-2021

External Panel Review of Underway and Moored pCO<sub>2</sub> Projects, NOAA Climate Program Office, Ocean Observing and Monitoring Divisions, 2017

NOAA Climate Working Group, NOAA Science Advisory Board, 2012-2015

Climate Process Team, *Southern Ocean Water Mass Transformation and the Carbon Cycle*, 2007-2012

Pacific Marine Environmental Laboratory (PMEL), external reviewer 2008

Office of Global Programs, Global Carbon Cycle program advisory panel, 1999-2002 & 2006-2008

Carbon Observations Planning Group, 1999-2001

CIMAS Visiting Scholar, University of Miami and NOAA/AOML, 1996

### National Aeronautics and Space Administration (NASA)

SeaWiFS Science Team (1997-2012) and Ocean Color Research Team, 1997-2022

Moderate Resolution Imaging Spectroradiometer (MODIS) Science Team, 2014-2019

Orbiting Carbon Observatory (OCO) Mission Science Team, 2002-2009; 2015-2022 & Atmospheric CO<sub>2</sub> from Space (ACOS) team, 2009-2015

NASA EXport Processes in the Ocean from Remote Sensing (EXPORTS) Science Definition Team (SDT), 2015-2016.

COOPEX-Controls on Open Ocean Productivity & EXport, member of writing team for a community science and implementation plan for a major field campaign, 2012-2015

Aerosol-Cloud-Ocean Mission Concept Study Science Working Group, 2007

National Academies of Sciences, Engineering and National Research Council

Committee Member, Climate Security Roundtable, 2022

Committee Chair, “A Research Strategy for Ocean Carbon Dioxide Removal and Sequestration”, 2020-2022

Planning Committee Member, “Workshop on Earth System Predictability Research and Development”, 2020

Steering Committee Member, “Decadal Survey for Earth Science and Applications from Space”, National Academies Space Studies Board, 2015-2018

Committee Member, “Geoengineering Climate: Technical Evaluation and Discussion of Impacts”, National Research Council Board on Environmental Change and Society, Ocean Studies Board, and Board on Atmospheric Sciences & Climate, 2013-2015

Committee Member, “Development of an Integrated Science Strategy for Ocean Acidification Monitoring, Research, and Impacts Assessment”, National Research Council Ocean Studies Board, 2009-2010

Committee Member, “Stabilization Targets for Atmospheric Greenhouse Gas Concentrations” National Research Council Board of Atmospheric Sciences & Climate, 2009-2010

Reviewer, “Review of the Federal Ocean Acidification Research and Monitoring Plan”, National Research Council, 2013.

Reviewer, “Verifying Greenhouse Gas Emissions: Methods to Support International Climate Agreements”, National Research Council, 2010.

Reviewer, “Exploration of the Seas: Interim Report”, National Research Council, 2003.

Congressional Testimony

U.S. Senate Testimony, Committee on Environment and Public Works, hearing on “Climate Change: It’s Happening Now” (July 18<sup>th</sup>, 2013)

U.S. Senate Testimony, Committee on Commerce, Science and Transportation, *Nomination Hearing*, Scott Doney to be Chief Scientist, National Oceanic and Atmospheric Administration, U.S. Department of Commerce (Nov. 30<sup>th</sup>, 2010)

U.S. House of Representatives Testimony, Committee on Science and Technology, Subcommittee on Energy and Environment, hearing on “The Federal Ocean Acidification Research and Monitoring Act: H.R. 4174” (June, 2008)

U.S. Senate Testimony, Committee on Commerce, Science and Transportation, Subcommittee on Oceans, Atmosphere, Fisheries and Coast Guard, hearing on “Effects of Climate Change and Ocean Acidification on Living Marine Resources” (May, 2007)

Intergovernmental Panel on Climate Change

Contributing author for IPCC Working Group I, Fifth Assessment Report chapter:

Ciais, P., C. Sabine, G. Bala, L. Bopp, V. Brovkin, J. Canadell, A. Chhabra, R. DeFries, J. Galloway, M. Heimann, C. Jones, C. Le Quéré, R.B. Myneni, S. Piao and P. Thornton, 2013: Carbon and Other Biogeochemical Cycles. In: *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

Association for the Sciences of Limnology and Oceanography (ASLO)

A.C. Redfield Lifetime Achievement Award Subcommittee, 2019-2022

American Geophysical Union

Selection Committee, Maurice Ewing Medal, 2022

Search Committee, Editor for *Global Biogeochemical Cycles*, 2004 and 2013

Panel updating AGU Ocean Research Position Statement, 2012  
Selection Committee, James B. Macelwane Medal, 2007 and 2008

The Oceanography Society

Council Member (at-large representative), 2009-2012

Consortium for Ocean Leadership

Council Member, Oceans and National Security Initiative, 2015-2016

Non-profit Organizations

Sea Education Association (SEA), Corporation overseer, 2006-2018; Trustee, 2009-2015; chair of Education Committee, 2012-2015

National Network for Oceans and Climate Change Interpretation (NNOCCI) (phase 1 joint effort among WHOI, New England Aquarium and the Frameworks Institute)

- NNOCCI Science Advisor, 2012-2017
- NNOCCI Science Partnership Committee, 2018

New England Aquarium, Science Advisor for *Changemakers: Advancing Community Science Literacy (CASL)* Project, 2017-2019

Sailors for the Sea, Science Advisor, 2012-2016

Association of Climate Change Officers (ACCO), Curriculum Committee for Training Bootcamp *Climate-103: The Basics of Sea Level Rise and Impacts on Coastal Assets & Infrastructure*, <http://www.accoonline.org/bootcamps/climate-103.html> , presented initially at ACCO Climate Strategies Forum, Washington, DC, June, 2015

COMPASS (<http://www.compassonline.org/>):

Science Advisor, 2009-2012

COMPASS Climate Initiative, Co-chair, 2009-2013

Ocean Acidification Science Communication Workshop, Sept. 2012

Mentor for Ocean Acidification Advanced Policy Training, 2014

Other

H. Burr Steinbach Visiting Scholar, Woods Hole Oceanographic Institution, 2000

NCAR Biogeosciences Initiative, Project Lead, 2001-2002

Ecosystems Center, External Review Committee Member, the Marine Biological Laboratory, Woods Hole, 2009

**INSTITUTIONAL SERVICE**

University of Virginia

Dept. of Environmental Sciences (EVSC)

Dept. Chaired Professors Committee, 2017-present

Graduate student admissions committee, Chair, 2021-2022

Faculty Search Committee (environmental justice), 2021-2022

3rd year review committee for Prof. Ajay Limaye, 2022

Graduate Academic Review Committee (GARC), 2021

H. Grant Goodell Endowment Committee, 2020-2021

Chair of 3rd year review committee for Prof. Lauren Simkins, 2021

Dept. Peer Review Committee, 2018-2020 (committee chair, 2019 & 2020)

Dept. Chair Search Committee (committee chair), 2019

Faculty Search Committee (two geoscience positions), 2017-2018

Environmental Resilience Institute (ERI) Steering Committee, 2017-2022

Woods Hole Oceanographic Institution

Marine Chemistry and Geochemistry Department Chair, 2014-2017

Director of WHOI Ocean and Climate Change Institute, 2012-2014

Chief Development Officer (CDO) Search Committee, 2014  
Unrestricted Budget Stabilization Task Force, 2014  
Director and President Search Committee, 2006-2007  
MIT/WHOI Joint Program Climate Group  
MIT/WHOI Joint Committee on Chemical Oceanography (JCCO), 2003-2007  
Ocean and Climate Change Institute (OCCI), Institute Advisory Committee, 2003-2006  
Information Technology Advisory Committee (ITAC), 2002-2006  
Marine Chemistry and Geochemistry Dept. Faculty Hiring Committees: Chair, 2003; Member  
Carbon-cycle Search, 2009-2010  
Marine Chemistry and Geochemistry Dept., Faculty Mentorship Committees: Mak Saito, chair;  
Dierdre Toole; Karen Casciotti; Rachel Stanley; Aleck Wang, chair

National Center for Atmospheric Research

Community Climate System Model (CCSM)  
Co-Chair Biogeochemistry Working Group, 1998-2007  
Climate System Model Principal Investigator Group, 1993-1998  
(see also additional entries post-NCAR above in *External Professional Activities*)  
NCAR Biogeosciences Initiative, Chair, 2001-2002  
Terrestrial Carbon Scientist Search Committee, 2001  
Acting Section Head Ecosystem Dynamics and the Atmosphere Section (EDAS), 2000  
UCAR/NCAR Outstanding Performance Awards Jury, 2000  
UCAR Institutional Equity Committee, 1993-1996  
NCAR Planetary Boundary Layer Working Group, 1993-1995  
Search Committee for Human Resources Staff Development Position, 1994

**FIELD EXPERIENCE**

Participant, Palmer LTER ocean research expedition, ARSV *Laurence M. Gould*, western Antarctic Peninsula LMG17-12, Chief Oscar Schofield, Dec. 2017  
Participant (<sup>234</sup>Th-based export and <sup>15</sup>N-based new production), Palmer LTER Cruise, ARSV *Laurence M. Gould*, western Antarctic Peninsula, Chief Scientist Oscar Schofield, Dec. 2013-Feb. 2014  
Awarded Antarctic Service Medal from National Science Foundation (March, 2014)  
Participant, Palmer LTER Cruise, ARSV *Laurence M. Gould*, western Antarctic Peninsula, Chief Scientist Hugh Ducklow, Dec. 2011  
Chief Scientist, A16S, CLIVAR/CO<sub>2</sub> Repeat Hydrography Program, R/V *Ronald H Brown*, South Atlantic, (joint Chief Scientist w/ Rik Wanninkhof), Jan. and Feb. 2005  
Collection of *Trichodesmium* samples for physiological and genomic analysis, NSF N<sub>2</sub> Fixation Biocomplexity Cruise (MANTRA), North Pacific, R/V *Revelle*, Chief Scientist Doug Capone, August, 2003  
Co-chief Scientist, World Ocean Circulation Experiment leg I7N in western Indian Ocean, R/V *Knorr*, Chief Scientist Don Olson; July and August, 1995  
Co-chief Scientist, NOAA 1993 North Atlantic CO<sub>2</sub> Cruise, R/V *Malcolm Baldrige*, Chief Scientist Rik Wanninkhof; July, 1993.  
Collection of tritium and <sup>3</sup>He samples for Leg 6 of South Atlantic Ventilation Experiment, R/V *Melville*, Chief Scientist Lynne Talley; March and April, 1989.  
Collection and analysis of chlorofluorocarbon, tritium, and <sup>3</sup>He samples on Oceanus Cruise 202, a hydrographic section from Iceland to equator along 20°W, R/V *Oceanus*, Chief Scientist Mike McCartney; July and August, 1988.  
Deployment and retrieval of *in-situ* particle pumping system and sediment trap array from R/V *Weatherbird*, Bermuda, Chief Scientist Robert Sherrell; Sept. 1987



At sea analysis of perfluorodecaline and SF<sub>6</sub> on Santa Monica Basin Purposeful Tracer Release Experiment, R/V *New Horizon* and R/V *Robert Gordon Sproul*, Chief Scientist Jim Ledwell; Sept. 1985.

Undergraduate student on Sea Education Association research cruise on SSV *Westward* (W-76), Sargasso Sea and western North Atlantic, Chief Scientist Mary Farmer; May and June, 1984.

### **SUPERVISION (Technical and Research Staff)**

University of Virginia: Kayla Mitchell (Lab Specialist, 2021-2022), Olivia Cronin-Golomb (Lab Specialist, 2021-2022), Elizabeth Tatham (Lab Specialist, 2022-present), Eleanor Lawrence (Lab Specialist, 2023-present)

WHOI: Jeff Dusenberry (Information Systems Associate III, 2003-2006), Ivan Lima (Research Specialist, 2003-2017), Heather Benway (Research Specialist, 2007-2017), Mary Zawosky (Administrative Associate II, 2007-2013), David Baker (Visiting Investigator, 2007-2008), Sarah Cooley (Research Associate III, 2011-2013), Jennie Rheuban (Research Associate III, 2013-2017), Shanna Williamson (Research Assistant II, 2014-2015), Michaela Fendrock (Research Assistant II, 2015-2017), Kelly Luis (Research Assistant II, 2015-2016), Will Oestreich (Research Assistant II, 2015-2017), Maria Kavanaugh (Research Associate III, 2016-2017)

NCAR: Keith Lindsay (Associate Scientist II, 1998-2002), Steve Yeager (Associate Scientist II, 1999), Rob DeConto (Associate Scientist II, 1998-1999), Joan Kleypas (Associate Scientist II, 1999-2002)

### **TEACHING AND MENTORING**

#### Undergraduate Research Advising

*University of Virginia*: Madelyn Sita (2018), Kira Baugh (2018-2019), Jacob Bushey (2019), Sarah Lang (2019-2021, DMP), Kendall Hanks (2019-2021), Samuel Mogen (2019-2020, DMP), Malvika Kuncham (2019-2020), Savannah Quick (2020), Jennifer Farfel (2021), Renee Hebert (2021-2023), Jonathan Luu (2023)

*Virginia-North Carolina Alliance for Minority Participation*: Brianna Jameson (2021)

*WHOI Summer Student Fellows*: Allis Wallis (2004), Nora Xu (2009), Grant Jiang (2011 & 2012), Catherine Phillips-Smith (2012), Victoria Luu (2013), Maria Ordovas-Montanes (Tufts, 2014), Laura Crews (Stanford, 2015), Gabriela Negrete (U. Wisconsin, Madison, 2016)

*Woods Hole Partnership Educational Program (PEP)*: Shanna Williamson (Skidmore, 2014), Kelly Luis (Columbia, 2015), Kanieka Neal (University of Maryland, Eastern Shore, 2016)

*Other*: Nicole Benoit (Co-op student, U. Pittsburgh, 3 semesters, 2007-2008), Hannah Lee (NOAA Hollings Scholar, 2008), Felipe Abdala (U. Rio Grande-FURG, Brazil, 2013), Dylan Chaves (Mass. Maritime Academy, 2015), Oliver Newman (Swarthmore, 2015), Jens Terhaar (LSCE, France, 2015)

*UCAR-SOARS program*: Kiesha Stevens (1996) and Sharon Perez (1998)

#### Graduate Student Advising

*University of Virginia, Environmental Sciences Dept.*

*Pre-generals advisor*:

Cesar Garcia (2019-2021) (co-advisor)

*Thesis advisor*:

Kayla Mitchell (2018-2020; M.S., 2020), Mitchell, K., 2020: *Characterizing OCO-2 XCO<sub>2</sub> Variability for the Conterminous United States and Adjacent Ocean*, M.S. Thesis, University of Virginia, <https://doi.org/10.18130/v3-amsn-da57>

Carly LaRoche (2019-present)

Emma Brahmey (2021-2023; M.S., 2023), Brahmey, E., 2023: *Exploring Spatial and Temporal Differences Between High and Low Frequency Water Quality Data in Coastal Virginia*, M.S. Thesis, University of Virginia, <https://doi.org/10.18130/99sn-hh38>

Mary Stack (2021-2023; M.S., 2023), Stack, M., 2023: *Assessing the Influence of Storms on Sea Ice, Snow, and Adélie Penguins along the West Antarctic Peninsula*, M.S. Thesis, University of Virginia, <https://doi.org/10.18130/h7ns-2q98>

*MIT/WHOI Joint Program in Oceanography:*

*Pre-generals advisor:* Andrew McDonnell (Chemical Oceanography, 2005-2007), Holly Moeller (Biological Oceanography, 2008-2009), Kevin Archibald (Biological Oceanography, 2015-2017), Sheron Luk (Chemical Oceanography, 2016-2017)

*Thesis advisor:*

Annette Hynes (Biological Oceanography, Ph.D., 2009), Hynes, A., 2009: *Diversity of the marine cyanobacterium Trichodesmium : characterization of the Woods Hole culture collection and quantification of field populations*, Ph.D. thesis, MIT-WHOI Joint Program in Oceanography, <http://hdl.handle.net/1721.1/54569>

Naomi Levine (Chemical Oceanography, Ph.D., 2009), Levine, N., 2009: *Understanding the ocean carbon and sulfur cycles in the context of a variable ocean: a study of anthropogenic carbon storage and dimethylsulfide production in the Atlantic Ocean*, Ph.D. thesis, MIT-WHOI Joint Program in Oceanography, <http://hdl.handle.net/1721.1/57553>

Tyler Rohr (Chemical Oceanography, Ph.D., 2019), Rohr, T., 2019: *Computational analysis of the biophysical controls on Southern Ocean phytoplankton ecosystem dynamics*, Ph.D. thesis, MIT-WHOI Joint Program in Oceanography, <https://hdl.handle.net/1721.1/122325>

Cristina Schultz (Chemical Oceanography, Ph.D., 2019), Schultz, C., 2019: *A modeling study of the marine biogeochemistry, plankton dynamics, and carbon cycle on the continental shelf off the West Antarctic Peninsula*, Ph.D. Thesis, MIT-WHOI Joint Program in Oceanography, <https://hdl.handle.net/1721.1/122331>

*Thesis Committee Member (other than as advisor/co-advisor):*

*University of Virginia:* Jay Fuhrman (ESE, Ph.D., 2021), Marion McKenzie (EVSC, Ph.D., 2023), Kayleigh Granville (EVSC), Hannah Mast (EVSC), Tianyuan Zhou (Statistics, Ph.D., 2023)

*MIT/WHOI Joint Program:* Rachel Stanley (Ph.D., 2007), Nathalie Goodkin (Ph.D., 2007), Louie Wurch (Ph.D., 2011), Harriet Alexander (Ph.D., 2015), Sophie Chu (Ph.D., 2016)

*Other:* Nan Rosenbloom (Ph.D., U. Colorado, Boulder, 1997), Sarah Zedler (M.S., U.C. Santa Barbara, 1999), Fei Da (Ph.D., William & Mary, VIMS, 2023), Anthony Torres (Ph.D., U. Michigan), Addie Norgaard (Ph.D., U. Alaska, Fairbanks)

*Visiting Graduate Student Advisor:*

*University of Virginia:* Wu Xi (Ocean University of China, Qingdao, China, 2017-2019), Ashley Dinuer (U. Bern, Switzerland, 2019)

*WHOI:* David Nicholson (U. Washington, 2009), Priya Sharma and Sri Nandini (U. South Pacific, Fiji, 2011), Sinikka Lennartz (U. Braunschweig, Germany, 2012)

*NCAR:* Camilla Geels (U. Copenhagen, Denmark, 2000-2001)

*Other Advisory Roles:*

Overseas External Examiner, Carolyn Walker (Ph.D., 2009), U. Otago, Dunedin, New Zealand

External Thesis Supervisor, Claudine Hauri (Ph.D., 2012), Swiss Federal Institute of Technology (ETH), Zurich, Switzerland

External Advisor for Megan Stephenson (2012-2013), Masters Program in Conservation Medicine, Tufts University Cummings School of Veterinary Medicine  
MIT/WHOI Joint Program Thesis Defense Chair: Phoebe Dreux Chappell (Ph.D., 2009)

Postdoctoral Advisor/co-advisor (26)

*University of Virginia*: Hyewon Heather Kim (2017-2019), Rachel Eveleth (2017-2018), Bo Yang (2018-2020), Cristina Schultz (2019-2020), Darren McKee (2019-present), Joy Ferenbaugh (2021-present), Ashley Dinauer (co-advisor, 2021-2022), Wiley Wolfe (2023-present)

*WHOI*: Dierdre Toole (2003-2005), Irina Marinov (2007-2008), Nathalie Goodkin (2007-2008), Sarah Cooley (2007-2010), Annette Hynes (2009-2010), Paulo Calil (2009-2010), David Nicholson (2009-2011), Ya-Wei (Wayne) Luo (2009-2013), Sevrine Saille (2009-2013), Maria Kavanaugh (2012-2016), Lin Zhang (2012-2013), Naomi Levine (2013), Annie Bourbonnais (2016-2018), Hillary Palevsky (2016-2018), Hyewon Heather Kim (postdoc guest investigator, 2017)

*NCAR*: Julia Lee (1996-1997), Montse Fuentes (1998), J. Keith Moore (1999-2002), Ivan Lima (1999-2002), Roger Dargaville (2000-2002), David Baker (2000-2002)

Undergraduate Teaching

*University of Virginia*, Dept. Environmental Sciences, Charlottesville VA:  
Changing Global Carbon Cycle (EVSC 4066/7066), Spring 2018, Fall 2019, Fall 2021  
Climate Resilience (EVSC 4559), Fall 2019  
Coastal Oceanography (EVSC 5060), Spring 2019, Spring 2021  
Coastal Resilience (EVSC 4559), Fall 2018  
Marine Biogeochemistry (EVSC 4559), Fall 2018  
Marine Microbiome (EVEC 5559), Spring 2022  
Polar Environments (EVSC 2559 then EVSC 2850), Spring 2019-2022  
Resources and the Environment (EVSC 1080), Fall 2022

*Sea Education Association (SEA)*, Woods Hole MA:

Distinguished Lecturer, week-long program, *SEA Oceans and Climate Program*: annually, Fall 2006-2012

Guest Lecturer on:

- Carbon cycle, ocean modeling and ocean acidification, Fall 2006, Fall 2007, Spring 2008, Fall 2008, Spring 2009, Summer 2009, Fall 2009, Spring 2014
- Conservation of Phoenix Island Protected Area, Summer 2015, Summer 2016
- Climate change & marine policy, Summer 2015, Jan. 2017
- Ocean Health Index, Summer 2014, Summer 2015, Fall 2015, Spring 2016, Summer 2016

*Woods Hole Partnership Educational Program (PEP)*, summer undergraduate student diversity program talks on Ocean Climate Change, June 2009, June 2011, June 2014

*MBL Semester in Environmental Science (SES)*, Distinguished Scientist visitor for Sept. 2011, Woods Hole MA

Graduate Teaching

*University of Virginia*, Dept. Environmental Sciences, Charlottesville VA:  
Changing Global Carbon Cycle (EVSC 7066), Spring 2018, Fall 2019, Fall 2021  
Climate Resilience (EVSC 7559), Fall 2019  
Coastal Oceanography (EVSC 5060), Spring 2019, 2020  
Coastal Resilience (EVSC 7559), Fall 2018  
Marine Biogeochemistry (EVSC 7559), Fall 2018  
Marine Microbiome (EVEC 5559), Spring 2022

*MIT/WHOI Joint Program*:

- 12.747 Modeling, Data Analysis, and Numerical Techniques for Geochemistry, biennially  
Fall 2002-2016, <http://www.whoi.edu/12.747/>
- 12.742 Marine Chemistry: annually Fall 2004-2010, Fall 2012-2016  
published Open Course Ware notes for Marine Chemistry:  
<http://ocw2.mit.edu/OcwWeb/Earth--Atmospheric--and-Planetary-Sciences/12-742Fall-2006/CourseHome/index.htm>
- 12.759 Special Topics in Marine Chemistry Seminar: Spring 2004
- 7.430 Topics in Quantitative Marine Science: Ocean Biological-Physical Interaction,  
Spring 2006
- MSRI-NCAR Summer Workshop on Carbon Data Assimilation*, Organizer with I. Fung and  
D. Schimel, Berkeley CA, July 2006.
- U. Colorado, Boulder.*  
ATOC 5225 Thermodynamics of Atmospheres and Oceans, Fall 1998  
GEOL/EPOB 5700-2 Carbon, Climate and Society: Spring 2001 & 2002; Fall 2001

### SCIENTIFIC AND TECHNICAL BOOKS

- Glover, D.M., W.J. Jenkins, and **S.C. Doney**, 2011: *Modeling Methods for Marine Science*,  
Cambridge University Press, Cambridge, UK, 592 pp., [www.cambridge.org/glover](http://www.cambridge.org/glover) ISBN-13:  
9780521867832, online ISBN: 9780511975721,  
<https://doi.org/10.1017/CBO9780511975721>  
Published reviews by:
- V. Rayband, 2011: *Limnol. Oceanogr. Bull.*, **20**(3) September, 64-66.
  - A. Burd, 2012: *Physics Today*, **65**(5), May, 56-57.
  - P. Gent, 2012: *Bull. Amer. Meteor. Soc.*, **93**(7), July, 1070-1072.

### PUBLICATIONS FOR GENERAL PUBLIC (Total of 16)

(papers denoted by \* first authored by supervised graduate student or postdoctoral researcher)

- Doney, S.C.**, 2020: Q&A: Environmental scientist Scott Doney on what societies can do to help the planet, *UVA Today*, Jan. 29th, 2020, <https://news.virginia.edu/content/qa-environmental-scientist-scott-doney-what-societies-can-do-help-planet>
- Doney, S.C.**, 2019: Coastal ocean water quality, U. Virginia *Lifetime Learning* website, April 15th, 2019, <https://alumni.virginia.edu/learn/2019/04/15/coastal-ocean-water-quality/>
- Doney, S.C.**, 2017: Climate change on the Antarctic Peninsula, U. Virginia *Lifetime Learning* website, August 1st, 2017, <https://alumni.virginia.edu/learn/2017/08/01/climate-change-antarctic-peninsula/>
- Doney, S.C.**, 2014: Oceans of acid: How fossil fuels could destroy marine ecosystems, PBS WGBH *NOVA Next* website (posted Wed. Feb. 12<sup>th</sup>, 2014), <http://www.pbs.org/wgbh/nova/next/earth/ocean-acidification/>
- Doney, S.C.**, and H. Ducklow, 2013: Rapid climate change along the West Antarctic Peninsula: impacts from sea-ice to penguins, *Flotsam & Jetsam*, Massachusetts Marine Educators, (Winter 2013), **42**(3), Pages 1 & 15-18. <http://www.massmarineeducators.org>
- Avery, S., A. Magnan, B. Garnaud, and **S.C. Doney**, 2011: Changing climate, changing ocean, changing planet, in "*Oceans: the New Frontier*", part of *Planet for Life* (2011) series, ed. P. Jacquet, L. Tubiana, and R. Pachauri and assoc. ed. J. Rochette, R. Jozan, and S. Sundar, TERI Press, New Dehli, 225-237 pp., ISBN: 9788179934029  
French version: Avery, S., A. Magnan, B. Garnaud, and **S.C. Doney**, 2011: Climat: l'enjeu pour les océans, in "*Océans: la frontière*", part of *Regards sur la Terre* (2011) series, ed. P. Jacquet, R. Pachauri, and L. Tubiana, Armand Colin publisher, pp 337-349, ISBN: 978-2-200-27150-3
- Ducklow, H. and **S. Doney**, 2011: What's for dinner? *MBL Catalyst*, **6**(1), Spring 2011, p. 16.

- Doney, S.C.**, 2010: Solutions to environmental threats: ocean acidification. *Scientific American*, **302**(4), April 2010, 60, <https://www.scientificamerican.com/article/boundaries-for-a-healthy-planet/>
- Doney, S.C.**, 2009: Ocean acidification, *Flotsam & Jetsam*, Massachusetts Marine Educators, **38**, Issue 1 (Summer 2009), 1-15, [www.massmarineeducators.org](http://www.massmarineeducators.org)
- Buesseler, K., **S. Doney**, and H. Kite-Powell, 2008: To fertilize, or not to fertilize, *Oceanus*, **46**(1), Jan. 2008, 3.  
(<http://www.whoi.edu/oceanus/viewPrintedIssue.do?archives=true&sortBy=printed&o=read&id=181>)
- Buesseler, K., **S. Doney**, and H. Kite-Powell (ed.), 2008: Should we fertilize the ocean to reduce greenhouse gases? *Oceanus*, **46**(1), Jan. 2008, 27pp.
- Pidgeon, E. and **S.C. Doney**, 2008: The role of the oceans, Chapter 8 (pp 246-276), in *A Climate for Life, Meeting the Global Challenge*, R.A. Mittermeier et al., CEMEX Conservation Book Series, with Conservation International and the International League of Conservation Photographers, ISBN 978-0-9818321.
- Doney, S.C.**, 2008: Ocean acidification, essay in *Ocean: An Illustrated Atlas (National Geographic Atlas)* by S.A. Earle and L.K. Glover, National Geographic, Washington D.C., p. 39, ISBN 978-1426203190.
- Goodkin, N. and **S. Doney**, 2007: Global calcification after ocean acidification, *Meridian*, Bermuda Institute of Ocean Sciences, **2**(2), 12-13.
- Doney, S.C.**, 2006: The dangers of ocean acidification. *Scientific American*, **294**(3), March 2006, 58-65. (republished in German as “Das Meer wird sauer” in *Spektrum der Wissenschaft*, June 2006).
- Doney, S.C.** and N.M. Levine, 2006: How long can the ocean slow global warming? *Oceanus*, Woods Hole Oceanographic Institution, (<http://www.whoi.edu/oceanus/index.do>).

#### REFEREED ELECTRONIC LECTURE (Total of 1)

- Feely, R.A., and **S.C. Doney**, 2011, Ocean acidification: the other CO<sub>2</sub> problem, *Limnol. Oceanogr. e-Lectures*, (or *ASLO Web Lectures*, **3**(1), 1–59)  
doi:10.4319/lol.2011.rfeely\_sdoney.5  
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#### NON-REFEREED WORKING PAPERS (Total of 1)

- Fuhrman, J., A.F. Clarens, H. McJeon, P. Patel, **S.C. Doney**, W.M. Shobe, S. Pradhan, 2020: China's 2060 carbon neutrality goal will require up to 2.5 GtCO<sub>2</sub>/year of negative emissions technology deployment, non-peer reviewed *arXiv* preprint in General Economics (econ.GN), <https://arxiv.org/abs/2010.06723>

#### PUBLICATIONS IN REFEREED JOURNALS, BOOKS & REPORTS (Total of 369 published)

ORCID: <https://orcid.org/0000-0002-3683-2437>  
 Web of Science: <https://www.webofscience.com/wos/author/record/1172914>  
 SCOPUS 35498837200 <https://www.scopus.com/authid/detail.uri?authorId=35498837200>  
 ISI Web of Science (WOS) total citations 51,013; h-index 104  
 Google Scholar total citations 80,889; h-index 124; i10-index 349  
 Google Scholar <https://scholar.google.com/citations?user=PZq3DmAAAAJ&hl=en>  
 (both WOS and Google Scholar accessed May 13th, 2023)

(underlined authors denote supervised student, postdoctoral researcher, or technician)

**Manuscripts submitted:**

Saenz, B.T., D.C. McKee, **S.C. Doney**, D.G. Martinson, and S.E. Stammerjohn, Influence of seasonally varying sea-ice concentration and subsurface ocean heat on sea-ice thickness and sea-ice seasonality for a 'warm-shelf' region in Antarctica, *J. Glaciology*, *submitted*.  
Lang, S.E., K.M.A. Luis, **S.C. Doney**, O. Cronin-Golomb, and M.C.N. Castorani, Modeling coastal water clarity using Landsat-8 and Sentinel-2, *Earth Space Sci.*, *submitted*.  
Pradhan, S., W.M. Shobe, **S.C. Doney**, H.C. McJeon, and A.F. Clarens, Climate mitigation policies with temperature overshoot: CO<sub>2</sub> versus temperature policy, *Environ. Resour. Econ.*, *submitted*.  
Fauvel, C., J. Fuhrman, Y. Ou, W. Shobe, **S.C. Doney**, H. McJeon, and A.F. Clarens, Net-zero emissions targets and state-level implications of carbon dioxide removal, *Earth's Future*, *submitted*.

### Manuscripts in press:

#### Published:

Bourbonnais, A., B.X. Chang, R.E. Sonnerup, **S.C. Doney**, and M.A. Altabet, 2023: Marine N<sub>2</sub>O cycling from high spatial resolution concentration, stable isotopic and isotopomer measurements along a meridional transect in the eastern Pacific Ocean, *Front. Mar. Sci.*, **10**, 1137064, <https://doi.org/10.3389/fmars.2023.1137064>

Guan, Y., G. Keppel-Aleks, **S.C. Doney**, C. Petri, D. Pollard, D. Wunch, F. Hase, H. Ohyama, I. Morino, J. Notholt, K. Shiomi, K. Strong, R. Kivi, M. Buschmann, N. Deutscher, P. Wennberg, R. Sussmann, V.A. Velazco, and Y. Té, 2023: Characteristics of interannual variability in space-based XCO<sub>2</sub> global observations, *Atmos. Chem. Phys.*, **23**, 5355–5372, <https://doi.org/10.5194/acp-23-5355-2023>

Jenkins, W.J., **S.C. Doney**, A.M. Seltzer, C.R. German, D.E. Lott, and K.L. Cahill, 2023: A North Pacific meridional section (U.S. GEOTRACES GP15) of helium isotopes and noble gases I: Deep water distributions, *Global Biogeochem. Cycles*, **37**, e2022GB007667, <https://doi.org/10.1029/2022GB007667>

McKee, D.C., **S.C. Doney**, A. Della Penna, E.S. Boss, P. Gaube, and M.J. Behrenfeld, 2023: Biophysical dynamics at ocean fronts revealed by Bio-Argo floats, *J. Geophys. Res. Oceans*, **128**, e2022JC019226, <https://doi.org/10.1029/2022JC019226>  
*Chosen for AGU Journal Editor's Highlight:* <https://eos.org/editor-highlights/bio-argo-floats-reveal-phytoplankton-increase-at-ocean-fronts>

Fuhrman, J., C. Bergero, M. Weber, S. Monteith, F.M. Wang, A.F. Clarens, **S.C. Doney**, W. Shobe, and H. McJeon, 2023: Diverse carbon dioxide removal approaches could reduce impacts on the energy–water–land system, *Nature Climate Change*, <https://doi.org/10.1038/s41558-023-01604-9>

Kim, H.H., C. Laufkötter, T. Lovato, **S.C. Doney**, and H.W. Ducklow, 2023: Projected 21st-century changes in marine heterotrophic bacteria under climate change, *Front. Microbiol.* **14**, 1049579, <https://doi.org/10.3389/fmicb.2023.1049579>

Mitchell, K.A., **S.C. Doney**, and G. Keppel-Aleks, 2023: Characterizing average seasonal, synoptic, and finer variability in Orbiting Carbon Observatory-2 XCO<sub>2</sub> across North America and adjacent ocean basins, *J. Geophys. Res. Atmospheres*, **128**, e2022JD036696, <https://doi.org/10.1029/2022JD036696>

Williams, C.A., S. Alin, D. Butman, **S. Doney**, A. Finzi, C.M. Gough, D.J. Hayes, S.E. Hobbie, T. Keenan, R. Kolka, K. Lajtha, P.J. Marcotullio, S. Pincetl, and A.D. Richardson, 2023: Process and attribution studies to uncover mechanistic responses of the carbon cycle to natural and anthropogenic influences, Chapter 3.3 in *2023 North American Carbon Program Science Implementation Plan*, pp. 71-96, [https://www.nacarbon.org/nacp/implementation\\_plan.html](https://www.nacarbon.org/nacp/implementation_plan.html)

- McKee, D.C., **S.C. Doney**, A. Della Penna, E.S. Boss, P. Gaube, M.J. Behrenfeld, and D.M. Glover, 2022: Lagrangian and Eulerian time and length scales of mesoscale ocean chlorophyll from Bio-Argo floats and satellites, *Biogeosciences*, **19**, 5927–5952, <https://doi.org/10.5194/bg-19-5927-2022>
- Fennel, K., J.P. Mattern, **S.C. Doney**, L. Bopp, A.M. Moore, B. Wang, and L. Yu, 2022: Ocean biogeochemical modelling, *Nature Reviews Methods Primers*, **2**, 76, <https://doi.org/10.1038/s43586-022-00154-2>
- Dinauer, A., C. Laufkötter, **S.C. Doney**, and F. Joos, 2022: What controls the large-scale efficiency of carbon transfer through the ocean's mesopelagic zone? Insights from a new, mechanistic model (MSPACMAM), *Global Biogeochem. Cycles*, **36**, e2021GB007131, <https://doi.org/10.1029/2021GB007131>
- Boyd, P.W., **S.C. Doney**, S. Eggins, M.J. Ellwood, M. Fourquez, B.L. Nunn, R. Strzepek, and E. Timmins-Schiffman, 2022: Transitioning global change experiments on Southern Ocean phytoplankton from lab to field settings: Insights and challenges, *Limnol. Oceanogr.*, **67**(9), 1911-1930, <https://doi.org/10.1002/lno.12175>
- National Academies of Sciences, Engineering, and Medicine (**S.C. Doney** Committee Chair) 2022: A Research Strategy for Ocean-based Carbon Dioxide Removal and Sequestration, Washington, DC, The National Academies Press, <https://doi.org/10.17226/26278>
- Moran, M.A., E.B. Kujawinski, W.F. Schroer, S.A. Amin, N.R. Bates, E.M. Bertrand, R. Braakman, C.T. Brown, M.W. Covert, **S.C. Doney**, S.T. Dyhrman, A.S. Edison, A.M. Eren, N.M. Levine, L. Li, A.C. Ross, M.A. Saito, A.E. Santoro, D. Segrè, A. Shade, M.B. Sullivan, and A. Vardi, Microbial metabolites in the marine carbon cycle, *Nature Microbiology*, **7**, 508-520, <https://doi.org/10.1038/s41564-022-01090-3>
- ISI Essential Science Indicators Highly Cited Paper in Microbiology
- Kim, H.H., J.S. Bowman, Y.-W. Luo, H.W. Ducklow, O.M. Schofield, D.K. Steinberg, and **S.C. Doney**, 2022: Modeling polar marine ecosystem functions guided by bacterial physiological and taxonomic traits, *Biogeosciences*, **19**, 117–136, <https://doi.org/10.5194/bg-19-117-2022>
- Long, M.C., J. Keith Moore, K. Lindsay, M. Levy, **S.C. Doney**, J.Y. Luo, K.M. Krumhardt, R.T. Letscher, M. Grover, and Z.T. Sylvester, 2021: Simulations with the Marine Biogeochemistry Library (MARBL), *J. Advances Modeling Earth Systems (JAMES)*, **13**, e2021MS002647, <https://doi.org/10.1029/2021MS002647>
- Kavanaugh, M.T., T. Bell, D. Catlett, M.A. Cimino, **S.C. Doney**, W. Klajbor, M. Messié, E. Montes, F.E. Muller-Karger, D. Otis, J.A. Santora, I.D. Schroeder, J. Triñanes, and D.A. Siegel, 2021: Satellite remote sensing and the Marine Biodiversity Observation Network: Current science and future steps, *Oceanography*, **34**(2), 62–79, <https://doi.org/10.5670/oceanog.2021.215>
- Jenkins, W., L. Rosa, J. Schmidt, L. Band, A. Beltran-Peña, A. Clarens, **S. Doney**, R.E. Emanuel, A. Glassie, J. Quinn, M.C. Rulli, W. Shobe, L. Szeptycki, and P. D'Odorico, 2021: Values-based scenarios of water security: rights to water, rights of water, and commercial water rights, *BioScience*, **71**(11), 1157–1170, <https://doi.org/10.1093/biosci/biab088>
- Fuhrman, J., A. Clarens, K. Calvin, **S.C. Doney**, J.A. Edmonds, P. O'Rourke, P. Patel, S. Pradhan, W. Shobe, and H. McJeon, 2021: The role of direct air capture and negative emissions technologies in the shared socioeconomic pathways towards +1.5 °C and +2 °C futures, *Environ. Res. Lett.*, **16**, 114012, <https://doi.org/10.1088/1748-9326/ac2db0>
- Siegel, D.A., T. DeVries, **S.C. Doney**, and T. Bell, 2021: Assessing the sequestration time scales of some ocean-based carbon dioxide reduction strategies, *Environ. Res. Lett.*, **16**, 104003, <https://doi.org/10.1088/1748-9326/ac0be0>
- Hauri, C. R. Pagès, A.M.P. McDonnell, M.F. Stuecker, S.L. Danielson, K. Hedstrom, B. Irving, C. Schultz, and **S.C. Doney**, 2021: Modulation of ocean acidification by decadal climate variability in the Gulf of Alaska, *Communications Earth and Environment*, **2**, 191, <https://doi.org/10.1038/s43247-021-00254-z>

- Zaiss, J., P.W. Boyd, **S.C. Doney**, J.N. Havenhand, and N.M. Levine, 2021: Impact of Lagrangian sea surface temperature variability on Southern Ocean phytoplankton community growth rates, *Global Biogeochem. Cycles*, **35**, e2020GB006880, <https://doi.org/10.1029/2020GB006880>
- Morgan, E.J., M. Manizza, R.F. Keeling, L. Resplandy, S.E. Mikaloff-Fletcher, C.D. Nevison, Y. Jin, J.D. Bent, O. Aumont, **S.C. Doney**, J.P. Dunne, J. John, I.D. Lima, M.C. Long, and K.B. Rodgers, 2021: An atmospheric constraint on the seasonal air–sea exchange of oxygen and heat in the extratropics, *J. Geophys. Res. Oceans*, **126**, e2021JC017510, <https://doi.org/10.1029/2021JC017510>
- Kim, H.H., Y.-W. Luo, H.W. Ducklow, O.M. Schofield, D.K. Steinberg, and **S.C. Doney**, 2021: WAP-1D-VAR v1.0: Development and evaluation of a one-dimensional variational data assimilation model for the marine ecosystem along the west Antarctic Peninsula, *Geosci. Model Dev.*, **14**, 4939–4975, <https://doi.org/10.5194/gmd-14-4939-2021>
- Pradhan, S., W.M. Shobe, J. Fuhrman, H. McJeon, M. Binstead, **S.C. Doney**, and A.F. Clarens, 2021: Effects of direct air capture technology availability on stranded assets and committed emissions in the power sector, *Frontiers in Climate*, **3**, 660787, <https://doi.org/10.3389/fclim.2021.660787>
- Fuhrman, J., A.F. Clarens, H. McJeon, P. Patel, Y. Ou, **S.C. Doney**, W.M. Shobe, and S. Pradhan, 2021: The role of negative emissions in meeting China’s 2060 carbon neutrality goal, *Oxford Open Climate Change*, **1**(1), kgab004, <https://doi.org/10.1093/oxfclm/kgab004>
- Schultz, C., **S.C. Doney**, J. Hauck, M.T. Kavanaugh, and O. Schofield, 2021: Modeling phytoplankton blooms and inorganic carbon responses to sea-ice variability in the West Antarctic Peninsula (WAP), *J. Geophys. Res. Biogeosci.*, **126**, e2020JG006227, <https://doi.org/10.1029/2020JG006227>
- Eveleth, R., D.M. Glover, M.C. Long, I.D. Lima, A.P. Chase, and **S.C. Doney**, 2021: Assessing the skill of a high-resolution marine biophysical model using geostatistical analysis of mesoscale ocean chlorophyll variability from field observations and satellite remote sensing, *Front. Mar. Sci.*, **8**, 612764, <https://doi.org/10.3389/fmars.2021.612764>
- Yang, B., E.H. Shadwick, C. Schultz, and **S.C. Doney**, 2021: Annual mixed layer carbon budget for the West Antarctic Peninsula continental shelf: Insights from year-round mooring measurements, *J. Geophys. Res. Oceans*, **126**, e2020JC016920, <https://doi.org/10.1029/2020JC016920>
- Yang, B., J. Fox, M.J. Behrenfeld, E.S. Boss, N. Haëntjens, K.H. Halsey, S.R. Emerson, and **S. Doney**, 2021: In situ estimates of net primary production in the western North Atlantic Ocean with Argo profiling floats, *J. Geophys. Res. Biogeosciences*, **126**, e2020JG006116, <https://doi.org/10.1029/2020JG006116>
- Palevsky, H.I. and **S.C. Doney**, 2021: Sensitivity of 21<sup>st</sup> century ocean carbon export flux projections to the choice of export depth horizon, *Global Biogeochem. Cycles*, **35**, e2020GB006790, <https://doi.org/10.1029/2020GB006790>
- Doney, S.C.**, D.S. Busch, S.R. Cooley, and K.J. Kroeker, 2020: The impacts of ocean acidification on marine ecosystems and reliant human communities, *Ann. Rev. Environ. Resources*, **45**, 83–112, <https://doi.org/10.1146/annurev-environ-012320-083019>  
<https://www.annualreviews.org/page/top-physical-2020>  
*Annual Reviews* highly downloaded articles in 2020  
 ISI Essential Science Indicators Highly Cited Paper in Environment/Ecology
- Fuhrman, J., H. McJeon, P. Patel, **S.C. Doney**, W.M. Shobe, and A.F. Clarens, 2020: Food–energy–water implications of negative emission technologies in a +1.5°C future, *Nature Climate Change*, **10**, 920–927, <https://doi.org/10.1038/s41558-020-0876-z>
- Schultz, C., **S.C. Doney**, W.G. Zhang, H. Regan, P. Holland, M.P. Meredith, and S. Stammerjohn, 2020: Modeling of the influence of sea ice cycle and Langmuir circulation on the upper ocean mixed layer depth and freshwater distribution at the West Antarctic



- Peninsula, *J. Geophys. Res. Oceans*, **125**, e2020JC016109, <https://doi.org/10.1029/2020JC016109>
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### **SELECTED SCIENCE LECTURES & PRESENTATIONS**

- Dept. of Energy, Carbon Negative Shot Summit, panelist on Innovation Panel, virtual workshop, July, 2022, <https://www.energy.gov/fecm/carbon-negative-shot-summit>
- Sea Education Association (SEA) Symposium, Sea State: Reflections on 50 Years at SEA, invited talk, *Ocean Sciences*, Falmouth, MA, June 2022, <https://sea.edu/about-us/sea-50th-anniversary/>
- Capitol Hill Ocean Week 2022, lead speaker for virtual breakout session on *The Future of Ocean-Based Carbon Dioxide Removal (CDR) Research*, June 2022, <https://marinesanctuary.org/chow-2022/>
- National Academies Ocean Studies Board, invited talk, *A Research Strategy for Ocean-based Carbon Dioxide Removal and Sequestration*, remote participation, April 2022
- Institute for Carbon Removal Law and Policy Webinar Series, American University (co-hosted by Environmental Policy & Culture Program at Northwestern University), invited panelist for webinar on *The Potential Role of Ocean-Based Carbon Dioxide Removal: The NAS Weighs In*, remote participation, April 2022 <https://www.american.edu/sis/centers/carbon-removal/webinars.cfm>
- Department of Energy, Carbon Dioxide Removal Project, invited talk, *Ocean-based Carbon Dioxide Removal*, remote participation, March 2022
- Ocean Sciences Meeting 2022, AGU, ASLO and TOS, two invited talks, virtual meeting with remote participation, Feb.-March 2022
- *Tutorial Session: Ocean-based Carbon Dioxide Removal (CDR), Where can research make a difference?*
  - *Innovation Session: Ocean-based Carbon Dioxide Removal, Challenges and Opportunities*

Georgia Tech Ocean Science and Engineering, Spring Seminar Series, invited talk, *Ocean-based Carbon Dioxide Removal*, Atlanta GA, remote participation, Feb. 2022

Environmental Science, Policy & Engineering Program, Winter Seminar Series, Union College, invited talk, *Ocean-based Carbon Dioxide Removal*, Schenectady NY, remote participation, Feb. 2022

UVA Climate Change and Health Elective, Virginia Clinicians for Climate Action, invited talk, *Climate Change – Science, Impacts & Solutions*, Charlottesville, VA, Jan. 2022

National Academies of Sciences, Engineering, and Medicine (NAEM), *A Research Strategy for Ocean-based Carbon Dioxide Removal and Sequestration*, Report release briefing, Dec. 2021 <https://www.nationalacademies.org/event/12-08-2021/a-research-strategy-for-ocean-carbon-dioxide-removal-and-sequestration-report-release>

Ocean Acidification Week 2021, Global Ocean Acidification Observing Network (GOA-ON), invited plenary talk, *Detection, Attribution, and Predictability of Ocean Acidification*, Sept. 2021, <http://www.goa-on.org/webinars/OaWeek2021/webinar.php> and <https://www.youtube.com/watch?v=Y0UHYK51Lk0&list=PLZ2ci3xomXhvFPYHxzvrDUfB8tnuNr2Yo&index=18>

Frontiers of Climate Science: A 5-year review, UVA Environmental Resilience Institute Climate Ambition Summit, webinar Q&A, audience ~300 plus posted recording, <https://www.youtube.com/watch?v=tVx87cKN-zE>, April 2021

Oregon State University Center for Genome Research and Biocomputing, invited talk, *Developing Models of Marine Planktonic Systems*, virtual talk, October 2020

Yale School of the Environment, Invited Keynote for Oceans and Climate Conference, virtual conference, October 2020, <https://yaleconnect.yale.edu/CC/2020-oceans-and-climate-conference/>  
[https://youtu.be/fMWYm14G5Xo?list=PLH71dbCFYcxji8JoWflVOEE7q8as\\_HbCu](https://youtu.be/fMWYm14G5Xo?list=PLH71dbCFYcxji8JoWflVOEE7q8as_HbCu)

COVID & the Environment Webinar, Invited Panelist (one of three), UVA Environmental Resilience Institute, May 2020, <https://eri.virginia.edu/event/covid-webinar/>

AAAS Annual Meeting 2020, Invited Talk, *Climate warming induces global reductions in marine biological productivity*, Seattle, WA, Feb. 2020

AAAS Annual Meeting 2020, Invited Talk, *Ocean ecosystems in a changing world: observational and modeling perspectives*, Seattle, WA, Feb. 2020

AAAS Annual Meeting 2020, Invited Talk, *NASA Hyperwall, Exploring ocean biology using new technologies*, Seattle, WA, Feb. 2020  
<https://svs.gsfc.nasa.gov/hyperwall/index/download/events/2020-aaas/playlist-doney.txt.html>

Carelyn Y. and William S. Reeburgh Endowed Earth System Science Lecture, Invited Talk, *The Changing Seascape of Ocean Science Research*, <https://www.ess.uci.edu/reeburghlecture>, UC Irvine, Irvine, CA, May 2019

6th Rasmusson Annual Lecture, University of Maryland, Dept. of Atmospheric and Oceanic Science, Invited Talk, *Impacts of Ocean Warming & Acidification on Marine Ecosystems*, College Park, MD, April 2019

OceanVisions2019 – Climate Summit, Invited talk, *Human Impacts on Coastal Water Quality and Ecosystem Services*, Georgia Tech, Atlanta, GA, April 2019

American Meteorological Society 99th Annual Meeting, Inez Fung Symposium, Invited Talk, *Ocean biogeochemistry and air-sea carbon exchange in an evolving climate*, Phoenix, AZ, Jan. 2019

Congress on Ocean Policy, Renewable Natural Resources Foundation, Invited Plenary Talk, *“Ocean acidification and rising ocean temperatures,”* Washington, DC, December 2018  
<https://www.rnrf.org/2018cong/>

NASA North Atlantic Aerosol and Marine Ecosystems Study (NAAMES) Science Meeting, Invited Plenary Talk, *“Overview of NAAMES Biogeochemical Modeling and Remote Sensing”*, Oregon State University, Corvallis, OR, June 2018



Virginia Institute of Marine Sciences, College of William and Mary, Invited talk, “*Ocean Climate Change, Water Quality & Acidification along the US Northeast*”, Gloucester, VA, Nov. 2017

NASA-World Resources Institute Workshop on Societal Applications of Satellite Data for Ocean Health and Fisheries, Invited talk and panelist “*Ocean Health in the Context of Climate Change*”, Washington, DC, Nov. 2017

New England Aquarium, evening public science talk, “*Climate Change Along the Western Antarctic Peninsula*”, Boston, MA, Sept. 2017 (<http://www.neaq.org/event/aquarium-lecture-scott-doney/>)

Harvard Engineering & Applied Science, Atmospheric and Environmental Chemistry Seminar, Invited Talk, “*Changing Coastal-Ocean Biogeochemistry along the Western Antarctic Peninsula*”, Cambridge, MA, March 2017

4th Annual Cape Coastal Conference, Waquoit Bay National Estuarine Research Reserve, Invited Keynote Science Address, “*Coastal and Ocean Acidification*”, Hyannis, MA, Dec. 2016

Northeast Coastal Acidification Network (NECAN), Invited Talk, “*Developing an Atlantic Sea Scallop Integrated Assessment Model*”, NECAN Webinar Series, Dec. 2016  
video available from <http://necan.org/necan-webinar-series-recent-upcoming> and <https://youtu.be/1egnAkgJm9k>

MIT Sea Grant Ocean Acidification Seminar, Invited Talk, “*Quantification of the Contribution of Wastewater Effluent to Coastal Ocean Acidification*”, Cambridge, MA, November 2016

Boston University, Seminar Series on Climate Change, Invited Talk, “*Coastal Water Quality, Climate Change & Ocean Acidification along the US Northeast*”, Boston, MA, Oct. 2016

Harvard Earth & Planetary Sciences Dept. Colloquium Series, Invited Talk, “*Coastal Water Quality, Climate Change & Ocean Acidification along the US Northeast*”, Cambridge, MA, Sept. 2016

U.S. CLIVAR Process Study & Model Improvement Panel (PSMIP) Annual Meeting, Invited Talk, “*Ocean Biogeochemistry & Global Climate Modeling*”, Woods Hole, MA, June 2016

Office of the U.S. Speaker Programs, Bureau of International Information Programs, U.S. Department of State; organized by U.S. Consulates in Vancouver, BC and Halifax, NS, Canada, June 2016 (all events invited)

- Science talk at University of Victoria, “*Coastal Water Quality, Climate Change & Ocean Acidification along the US Northeast*”, Victoria, BC, Canada
- Talks for the general public on “*Ocean Climate Change and Acidification*”: Oceans Network Canada (Victoria, BC), Vancouver Aquarium (Vancouver, BC), and Maritime Museum of the Atlantic (Halifax, NS)

Environmental Sciences Department, University of Virginia, Invited Talk, “*Coastal Water Quality, Climate Change & Ocean Acidification along the US Northeast*”, Charlottesville, VA, Feb. 2016

Woods Institute Environmental Forum, Stanford University, Invited Talk, “*Coastal Water Quality, Climate Change & Ocean Acidification along the US Northeast*”, Stanford, CA, Feb. 2016

Arctic Matters Day, National Academy of Sciences, Invited Talk/Panelist, “*Physical and Chemical Oceanic Changes in the Arctic*”, <http://nas-sites.org/arctic/>, Washington, DC, Jan. 2016

MIT Water Summit, Invited panelist on Climate Change and Water “Interpret” Panel, Cambridge, MA, Nov. 2015

Transatlantic Science Week “Blue Frontiers”, The Research Council of Norway and the Norwegian Government, Invited Talk and Session Moderator, “*Ocean Climate Change*”, Boston, MA, Nov. 2015

Ocean Carbon and Biogeochemistry (OCB) Annual Summer Workshop, Invited Talk, S. Doney and P. Boyd, Overview talk on emissions, sources and scales of impact for session “*Atmospheric Nutrient Deposition: Impacts on Marine Ecosystem & Biogeochemical Cycles*”,

Woods Hole, MA, July, 2015

U.S. Ocean Acidification Principal Investigators' Meeting, Two Invited Talks, "Ecosystem Modeling and Ocean Acidification" and "*Ocean Acidification at the Palmer, Antarctic LTER Project*", Ocean Carbon and Biogeochemistry Project, NSF, and NOAA, Woods Hole, MA, June, 2015

Oceanography Graduate Student Association Annual Distinguished Lecture, Invited Talk, "*Global and Regional Perspectives on Ocean Acidification*", Rutgers University, New Brunswick, NJ, April 2015

Enviroday 2015, Dept. of Environmental Sciences, U. Virginia, Invited Keynote Speaker, "*Ocean Climate Change and Acidification: Global-Scale Human Impacts on the Sea*", Charlottesville, VA, Feb. 2015

2015 ASLO Aquatic Sciences Meeting, Invited Plenary Talk, "*Changing Coastal & Open-ocean Biogeochemistry in the Southern Ocean*", Granada, Spain, Feb. 2015

Southern Ocean Dynamics & Biogeochemistry Workshop, Linde Center for Global Environmental Science, California Institute of Technology, invited talk, "*Biological Ramifications of Climate-Change Mediated Oceanic Multi-Stressors*", Pasadena, CA, Feb. 2015

Ocean's Carbon and Heat Uptake Workshop, Joint US CLIVAR and OCB Workshop, Invited Talk and Panelist, "*Model Biases & Uncertainties in CMIP5 Models: Ocean Carbon Uptake & Climate Feedbacks*", San Francisco, CA, Dec. 2014

The Sustainable Adaptive Gradients in the Coastal Environment (SAGE) Program (<http://www.resilient-infrastructure.org/>), College of Engineering at Northeastern University, Invited Webinar to SAGE Network, "*Climate Change and Adaptation Solutions for the Coastal Ocean along the US Northeast*", Dec. 2104, <https://nucoe.webex.com/nucoe/lr.php?RCID=e8e216a876bdee1654ccc188c008e804>

Sea Level Rise & the Future of Coastal Cities Conference, Boston University Initiative on Cities (<http://sites.bu.edu/sealevelcon/>), Invited Panelist on "*The Science of Sea Level Rise and Climate Change*", Boston, MA, Nov. 2014

Ocean Acidification and Southern New England: A Conference, Invited Talk, "*Coastal Ocean Acidification*", organized by Woods Hole Research Center, New Bedford, MA, Oct. 2014

New England Ocean Science Education Collaborative (NEOSEC), 2014 Ocean Literacy Summit, Invited Talk, "*New Developments in Marine Science*", Woods Hole, MA, Nov. 2014

Sea Education Association, Invited Talk, "*The Ocean Health Index*", Falmouth, MA, August 2014

Ocean Acidification: Understanding the Problem and Policy Responses, Roundtable Co-sponsored by the Foreign Service Institute, The Bureau of Oceans and International Environmental and Scientific Affairs, U.S. Department of State and NOAA, Invited Talk, "*Biological Impacts of Ocean Acidification*", George P. Shultz National Foreign Affairs Training Center, Arlington, VA, August, 2014

State of Maine Commission to Study the Effects of Coastal and Ocean Acidification on Commercially Harvested and Grown Species (Ocean Acidification Commission), Invited Talk, "*Overview on Ocean Acidification*", U. Maine Darling Marine Center, Walpole, ME, August 2014

Gordon Research Conference on Ocean Global Change Biology, Invited Discussion Leader for session on "*Ecosystem Modeling of Multiple Stressors*", Waterville Valley, NH, July 2014

2nd annual Cape Coastal Conference State of the Cape: Implementing Strategies To Improve Water Quality & Build Coastal Resilience, Invited Keynote Talk, "*Regional Climate Change in New England: Update from the National Climate Assessment*", hosted by Waquoit Bay National Estuarine Research Reserve, Barnstable, MA, June 2014  
<http://www.waquoitbayreserve.org/education-training/coastal-training-programs/2014-cape-coastal-conference-2/>

Capitol Hill Ocean Week (CHOW 2014), *State of the Ocean Panel*, National Marine Sanctuaries Foundation, Washington, DC, June 2014,

U.S. State Department Our Ocean Conference (<http://ourocean.info>), Mediator for *Ocean Acidification Panel*, video of panel available from <http://video.state.gov/en/remarks-and-events/video/3628176407001/ocean-acidification/s~creationDate/p~1/> Washington, DC, June 2014

American Society of Microbiology, Invited Talk, “*A Changing Environment for Ocean Microbes: Climate Warming and Ocean Acidification*”, Boston, MA, May 2014

WHOI Morss Colloquium From Penguins to Polar Bears: Impacts of Climate Change, “*Climate Change and Other Human Pressures on Polar Ecosystems*”, Invited Public Lecture, Woods Hole Oceanographic Institution, Woods Hole, May 2014

Conservation of Polar Species Endangered by Climate Change Workshop, “*Impact of Climate Change on the Western Antarctic Peninsula Ecosystem*”, Invited Lecture, Woods Hole Oceanographic Institution, Woods Hole, MA, May 2014

WGBH Smart Conversations Series Presents Climate Change, Public Panel Discussion, Brighton, MA, March 2014, <https://www.youtube.com/user/WGBHForum>

Dalhousie University, Invited Public Lecture, “*A Changing Sea*”, Halifax, Nova Scotia, Canada, Nov. 2013

Bedford Institute of Oceanography, Invited Talk, “*Rapid Climate Change Along the West Antarctic Peninsula: from Sea-ice to Penguins*”, Dartmouth, Nova Scotia, Canada, Nov. 2013

WHOI Development Event, Harvard Club, “*The Changing Ocean and the Free Market*”, Boston, MA, November 2013

WHOI Biology Dept. Seminar, “*Quantifying Climate and CO<sub>2</sub> Driven Trends in Ocean Biogeochemistry*”, Woods Hole, MA, November 2013

Yale School of Forestry and Environmental Studies, Invited Talk, “*Rapid Climate Change: Impacts from Sea-Ice to Penguins*”, New Haven, CT, October, 2013

Gordon Research Conference, Chemical Oceanography, Invited Talk, “*Quantifying Climate and CO<sub>2</sub> Driven Trends in Ocean Biogeochemistry*”, Biddeford, ME, August 2013

ASP Graduate Student Colloquium: Carbon-Climate Connections in the Earth System, 3 Invited Talks, National Center for Atmospheric Research, Boulder, CO, July-August 2013

- “*Marine Biogeochemical Modeling*”
- “*Marine Phytoplankton-Zooplankton Modeling*”
- “*Marine Ecosystem Modeling*”

From the Alps to the Atlantic: Water in a Changing Climate Symposium, Invited Talk, “*Climate Change Impacts on Marine Ecosystems*”, Symposium co-sponsored by Swissnex (Consulate of Switzerland, Boston), PlanetSolar DeepWater Project, University of Geneva, and the Woods Hole Oceanographic Institution, Boston, MA, June 2013, <http://www.swissnexboston.org/planetsolar-deepwater-expedition-in-boston>

Liberty Mutual Insurance Catastrophe Modelers Forum, Invited, “*Climate Change*”, Boston MA, May 2013

National Climate Assessment Workshop on Sustaining Assessments of Oceans and Coasts, Invited, “*2013 National Climate Assessment: Overview of Oceans and Marine Resources Chapter*”, Washington DC, April 2013

MAREMIP/EUR-OCEANS/IMBER/GREENCYCLES II Meeting on Impact of Climate Change on Marine Ecosystems. University of Paris VI, Invited, “*Climate Change Impacts on Ocean Ecosystems-Higher Trophic Level Effects*”, Paris, France, March 2013

WHOI Marine Chemistry & Geochemistry Dept. Seminar, *U.S. National Climate Assessment: Key Findings*, Feb. 2013

American Association for Advancement of Science (AAAS) Annual Meeting, Invited, *Observing Systems for Constraining Ocean Carbon Uptake and Acidification*, Boston MA, Feb. 2013

Casco Bay Estuary Partnership, Mud-Clam Summit (EPA funded project), Invited, *Overview on Ocean Acidification*, U. Southern Maine, Portland ME, Jan. 2013

University of California, Irvine, Earth System Science Department Seminar, Invited, *Climate Impacts on Ocean Ecosystems*, Irvine CA, Jan. 2013

American Geophysical Union (AGU) Fall Meeting, Invited, *U.S. 2013 National Climate Assessment of Oceans and Marine Resources*, San Francisco, CA, Dec. 2012

University of Massachusetts, Boston, Symposium on Global Challenges in Climate Science and Policy, Invited, *Climate Impacts on Ocean Ecosystems*, Boston MA, Dec. 2012

Gulf of Maine Council on the Marine Environment (U.S.-Canadian partnership of government and non-government organizations), Invited, *Climate Impacts on Marine Ecosystems*, Boston MA, Dec. 2012

Boston University School of Public Health, Gijs van Seventer Environmental Health Seminar, Invited, *Climate Impacts on Ocean Ecosystems*, Boston MA, Oct. 2012

NOAA in New England, NOAA NMFS, Invited Talk, *Ocean Acidification and Sea Scallops*, Woods Hole, MA, Sept. 2012

WHOI Public Event Ocean's Acid Test, *An Overview of Ocean Acidification*, Woods Hole, MA, August 2012

Atlantic Meridional Overturning Circulation (AMOC) Annual Meeting, Invited Talk, *Impacts of Climate Forcing on CO<sub>2</sub> uptake in the North Atlantic*, Boulder CO, August 2012

Gordon Conference on Environmental Sciences: Water, Invited Plenary Talk, *Ocean Acidification: The Other CO<sub>2</sub> Problem*, Holderness NH, June 2012

ASLO Aquatic Sciences Meeting, *The climate response of plankton community structure in the NCAR CESM global ocean biogeochemical model*, Otsu, Lake Biwa, Japan, June 2012.

AGU Science Policy Conference, Invited Talk and Panel Discussion, *A Research Agenda for Ocean Acidification to Support Decision Makers*, Washington, DC, May 2012

International SOLAS Open Science Conference (Surface Ocean-Lower Atmosphere Study), Invited Plenary Talk, *Rising Atmospheric CO<sub>2</sub> & Ocean Acidification*, Cle Elum, WA, May 2012.

Global Conference on Oceans, Climate and Security, Invited Talk and Panel Discussion, *National Climate Assessment-Oceans and Marine Resources Chapter*, UMass Boston, Boston, MA, May 2012

Stanford University, Woods Institute Environmental Forum, Invited Talk, *Ocean Uptake of Anthropogenic CO<sub>2</sub>*, Stanford, CA, May 2012

Williams College Oceans Symposium Lecture Series, Invited Talk, *"Rising Atmospheric CO<sub>2</sub> & Ocean Acidification"*, Williamstown, MA, March 2012

Advancing Oceans at Rio+20, Side Event at the Rio+20 3rd Intersessional Meeting, Invited Talk, *Ocean Acidification in the Rio+20 Zero Draft*, hosted by Global Ocean Forum & Intergovernmental Oceanographic Commission (IOC-UNESCO), United Nations, New York, NY, March 2012

MIT-EAPS IAP Lecture Series, From Measurements to Models in the Earth System, Massachusetts Institute of Technology, Invited Talk, *"Ocean Acidification Modeling: From Seawater Chemistry to Fisheries"*, Cambridge MA, Feb. 2012

WHOI Marine Chemistry & Geochemistry Dept. Seminar, *"20<sup>th</sup> Century Carbon Dynamics in the Community Earth System Model (CESM1)"*, Woods Hole, MA, Feb. 2012

2012 Ocean Sciences Meeting Workshop, *"Communicating Your Science: Challenges and Opportunities with Ocean Acidification"*, Panel Presentation and Discussion, Salt Lake City, UT, Feb. 2012

AAAS Science and Technology Policy Fellows Workshop, Invited Talk, *"Communicating Science for Policy: Lessons Learned from Ocean Acidification"*, Washington DC, Jan. 2012

12<sup>th</sup> National Conference on Science, Policy and the Environment (this year's conference topic on Environment & Security), "*Ocean Acidification: Scientific Understanding & Implications for Food Supply*", Washington, DC, Jan. 2012

NOAA Geophysical Fluid Dynamics Laboratory (GFDL), Invited Talk, "*Carbon Cycle Dynamics in the Community Earth System Model (CESM1)*", Princeton NJ, Jan. 2012

NASA Carbon Cycle & Ecosystems Joint Science Workshop, Invited Panelist, "*Integrated Remote Sensing and Modeling of Coupled Process at Interfaces between Land-Atmosphere-Ocean Ecosystems*", Alexandria, VA, Oct. 2011

Semester in Environmental Science (SES) Distinguished Scientist Seminar, Marine Biological Laboratory, Invited Talk, "*Rising Atmospheric CO<sub>2</sub> & Ocean Acidification*", Woods Hole MA, Sept. 2011

American Fisheries Society 141<sup>st</sup> Annual Meeting, Invited Keynote Talk, "*Ocean Acidification and Living Marine Resources*", Seattle, WA, Sept. 2011

Ocean Carbon and Biogeochemistry (OCB) Summer Workshop & U.S. CLIVAR Summit, Invited Talk, "*OCB and U.S. CLIVAR: Scientific Questions & Global Observing Capabilities*", Woods Hole MA, July 2011

American Association for the Advancement of Science (AAAS) Forum on Science and Technology Policy, Invited Talk, "*Communicating Science for Policy: Lessons Learned from Ocean Acidification*", Washington DC, May 2011

2011 Long Term Ecological Research (LTER) Science Council Meeting, Invited Talk, "*Climate Change & Marine Biogeochemical Modeling from Local to Global Scales*", Jekyll Island, GA, May 2011

National Research Council Committee on Future Science Opportunities in the Antarctic and Southern Ocean, Invited Talk, "*Acidification of the Southern Ocean*", Woods Hole, MA, April 2011

NSF Forum: Understanding Climate Change Through Long-Term Ecological Research, National Science Foundation, Invited Talk, "*Climate Change & Marine Biogeochemical Modeling from Local to Global Scales*", Arlington VA, March 2011

Bevan Series on Sustainable Fisheries, University of Washington School of Aquatic and Fishery Sciences and NOAA, Invited Talk, "*Do the Dollars Make Cents? Economic Impacts of Acidification on Fisheries*", Seattle, WA, Jan. 2011

The Future of the Oceans: Building a New Agenda for Ocean Research and Education, Massachusetts Institute of Technology, Invited Talk, "*The Ocean Carbon Cycle, Ecology & Acidification*", Cambridge, MA, Dec. 2010

U.S. Navy, Chief of Naval Operations Strategic Studies Group (CNO-SSG), Naval War College, Invited Talk, "*Degrading Ocean Health: Ecosystem and Socio-economic Impacts*", Newport, RI, Oct. 2010

Gordon Research Conference, Marine Microbes: From Genes to Global Cycles, Invited Plenary Talk, "*Incorporating Microbial Dynamics into Marine Ecosystem Models*", Tilton NH, July 2010

NSF Joint Annual Meeting, Louis Stokes Alliances for Minority Participation-Bridge to the Doctorate Program, Invited Plenary Speaker, "*Growing Human Footprint on the Ocean*", Washington DC, June 2010

Joint Subcommittee on Ocean Science and Technology (JSOST), White House Conference Center, "*Ocean Acidification: A National Strategy to Meet the Needs of a Changing Ocean*", invited talk, Washington DC, May 2010.

Harvard University School of Public Health, "*Ocean Acidification, Coral Reefs and Fisheries*", Invited Talk, Boston MA, April 2010.

World Bank, Sustainable Development Network Forum 2010, Invited Talk and Panelist, "*Ocean Carbon and Ocean Acidification*", Washington DC, January 2010

UNFCCC Conference of the Parties (COP15), Copenhagen, Denmark, December, 2009:

- Oceans Day at Copenhagen, European Environmental Agency, Invited Talk and Panelist, *“Economic and Social Impacts of Ocean Acidification”*
  - U.S. Center at Copenhagen, session on Oceans and Ecosystems in a Changing Climate sponsored by NOAA, Invited Talk *“Ocean Carbon Uptake and Ocean Acidification”*
- Yale University, Curtis and Edith Munson Conservation Lecture Series, Invited Talk, *“Ocean Acidification”*, New Haven CT, September 2009
- Ecological Society of America Annual Meeting, Invited Talk, *“The coupled cycles of carbon and iron in the sea”*, Albuquerque NM, August 2009
- Conservation International, Recipes for Adaptation: Marine Management under Climate Change and Ocean Acidification Workshop, Invited Keynote Talk, *“Climate Change and Ocean Acidification”*, Arlington VA, May 2009.
- Boston University Medical School, Environmental Health Seminar Series, Invited Talk, *“Climate Change and the Future of Oceans in the 21st Century”*, Boston MA, December 2008.
- EUR-OCEANS, European Conference on Global Change and Marine Ecosystems, Invited Keynote Lecture, *“Climate Change and the Future of Oceans in the 21st Century”*, Rome, Italy, November 2008
- Defense Sciences Research Council (DARPA), Workshop on Impact of Climate Change on the DoD, Invited Talk, *“Ocean Acidification and Climate Impacts on Ocean Ecology”*, National Academy Center, Woods Hole MA, October 2008.
- U.S. House of Representatives Testimony, Committee on Science and Technology, Subcommittee on Energy and Environment, hearing on *“The Federal Ocean Acidification Research and Monitoring Act: H.R. 4174”* (June, 2008)
- NASA Carbon Cycle and Ecosystems Joint Science Meeting, Invited Plenary Talks, *“Carbon Management: Overview of Biotic Approaches”*, U. Maryland, College Park MD, April/May 2008.
- Stanford University, Woods Institute of the Environment, Invited Talk, *“Fossil Fuel CO<sub>2</sub>, Ocean Acidification & Ocean Iron Fertilization”*, Palo Alto, CA, April 2008.
- National Science Teachers Association Annual Meeting, American Geophysical Union Lecture (Invited), *“Ocean Acidification”*, Boston MA, March 2008.
- American Association for the Advancement of Science (AAAS) Annual Meeting, Boston, MA, February 2008:
- Special Session “Strange Days on Planet Ocean”, Invited Talk *“Oceanic Acidification and Carbon Cycling”*
  - Special Session “Communicating Science: Tools for Scientists and Engineers” Invited Talk and Panelist
- 50<sup>th</sup> Anniversary of the Global Carbon Dioxide Record Symposium and Celebration, NOAA, Invited Plenary Talk and Panelist, *“The Ocean in a High CO<sub>2</sub> World: Ocean Climate Responses and Feedbacks”*, Kona, HI, November 2007.
- Woods Hole Oceanographic Institution, Exploring Ocean Iron Fertilization: the Scientific, Economic, Legal and Political Basis Workshop, Woods Hole MA,
- Meeting Co-Organizer, September 2007
  - Morss Colloquim Public Forum, Invited Talk and Panelist *“Ocean Iron Fertilization: Ironing Out Uncertainties of Climate Engineering”*, October 2007
- Ocean Carbon and Biogeochemistry (OCB) Ocean Acidification Workshop, Scripps Institution of Oceanography, Invited Plenary Talk, *“Modeling Challenges for Ocean Acidification”*, La Jolla CA, October 2007.
- National Academy of Sciences, Chemical Sciences Roundtable, Invited Talk, *“Ocean Acidification”*, Washington DC, September 2007.

U.S. Senate Testimony, Committee on Commerce, Science and Transportation, Subcommittee on Oceans, Atmosphere, Fisheries and Coast Guard, hearing on “*Effects of Climate Change and Ocean Acidification on Living Marine Resources*”, Washington DC, May, 2007.

Intergovernmental Oceanographic Commission and Scientific Committee on Oceanic Research (IOC/SCOR), Surface Ocean Carbon Variability and Vulnerability Workshop, UNESCO Headquarters, Paris France, April 2007.

- Invited Plenary Talk, “*Ocean Carbon Interannual Variability*”
- Invited Plenary Talk, “*Climate-Marine Ecosystem Interactions*”

North American Carbon Program (NACP) Meeting, Invited Plenary Talk, “*Air-Sea CO<sub>2</sub> Flux Inter-Annual Variability*”, Colorado Springs CO, January 2007.

CarboOcean North Atlantic CO<sub>2</sub> Synthesis Workshop, Invited Talk, “*Modeling Ocean Carbon Interannual Variability*”, Lagurvatn Iceland, July 2006.

International CLIVAR/CO<sub>2</sub> Repeat Hydrography Meeting, Invited Talk, “*Decadal-scale changes in ocean biogeochemistry: Results from the CLIVAR/CO<sub>2</sub> Repeat Survey*”, Shonan Village Japan, November 2005.

Woods Hole Oceanographic Institution 75<sup>th</sup> Anniversary Symposium, Invited Plenary Talk, “*Observing the Ocean Carbon System*”, Woods Hole MA, September 2005.

Community Climate System Model Annual Meeting, Invited Plenary Talk, “*Marine Ecosystem Dynamics in the New Genomic Era*”, Breckenridge CO, June 2005.

American Society for Limnology and Oceanography and The Oceanography Society (ASLO/TOS) Ocean Sciences Meeting, Invited Plenary Talk, “*Interannual Variability of the Ocean Carbon System*”, Honolulu HI, February 2004.

Intergovernmental Oceanographic Commission and Scientific Committee on Oceanic Research (IOC/SCOR), Ocean Carbon Observing Systems Meeting, UNESCO Headquarters, Invited Plenary Talk, “*Global Ocean Carbon Cycle*”, Paris France, January 2003.

International WOCE/JGOFS Transport Workshop, Southampton Oceanography Centre, Invited Talk, “*Carbon transport in ocean climate models*”, Southampton UK, June 2001

International Geosphere-Biosphere Programme (IGBP) Carbon Cycle Meeting, “*Ocean Carbon Cycle: Status and Future Directions*”, Durham NH, October 2000.

H. Burr Steinbach Visiting Scholar, Woods Hole Oceanographic Institution, Woods Hole MA, July 2000.

International Joint Global Ocean Flux Study (JGOFS) Open Science Meeting, Invited Plenary Talk, “*Emerging Paradigms for Ocean Biogeochemical and Ecosystem Modeling*”, Bergen Norway, April 2000.

International Surface Ocean-Lower Atmosphere Study (SOLAS) Meeting, Keynote Talk, “*Marine Biogeochemical Response to Climate Change*”, Damp Germany, February 2000.

International World Ocean Circulation Experiment (WOCE) Tracer Workshop, University of Bremen, Invited Plenary Talk, “*Conceptual Models versus Ocean General Circulation Models in Tracer Oceanography: a False Dichotomy*”, Bremen Germany, February 1999.

U.S. National Carbon Cycle Science Workshop, Invited Plenary Talk, “*The Ocean Carbon Cycle: Recent Advances and Future Directions*”, Westminster CO, August 1998.

National Science Foundation, Ocean Modeling and Data Synthesis Workshop, Invited Plenary Talk, “*Future Directions in Marine Biogeochemical and Geochemical Modeling*”, Arlington VA, May 1998.

Columbia University, Lamont Doherty Earth Observatory, Invited Institute Talk, “*Marine Nitrogen Cycle*”, Palisades NY, December 1997.

Inter-Americas Institute, Ocean Biogeochemical Time-series Meeting, Invited Talk, “*Role of models, Remote Sensing, and Autonomous Platforms in Ocean Time-Series*”, Concepcion Chile, November 1996.

International Council for the Exploration of the Sea (ICES) Annual Scientific Meeting, Invited Talk, “*North Atlantic Carbon Cycle*”, Reykjavik Iceland, September 1996.

CIMAS Visiting Scholar, University of Miami and NOAA/AOML laboratories, Series of Three Invited Seminars on “*Ocean Tracers*”, “*Marine Biogeochemical Modeling*”, and “*Global Ocean Physical Modeling*”, Miami FL, January 1996.

Ewing Tracer Symposium hosted by Columbia University, Invited Plenary Talk, “*Methods for intercomparing transient tracer data in the ocean using models and observations*”, Biosphere II, AZ, October 1995.

#### **PUBLISHED ABSTRACTS (Total of 308)**

Patara, L., J. Hauck, L. Gregor, and the RECCAP2 Southern Ocean team (**S. Doney** team member), 2023: RECCAP2 – Southern Ocean carbon fluxes and storage, EGU General Assembly 2023, Vienna, Austria, EGU23-17328, <https://doi.org/10.5194/egusphere-egu23-17328>

Hauck, J., N. Gruber, M. Ishii, J.D. Müller, and the RECCAP2 ocean chapter leads (**S. Doney** chapter lead), 2023: Constraining regional and global ocean carbon fluxes in RECCAP2, EGU General Assembly 2023, Vienna, Austria, EGU23-12786, <https://doi.org/10.5194/egusphere-egu23-12786>

DeVries, T., K. Yamamoto, R. Wanninkhof, and the RECCAP2 Global Ocean Team (**S. Doney** team member), 2023: Magnitude, trends, and variability of the global ocean carbon sink from 1985-2018, EGU General Assembly 2023, Vienna, Austria, EGU23-16842, <https://doi.org/10.5194/egusphere-egu23-16842>

Keppel-Aleks, G., M. Cheatham, A.D. Torres, Y. Guan, and **S. Doney**, 2022: Carbon cycle inferences from diurnal to interannual variations in space-based XCO<sub>2</sub>, Abstract A12I-06, AGU 2022 Fall Meeting, Chicago, IL, Dec. 2022

Fuhrman, J., H.C. McJeon, S. Monteith, F. Wang, A. Clarens, **S. Doney**, and W. Shobe, 2022: Integrated assessment modeling of a comprehensive suite of CO<sub>2</sub> removal technologies towards a 1.5-degree future, Abstract GC16B-01, AGU 2022 Fall Meeting, Chicago, IL, Dec. 2022

Clarens, A.F., C. Fauvel, J. Fuhrman, Y. Ou, H.C. McJeon, W. Shobe, and **S. Doney**, 2022: Regional implications of carbon dioxide removal on achieving net-zero emissions targets, Abstract GC26F-05, AGU 2022 Fall Meeting, Chicago, IL, Dec. 2022

Hauck, J., N. Gruber, M. Ishii, J. Müller, B. Carter, M. Dai, T. DeVries, **S. Doney**, A. Fassbender, M. Gehlen, N. Goris, L. Gregor, S. Henson, Z. Lachkar, P. Landschützer, G. Laruelle, M. Manizza, A. Olsen, F. Perez, P. Regnier, L. Resplandy, K. Rodgers, V.V.S.S. Sarma, J. Schwinger, J. Terhaar, J. Tjiputra, R. Wanninkhof, S. Yasunaka, A. Bastos, B. Poulter, and J. Canadell, 2022: Constraining regional and global ocean carbon fluxes 1985 to 2018 in RECCAP2, SOLAS Open Science Conference 2022, Cape Town, South Africa, Sept. 2022

LaRoche, C.K., and **S.C. Doney**, 2022: Seawater carbonate system variability in the Virginia Coast Reserve LTER, 5th International Symposium on the Ocean in a High CO<sub>2</sub> World, Lima, Perú, Sept. 2022

Hauri, C., R. Pagès, A.M.P. McDonnell, M.F. Stuecker, S.L. Danielson, K. Hedstrom, B. Irving, C. Schultz, and **S.C. Doney**, 2022: Modulation of ocean acidification by decadal climate variability in the Gulf of Alaska, 5th International Symposium on the Ocean in a High CO<sub>2</sub> World, Lima, Perú, Sept. 2022

Stack, M.E., **S.C. Doney**, 2022: Storms and sea ice: an investigative analysis in the Palmer LTER region, LTER All Scientists' Meeting 2022, Virtual Poster, Pacific Grove, CA, Sept. 2022

Cappola, M., C. Moffat, M. Cimino, **S. Doney**, A. Friedlaender, O. Schofield, D. Steinberg, S. Stammerjohn, and B. Van Mooy, 2022: Long-term changes in upper ocean properties along the West Antarctic Peninsula (PAL-LTER), LTER All Scientists' Meeting 2022, Virtual Poster, Pacific Grove, CA, Sept. 2022



- Fuhrman, J. et al., 2022: Integrated Assessment Modeling of a Comprehensive Suite of CO<sub>2</sub> Removal Technologies towards a 1.5 degree Future, Forum on Scenarios for Climate and Societal Futures, Laxenburg, Austria, June 2022, <https://scenariosforum.org/>
- Cronin-Golomb, O., S. Lang, and **S. Doney**, 2022: Monitoring water quality in an optically complex coastal estuary using Landsat 8 and Sentinel 2, 15th Mediterranean Workshop and Topical Meeting Novel Optical Materials and Applications, <http://noma.fis.unical.it/>, Cetraro, Italy, May 2022
- McKee, D., **S. Doney**, A. Della Penna, E. Boss, P. Gaube, M. Behrenfeld, and D. Glover, 2022: Interpreting quasi-Lagrangian time series of ocean phytoplankton from Bio-Argo floats, Ocean Sciences Meeting (ASLO/AGU/TOS), virtual meeting, Feb.-March 2022
- Lang, S., K. Luis, **S. Doney**, and M. Castorani, 2022: Modeling coastal water clarity using Landsat-8 and Sentinel-2, Ocean Sciences Meeting (ASLO/AGU/TOS), virtual meeting, Feb.-March 2022
- Kim, H.H., C. Laufkötter, T. Lovato, **S. Doney**, and H. Ducklow, 2022: Projected 21st-century changes in marine heterotrophic bacteria under climate change, Ocean Sciences Meeting (ASLO/AGU/TOS), virtual meeting, Feb.-March 2022
- Fuhrman, J., H.C. McJeon, J. Edmonds, A. Clarens, **S. Doney**, W. Shobe, S. Pradhan, J. Sansalone and C. Fauvel, 2021: Integrated assessment modeling of multiple carbon dioxide removal pathways, AGU Fall Meeting, Abstract GC33B-06, Dec. 2021
- Sansalone, J., J. Fuhrman, A. Clarens, H.C. McJeon, S. Yu, **S. Doney**, W. Shobe, L.M. Colosi, and C. Fauvel, 2021: Decarbonizing cement and concrete: a curable problem, AGU Fall Meeting, Abstract GC35E-0740, Dec. 2021
- Smith, A.J., Y. Chen, K. McGlathery, P. Berg, **S. Doney**, C.E. Lewis, K. Gedan, C. LaRoche, M.L. Pace, J.C. Zinnert, and M.L. Kirwan, 2021: Landscape-scale carbon storage in a shifting mosaic of coastal ecosystems, AGU Fall Meeting, Abstract B34A-09, Dec. 2021
- Fauvel, C., J. Sansalone, J.A. Bennett, J. Fuhrman, H.C. McJeon, W. Shobe, A. Artuso, **S. Doney**, and A. Clarens, 2021: Reconciling integrated assessment estimates of carbon removal with regional-scale potential, AGU Fall Meeting, Abstract GC15F-0754, Dec. 2021
- Torres, A.D., G. Keppel-Aleks, **S. Doney**, and K.A. Mitchell, 2021: Spaceborne observations of the diurnal cycle of column-averaged carbon dioxide, AGU Fall Meeting, Abstract A51F-06, Dec. 2021
- Guan, Y., G. Keppel-Aleks, G.A. McKinley, A.R. Fay, and **S. Doney**, 2021: Quantifying atmospheric CO<sub>2</sub> interannual variability driven by ocean from space-based observations and atmospheric transport simulations, AGU Fall Meeting, Abstract A51F-07, Dec. 2021
- Jameson, B., (**S. Doney** co-author) 2021: How the Seascapes of Antarctica are Changing and Affecting Phytoplankton, oral presentation, 2021 Virtual Leadership Alliance National Symposium, July, 2021, <https://theleadershipalliance.org/leadership-alliance-national-symposium>
- Hauck, J., L. Gregor, C. Nissen, E. Mortenson, S. Bushinsky, **S. Doney**, N. Gruber, A. Lenton, C. LeQuere, M. Mazloff, P.M.S. Monteiro, and L. Patara, 2021: The Southern Ocean carbon sink 1985-2018: first results of the RECCAP2 project, European Geophysical Union (EGU) General Assembly 2021, EGU21-1834, April 2021
- Lang, S., M.C.N. Castorani, and **S.C. Doney**, 2021: Modeling coastal water clarity using Landsat-8 and Sentinel-2, Virginia Space Grant Consortium Student Research Conference, April 2021
- Lang, S., M.C.N. Castorani, and **S.C. Doney**, 2021: Modeling coastal water clarity using Landsat-8 and Sentinel-2, UVA EnviroDay, poster, March 2021
- LaRoche, C., and **S. Doney**, 2021: Air-sea gas exchange of CO<sub>2</sub> in South Bay, UVA EnviroDay, poster, March 2021

- Hauri, C. and **S. Doney**, 2021: Freshwater inputs change ocean acidification impacts on nearshore biogeochemistry in the Gulf of Alaska, 2021 Alaska Marine Science Symposium, January 2021
- Kim, H., Y.-W. Luo, H.W. Ducklow, O. Schofield, D.K. Steinberg, and **S. Doney**, 2020: Microbial control of ocean carbon and biogeochemical cycling in a changing polar ocean: Insights from ecosystem modeling of the West Antarctic Peninsula, OB34B-0567, Ocean Sciences 2020, San Diego, CA, Feb. 2020
- Yang, B., E. Boss, N. Haentjens, M. Behrenfeld, M.C. Long, S.R. Emerson, R. Eveleth, and **S. Doney**, 2020: In-situ observations of phytoplankton phenology, net primary production (NPP), net community production (NCP), and NCP to NPP ratio in the North Atlantic Ocean with Argo profiling floats, OB51B-03, Ocean Sciences 2020, San Diego, CA, Feb. 2020
- Licker, R., B. Ekwurzel, **S. Doney**, S.R. Cooley, I.D. Lima, R. Heede, and P.C. Frumhoff, 2020: New directions in ocean attribution science – tying acidification and other changes to specific emission sources, SI34B-1647, Ocean Sciences 2020, San Diego, CA, Feb. 2020
- Westberry, T., **S. Doney**, and M. Behrenfeld, 2020: Biogeochemically-contrasting phytoplankton populations of the Eastern and Western Subarctic Atlantic, OB24C-0469, Ocean Sciences 2020, San Diego, CA, Feb. 2020
- Scarino, A.J. C.A. Hostetler, J.W. Hair, M. Behrenfeld, T. Westberry, E. Boss, D. Siegel, N.B. Nelson, J. Allen, **S. Doney**, B. Yang, and M.C. Long, 2020: Ocean lidar profile results during the North Atlantic Aerosols and Marine Ecosystems Study: Validation and comparison with ship, floats, satellite, and model, OB33A-01, Ocean Sciences 2020, San Diego, CA, Feb. 2020
- Schultz, C., **S. Doney**, and W.G. Zhang, 2020: Modeling the impact of climate variability in the sea ice and biogeochemistry of the West Antarctic Peninsula, HE34A-1981, Ocean Sciences 2020, San Diego, CA, Feb. 2020
- Dinauer, A., **S. Doney**, and F. Joos, 2020: A streamlined, mechanistic particle flux model designed for earth system models of intermediate complexity: a global assessment of particle transfer efficiency to the deep ocean, OB14E-0411, Ocean Sciences 2020, San Diego, CA, Feb. 2020
- Chamberlain, E., H. Kim, **S. Doney**, and J.S. Bowman, 2020: Leveraging microbial community structure data to inform ecosystem modeling, an approach based on microbial community segmentation, OB53C-06, Ocean Sciences 2020, San Diego, CA, Feb. 2020
- Doney, S.**, 2020: Ocean ecosystems in a changing world: observational and modeling perspectives, in special session, Climate and Marine Ecosystems: Exploration, Prediction, and Protection, American Association for the Advancement of Science (AAAS) Annual Meeting, Seattle, WA, Feb. 2020
- Fuhrman, J.G., A.F. Clarens, H.C. McJeon, **S.C. Doney**, W. Shobe, 2019: Evaluating the anticipated food-energy-water impacts of direct air capture and other forms of negative emissions using integrated assessment models, GC43H-1399, AGU Fall Meeting 2019, San Francisco, CA, Dec. 2019
- Keppel-Aleks, G., Z. Butterfield, S. Basile, Y. Guan, **S.C. Doney**, and W. Buermann, 2019: Quantifying land and ocean carbon cycle responses to climate variability using Earth system satellite observations, A54G-01, AGU Fall Meeting 2019, San Francisco, CA, Dec. 2019
- Kavanaugh, M.T., F. Chavez, **S. Doney**, J.M. Grebmeier, E. Montes, F.E. Muller-Karger, D. Siegel, and J.A. Trinanes, 2019: A dynamic, global seascape framework for observing and understanding biodiversity patterns in ocean ecosystems, B22A-01, AGU Fall Meeting 2019, San Francisco, CA, Dec. 2019
- Chamberlain, E.J., H. Kim, **S. Doney**, J. Bowman, 2019: Leveraging microbial structure data to inform traits-based modeling, an approach based on microbial community segmentation, 4th Workshop on Trait-Based Approaches to Ocean Life, Aug. 2019, Buckinghamshire, UK, <https://www.traitspace.com/>

- Eveleth, R., **S. Doney**, D.M. Glover, M. Long, I. Lima, A. Chase, and M. Zhang, 2019: Geostatistical analysis of North Atlantic mesoscale ocean biophysical variability in the western North Atlantic from field observations, remote sensing and numerical modeling, Ocean Carbon and Biogeochemistry (OCB) Program, Woods Hole, MA, June 2019
- Keppel-Aleks, G., Z. Butterfield, S. Basile, W. Buermann, **S. Doney**, and W. Wieder, 2019: Diagnosing regional drivers of carbon cycle interannual variability from atmospheric CO<sub>2</sub>, AGU Chapman Conference on Understanding Carbon-Climate Feedbacks, San Diego, CA, August 2019, <https://connect.agu.org/aguchapmanconference/upcoming-chapmans/carbon-climate>
- Schultz, C., **S. Doney**, and W. Zhang, 2019: Biogeochemical modeling of the West Antarctic Peninsula, Liège Colloquium on Ocean Dynamics, Liège, Belgium, May 2019, <http://labos.ulg.ac.be/gher/home/colloquium/>
- Eveleth, R., **S. Doney**, I. Lima, D. Glover, and M. Long, 2019: Geostatistical analysis of North Atlantic mesoscale biophysical variability and its drivers in an eddy resolving CESM run, ASLO 2019 Aquatic Sciences Meeting, talk in session SS011, San Juan, PR, Feb. 2019
- Kim, H., H. Ducklow, O. Schofield, D. Steinberg, and **S. Doney**, 2019: Data assimilative modeling of marine ecosystem and microbial dynamics in the coastal west Antarctic Peninsula, ASLO 2019 Aquatic Sciences Meeting, talk in session CS035, San Juan, PR, Feb. 2019
- Doney, S.C.**, 2019: Ocean biogeochemistry and air-sea carbon exchange in an evolving climate, American Meteorological Society 99<sup>th</sup> Annual Meeting, Inez Fung Symposium Talk 2.2, Phoenix, AZ, Jan. 2019.
- Dunne, J.P., **S.C. Doney**, M.C. Long, G.A. McKinley, and A. Romanou, 2018: Synthesis and intercomparison of ocean carbon uptake in CMIP6 models: an Ocean Carbon and Biogeochemistry Workshop summary, AGU 2018 Fall Meeting, OS31C-01, Washington, DC, Dec. 2018.
- Kavanaugh, M.T., G. Canonico, F. Chavez, P.M. DiGiacomo, **S.C. Doney**, J.M. Grebmeier, B.R. Hales, K. Iken, E. Montes, F.E. Muller-Karger, D.B. Otis, D. Siegel, J.A. Trinanes, and D. Wright, 2018: A hierarchical, synoptic, and dynamic seascape framework for observing and understanding pelagic biodiversity, AGU 2018 Fall Meeting, B43E-07, Washington, DC, Dec. 2018.
- Palevsky, H.I., and **S.C. Doney**, 2018: Sensitivity of ocean carbon export flux projections to the choice of export depth horizon, AGU 2018 Fall Meeting, OS31C-04, Washington, DC, Dec. 2018.
- Keppel-Aleks, G., J.M. Liptak, A. Hogikyan, A.S. Wolf, and **S.C. Doney**, 2018: Ecosystem memory alters the carbon cycle response to interannual climate variations, AGU 2018 Fall Meeting, B54A-03, Washington, DC, Dec. 2018.
- Licker, R., B. Ekwurzel, **S.C. Doney**, S.R. Cooley, I.D. Lima, R. Heede, and P.C. Frumhoff, 2018: Attributing ocean acidification to major carbon producers, AGU 2018 Fall Meeting, GC21F-1169, Washington, DC, Dec. 2018.
- Torres, A.D., G. Keppel-Aleks, **S.C. Doney**, M.A. Fendrock, and K. Luis, 2018: Quantifying the imprint of atmospheric transport on total column-averaged CO<sub>2</sub> observations from OCO-2, AGU 2018 Fall Meeting, A51R-2500, Washington, DC, Dec. 2018.
- Hauri, C., K. Hedstrom, S.L. Danielson, **S.C. Doney**, A.M.P. McDonnell, and C. Schultz, 2018: The Chukchi Sea in a changing environment: A synthesis of modeling and observations, AGU 2018 Fall Meeting, GC51O-0980, Washington, DC, Dec. 2018.
- Hedstrom, K., C. Hauri, C. Schultz, J. Beamer, S.L. Danielson, **S.C. Doney**, D. Hill, and C.A. Stock, 2018: Influence of ocean acidification and climate change on the biogeochemistry in the Gulf of Alaska: A regional modeling study, AGU 2018 Fall Meeting, OS41B-2009, Washington, DC, Dec. 2018.

- Kim, H., Y.-W. Luo, and **S. Doney**, 2018: Data assimilative ecosystem modeling of bacterial dynamics and upper-ocean carbon cycling in the coastal West Antarctic Peninsula, poster, Ocean Carbon and Biogeochemistry (OCB) Summer Workshop, [www.us-ocb.org](http://www.us-ocb.org), Woods Hole, MA, June 2018.
- Rohr, T., C. Harrison, and **S. Doney**, 2018: Simulated eddy induced bottom-up controls on phytoplankton growth in the Southern Ocean, poster, Ocean Carbon and Biogeochemistry (OCB) Summer Workshop, [www.us-ocb.org](http://www.us-ocb.org), Woods Hole, MA, June 2018.
- Archibald, K., D. Siegel, and **S. Doney**, 2018: Modeling the impact of zooplankton diel vertical migration on the carbon export flux of the biological pump, poster, Ocean Carbon and Biogeochemistry (OCB) Summer Workshop, [www.us-ocb.org](http://www.us-ocb.org), Woods Hole, MA, June 2018.
- Eveleth, R., **S. Doney**, I. Lima, and D. Glover, 2018: Geostatistical analysis of North Atlantic mesoscale biophysical variability in an eddy resolving CESM run, poster, Ocean Carbon and Biogeochemistry (OCB) Summer Workshop, [www.us-ocb.org](http://www.us-ocb.org), Woods Hole, MA, June 2018.
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- Atamanchuk, D., K. Azetsu-Scott, M. Babin, E. Boss, S. Bushinsky, H. Claustre, G. Dall'Olmo, E. Devred, B. deYoung, **S. Doney**, C. Dufour, M. Estapa, K. Fennel, B. Greenan, R. Hamme, K. Johnson, J. Lagunas, P.-Y. Le Traon, M. Lewis, A. Mucci, E. Oliver, S. Pouliquen, A. Stewart, and D. Wallace, 2018: Biogeochemical Argo as an essential component of a North Atlantic Ocean Observing System, Canadian Meteorological and Oceanographic Society's 52<sup>nd</sup> Congress (CMOS) (<http://congress.cmos.ca/>), Halifax, Canada, June 2018
- Bowman, J., M. Kavanaugh, **S. Doney**, and H. Ducklow, 2018: A Seascape View of Decadal Change along the Western Antarctic Peninsula, Polar2018 SCAR/IASC Open Science Conference, Session BE-7 (<https://www.polar2018.org/>), Davos, Switzerland, June 2018
- Eveleth, R., and **S.C. Doney**, 2018: Sea ice heterogeneity along the Western Antarctic Peninsula from high-resolution satellite imagery, EnviroDay 2018, Department of Environmental Sciences, University of Virginia, Feb. 2018
- Kavanaugh, M.T., D.B. Otis, E. Montes, J.A. Santora, I.D. Schroeder, K. Shulzitski, A. Djurhuus, M. Messié, J. Brown, F. Chavez, **S.C. Doney**, and F.E. Muller-Karger, 2018: Monitoring and understanding pelagic ecosystem change through a hierarchical multiplatform seascape framework, Abstract B21A-05, 2018 Ocean Science Meeting (AGU/ASLO/TOS), Portland, OR, Feb. 2018
- Archibald, K., and **S.C. Doney**, 2018: A quantitative model for the impact of zooplankton diel vertical migration on the vertical carbon flux of the biological pump, Abstract BN44A-1175, 2018 Ocean Science Meeting (AGU/ASLO/TOS), Portland, OR, Feb. 2018
- Luk, S., J.E. Rheuban, P. Hoagland, J.E. Costa, and **S.C. Doney**, 2018: Understanding the influences of water quality on the value of recreational shellfishing in Buzzards Bay, Abstract ES44C-2529, 2018 Ocean Science Meeting (AGU/ASLO/TOS), Portland, OR, Feb. 2018
- Schofield, O., D.G. Martinson, W. Fraser, D.K. Steinberg, A.S. Friedlaender, **S.C. Doney**, D.W. Johnston, S.E. Stammerjohn, D. Nowacek, and H.W. Ducklow, 2018: Decadal dynamics in the ecosystems along the rapidly warming West Antarctic Peninsula, Abstract IS12A-05, 2018 Ocean Science Meeting (AGU/ASLO/TOS), Portland, OR, Feb. 2018
- Glover, D.M., **S.C. Doney**, W. Oestreich, and A.W. Tullo, 2018: Geostatistical analysis to quantify mesoscale (and sub-mesoscale) spatial variability, patchiness, and error in SeaWiFS and MODIS/Aqua global ocean color data, Abstract EP34C-0854, 2018 Ocean Science Meeting (AGU/ASLO/TOS), Portland, OR, Feb. 2018
- Hauri, C., C. Schultz, K. Hedstrom, J. Beamer, S.L. Danielson, **S.C. Doney**, D. Hill, and C.A. Stock, 2018: Influence of ocean acidification and climate change on the biogeochemistry of

- the Gulf of Alaska, Abstract HE13A-06, 2018 Ocean Science Meeting (AGU/ASLO/TOS), Portland, OR, Feb. 2018
- Eveleth, R., and **S.C. Doney**, 2018: Biogeochemical and Ecosystem Impacts of Sea Ice Heterogeneity Along the Western Antarctic Peninsula, Abstract BN14D-1065, 2018 Ocean Science Meeting (AGU/ASLO/TOS), Portland, OR, Feb. 2018
- Keppel-Aleks, G., **S. Doney**, A. D. Torres, and M. Fendrock, 2018: Quantifying the impact of mesoscale and synoptic scale transport on XCO<sub>2</sub> for robust flux inference, Abstract 13.3, American Meteorological Society (AMS), Austin, TX, Jan. 2018
- Torres, A.D., G. Keppel-Aleks, **S.C. Doney**, S. Feng, T. Lauvaux, M.A. Fendrock, J. Rheuban, 2017: Quantifying the imprint of mesoscale and synoptic-scale atmospheric transport on total column carbon dioxide measurements, Abstract A31O-04, American Geophysical Union (AGU) Fall Meeting, New Orleans, LA, Dec. 2017
- Keppel-Aleks, G. Z. Butterfield, **S.C. Doney**, E.J. Dlugokencky, J. Miller, D.C Morton, 2017: Quantifying the impact of El Niño-driven variations in temperature and precipitation on regional atmospheric CO<sub>2</sub> growth rate variations, Abstract GC21C-0952, American Geophysical Union (AGU) Fall Meeting, New Orleans, LA, Dec. 2017
- Rheuban, J., R. Jakuba, J. Mora, J. Costa, and **S. Doney**, 2017: The value of long term monitoring for guiding restoration efforts – warming trends and water quality, 5th Annual Cape Coastal Conference, Hyannis, MA, Dec. 2017
- Luk, S., P. Hoagland, J. Rheuban, **S. Doney**, and J.E. Costa, 2017: Understanding the Influences of water quality on the value of recreational shellfishing in Buzzards Bay, Coastal & Estuarine Research Federation (CERF) Biennial Conference, Providence, RI, Nov. 2017
- Rheuban, J., D.C. McCorkle, R.W. Jakuba, C. Neill, and **S. Doney**, 2017: Variability in carbonate chemistry and coastal acidification across a eutrophication gradient in Buzzards Bay, MA, Coastal & Estuarine Research Federation (CERF) Biennial Conference, Providence, RI, Nov. 2017
- Schultz, C., C. Hauri, **S. Doney**, K. Hedstrom, S. Danielson, C. Stock, D. Hill, and J. Beamer, 2017: A new regional model for the study of the carbon cycle and ocean acidification in the Gulf of Alaska, Forum for Arctic Modeling & Observational Synthesis (FAMOS), Woods Hole, MA, Oct. 2017.
- Torres, A., G. Keppel Aleks, **S. Doney**, M. Fendrock, and K. Luis, 2017: Quantifying the imprint of mesoscale and synoptic-scale atmospheric transport on total column carbon dioxide measurements, OCO-2 Science Team Meeting, NCAR, Boulder, CO, Oct. 2017.
- Archibald, K., and S. Doney, 2017: A quantitative model for the impact of zooplankton diel vertical migration on the vertical carbon flux of the biological pump, International Conference on Mathematical Modeling and Analysis in Biological Populations, U. Arizona, Tucson, AZ, Oct. 2017
- Palevsky, H.I., P.D. Quay, **S.C. Doney**, and C. Deutsch, 2017: Influence of the biological pump on air-sea CO<sub>2</sub> flux depends on the magnitude and seasonal timing of physical processes, Ocean Carbon Hot Spots Workshop, U.S. CLIVAR & Ocean Carbon and Biogeochemistry (OCB), Monterey, CA, Sept. 2017
- Palevsky, H., and S. Doney, 2017: How choice of depth horizon influences estimated spatial patterns and global magnitude of ocean carbon export flux, Ocean Carbon and Biogeochemistry (OCB) 2017 Summer Workshop, Poster, Woods Hole, MA, June 2017
- Doney, S., H. Ducklow, and Palmer Station Antarctica LTER Team, 2017: How does shrinking sea-ice affect ecosystems along the western Antarctic Peninsula?, Long-term Ecological Research (LTER) Symposium, NSF, Arlington, VA, March, 2017.
- Negrete, G., S.C. Doney, D.M. Glover, J.E. Rheuban, D. McCorkle, and R. Jakuba, 2017: Impacts of water quality and ocean acidification along Buzzards Bay, Massachusetts, Association for the Sciences of Limnology and Oceanography (ASLO) 2017 Meeting, Honolulu, HI, Feb. 2017 (Abstract ID: 28789)

- Bowman, J.S., M. Kavanaugh, S. Doney, and H.W. Ducklow, 2007: Characterizing temporal and spatial ecosystem variability with objectively defined biomes in a twenty-plus year time-series from the west Antarctic Peninsula, Association for the Sciences of Limnology and Oceanography (ASLO) 2017 Meeting, Honolulu, HI, Feb. 2017 (Abstract ID: 29297)
- Kavanaugh, M.T., M.J. Church, R.M. Letelier, D.M. Karl, and S.C. Doney, 2017; Aloha from the edge: multiscale biophysical variability in the North Pacific oligotrophic gyre, Association for the Sciences of Limnology and Oceanography (ASLO) 2017 Meeting, Honolulu, HI, Feb. 2017 (Abstract ID: 29988)
- Torres, AD, MA Fendrock, SC Doney, and G Keppel-Aleks, 2016: Identifying temporal and spatial synoptic-scale variability of total column carbon dioxide measurements, American Geophysical Union (AGU) Fall 2016 Meeting, San Francisco, CA (A41F-0094)
- Ducklow, HW, MR Stukel, JS Bowman, H Kim, N Cassar, R Eveleth, Z Li, SC Doney, SF Sailer, TD Jickells, AR Baker, and R Chance, 2016: Exploring Estimates of Net community production and export along the Western Antarctic Peninsula (WAP), 1993-2014, American Geophysical Union (AGU) Fall 2016 Meeting, San Francisco, CA (OS41D-08)
- Doney, S., and T.K. Hirata, 2016: MARine Ecosystem Model Intercomparison Project (MAREMIP), Invited paper, Japan Geoscience Union Meeting, May, 2016, Makuhari Messe, Japan (ACG09-01)
- Kavanaugh, M., F. Muller-Karger, E. Montes, J. Santora, F. Chavez, M. Messié, S. Doney, 2016: A Hierarchical and Dynamic Seascape Framework for Scaling and Comparing Ocean Biodiversity Observations, 2016 Ocean Sciences Meeting, New Orleans, LA (OD34B-2513)
- Nicholson, D.P., S.C Doney, and R.H.R. Stanley, 2016: The metabolic tradeoffs of diazotrophy in a flexible phytoplankton cell allocation model, 2016 Ocean Sciences Meeting, New Orleans, LA (IS33A-06)
- Williamson, S., J. Rheuban, J. Costa, D. Glover, S. Doney, 2016: Changing ecosystem response to nitrogen load into Buzzards Bay, MA, 2016 Ocean Sciences Meeting, New Orleans, LA, (HI34A-1806)
- Schultz, C., S. Doney, 2016: High-Resolution Simulation of Sea Ice and circulation in the West Antarctic Peninsula (WAP), 2016 Ocean Sciences Meeting, New Orleans, LA, (HE44D-1549)
- Muller-Karger, F., F. Chavez, S. Gittings, S. Doney, M. Kavanaugh, E. Montes, M. Breitbart, B. Kirkpatrick, D. Anderson, M. Tartt, 2016: National Marine Sanctuaries as Sentinel Sites for a Demonstration Marine Biodiversity Observation Network (MBON), 2016 Ocean Sciences Meeting, New Orleans, LA, (OD34B-2503)
- Mathis, J., J. Cross, W. Evans, S. Doney, 2016: Ocean Acidification in the Surface Waters of the Pacific-Arctic Boundary Regions, 2016 Ocean Sciences Meeting, New Orleans, LA, (AH21A-08)
- Kavanaugh, M., O. Schofield, H. Ducklow, S. Doney, 2016: Ocean Color Reveals Multi-scale Responses of Phytoplankton to Changing Sea Ice and Ocean Temperatures along the Western Antarctic Peninsula, 2016 Ocean Sciences Meeting, New Orleans, LA, (HE54C-1592)
- Jonsson, B., J. Dunne, S. Doney, 2016: Using O<sub>2</sub>/Ar ratios to assess biological production and near-surface vertical vertical mixing in global general circulation models on daily to seasonal timescales, 2016 Ocean Sciences Meeting, New Orleans, LA, (A43A-04)
- Kim, H., S. Doney, R. Iannuzzi, M. Meredith, D. Martinson, and H. Ducklow, 2016: Climate-Biogeochemical Coupling in an Antarctic Coastal Ecosystem: Chlorophyll, Nutrient, and Bacterial Production, 2016 Ocean Sciences Meeting, New Orleans, LA, (EC51A-06)
- Boyd, P. and S. Doney, 2015: A regional ocean classification to map future ecosystem change, NEOPS New Ocean Paradigm on its Biogeochemistry, Ecosystem and Sustainable Use, University of Tokyo Ocean Alliance and the Nippon Foundation, Tokyo, Japan (Dec. 2015)

- Rheuban, J., S. Cooley, D. Hart, V. Luu, D. Glover, J. Hare, and S. Doney, 2015: Developing a model for the US sea scallop fishery that incorporates ocean acidification and warming, Coastal & Estuarine Research Federation (CREF) 2015, (Poster SCI-136, C-4), Portland OR
- Mahowald, N., D. Ward, S. Kloster, J. Randerson, Scott Doney, K. Lindsay, E. Munoz, S. Schlunegger, D. Lombardozzi, D. Lawrence, P. Lawrence, and F. Hoffman, 2015: Impact of land use and land cover change on climate and air quality in the CESM, AGU 2015 Fall Meeting, San Francisco, CA, A41R-03
- Crews, L., S. Doney, M. Kavanaugh, H. Ducklow, O. Schofield, and D. Glover, 2015: Phytoplankton bloom phenology near Palmer Station Antarctica, AGU 2015 Fall Meeting, San Francisco, CA, OS13A-2016
- McNutt, M., W. Abdalati, K. Caldeira, S. Doney, P. Falkowski, S. Fetter, J. Fleming, S. Hamburg, G. Morgan, J. Penner, R. Pierrehumbert, P. Rasch, L. Russell, J. Snow, and J. Wilcox, 2015: Responding to climate change at the poles: findings from the National Research Council's Reports on Climate Intervention, AGU 2015 Fall Meeting, San Francisco, CA, GC14C-03
- Goodkin, N., B.-S. Wang, C.-F. You, K. Hughen, N. Grumet-Prouty. and S. Doney, 2015: Ocean circulation and biogeochemistry moderate inter-annual and decadal surface water pH changes in the Sargasso Sea, Goldschmidt Abstracts, Abstract 1077, Prague, Czech Republic.
- Nicholson, D.P., R. Curry, B. Barone, S.T. Wilson, S.C. Doney, and D.M. Karl, 2015: Biogeochemistry from gliders at HOT and BATS, Ocean Carbon & Biogeochemistry 2015 Summer Workshop, Poster, Woods Hole, MA
- Kavanaugh, M., I. Lima, and S. Doney, 2015: Climate-induced shifts of pelagic habitat revealed through seascape-based model intercomparison, 2015 NASA Carbon Cycle & Ecosystems Joint Science Workshop, Poster 2, College Park, MD.
- Kavanaugh, M., S. Doney, F. Muller-Karger, F. Chavez, E. Montes, and S. Gittings, 2015: National Marine Sanctuaries as sentinel sites for a demonstration Marine Biodiversity Observation Network (MBON): remote sensing of dynamic biogeographical seascapes, 2015 NASA Carbon Cycle & Ecosystems Joint Science Workshop, Poster 17, College Park, MD.
- Kavanaugh, M., D. Glover, H. Ducklow, O. Schofield, and S. Doney, 2015: Local and regional shifts in phytoplankton abundance and community structure along the western Antarctic Peninsula 2015 NASA Carbon Cycle & Ecosystems Joint Science Workshop, Poster 90, College Park, MD.
- Williamson, S., J. Rheuban, D. Glover, J. Costa, and S. Doney, 2015: The Effect of Land Use Change on Nitrogen Load into the Buzzards Bay, MA Watershed, 2015 NASA Carbon Cycle & Ecosystems Joint Science Workshop, Poster 94, College Park, MD.
- Williamson, S.C., J.E. Rheuban, J.E. Costa, D.M. Glover, R.W. Jakuba, M.T. Kavanaugh, C. Neill, and S. Doney, 2015: Long-term trends in water quality in Buzzards Bay, Massachusetts, 2015 ASLO Aquatic Sciences Meeting, Granada, Spain, ID: 26397
- Rohr, T., M. Long, and S. Doney, 2015: The effect of mixed layer deepening and sea ice on spatial variability in phytoplankton bloom dynamics in the Southern Ocean, Southern Ocean Dynamics & Biogeochemistry Workshop, Linde Center for Global Environmental Science, California Institute of Technology, Pasadena, CA, Feb. 2015
- Ducklow, H., S. Saille, S. Stammerjohn, G. Saba, and S. Doney 2014: Ecological controls on biogeochemical fluxes in the western Antarctic Peninsula: Long-Term observations and inverse food web model results, AGU Fall Meeting, San Francisco CA, B31J-07
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- and J. Wilcox, 2014: Climate intervention: reflecting sunlight to cool the Earth - Report from the National Research Council, AGU Fall Meeting, San Francisco CA, GC13I-0771
- Randerson, J., K. Lindsay, E. Munoz, W. Fu, F. Hoffman, J. Moore, S. Doney, N. Mahowald, and G. Bonan, 2014: Intensification of climate-carbon feedbacks after 2100 and implications for disturbance regimes, AGU Fall Meeting, San Francisco CA, B14D-01
- Kavanaugh, M., H. Ducklow, D. Glover, O. Schofield, and S. Doney, 2014: An intercomparison of the skill of satellite-based phytoplankton functional type algorithms for the western Antarctic Peninsula, Ocean Optics XXII, The Oceanography Society, Portland, ME, 2220
- Behrenfeld, M.J., E.S. Boss, S.C. Doney, D.A. Siegel, and I. Lima, 2014: Blooms in the context of ecosystem annual cycles, AGU/ASLO/TOS Ocean Sciences Meeting, Honolulu, HI, (Abstract ID: 13034)
- Luo, Y.W., D.P. Nicholson, and S.C. Doney, 2014: High-frequency biogeochemical modeling based on HOE-DYLAN experiment at Station ALOHA, AGU/ASLO/TOS Ocean Sciences Meeting, Honolulu, HI, (Abstract ID: 13460)
- Boyd, P.W., S.C. Doney, D. Glover, and S. Lennartz, New approaches to designing complex environmental manipulations of marine phytoplankton, AGU/ASLO/TOS Ocean Sciences Meeting, Honolulu, HI, (Abstract ID: 14570)
- Jenkins, W.J., and S.C. Doney, 2014: Determining oxygen utilization rates in the eastern subtropical North Atlantic main thermocline using an age tracer hybrid inverse model, AGU/ASLO/TOS Ocean Sciences Meeting, Honolulu, HI, (Abstract ID: 14962)
- Misumi, K., K. Lindsay, J.K. Moore, S.C. Doney, and F.O. Bryan, 2014: The iron budget in the ocean surface waters in the 20th and 21st centuries: projections by the Community Earth System Model Version 1, AGU/ASLO/TOS Ocean Sciences Meeting, Honolulu, HI, (Abstract ID: 15547)
- Kavanaugh, M.T., S.C. Doney, H.W. Ducklow, O. Schofield, and S.E. Stammerjohn, 2014: Role of submarine canyons on phytoplankton dynamics along the western Antarctic Peninsula, AGU/ASLO/TOS Ocean Sciences Meeting, Honolulu, HI, (Abstract ID: 16310)
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