

# Hugh William Ducklow

## *Curriculum Vitae*

### **Personal Information**

1. Name: Hugh William Ducklow Date: 30 April, 2019
2. Office address: Lamont-Doherty Earth Observatory  
Columbia University  
Geosciences 208  
Palisades, NY 10964
- Phone: (845) 365-8167  
Email: [hducklow@ldeo.columbia.edu](mailto:hducklow@ldeo.columbia.edu)  
WWW: <http://www.ldeo.columbia.edu/user/hducklow>  
<http://pal.lternet.edu/>
3. Position: Professor, Department of Earth & Environmental Sciences

### **Education and Postdoctoral Training:**

- 1977:** Postdoctoral Fellowship. Harvard University. Research: Biocontrol of Schistosomiasis vector snails. Supervisor: Ralph Mitchell.
- 1977:** Ph.D.; Harvard University, Cambridge, MA; Division of Applied Sciences; Major field: Environmental Engineering. Advisor: Ralph Mitchell.
- 1974:** AM; Harvard University, Cambridge, MA; Division of Engineering and Applied Physics; Major field: Environmental biology.
- 1972:** AB; Harvard College, Cambridge, MA; Summa cum laude; Phi Beta Kappa; Concentration: History and Science.

### **Professional Positions:**

- 2013:** Professor, Dept of Earth and Environmental Sciences, Columbia University
- 2007:** Director, The Ecosystems Center, MBL, Woods Hole Ma 02543 and Professor, Dept of Ecology and Evolutionary Biology, Brown University
- 1994:** Glucksman Professor of Marine Science, The College of William and Mary School of Marine Sciences and Virginia Institute of Marine Science, Gloucester Point VA.
- 1991:** Full Professor, University of Maryland Horn Point Environmental Laboratory, Cambridge, MD.
- 1984:** Associate Research Scientist, Horn Point Environmental Laboratory, Cambridge, MD.
- 1980:** Research Associate, Lamont-Doherty Geological Observatory of Columbia University, Palisades, NY.

### **Honors and Awards:**

- 1972:** Graduated Summa cum laude, Phi Beta Kappa, Harvard College.
- 1995:** Antarctic Service Medal
- 2002:** Elected Fellow of AAAS  
ISI Highly Cited researcher
- 2010:** ASLO John Martin Award for high impact paper in aquatic sciences (Fasham et al. 1990 below).
- 2015:** Former student Craig Carlson (UMD, 1994) wins ASLO Hutchinson Career Award
- 2015:** Former student Matt Church (Wm & Mary, ) wins ASLO Yentsch-Schindler Young Scientist Award

### **Invited Talks, past five years**

- 2019 H. Ducklow,** Metcalf Institute, Cambridge MA April 27.
- 2018 H. Ducklow,** Export and Net Community Production in Western Antarctica. Dept. of Geosciences, University of Edinburgh, Scotland. Nov. 03.
- 2017 H. Ducklow. Somerville College Oxford University.** “Is the West Antarctic Peninsula Changing? A Second Look. 19-22 Sept.
- 2017 H. Ducklow. Royal Society of London Chicheley Hall Conference Centre.**  
“In Icy Waters: The Future of Marine Biogeochemical Research off the West Antarctic Peninsula.” May 17-18th 2017
- 2016 H. Ducklow. New York Explorers’ Club.** Lamont Outreach Event.
- 2016 H. Ducklow.** US House of Representatives Committee on Science and Technology. One of Lamont Delegation Briefing on Antarctica and Climate Change. Nov 3.
- 2016 H. Ducklow,** The War on Cold: Dispatches From the Front Lines. Cornelia Street Café, Science Meets Art Series, Nov 6.
- 2016 H. Ducklow.** Ecosystem Responses to Climate Change: Western Antarctic Peninsula. University of Minnesota-Duluth, April 14.
- 2016 H. Ducklow.** Particle export and decomposition in the Amundsen Sea Polynya, 2010-12 University of Minnesota-Duluth, April 15.
- 2016 H. Ducklow.** Particle export and decomposition in the Amundsen Sea Polynya, 2010-12. Princeton University Department of Geosciences. March 10.
- 2015 H. Ducklow,** University of British Columbia, Dept of Earth Atmosphere and Oceans, Vancouver, BC Canada. Oct 8, 2015
- 2015, H. Ducklow,** University of British Columbia, Institute for Oceans and Fisheries, Vancouver, BC Canada. Oct 9, 2015
- 2015 H. Ducklow,** American Museum of Natural History.
- 2014 H. Ducklow,** Western Antarctic Peninsula- Rapid Climate Change and an Ecosystem Near a Tipping Point, Lamont-Doherty Spring Public Lecture Series. Columbia University, 24 April.
- 2013 H. Ducklow,** Changing Times in the Cryosphere. Keynote Address, 5<sup>th</sup> Polar and Alpine Microbiology Meeting, Big Sky, MT, Sept 2013.

- 2013 H. Ducklow**, The Disappearing Cryosphere and Antarctica's Changing Ecosystems, invited presentation to Lamont-Doherty Director's Circle and Advisory Board, 20 June.
- 2013 H. Ducklow**, Recent climate warming and ecosystem transformation along the western Antarctic Peninsula, Department of Zoology, Southern Illinois University, Carbondale, IL. April 2013
- 2013 H. Ducklow**, Challenges and rewards of interdisciplinary ocean science: examples from Palmer LTER. Gordon Research Seminar on Polar Marine Science. Ventura, CA. March 2013 (Keynote lecture).
- 2013 H. Ducklow**, S. Stammerjohn, S. Doney and S. Saille. The Changing Marine Ecosystem of the Western Antarctic Peninsula: Insights from Observations and Models. Gordon Research Conference on Polar Marine Science. Ventura, CA. March 2013.

### **Service on Committees and Institutional Boards**

- Controls over Ocean Mesopelagic Interior Carbon Storage (COMICS). Chair, External Advisory Board, for UK-NERC, 2014 - .
- Ocean Carbon Biogeochemistry Scientific Steering Committee, 2013 - 2015
- National Science Foundation, Office of Polar Programs Blue Ribbon Panel for Future Antarctic Science 2011-12 (Norman Augustine, Chair; appointed by White House Science Advisor and OSTP)
- National Academy of Sciences, Polar Research Board, Committee on Future Science Opportunities in Antarctica and the Southern Ocean (Warren Zapol, Chair). 2010-11.
- External Review RCEC, Academia Sinica, Taiwan, 2011
- UNOLS Polar Research Vessel Committee, 2011
- National Academy of Sciences, Organizing Committee for Polar Research Board Frontiers in Polar Science Workshop on Polar Climate Change, 2010.
- NSF Biological Oceanography Proposal Panel, 2010
- Long Term Ecological Research Program, Executive Board, 2009-2012. Science Council, 2002- External Review Panel, National Academy of Sciences, NRC Polar Research Board, 2009-10.
- Chair, External Review Panel, Scripps Institution of Oceanography and Graduate School of Oceanography, 2009.
- External Review Panel, The Nicholas School of the Environment, Duke University, 2008.
- External Review Panel, Texas A&M Department of Oceanography, 2008 (Jim Yoder, WHOI, Chair)
- Committee on the Design of the Martha Muse Award to Support the Advancement of Antarctic Researchers. US National Academy of Sciences, Polar Research Board. April, 2008. Washington DC.
- Scientific Committee for the IGBP, Member, 2000 - 2003
- US National Academy of Sciences Panel on Smithsonian Scientific Research, 2002-3.
- Advisor: NATO Science for Stability Project, "TU-Black Sea" 1993 - 2000 .

Interagency Carbon Cycle Science Plan Steering Committee (C. Field, Chair), 2000 - 2004  
Nominee, President-elect, American Society for Limnology and Oceanography (ASLO), 2000  
US National Academy of Sciences Panel on Oceanic Carbon (T. Takahashi, Chair). term 1992-  
**1995.**

NATO Advanced Study Institute on Biogeochemical Modeling, Member, Organizing  
Committee, **1991 - 92.** (G. T. Evans, Chair, meeting in Bonas France, May **1992**).

ICSU/IGBP/SCOR Committee for the Joint Global Ocean Flux Study (JGOFS) Member,  
Scientific Steering Committee, terms **1990 - 1992, 1996-1998**, Executive Scientist, **1993-94.**  
Vice-Chair, **1996-99; Chair, 2000-2003**

NATO Advanced Research Institute on Protozoans and Their Roles in Marine Processes,  
Plymouth, UK, **1988.** Member, Organizing Committee - (P.C. Reid, Chair, meeting in Plymouth,  
UK, August 1988).

US National Academy of Sciences review panel for the National Oceanographic Data Center (V.  
Zlotnicki, Chair). **1990.**

United States Senate Panel on Global Change and the Oceans, Sen. John Kerry, Chmn., April,  
**1989.** (Expert testimony).

US National Academy of Sciences panel on "Reducing global warming by enhancing oceanic  
primary production," (R. Barber, chair.) **1989.**

US National Academy of Sciences Committee on Global Change, working group on  
biogeochemical processes (J. Baker, chair), **1989.**

Joint Global Ocean Flux Study (US JGOFS), Member of Steering Committee Oct. **1985-2002;**  
Member US JGOFS Executive Committee, **1989-2002.** Chair, **1995 -1999.**

NASA SeaWiFS Prelaunch Science Advisory Working Group, **1988.**

### **Editorial Boards**

Editorial Advisory Board, TAO Journal, 2018 -

Editorial Advisory Board, Columbia Undergraduate Science Journal, 2018 -

Editorial Board, *Ecosystems*, **2014 -**

Editorial Board, *Applied and Environmental Microbiology*, (American Society of  
Microbiology), **1981- 87.**

Editor (Biology), *Journal of Geophysical Research (Oceans)*, (American Geophysical Union),  
term **1991-1994.**

Editor Selection Board, *Global Biogeochemical Cycles*, (American Geophysical Union), **1995,**  
**1997.**

Guest Editor, *Deep-Sea Research II* Special Volumes **1992, 2002, 2006, 2008, 2015.**

Guest Editor, *Oceanography* Special Volume on US Antarctic Oceanography, **2012.**

Editorial Board, *Microbial Ecology*, **1994 - 2006**

Editorial Board, *Marine Microbial Foodwebs and Aquatic Microbial Ecology*, **1992 – 1997.**

Editorial Board, *Aquatic Microbial Ecology*, **2007 – present**

## **Committee Service (Columbia University and DEES)**

DEES Undergraduate Program Committee 2019 -

DEES Graduate Admissions Committee 2019 -

DEES Teaching Asst Policies Committee 2018 -

Columbia Undergraduate Science Journal, editorial advisory board, 2018 -

Columbia Dept of Earth & Environmental Sciences, Co-Director of Undergraduate Studies, 2016-18.

Columbia College, Science Research Fellows Admissions Committee, March, 2017

Lamont Doherty Earth Observatory, Campus Life Committee, 2015 – 16.

Columbia College, Kellett Prize Selection Committee, 2015.

Columbia Dept of Earth & Environmental Sciences, Co-Director of Undergraduate Studies, 2015-18

Columbia Dept of Earth & Environmental Sciences Student Awards Committee, Chair 2016 - 17

Columbia Dept of Earth & Environmental Sciences, Cryosphere Science faculty search committee, 2015.

Lamont Doherty Earth Observatory, Endowments committee, 2015 – 16.

Columbia Dept of Earth & Environmental Sciences, Graduate Admissions Committee, 2019 -

## **Classroom Teaching.**

### **Columbia University**

**2018 EESC G6823**, “Microbial Oceanography” (3 pts, 4 students).

**2016 EESC G6823**, “Microbial Oceanography” (3 pts, 4 students; w/ S. Dyhrman).

**2017-18 EESC BC3800x, EEEB W3991/2**, “Environmental Science, Biology and Policy, Senior Thesis seminar” (3 pts, 59 students, w/ M. Stute and 5 others).

**2016-17 EESC BC3800x, EEEB W3991/2**, “Environmental Science, Biology and Policy, Senior Thesis seminar” (3 pts, 54 students, w/ S. Pfirman and 5 others).

**2015-16 EESC BC3800x, EEEB W3991/2**, “Environmental Science, Biology and Policy, Senior Thesis seminar” (3 pts, 56 students, w/ M. Stute, S. Pfirman and 4 others).

**2015** – DEES Co-Director of Graduate Studies

**2014 EESC BC3800x, EEEB W3991/2**, “Environmental Science, Biology and Policy, Senior Thesis seminar” (3 pts, 59 students, w/ M. Stute, S. Pfirman and 4 others).

**2014 EESC G6823**, “Microbial Oceanography” (3 pts, 9 students; w/ S. Dyhrman).

**2013 EESC G9505 001**, “Seminar: Readings in Plankton Ecology, (1 point, 6 students)

### **The Ecosystems Center, MBL**

**2007 – 12** Lectures and student mentoring in Semester in Environmental Sciences, 2007 -12. Also hosted several SES students on trips to Antarctica.

### **Brown University**

**2010** guest lectures in ENVS 0490 Environmental Science in a Changing World (O. Sala)

**2009** guest lecture in BIOL1460. “Microbial Diversity in the Environment.” (J. Rich).

**2009** guest lectures in ENVS 0490 Environmental Science in a Changing World (O. Sala)

**2008** guest lectures in ENVS 0490 Environmental Science in a Changing World (O. Sala)

### **College of William & Mary, School of Marine Sciences:**

**2007** MS 526, “Principles of Biol. Oceanography,” (co-taught with E. Duffy), 3 cr., 15 students

**2006** PUBP 600, “Principles of Environmental Science with D Taylor. (3 cr, 8 students)

**2005** PUBP 600, “Principles of Environmental Science with D Taylor. (3 cr, 8 students)

**2005** MS 652, “Plankton Ecology” with W Smith and K Tang (3 cr, 5 students)

**2005** MS 526, “Principles of Biol. Oceanography,” (co-taught with E. Duffy), 3 cr., 15 students

**2003** INTR150W-03 Freshman Seminar (at W&M), Fall, 4 credits, 15 students

**2003** MS 652, “Topics in plankton ecology” 3 cr. , Fall, 5 students (with D Steinberg)

**2003** MS 526, “Principles of Biol. Oceanography,” (co-taught with E. Duffy), 4 cr., 8 students

**2002** MS 526, “Principles of Biol. Oceanography,” (co-taught with E. Duffy), 4 cr., 9 students

**2001** MS 652, “Topics in plankton ecology” 3 cr. , Fall, 6 students (with D Steinberg)

**2001** MS 697-X, “Antarctic Sea Ice Processes” (2 cr, 2 students)  
**2000** MS 698-4, “Ideas on Nature in American Society” (co- w/ Bronk, Taylor), 1 cr, 7 students  
**2000** MS 526, “Principles of Biol. Oceanography,” (co-taught with E. Duffy), 4 cr., 9 students)  
**1999** MS 652, “Topics in plankton ecology” 3 cr. , Fall, 6 students  
**1999** MS 598, “Modeling in FORTRAN,” 1 cr., Summer, 2 students  
**1999** MS 597, “Polar Oceanography,” w/ W. Smith, 1 cr., Spring, 9 students.  
**1999** MS 698, “Modeling of Nature,” w/ E. Duffy, 2 cr., Spring, 5 students.  
**1998** MS 697, “Ecological Plankton Modeling,” 3 cr., Spring, 1 student  
**1998** MS 526, “Principles of Biol. Oceanography,” (co-taught with E. Duffy), 4 cr., 8 students.  
**1998** MS 697, “Methods and techniques in microbial ecology,” 3 cr., Spring, 4 students  
**1997** MS 652, “Topics in plankton ecology” 3 cr. , Fall, 7 students  
**1997** MS 698-02, “Biogeochemistry Seminar” 1 cr., Spring, (team taught) 18 students.  
**1997** MS 697-??, “Methods and techniques in bacterioplankton ecology” 3 cr. 5 students.  
**1997** MS 526, "Principles of Biological Oceanography" 3 cr., Spring, (co-instructor) 10 students  
**1996** MS 526, "Principles of Biological Oceanography" 3 cr., Spring, (co-instructor) 12 students  
**1995** MS 526, "Principles of Biological Oceanography" 3 cr., Spring, (co-instructor) 12 students

### Training Record (graduate students advised)

Name	Grad	Degree	Thesis Topic	Current Position
<b>University of Maryland:</b>				
Fuh-Kwo Shiah	1994	PhD	Estuarine Microbial Ecology	Academia Sinica, Taiwan
Craig Carlson	1994	PhD	Oceanic bacterial production	UCSB
Alison Bryant	1996	MSc	Experimental microbial ecology	
<b>College of Wm &amp; Mary:</b>				
Gary Schultz.	1999	Ph.D.	York River Bacteria	Marshall Univ
Matthew Church	1999	MS	Antarctic bacteria	Univ Hawaii
Peter Countway	1999	MS	Coral reef bacteria	Bigelow Lab, ME
Leigh McCallister	2002	Ph.D.	Estuary biogeochem	VA Common- wealth Univ
Jessica Morgan	2003	MS	Microb. Ecol of the Black Sea	NOAA
Matthew Church	2003	Ph.D.	Microb Ecol of the N. Pacific	Univ Hawaii
Jacques Oliver	2005	Ph.D.	Bacterial growth and iron limitation	NOAA
Robert Daniels	2003	MS	Foodweb modeling	NOAA
Amy Chiuchiolo	2003	MS	Antarctic microbial ecology	Montana State Univ (RA)

Heidi Geisz	2010	PhD	Antarctic seabird ecology	Knauss Fellow, NOAA
<b>Brown-MBL:</b>				
Yawei Luo	2009	Ph.D.	Ecological Modeling	Xiamen Univ, China
Kristen Myers	2009	MSc	Antarctic microbial ecology	Portland State Univ (RA)
Catherine Luria	2017	PhD	Antarctic microbial ecology	--
<b>Columbia Univ:</b>				
Hyewon Kim	2017	PhD	Antarctic marine ecology	Postdoc UVA w/ S Doney
Rebecca Trinh	--	PhD	Antarctic microbial ecology	--

**PhD Advisory Committee Member (Columbia DEES):**

Ali Bausch (R. Anderson, advisor, graduated May 2017)  
 Logan Brenner (B. Linsley, advisor, graduated May 2017)  
 Jan-Erik Tesdal (J. Goes, advisor)  
 Sean Ridge (G. McKinley, advisor)

**External:**

James Collins (B. van Mooy, WHOI, advisor) Grad 2016  
 Cristina Schultz (S. Doney, WHOI advisor) Grad 2019  
 Ribanna Dittrich (S. Henly, Univ Edinburgh, advisor)  
 Tyler Rohr (S. Doney, WHOI advisor) Grad 2019

**Training Record (postdoctoral fellows advised)**

Name	Years	Research Topic	Current Position
Emily Peele	1988-92	Amazon River bacteriology	Univ West. Washington
Martin Montes-Hugo	2006-09	Antarctic Phytoplankton Ecology	Univ Quebec a Rimouski
Mirko Lunau	2009-10	Bacterial nitrogen cycling	AWI,
Jennifer Brum	2010-11	Marine viruses (Polar Postdoc)	Univ Arizona
Stephanie Wilson	2010-11	Amundsen Sea Polynya Experiment	UCNW
Mike Stukel	2011-13	Particle export and Thorium-234	FSU
Shellie Bench	2012-14	Phytoplankton Genomics	Arizona State
Jeff Bowman	2014-16	Bacteria-phytoplankton interactions	UCSD-Scripps

**Training Record (undergraduate senior theses mentored – Columbia)**

Name	Year	College/Department	Thesis title
Shana Leshko	2015	BC Env. Sci.	“Surprises under the Ice”

**Training Record (undergraduate senior theses advised – Columbia/Barnard)**

Name	Year	College/Department	Topic
Julia Russell	2014	BC Env. Sci.	



Emilie Schattman	2015	BC Env. Sci.
Griffin Whitlock	2015	CC DEES
Therese Chen	2015	BC Env. Sci.
Ana De Oliveira Lobo	2015	CC DEES
Mary McElroy	2015	BC Env. Sci.
Dina Morris	2015	BC Env. Sci.
Laura Booth	2015	CC E3B
Emma Bartnick	2016	BC Env. Sci.
Parker Case	2016	CC DEES
Kayla Farrell	2016	BC Env. Sci.
Ana Camila Gonzalez	2016	CC DEES
Abigail Caparros-Janto	2016	BC Env. Sci.
Andres Salazar	2016	CC DEES
Neida Vasquez	2016	BC Env. Sci.
Jee Min Lee	2016	BC Env. Sci.
Shana Leshko	2016	BC Env. Sci.
Caitlyn Collins-Palmer	2017	CC E3B
Flannery James	2017	CC E3B
Andy Garcia	2017	CC E3B
Kelsey Markey	2017	GS DEES
Hailey Riechelson	2017	CC DEES
Meghan Siritzky	2017	BC Env. Sci.
Madalyn Taylor	2017	CC E3B
Olivia Williamson	2017	BC Env. Sci.
Julia Zeh	2017	BC Env. Sci.

**Training Record (undergraduate senior theses advised – Columbia/Barnard)**

<b>Name</b>	<b>Year</b>	<b>College/Department</b>	<b>Topic</b>
Persis Ticknor-Swanson	2018	BC Env. Sci.	
Elizabeth Thompson	2018	CGS DEES	
Katherine Uriarte	2018	CC E3B	
Zoe Berg	2018	BC Env. Sci.	
Caroline Freinberg	2018	CC E3B	

## Extramural Funding (Last 10 Years)

Award term:	2014-20
Title:	LTER Palmer, Antarctica (PAL): Land-Shelf-Ocean Connectivity, Ecosystem Resilience and Transformation in a Sea-Ice Influenced Pelagic Ecosystem (Lead PI)
Agency:	NSF-OPP
Amount:	\$6,761,996
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Award term:	2011-14
Title:	The seasonal cycle of export production in an Antarctic coastal marine ecosystem
Agency:	NSF-OPP (Lead PI)
Amount:	\$411,492
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Award term:	2009-2012
Title:	Collaborative research aboard Icebreaker Oden: ASPIRE (Amundsen Sea Polynya International Research Expedition)
Agency:	NSF-OPP (Co-PI)
Amount:	\$259,627
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Award term:	2009-2012
Title:	MRI-R2: Acquisition of Trace Gas and Aerosol Instrumentation for Ecosystem Analysis
Agency:	NSF-DBI (Lead PI)
Amount:	\$418,048
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Award term:	2008 - 2014
Title:	Palmer Antarctica Long Term Ecological Research Program (Lead PI)
Agency:	NSF-OPP
Amount:	\$5,640,000 (Lead PI with 7 other PIs). plus various supplements
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Award term:	2007 - 2010
Title:	IPY: Collaborative Research: Bacterioplankton genomic adaptations to Antarctic winter
Agency:	NSF-OPP (Co-PI)
Amount:	\$230,000 (MBL portion, with A. Murray, Desert Research Inst, NV)
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Award term:	2002 - 2008
Title:	Palmer Antarctica Long Term Ecological Research Program (Lead PI)
Agency:	NSF-OPP
Amount:	\$4,200,000 (Lead PI with 7 other PIs). plus various supplements
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## **Oceanographic Cruise and Other Field Experience:**

- 2018** LM GOULD 18-01 January-February, 2018. Palmer LTER. Punta Arenas, Chile – Punta Arenas (45 days; A. Friedlaender, Chief Scientist).
- 2017** LM GOULD 17-01 January-February, 2017. Palmer LTER. Punta Arenas, Chile – Punta Arenas (45 days; Co-Chief Scientist).
- 2016** LM GOULD 16-01 January-February, 2016. Palmer LTER. Punta Arenas, Chile – Punta Arenas (45 days; Co-Chief Scientist).
- 2014** LM GOULD 14-01 January-February, 2014. Palmer LTER. Punta Arenas, Chile – Punta Arenas (40 days; Co-Chief Scientist).
- 2013** LM GOULD 13-01 January-February, 2013. Palmer LTER. Punta Arenas, Chile – Punta Arenas (40 days; Chief Scientist).
- 2012** LM GOULD 12-01 January-February, 2012. Palmer LTER. Punta Arenas, Chile – Punta Arenas (40 days; Chief Scientist).
- 2011** NB PALMER 10-05 November 2010-January 2011. Amundsen Sea International Polynya Expedition (ASPIRE). Punta Arenas, Chile – McMurdo, Antarctica. (52 days, project represented by Anton Post and Stephanie Wilson, MBL).
- 2011** LM GOULD 11-01 January-February, 2011. Palmer LTER. Punta Arenas, Chile – Punta Arenas (40 days; Chief Scientist).
- 2010** LM GOULD 10-01 January-February, 2010. Palmer LTER. Punta Arenas, Chile – Punta Arenas (40 days; Chief Scientist).
- 2009** LM GOULD 09-01 January-February, 2009. Palmer LTER. Punta Arenas, Chile – Punta Arenas (40 days; Chief Scientist).
- 2008** Palmer Station, July – September, 2008. IPY Winter Microbes. (Station Science Leader)
- 2007** LM GOULD 07-01 January-February, 2007. Palmer LTER. Punta Arenas, Chile – Punta Arenas (40 days; Chief Scientist).
- 2006** Palmer Station, February – March and October – November, 2006. Palmer LTER
- 2006** LM GOULD 06-01 January-February, 2006. Palmer LTER. Punta Arenas, Chile – Punta Arenas (40 days)
- 2005** Palmer Station, October – November, 2005. Palmer LTER.
- 2005** LM GOULD 05-01 January-February, 2005. Palmer LTER. Punta Arenas, Chile – Punta Arenas (40 days; Chief Scientist).
- 2004:** Palmer Station, February – March, 2004. Palmer LTER.
- 2004:** Palmer Station, October – November, 2004. Palmer LTER (Station Science Leader)
- 2004** LM GOULD 04-01 January-February, 2004. Palmer LTER. Punta Arenas, Chile – Punta Arenas (40 days; Chief Scientist).
- 2003** LM GOULD 03-01 January-February, 2003. Palmer LTER. Punta Arenas, Chile – Punta Arenas (40 days)

- 2002-03:** Palmer Station, October 2002 – April, 2003. Palmer LTER. (Station Science Leader)
- 2002** Palmer Station, January – February, 2002. Pollutants in Antarctic Foodweb.
- 2001** NB Palmer, NBP 01-10. Palmer LTER Sea Ice Cruise, Sept – Nov 2001.
- 2001** RRS DISCOVERY. Southampton, England – Lerwick, Shetlands. Faeroes-Iceland-Scotland Ecosystem Research (FISHES) Project with Deacon Division (Southampton Oceanography Centre), May, 2001.
- 1997** NB PALMER, Christchurch, NZ – Christchurch (Ross Sea). JGOFS AESOPS 3, April – May 1997 (Chief Scientist).
- 1996** NB PALMER, Christchurch, NZ – Christchurch (Ross Sea). JGOFS AESOPS 1, October – November, 1996.
- 1995** RV Thomas Thompson, Muscat, Oman – Muscat (Arabian Sea). JGOFS Arabian Sea Expedition, March - April, 1995.
- 1995** NB PALMER, Christchurch, NZ – Christchurch (Ross Sea). JGOFS AESOPS 1, December, 95 – January, 1996.
- 1994** NB PALMER, Christchurch, NZ – Christchurch (Ross Sea). November – December, 1994.
- 1992** RV Thomas Thompson, Honolulu – Tahiti (Equatorial Pacific). JGOFS EQPAC Time Series 2, October, 1992.
- 1992** RV Thomas Thompson, Tahiti – Honolulu (Equatorial Pacific). JGOFS EQPAC Time Series 1, March, 1992.
- 1989** RV ATLANTIS II. Azores – Reykjavik (North Atlantic). JGOFS North Atlantic Bloom Experiment (NABE). May-June, 1989 (Chief Scientist).
- 1986** RRS CHARLES DARWIN. Seychelles – Muscat, Oman. UK Arabian Sea Expedition. October, 1986.
- 1984** RV GYRE. Norfolk –Norfolk. Chesapeake Bay Plume (MECCAS Experiment), 3 cruises in June – September, 1984.
- 1984** RV OCEANUS. Norfolk –Norfolk. Chesapeake Bay Plume (MECCAS Experiment), April, 1984.
- 1983** Australian Institute of Marine Science, Great Barrier Reef. Microbial Ecology of a Coral Reef (MECOR Experiment). August, 1983.
- 1982** RV KNORR. Woods Hole – Woods Hole. Sargasso Sea, NE US Slope Water. (Warm Core Rings Experiment). 4 cruises KNORR 93, 95, 97, 98 in April – October, 1982.
- 1981** RV KNORR. Woods Hole – Woods Hole. Hudso River Plume. March, 1981.
- 1981** Johore Bahru, Malaysia. Research on Mangrove / Prawn Aquaculture systems (w/ Jim Simpson, LDGO).
- 1978-79** Rockefeller Research Institute, Morne Fortune, St Lucia. Field research on bacterial control of Schistosomiasis vector snails, *Biomphalaria glabrata*.

- 1977** University of Puerto Rico, Rio Piedras, PR. Field research on bacterial control of Schistosomiasis vector snails, *Biomphalaria glabrata*.
- 1976** Bellairs Research Institute (McGill Univ). St. James, Barbados. Research on coral – microbe interactions (several trips).
- 1975** Weizmann Institute of Science, Rehovot, Israel and Steinitz Marine Lab, Eilat Israel. Research on coral – microbe interactions (several trips). March - November, 1975.
- 1973 – 74, 78** Bermuda Biological Station, St Georges, Bermuda. Research on coral – microbe interactions (several trips).

## Peer-Reviewed Publications (234)

Refereed publications and reports in journals and books (student and postdoc coauthors underlined).

- 2019** Henley S. F., O. M. Schofield, K. R. Hendry, I. R. Schloss, D. K. Steinberg, C. Moffat, L. S. Peck, D. P. Costa, D. C. E. Bakker, C. Hughes, P. D. Rozema, **H. W. Ducklow**, D. Abele, J. Stefels, M. A. Van Leeuwe, C. P. D. Brussaard, A. G. J. Buma, J. Kohut, R. Sahade, A. S. Friedlaender, S. E. Stammerjohn, H. J. Venables, M. P. Meredith. 2019. Variability and change in the west Antarctic Peninsula marine system: Research priorities and opportunities. *Progress in Oceanography*, 173, 208-237.
- 2018** Collins J. R., H. F. Fredricks, J. S. Bowman, C. P. Ward, C. Moreno, K. Longnecker, A. Marchetti, C. M. Hansel, **H. W. Ducklow**, B. A. S. V. Mooy. 2018. The molecular products and biogeochemical significance of lipid photooxidation in West Antarctic surface waters. *Geochimica et cosmochimica acta*, 232, 244-264.
- 2018** Kim H, Lee DE, **Ducklow HW**. 2018. Mixing regime-dependent causality between phytoplankton and bacteria in the subtropical North Atlantic Ocean ecosystem. *Mar Ecol Prog Ser* 600:41-53. <https://doi.org/10.3354/meps12643>
- 2018** Schofield, O., M. Brown, J. Kohut, S. Nardelli, G. Saba, N. Waite, and H. Ducklow. 2018. Changes in the upper ocean mixed layer and phytoplankton productivity along the West Antarctic Peninsula. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* 376. DOI: 10.1098/rsta.2017.0173
- 2018** Bowman Jeff, S., Kavanaugh Maria T., Doney Scott, and W. Ducklow Hugh. 2018. Recurrent seascape units identify key ecological processes along the western Antarctic Peninsula. *Global Change Biology* doi: 10.1111/gcb.14161.
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