

OSCAR MAX ERIC SCHOFIELD

Rutgers University Center for Ocean Observing Leadership (RU COOL)
Department of Marine and Coastal Sciences
School of Environmental and Biological Sciences, Rutgers University
New Brunswick, NJ 08901 email:oscar@marine.rutgers.edu

EDUCATION AND ACADEMIC APPOINTMENTS

1983-1987 B.A. in Aquatic Biology, Department of Biology, University of California at Santa Barbara
1989-1993 Ph.D. in Biology, Department of Biology, University of California at Santa Barbara
1994 Postdoctoral Researcher, Center for Remote Sensing and Environmental Optics, University of California at Santa Barbara
1994-1995 Postdoctoral Researcher, Southern Regional Research Center, Agriculture Research Service
1995-2001 Assistant Professor, Department of Marine and Coastal Science, Rutgers University
2001-2007 Associate Professor, Department of Marine and Coastal Science, Rutgers University
2007-2016 Professor, Department of Marine and Coastal Science, Rutgers University
2016-present Distinguished Professor, Department of Marine and Coastal Science, Rutgers University

OTHER PROFESSIONAL APPOINTMENTS

1988 Laboratory Research Associate I, Marine Science Institute, University of California at Santa Barbara
1989-1993 Graduate Research Assistant, Marine Science Institute, University of California at Santa Barbara
1989-1993 Graduate Teaching Assistant, Department of Biology, University of California at Santa Barbara
1989-1990 Curator, Algal Culture Collection, Department of Biology, University of California at Santa Barbara
1995 Adjunct Professor of Biological Sciences, Loyola University, New Orleans, LA.
1995-present Adjunct Research Scientist, Mote Marine Laboratory, Sarasota, FL.
1999-2015 Co-Founder & Co-Director of the Coastal Ocean Observation Laboratory
1999-present member Rutgers Environmental Biophysics and Molecular Biology Program
2000-2015 member of Rutgers Ocean Systems Engineering Center
2001-2014 Adjunct Professor, California Polytechnic State University, San Luis Obispo, CA.
2008-2017 Senior Project Scientist, Ocean Observatory Initiative
2012-present Chair of Department of the Marine and Coastal Sciences, Rutgers University
2013-2017 Faculty Affiliate with the Rutgers Discovery Informatics Institute (RDI2)
2015-present co-Founder and co-Director of the Center of Ocean Observing Leadership (COOL)
2018-present Director of Rutgers Marine Field Station at Tuckerton New Jersey
2019 Director of the Al Giddings Lifetime Video & Photography Collection

RESEARCH INTERESTS

primary productivity in aquatic ecosystems, climate change and the oceans, evolution of phytoplankton and global geochemistry, hydrological optics, integrated ocean observatories

AWARDS, HONORS AND CERTIFICATIONS

Deans Honor Student, University of California at Santa Barbara (1987)
National Science Foundation- Research Experience for Undergraduates (REU) (1987)
Antarctic Service Medal (1988)
University Research SCUBA certification (1988)
Invited Scientist 5th International Group on Aquatic Productivity (1990)
University of California at Santa Barbara Travel Award (1992)
University of California Regents Fellowship Award (1992)
Invited Scientist DIALOG Symposium (1994)
Invited Scientist National Academy of Sciences and Max Planck for the German-American Frontiers of Science Symposium, Munich Germany (1997)
Invited Scientist "Techniques for Food Industry, Agriculture and Environment" Todi, Italy (1997)
Authorized Data User and Real-time Site License for the SeaWiFS Project (1998-2008)
Invited Participant National Academy of Sciences and Japan Science & Technology Corporation (JAMSTEC), Japanese-American Frontiers of Science Symposium (1999)
NJ State Legislation Resolution Assembly Resolution No. 209 recognizing RU COOL as a state resource (2003)
Rutgers University Faculty Academic Service Program (FASIP) Award (1998-present)

Rutgers Cook College TEAM Award (2006)
 Technology Collaboration Award by the Naval Research Lab for Helping to Focus Future Naval Oceanographic Research to Support the United States Navy Warfighter Operating in the Littoral Zone, Glenn & Schofield, (2007)
 Bianco, Spain, International recognition of the arrival of the Rutgers glider named Scarlet Knight for being the first robot to cross an ocean basin with a plaque adjacent to celebrating the return of Columbus's crew of the Pinta (2009)
 RU Scarlett Knight glider is declared a historic artifact by the White House (2009)
 Antarctic Service Medal (2009)
 The transatlantic glider RU27 is inducted into the Smithsonian Museum, Washington DC (2010)
 RU COOL as part of the Port Security Center of Excellence is awarded a Department of Homeland Security Science & Technology Impact Award for efforts during the Deep-water Horizon Oil Spill (2011)
 New Jersey Assembly Resolution honoring the Rutgers Coastal Ocean Observation Lab on its 20th anniversary (2012)
 School of Environmental and Biological Sciences International Excellence Award awarded to Scott Glenn and Oscar Schofield (2015)
 RU-COOL recognized by the New Jersey Senate Resolution SCR-144 by the New Jersey Senate Environment and Energy Committee for contributions to ocean research, data collection, technology and forecasting. (2017)
 American Society of Limnology and Oceanography G. Evelyn Hutchinson Award (2019)

TEACHING EXPERIENCE

Post-Doctoral Advisor for

Dr. Mark Moline, Institute of Marine and Coastal Sciences, Rutgers University, NJ (1996-1997)
Presently: Professor and Director of School of Marine Science and Policy, University of Delaware
 Dr. Yu Gao, Institute of Marine and Coastal Sciences, Rutgers University, NJ (1998-2000)
Presently: Senior Research Scientist at Phycogen
 Dr. Elena Litchmann, Institute of Marine and Coastal Sciences, Rutgers University, NJ (2001-2002)
Presently: Faculty at University of Wisconsin
 Dr. Antonietta Quigg, Institute of Marine and Coastal Sciences, Rutgers University, NJ (2000-2003)
Presently: Faculty at Texas A&M
 Dr. Lin Jhang, Institute of Marine and Coastal Sciences, Rutgers University, NJ (2003-2005)
Presently: Faculty at Georgia Technology University
 Dr. Mathew Oliver Institute of Marine and Coastal Sciences, Rutgers University, NJ (2006-2007)
Presently: Faculty at University of Delaware
 Dr. Bronwyn Cahill, Institute of Marine and Coastal Sciences, Rutgers University, NJ (2006-2008)
Presently: Scientist at Informus
 Dr. Renato Castelao, Institute of Marine and Coastal Sciences, Rutgers University, NJ (2006-2008)
Presently: Faculty at University of Georgia
 Dr. Martin Montes-Hugo, Institute of Marine and Coastal Sciences, Rutgers University, NJ (2007-2009)
Presently: Faculty at University of Quebec
 Dr. Alex Kahl, Institute of Marine and Coastal Sciences, Rutgers University, NJ (2008-2010)
Presently: NOAA, Hawaii
 Dr. Grace Saba, Department of Marine and Coastal Sciences, Rutgers University, NJ (2010-2012)
Presently: Faculty at Rutgers University
 Dr. Xu Yi, Department of Marine and Coastal Sciences, Rutgers University, NJ (2013-2014)
Presently: East China Normal University, Shanghai China
 Dr. Mansha Seth Pasricha, Department of Marine and Coastal Sciences, Rutgers University, NJ (2018-2019)
Presently: Research Scientists at Stratgen

Major Advisor for Ph.D. and Masters

Joe Grzymalski "Ecosystem adjustments and organism adaptations: energy flows in the Santa Barbara Basin and Antarctic Peninsula" Institute of Marine and Coastal Sciences, Rutgers University, NJ (Ph.D.) (1996-2001)
Presently Senior Research Faculty at Reno Desert Research Institute
 Patricia Shaheen "Selective Feeding of the Early Winter Flounder Pleuronectes americanus" Institute of Marine and Coastal Sciences, Rutgers University, NJ (M.S.) (1998-2000) *Presently Faculty at Monmouth State University*

- Trisha Bergmann “The Ecology of Cryptophytes and Their Associated Biogeochemical Consequences” Institute of Marine and Coastal Sciences, Rutgers University, NJ (Ph.D., Co-advisor w/ Dr. Scott Glenn) (1997-2003)
Presently at National Ocean and Atmospheric Administration
- Zoe Finkel “Photoacclimation in chromophytic algae under fluctuating light and nutrient fields” Institute of Marine and Coastal Sciences, Rutgers University, NJ (Ph.D., Co-advisor w/ Dr. Paul Falkowski) (2000-2004)
Presently Faculty at Dalhousie University
- Felisa Wolfe “Role and evolution of super oxide dismutase in eukaryotic algae” Institute of Marine and Coastal Sciences, Rutgers University, NJ (Ph.D., Co-advisor w/ Dr. Paul Falkowski 2000-2005) *Presently a postdoctoral researcher at Lawrence Livermore*
- Matthew Oliver “The physical forcing of biogeochemistry of the Mid-Atlantic Bight as defined using the New Jersey shelf system.” Institute of Marine and Coastal Sciences, Rutgers University, NJ (Ph.D., Co-advisor w/ Dr. Paul Falkowski 2001-2007) *Presently Faculty at University of Delaware*
- Meenal Gogte “Chlorophyll budgets for the Mid-Atlantic Bight” Institute of Marine and Coastal Sciences, Rutgers University, (M.S. 2005-2006)
- Alex Kahl “Flocculation processes and oceanic export flux in the world’s oceans.” Institute of Marine and Coastal Sciences, Rutgers University, NJ (Ph.D. 2002-2008) *Presently at senior scientist at NOAA*
- Rachael Sipler “Dissolved organic nutrient regulation of coastal phytoplankton communities” Institute of Marine and Coastal Sciences, Rutgers University, NJ (Ph.D., Co-advisor w/ Dr. Sybil Sietzinger 2004-2009) *Presently research faculty at the Virginia Institute of Marine Sciences, William and Mary*
- Xu Yi “Physical regulation of biogeochemical fluxes of continental shelves” Institute of Marine and Coastal Sciences, Rutgers University, (Ph.D. 2006-2012) *Deputy Executive Officer Integrated Marine Biogeochemistry and Ecosystem Research, Shanghai China*
- Travis Miles “Storm regulation of Mid-Atlantic Bight phytoplankton dynamics and sediment resuspension” Institute of Marine and Coastal Sciences, Rutgers University, (Ph.D. 2009-2014) *Assistant Research Professor Rutgers University*
- Mike Garzio “Regulation of diatom productivity in a variable light field” Ecology and Evolution, Rutgers University, Rutgers University (M.S. 2009-2012) *High School Science Teacher, New Jersey*
- Nicole Couto “Mesoscale eddy propagation on the West Antarctic Peninsula” Department of Marine and Coastal Sciences, Rutgers University, (Ph.D. 2011-2017) *Presently a postdoctoral researcher at Scripps Institution of Oceanography*
- Christina Haskin “Integration of a Fluorescence Induction and Relaxation measurements in a Slocum glider” (M.S. 2011-2013) *Marine technician physical oceanography, Woods Hole Oceanographic Institution*
- Ana Filipa Carvalho “Phytoplankton dynamics along the West Antarctic Peninsula” Department of Marine and Coastal Sciences, Rutgers University, (Ph.D. 2011-2017) *Presently a postdoctoral researcher at the National Oceanographic Centre (United Kingdom)*
- Michael Brown “Bio-optical properties of the West Antarctic Peninsula” Department of Marine and Coastal Sciences, Rutgers University, (Ph.D. 2014-present)
- Schuyler Nardelli “Bio-optical and acoustic correlation scales along the West Antarctica Peninsula” Department of Marine and Coastal Sciences (Ph.D. 2016-present)
- Quintin Diou-Cass “Phytoplankton diversity dynamics along a changing West Antarctic Peninsula” Department of Marine and Coastal Sciences (Ph.D. 2019-present)

Thesis committee member for

- Terence Evens, Department of Biology, University of California at Santa Barbara (Ph.D. awarded in 1999)
- Scott Durski, Institute of Marine and Coastal Sciences, Rutgers University, NJ (Ph.D. awarded in 2000)
- Tomoko Komada, Institute of Marine and Coastal Sciences, Rutgers University, NJ (Ph.D. awarded in 2001)
- Tracy Weigner, Institute of Marine and Coastal Sciences, Rutgers University, NJ (Ph.D. awarded in 2001)
- Cris Orrico, Department of Biology, California Polytechnic State University, CA (M.S. awarded in 2002)
- Sasha Tozzi, Institute of Marine and Coastal Sciences, Rutgers University, NJ (M.S. awarded in 2001)
- Sara Green, Lamont Doherty Earth Observatory, Columbia University, NY (Ph.D. awarded in 2005)
- Tuo Shi, Institute of Marine and Coastal Sciences, Rutgers University, NJ (Ph.D. awarded in 2006)
- Ramya Ramadurai, Institute of Marine and Coastal Sciences, Rutgers University, NJ (M.S. awarded in 2008)
- Sherrie Whitaker, Institute of Marine and Coastal Sciences, Rutgers University, NJ (M.S. awarded in 2008)
- Hui Lui, Institute of Marine and Coastal Sciences, Rutgers University, NJ (Ph.D. awarded in 2009)
- Cheng Yi, Institute of Marine and Coastal Sciences, Rutgers University, NJ (M.S. awarded in 2009)
- Frank Natale, Institute of Marine and Coastal Sciences, Rutgers University, NJ (M.S. awarded in 2009)

Wao Jing, Institute of Marine and Coastal Sciences, Rutgers University, NJ (M.S. awarded in 2010)
 Dong Lai Gong, Institute of Marine and Coastal Sciences, Rutgers University, NJ (Ph.D. awarded in 2010)
 Brian Gaas, Institute of Marine and Coastal Sciences, Rutgers University, NJ (Ph.D. awarded in 2010)
 Suzanne Rose, Department of Ecology and Evolution, Rutgers University (M.S. awarded in 2012)
 Kathleen Harazin, Institute of Marine and Coastal Sciences, Rutgers University, NJ (M.S. awarded in 2013)
 Hans Woithe, Computer Sciences, Rutgers University, NJ (Ph.D. awarded in 2014)
 Dean Lyon, Ecology and Evolution, Rutgers University, NJ (M.S. awarded in 2014)
 Jeena Drake, Department of Marine and Coastal Sciences, Rutgers University, NJ (Ph.D. awarded in 2015)
 Hyewon Kim, Lamont Doherty Earth Observatory, Columbia University, NY (Ph.D. awarded in 2017)
 Patrick Rozema, University of Groningen- Netherlands (Ph.D. awarded in 2017)
 Christian Laber, Department of Marine and Coastal Sciences, Rutgers University, NJ (Ph.D. awarded in 2018)
 Miaojo Chen, University of Western Australia (Ph.D. awarded in 2018)
 Jonathan Sherman, Department of Marine and Coastal Sciences (PhD in progress)
 Hank Statesewich, University of Alaska at Fairbanks (PhD in progress)

Undergraduate Internships.

Jeffrey Widmer, 1997 Summer Internship at Institute of Marine and Coastal Sciences, Rutgers University, “PSII yields and light adaptation in the green alga *Chlorella pyrenoidosa* and the cyanobacteria *Anabanea flos aquae*”
 Christina Orrico, 1997 Summer Internship at Institute of Marine and Coastal Sciences, Rutgers University
 “Comparative monochromatic action spectra for *Alexandrium fundyense* (Ca28) and *Thalassiosira pseudonana*”
 Taylor Newton 1999 Summer Internship at Institute of Marine and Coastal Sciences, Rutgers University, “Spectral reflectance and its relation to spectral backscatter during summer upwelling at LEO-15”
 Meredith Armstrong 2000 Summer Internship at Institute of Marine and Coastal Sciences, Rutgers University,
 “State transitions in Cryptophyte algae”
 Dwight Peterson 2000 Summer Internship at Marine and Coastal Sciences, Rutgers University, “Deconvolving *in situ* bulk absorption measurements into the different spectral classes of algae”
 Jessie Sebbo 2001 Summer Internship at Marine and Coastal Sciences, Rutgers University, “The rates of transparent exopolymer particles in the coastal off New Jersey”
 Meghann Horner 2001 Summer Internship at Marine and Coastal Sciences, Rutgers University, “Particulate organic carbon and the relationship to the *in situ* optical properties”
 Rebecca Chiambi 2003 Summer Internship at Marine and Coastal Sciences, Rutgers University, “Evolution of size in the phytoplankton”
 Erin Meyer 2004 REU summer intern at Marine and Coastal Sciences, Rutgers University, “Dissolved nutrient physiology of *Karenia brevis*”
 Brendan Newell 2007 summer intern at Marine and Coastal Sciences, Rutgers University, “Acoustics of fish schools in the Mid-Atlantic Bight”
 Steven Savard 2009 summer intern at Marine and Coastal Sciences, Rutgers University “Seasonal dynamics in phytoplankton dynamics at Palmer Station Antarctica”
 Emily Rogalsky 2010 REU summer intern at Marine and Coastal Sciences, Rutgers University “Competition between coccolithophorids and diatoms under a variable light field”
 Melissa Glibranes 2010 Douglas college summer intern at Marine and Coastal Sciences, Rutgers University “Wind speed regulation of Antarctic ecosystems”
 Emily Pirl 2011 REU summer intern at Marine and Coastal Sciences, Rutgers University “Role of ocean acidification on ocean bio-optical properties”
 Amelia Snow 2012 NOAA CINAR summer intern at Marine and Coastal Sciences, Rutgers University “Sea surface temperature as a trigger of butterflyfish migration: A study of fall phenology”
 Collin Dobson 2012 NOAA CINAR summer intern at Marine and Coastal Sciences, Rutgers University “Combining ocean observing systems with statistical analysis to account for a dynamic habitat”
 Rachel Sacatelli 2014 Teledyne Webb Summer Internship “Challenger Expedition”
 Katie Todoroff 2014 Teledyne Webb Summer Internship “Challenger Expedition”
 Andrenette Morrison 2015 Teledyne Webb Summer Internship “Challenger Expedition”
 Liam Nelson 2015 Teledyne Webb Summer Internship “Challenger Expedition”
 Kayla Evens 2015 NSF REU program “Phytoplankton community dynamics along the West Antarctic Peninsula”
 Laura Leysa 2019 NSF REU program “Phytoplankton diversity along a changing West Antarctic Peninsula”
 Laura Witzlee 2019 LTER field program undergraduate participant along the West Antarctic Peninsula
 Gab Rosenthal 2019 LTER field program undergraduate participant along the West Antarctic Peninsula

Kasey Walsh 2019 LTER field program undergraduate participant along the West Antarctic Peninsula

Undergraduate Advisor

- 1997-1998 Advisor for Christina Orrico “Intraspecific variability in the monochromatic UV action spectra in the diatom *Thalassiosira pseudonana*” (*Henry Rutgers Scholars Program*)
- 1997-1998 Advisor for Jeffrey Widmer “Xanthophyll Pigment Cycling in Stochastic Light Environments” (*George H. Cook Undergraduate Scholars Program*)
- 1997-1998 Reader for Brian Larsen “LEO-15 and Upwelling Off the Coast of New Jersey” (*George H. Cook Undergraduate Scholars Program*)
- 1996-1997 Reader for Eric Halpern “Benthic Productivity at LEO-15” (*George H. Cook Undergraduate Scholars Program*)
- 1998 Advisor for Jessica Graham “Optical properties of *Gymnodinium breve*” (*Cook General Honors Program*)
- 2000 Advisor for Meredith Armstrong “Variability in light absorption capabilities of phycobilin containing algae” (*General Honors Program*)
- 2000-2001 Advisor for Ria Palmer “High light stress in the toxic red tide *Gymnodinium breve*” (*General Honors Program*)
- 2000-2001 Advisor for Scott Smolder “Derivative analysis of phytoplankton optical properties” (*General Honors Program*)
- 2001-2002 Advisor for Sarah Cundiff “Cryptomonad temperature and light ecological niches” (*General Honors Program*)
- 2001-2002 Jessie Sebbo “Exudate production production and the relation to nutrient stress in marine chromophytes” (*Cook Douglass Honors Program*)
- 2002 Sarah Cundiff “Effects of ultraviolet light stress on aquatic ecosystems” (*Cook Douglass Honors Program*)
- 2005 John Hencken “Particle aggregation and transparent exopolymers” (*General Honors Program*)
- 2007-2008 Evan Goodwill-Randal “Slocum Gliders, storms, and sediment resuspension” (*Research Internship*)
- 2008 Michael Garzio “Phytoplankton bloom dynamics and exudation rates” (*Research Internship*)
- 2009 Steven Savard “Penguin foraging zones in the west Antarctic Peninsula” (*Research Internship*)
- 2010 Kaycee Coleman “Phytoplankton dynamics along the West Antarctic Peninsula” (*Research Internship*),
- 2010 Emily Rogalsky “Impact of a dynamic light field on phytoplankton growth” (*Research Internship*),
- 2010 Nils Strandovesky “Upper mixed layer regulation of phytoplankton communities” (*Research Internship*)
- 2011 Amelia Snow “Ocean acidification impact on marine cryptophytes” (*Cook Douglass Honors Program*)
- 2013 Oliver Ho “Role of temperature in structuring southern ocean microbial communities” (*GH Cook Honors Program*)
- 2014 Austin Melillo “Climatology of the Palmer LTER 2013-2014 season” (*Research Internship*)
- 2015 James Florendino “Impact of temperature on the spectral properties of Antarctic phytoplankton” (*GH Cook Honors Program*)
- 2015 Sher Lynn Ng “Physical forcing of chlorophyll variability along West Antarctic Peninsula” (*GH Cook Honors Program*)
- 2015-2016 Anjali Suman “Penguin foraging ecology at Palmer Station” (*Arresty Honors Program*)
- 2017-2018 Taylor Dodge “Phytoplankton diversity along the West Antarctic Peninsula” (*Research Internship*)
- 2017-2018 Steven Weber “Phytoplankton and the biogeochemistry of the West Antarctic Peninsula” (*Research Internship*)

Curriculum Developed

- 1996 Graduate Course Developed “Primary Production in Aquatic Ecosystems” 16:712:523
- 1997 Major Revision of Undergraduate Course “Oceanographic Methods and Data Analysis” 11:6289:364
- 1999 Group Revision of “Biological Oceanography” 11:628:462, 16:712:522
- 2004 Major Revision of Undergraduate Course “Marine Sciences” 11:628:200
- 2004 Major Revision of Graduate Course “Biological Oceanography” 11:628:462
- 2007 Developed Freshmen Seminar Course “Sea Monsters, Robots, and Radars”
- 2009 Major Revision of the Undergraduate Course “Oceanographic Methods and Data Analysis” 11:6289:364
- 2009 Development of Online 100 level “Exploring and Understanding the World’s Oceans” 11:628:125
- 2010 Faculty co-PI, Rutgers Oceanography House learning community
- 2012 Design of Rutgers University Glider Extension Course
- 2015 Design of “The Biology of Living in the Ocean: Water Column Ecosystems and Processes” 11:628:461
- 2017 Development of the Rutgers Masters of Operational Oceanography program

2018 Revision of “Earth Systems II: Ecology of the West Antarctic Peninsula” 11:628:402
 2018 Development of “Sea Monsters and Weird Biology in the Ocean”
 2019 Development of the Online Course “Science, Pseudoscience, and Society”

Year: Courses Taught (course number)

2019 “Ocean Observatories” 16:712:523 (Fall and Spring terms), “Earth Systems II: Ecology of the West Antarctic Peninsula 11:628:203, “The Biology of Living in the Ocean: Water Column Ecosystems and Processes” 11:628:461 “Freshmen Oceanography House” 11:628:203

2018 “Oceanographic Methods and Data Analysis” 11:628:364 “Ocean Observatories” 16:712:523 (Fall and Spring terms), “Earth Systems II: Ecology of the West Antarctic Peninsula 11:628:203, “The Biology of Living in the Ocean: Water Column Ecosystems and Processes” 11:628:461 “Freshmen Oceanography House” 11:628:203

2017 “Oceanographic Methods and Data Analysis” 11:628:364 “Ocean Observatories” 16:712:523 (Fall and Spring terms), “The Biology of Living in the Ocean: Water Column Ecosystems and Processes” 11:628:461 “Freshmen Oceanography House” 11:628:203

2016 “Oceanographic Methods and Data Analysis” 11:628:364 “Ocean Observatories” 16:712:523 (Fall and Spring terms), “The Biology of Living in the Ocean: Water Column Ecosystems and Processes” 11:628:461 “Freshmen Oceanography House” 11:628:203

2015 “Ocean Observatories” 16:712:523 (Fall and Spring terms), “Oceanographic Methods and Data Analysis” 11:628:364, “Freshmen Oceanography House” 11:628:203

2014: “Oceanographic Methods and Data Analysis” 11:628:364, “Ocean Observatories” 16:712:523 (Fall and Spring terms), Freshmen Oceanography House: 11:628:203, 11: 628:202,

2013: “Oceanographic Methods and Data Analysis”, “Exploring and Understanding the World’s Oceans” 11:628:125, “Ocean Observatories” 16:712:523 (Fall and Spring terms), “Freshmen Oceanography House: 11:628:203, 11: 628:202

2012: “Oceanographic Methods and Data Analysis” 11:628:364, “Exploring and Understanding the World’s Oceans” 11:628:125, “Ocean Observatories” 16:712:523 (Fall and Spring terms), “Freshmen Oceanography House: 11:628:203, 11: 628:202

2011: “Oceanographic Methods and Data Analysis” 11:628:364, “Exploring and Understanding the World’s Oceans” 11:628:125, “Ocean Observatories” 16:712:523 (Fall and Spring terms), “Freshmen Oceanography House: 11:628:203, 11: 628:202

2010: “Freshmen Seminar: Sea Monsters, Robots, and Radars”, “Ocean Ecology” 11:628:462, 16:712:522, “Oceanographic Methods and Data Analysis” 11:628:364, “Exploring and Understanding the World’s Oceans” 11:628:125, “Ocean Observatories” 16:712:523 (Fall and Spring terms), Science Communication Skills” 16:712:595, “Freshmen Oceanography House: 11:628:203, 11: 628:202

2009: “Oceanographic Methods and Data Analysis” 11:628:364, 11:628:364, “Science Communication Skills” 16:712:595, “Ocean Observatories” 16:712:523 (Fall and Spring terms), 1:090:101 “Freshmen Seminar: Sea Monsters, Robots, and Radars”, Science Communication Skills” 16:712:595

2008: “Marine Dynamics” 11:628:200, “Oceanographic Methods and Data Analysis” 11:628:364, 1:090:101 “Freshmen Seminar: Sea Monsters, Robots, and Radars”, “Science Communication Skills” 16:712:595, “Ocean Observatories” 16:712:523 (Fall and Spring terms)

2007: “Marine Dynamics” 11:628:200, “Oceanographic Methods and Data Analysis” 11:628:364, 1:090:101 “Freshmen Seminar: Sea Monsters, Robots, and Radars”, “Science Communication Skills” 16:712:595

2006: “Marine Dynamics” 11:628:200, “Oceanographic Methods and Data Analysis” 11:628:364

2005 “Marine Dynamics” 11:628:200, “Oceanographic Methods and Data Analysis” 11:628:364, “Biological Oceanography” 11:628:462, 16:712:522

2004 “Marine Science” 11:628:200, Oceanographic Methods and Data Analysis” 11:628:364, “Biological Oceanography” 11:628:462, 16:712:522

2003 “Marine Science” 11:628:200, “Oceanographic Methods and Data Analysis” 11:628:364, “Biological Oceanography” 11:628:462, 16:712:522

2002 “Marine Science” 11:628:200, “Primary Production in Aquatic Ecosystems” 16:712:523, “Oceanographic Methods and Data Analysis” 11:628:364, “Biological Oceanography” 11:628:462, 16:712:522

2001 “Marine Science” 11:628:200, “Primary Production in Aquatic Ecosystems” 16:712:523, “Oceanographic Methods and Data Analysis” 11:628:364, “Biological Oceanography” 11:628:462, 16:712:522

2000 “Perspectives in Agriculture and the Environment” 11:015:101, “Marine Science” 11:628:200, “Biological Oceanography” 11:628:462, 16:712:522, “Oceanographic Methods and Data Analysis” 11:628:364

- 1999 “Perspectives in Agriculture and the Environment” 11:015:101, Fall 1999 “Marine Science” 11:628:200, “Oceanographic Methods and Data Analysis” 11:628:364, “Perspectives in Agriculture and the Environment” 11:015:101
- 1998 “Marine Sciences” 11:628:200, “Oceanographic Methods and Data Analysis” 11:628:364, “General Honors Program” 11:554:298
- 1997 “Primary Production in Aquatic Ecosystems” 16:712:523, “Research in Oceanography” 16:712:701, “Marine Sciences” 11:628:200, “Problems in Oceanography” 11:628:498
- 1996 “Marine Sciences” 11:628:200, “Research in Oceanography” 16:712:701, “Graduate Research Assistantship” 16:712:866
- 1995 “Marine Sciences” 11:628:200

EDUCATIONAL PODCASTS, AUDIO SLIDE SHOWS

- Gliding on Earth (Episode 15 for Ocean Gazing) <http://coseenow.net/podcast/>
- The glide of a lifetime: Part II (Episode 8 for Ocean Gazing) <http://coseenow.net/podcast/>
- The glide of a lifetime: Part I (Episode 7 for Ocean Gazing) <http://coseenow.net/podcast/>
- Antarctica Melting (Audio slide show with LTER collaborators) <http://coseenow.net/antarctica/>
- NPR Story Collider broadcast from New York “To the sea and back”

OUTREACH THROUGH DOCUMENTARY MOVIES

- Atlantic Crossing: A Robot's Daring Mission* (released 2010, aired on PBS)
- Antarctic Edge: 70° South* (Theatrical release in spring 2015 in New York City, Los Angeles, Minneapolis, Washington DC)

TEACHING EXTERNAL TO RUTGERS

- 2006 Short Course (8 class room hours) “An oceanographic life beyond chlorophyll *a*: measuring primary productivity from space” sponsored by Ocean Optics 2006 in Montreal Canada
- 2010 Graduate Short Course (16 class-room hours) “A primer in building ocean observatories to address a changing water planet” hosted at National Kaohsiung Marine University, College of Ocean Engineering, Kaohsiung, Taiwan
- 2011 Center for Microbial Oceanography Research and Education (C-MORE) summer course (4 days). University of Hawaii, Honolulu
- 2012 Center for Microbial Oceanography Research and Education (C-MORE) summer course (3 days). University of Hawaii, Honolulu

COMMUNITY OUTREACH

- 1997-2001. IMCS Project Tomorrow Instructor (over 2,000 Pre-Collegiate Teachers Registered)
1998. Faculty Mentor for 12 High School Teachers for the Princeton University Woodrow Wilson “Science as Inquiry” Program
- 1998-1999. Faculty Oceanographer mentor for Field Excursions by K6-12 Teachers in Project Tomorrow
1999. Invited community seminar as part of the Princeton Plasma Physics Laboratory Science for Saturday Science Lecture Series.
- 2000-2002 Faculty Advisor for the Rutgers University SCUBA club
- 2001 Faculty advisor for Turnstone Publishing K-12 Curriculum Development
- 2001-present COOL Room integrated in NBC and ABC daily weather television broadcasts for Philadelphia Stations
- 2005-2007 Science Representative for State of New Jersey Department of Personnel’s program for “Creating the Workforce of the Future” in underprivileged urban middle schools
- 2006 Learning & Teaching Advisory Committee for the Liberty Science Center
- 2009 Podcast for the New Jersey Network on “Ocean Observatories”
- 2009 Invited Speaker at NJ-PIRG's Global Warming Solutions campaign
- 2010 Invited Speaker, Rutgers Science Saturday, Climate Change Symposium
- 2010 Twice Invited Podcast speaker for Robots (<http://www.robotspodcast.com/>)
- 2010 TIGER Talk to molecular biology high school teachers/students (http://www.hhmi.princeton.edu/index.php?option=com_content&task=view&id=21&Itemid=46)
- 2011 Invited community seminar as part of the Princeton Plasma Physics Laboratory Science for Saturday Science Lecture Series

- 2011 Invited movie screening of “Atlantic Crossing” the State Department of the United States (Washington DC)
- 2011 Invited movie screening of “Atlantic Crossing” at NOAA (Washington DC)
- 2011 Outreach to Rutgers Campus “RU Cold?: Rutgers Undergraduates in Antarctica” (New Brunswick, NJ)
- 2011 Project Civility at Rutgers Campus invited questions and screening of “Atlantic Crossing” (New Brunswick, NJ)
- 2011 Speaker at Rutgers GIS day (New Brunswick, NJ)
- 2012 Colloquium seminar at Princeton Plasma Physics Laboratory (New Brunswick, NJ)
- 2012 Speech to School of Environmental and Biological Science Staff about the polar research efforts by COOL (New Brunswick, NJ)
- 2013 Public lecture for the Rutgers 4H high school teen climate summit (New Brunswick, NJ)
- 2013 WHYY National Public Radio (<http://whyy.org/cms/radiotimes/2013/12/12/the-east-coast-by-sea-and-land-ocean-gliders-beetles-in-the-pine-barrens/>)
- 2013-2014 Conceived and help coordinate of the Gliderpalooza efforts to develop a national community of glider operators for the United States and Canada
- 2015 WYNC NPR, Interviewed on Leonard Lopate Show (<http://www.wnyc.org/story/the-leonard-lopate-show-2015-04-16/>)
- 2016 National Public Radio, the focus of the *Meet the Expert* radio show (>500,000 downloads)
- 2016 Working with the New Jersey State Government formed the first State Oceanographer for New Jersey. First State Oceanographer in the United States, signed into law by the Governor November 2, 2016.
- 2017 NBC Nightly National Broadcast News “Interview on factors driving hurricanes in the Atlantic” 9/9/2017
- 2019 Big Ten National Broadcast Commercial “Climate Change and the Southern Ocean”
- 2019 NPR Story Collider Broadcast “To the sea and back” recorded in New York City

SOCIETY MEMBERSHIPS

American Society of Limnologists and Oceanographers, Phycological Society of America, Oceanography Society, American Geophysical Union, AAAS

PROFESSIONAL SERVICE

- 1995 Minority Mentor at American Society of Limnology and Oceanography Meeting, Reno, Nevada
- 1995 Invited Scientist, “NY/NJ Harbor Estuary Monitoring Workshop” Rutgers University
- 1995 Invited Scientist. NOAA Brown Tide Summit, Brookhaven, Long Island
- 1996-1998 Editorial Board Journal of Phycology
- 1996 Chair “Applied Phycology” at Phycological Society Meetings, Santa Cruz, California
- 1997 Invited Scientist. NOAA “Application of Remote Sensing to Red Tide Forecasts in the Gulf of Mexico” NOAA Coastal Services Center, Charelston South Carolina
- 1997-2000 Committee Member for ASLO Lifetime Achievement Award
- 1998 Chair at Ocean Sciences Meeting “Bio-optical Measurements, Spectra, and Modeling” San Diego California,
- 1998 Chair for the Symposium of “Molecular, Cellular, & Ecophysiological Bases of Noxious & Harmful Algal Blooms” Phycological Society Meeting, Flagstaff, AZ
- 1998-1999 Guest Editor for the Journal of Phycology
- 1999 Invited Scientist Coastal Ocean Observation Systems (GOOS) Symposium, Maryland
- 2000 Chair at Ocean Sciences for “Coastal Ocean Dynamics and Prediction” San Antonio, Texas
- 2000 Invited Scientist National Research Council for “Seafloor Observatories: Challenges and Opportunities” Fort Lauderdale, FL.
- 2000-2005 NOAA Coastal Ocean Program Steering Committee
- 2000 Invited Scientist Office of Naval Research “Vertical Mixing in the Coastal Ocean” Seattle, Washington
- 2000 Chair at Ocean Optics for “Ocean Observatories”, Monaco
- 2000 Rutgers Host (with Scott Glenn) for Naval Oceanographic Office Naval Liaison
- 2000 Invited Scientist of NOAA symposium on a “Harmful Algal Bloom Ocean Observatory” Pensacola, FL.
- 2001 Invited Scientist for the International Ocean Network symposium on “Ocean Observations” Mt. Fuji, Japan,
- 2001 Invited Scientist for “Integrated Ocean Observatories” symposium Ft. Lauderdale FL.
- 2002 Invited Scientist for OCEAN.US for the “National Ocean Observatory”, Warrenton, VA.
- 2002 Organizer & Convener for “Coastal Ocean Observatory Workshop” organized by the NOAA Coastal Ocean Program
- 2002 Invited Scientist for the NSF symposium on “Scientific Cable Ocean Time Series” Workshop

2002-2003 National Research Council Member for the Committee of “Seafloor Observatory Network for Oceanographic Research”

2002-2003 Special Guest Editor, Journal of Geophysical Research (Oceans)

2003 Invited Scientist for the NSF symposium on “Autonomous and Lagrangian Platforms and Sensors” Workshop, San Diego, California

2003 Chair for the “The Southern Ocean’s Role in Present and Past Climate” Joint Assembly European Geophysical Society-American Geophysical Union-European Union of Geosciences (Nice, France)

2003 Co-Chair for “The Coastal Ocean Observing System” at the IAPSO/IAG/IOC meeting in Sapporo Japan

2003-2004 Co-Chair for NSF “Ocean Research Interactive Observational Networks (ORION)” Workshop in San Juan, Puerto Rico

2003 Invited scientist for “Real-time Coastal Observing Systems for Ecosystem Dynamics and Harmful Algal Blooms” sponsored by the European Commission and UNESCO, Villenfranche-sur-mer, France

2003-2007 Associate Editor, Journal of Geophysical Research (Oceans)

2004-2007 Executive Board for the ORION Program Office.

2004-2006 North American Chair for the Oceanography Society Meetings in Paris, France in Spring 2005

2004-2009 Editorial Board for the Continental Shelf Research

2004 Steering Committee for Alliance of Coastal Technologies Autonomous Underwater Vehicle Workshop

2004 Science risk reduction team GOES-R Hyperspectral Environmental Suite (HES) Coastal Waters (CW) Imager

2005-2006 Ocean Optics Steering Committee

2005 Steering Committee for the Coastal North American Carbon Program

2006 Invited U.S. Scientist for European Eulerian Observatories (Monaco)

2006 Steering Committee for “Artificial Intelligence and Autonomous Systems Symposium” Monterey Bay

2006-2007 Advisory Committee for the “Undersea Vehicle Technology Center”

2007-2013 Board of Directors of the Canadian “Ocean Entity Society”

2007-2008 Advisory Committee for the European EuroSITES program

2007 Chair of “Cyberinfrastructure for Ocean Observatories” session at American Geophysical Union Meeting

2008 Invited Participant for workshop to develop the Cyberinfrastructure for United States Environmental Observatories hosted by the Computer Science Division, NSF (Arlington VA)

2008 Organizing Committee on the “Integrated Ocean Observing System Modeling framework symposium” Arlington, Virginia

2008-2009 Steering Committee for the Federation of Observing Environmental Networks (FEON) for NSF Computer Science Directorate.

2008-2010 Editorial Board of the Journal of Marine Biology

2009-2010 Chair of the Advisory Committee for the European EuroSITES program

2009-2011 National Research Council Member for the Committee of “Ocean Infrastructure for the year 2030”

2010-2011 Alliance of Coastal Technologies Advisory Board

2011-2013 Guest Editor for Continental Shelf Research for a Special Issue on Coastal Ocean Observatories

2011 Search committee for the Director of Neptune Canada

2011 Science Steering Committee Global Biogeochemical Flux Ocean Observatories Initiative

2012-2018 Co-Chair of Scientific Steering Committee of the International Southern Ocean Observing System

2012 Chair, Science Review Committee of Naval Research Laboratory’s Physical Oceanography Program at Stennis Science Center

2012-2015 United States Antarctic Palmer Area Users Committee

2013-2014 Science Advisor to Marinexplore (www.marinexplore.com)

2013-2014 Institute of Broadening Participation Advisory Board

2014-2015 National Research Council Advisory Committee on “Developing a Strategic Vision and Implementation Plan for the U.S. Antarctic Program”

2015 Schmidt Ocean Institute Research Symposium Steering Committee

2015-2018 Association of Public and Land-grant Universities’ Board on Oceans, Atmosphere, and Climate

2015-2016 Science Steering Committee for Scientific Committee of Antarctic Research Biannual meeting in 2016 (Malaysia)

2015-2018 Steering Committee for New Jersey Sea Grant

2016 Co-Chair for “Ocean Observatory Science: Unprecedented Access to the Sea” at the 2016 Ocean Sciences Meeting

2016 Co-Chair for “New Insights into Shelf and Slope Processes from Interdisciplinary Studies and the Use of Autonomous Platforms” at the 2016 Ocean Sciences Meeting

2016 External Review Committee for the Oceanography Program at Texas A&M
 2016-2018 International Science Technology Advisory Board for the EU Atlantos program
 2016 External Review Committee for the Schmidt Ocean Institute
 2016 NSF Geoscience Review Panel
 2017 External reviewer for the Inter-University Institute for Marine Sciences in Eilat and The Mediterranean Sea
 Research Center of Israel in Haifa on behalf of the Israeli Council for Higher Education
 2017-2020 Co-Formed and Co-Chair for the Regional West Antarctic Peninsula Working Group as part of the
 Southern Ocean Observing System
 2017-2018 Ocean Frontier Institute Scientific Advisory Committee
 2018-2020 National Science Foundation LTER Executive Committee
 2018-2021 U.S. Integrated Ocean Observing System Federal Advisory Committee
 2018-2020 Rutgers University Representative for the International Partnership for Observation of the Global Oceans
 2018-2020 Editorial Board for Polar Biology
 2019 National Ocean Partnership Program grant panel review team
 2019 Co-Chair of external review for Naval Research Laboratory at Stennis Space Center
 2019 Ocean Frontier Institute grant panel review team

Review grants for NSF, USDA, NASA, EPA, AAAS, United Kingdom NERC fellowships, SeaGrant
 Review manuscripts for Limnology and Oceanography, Journal of Phycology, Marine Biology, Marine Ecology
 Progress Series, Deep-Sea Research, Phycologia, Ecology, Science, Nature, PNAS, Nature, AAAS,

UNIVERSITY COMMITTEES

Chair IMCS Seminar Series (1996-1998)
 Undergraduate Curriculum Committee (1996-1998)
 Graduate Admissions Committee (1999)
 Chair Graduate Admissions Committee (1999-2004)
 Graduate Executive Committee (1999-2004)
 Cook College General Honors Program (2001-2003)
 Institute of Marine and Coastal Sciences Computing Committee (2003, Chair 2005-2007)
 Institute of Marine and Coastal Sciences Executive Counsel (2005-2006)
 Chair Institute of Marine and Coastal Sciences Microbial Ecologist Faculty Search Position (2005)
 PEC FASIP Committee (2005)
 Institute of Marine and Coastal Sciences Oceanography Faculty Search Position (2007)
 Chair, Agricultural Experiment Faculty Search for Marine Extension (2007)
 Executive Committee for Graduate Program in Department of Ecology & Evolution (2010)
 Academic and Promotion Committee, School of Environmental and Biological Sciences (2010-2013)
 Department Chair of Marine and Coastal Sciences (2012-present)
 Co-Chair of Academic and Promotion Committee, School of Environmental and Biological Sciences (2013)
 Committee for graduate program for the new Institute of Earth Ocean Atmosphere System Science Institute (2014)
 Committee for an Advanced Cyberinfrastructure Institute at Rutgers (2014)
 Search Committee for Henry Rutgers Earth, Ocean, and Atmospheric Sciences Professor (2014-2015)
 Committee for Developing School of Environmental and Biological Sciences Strategic Plan (2019)

PUBLICATIONS (**Paper by students and post-doctoral researchers)

(Google Scholar h-index 55, i10-index 162; Research Gate h-index 48, Web of Science h-index 47)

1. Prézelin, B. B., Glover, H. E., Ver Hoven, B., Steinberg, D., Matlick, H.A., **Schofield, O.**, Nelson, N., Wyman, M., Campbell, L. 1989. Blue-green light effects on light-limited rates of photosynthesis: relationship to pigmentation and productivity estimates for *Synechococcus* populations from the Sargasso Sea. *Marine Ecology Progress Series* 54: 121-136.
2. Bidigare, R. R., **Schofield, O.**, Prézelin, B. B. 1989. Influence of zeaxanthin on quantum yield of photosynthesis of *Synechococcus* clone WH7803 (DC2). *Marine Ecology Progress Series* 56: 177-188.
3. **Schofield, O.**, Bidigare, R. R., Prézelin, B. B. 1990. Spectral photosynthesis, quantum yield and bluegreen light enhancement of productivity rates in the diatom *Chaetoceros gracile* and the prymnesiophyte *Emiliania huxleyi*. *Marine Ecology Progress Series* 64: 175-186.

4. Prézelin, B. B., Tilzer, M. M., **Schofield, O.**, Haese, C. 1991. The control of the production process of phytoplankton by the physical structure of the aquatic environment with special reference to its optical properties. *Aquatic Sciences* 53: 136-186.
5. **Schofield, O.**, Prézelin, B. B., Stegmann, P., Nelson, N. B., Lewis, M., Smith, R. C., Baker, K. 1991. Variability in spectral and nonspectral measurements of photosynthetic light utilization efficiencies. *Marine Ecology Progress Series* 78: 253-271.
6. Gons, H. J., Kromkamp, J., Rijkeboer, M., **Schofield, O.** 1992. Characterization of the light field in laboratory scale enclosures of eutrophic lake water (Lake Loosdrecht, The Netherlands). *Hydrobiologia*. 238: 99-109.
7. **Schofield, O.**, Prézelin, B. B., Bidigare, R. R., Smith, R. C. 1993. *In situ* photosynthetic quantum yield. Correspondence to hydrographic and optical variability within the Southern California Bight. *Marine Ecology Progress Series* 93: 25-37.
8. Kroon, B., Prézelin, B. B., **Schofield, O.** 1993. Relationships between quantum yields for fluorescence, oxygen evolution and carbon fixation as a function of spectral growth irradiances for the marine dinoflagellate *Heterocapsa pygmaea* (aka *Glenodinium* sp.). In: Photosynthetic Responses to the Environment. (H. Y. Yamamoto & C. M. Smith eds.) American Society of Plant Physiologists. pp 178-184.
9. Kroon, B., Prézelin, B. B., **Schofield, O.** 1993. Chromatic regulation of quantum yields values for photosystem II charge separation, oxygen evolution and carbon fixation in *Heterocapsa pygmaea*. (Pyrrophyta) *Journal of Phycology* 29: 453-469.
10. Prézelin, B. B., Boucher, N. P., **Schofield, O.** 1994. Evaluation of field studies of UV-B effects on Antarctic marine primary production. In: Stratospheric Ozone Depletion and UV-B Radiation in the Biosphere. (R. H. Bigg, & M. E. B. Joyner, eds). NATO Advance Study Institute, Springer Verlag, Berlin. vol. I: 181-194.
11. **Schofield, O.**, Moline, M. A., Prézelin, B. B. 1994. Palmer LTER: Photoadaptation in a coastal phytoplankton bloom and impact on the radiation utilization efficiency for carbon fixation. *Antarctic Journal of the United States* 29(5): 214-216.
12. Boucher, N., Prézelin, B. B., Evens, T., Jovine, R., Kroon, B., Moline, M. A., **Schofield, O.** 1994. Icecolors '93: Biological weighting function for the UV inhibition of carbon fixation in a natural Antarctic phytoplankton community. *Antarctic Journal of the United States* 29(5): 272-274.
13. **Schofield, O.**, Prézelin, B. B., Kroon, B. M. A. 1995. Impact of ultraviolet-B radiation on photosystem II activity and its relationship to the inhibition of carbon fixation rates for Antarctic ice algae communities. *Journal of Phycology* 31: 703-715.
14. Millie, D. F., **Schofield, O.**, Diongi, C. P., Johnsen, P. B. 1995. Assessment of noxious phytoplankton within aquaculture systems using pigment-based applications: A review. *Journal of World Aquaculture* 26:329-345.
15. **Schofield, O.**, Moline, M. A., Prézelin, B. B. 1995. Palmer LTER: Photoacclimation in coastal Antarctic phytoplankton. *Antarctic Journal of the United States* 30(5): 260-262.
16. Moline, M. A., **Schofield, O.**, Prézelin, B. B. 1995. Statistical analyses of environmental predictors for phytoplankton photosynthetic parameters and productivity in an Antarctic time series database. *Antarctic Journal of the United States* 30(5): 162-165.
17. **Schofield, O.**, Prézelin, B. B., Johnsen, G. 1996. Wavelength dependency in the photosynthetic parameters for two dinoflagellate species *Heterocapsa pygmaea* and *Prorocentrum minimum*: implications for the bio-optical modeling of photosynthetic rates. *Journal of Phycology* 32(4). 574-583.
18. **Moline, M., Prézelin, B. B., **Schofield, O.**, Smith, R. C. 1997. Temporal dynamics of coastal Antarctic phytoplankton: physical/chemical/biological linkages through a summer diatom bloom. In B. Battaglia, J. Valencia, and D. W. H. Walton (eds.) Antarctic Communities. Cambridge University Press. pps. 67-72.
19. Millie, D. F., **Schofield, O.**, Kirkpatrick, G. J., Johnsen, G., Tester, P. A., Vinyard, B. T. 1997. Phytoplankton pigments and absorption spectra as potential 'Biomarkers' for harmful algal blooms: A case study of the Florida red-tide dinoflagellate, *Gymnodinium breve*. *Limnology Oceanography* 42(5): 1240-1251.
20. **Moline, M. A., **Schofield, O.**, Boucher, N. B. 1998. Photosynthetic parameters and empirical modeling of primary production in the Southern ocean. *Antarctic Science*. 10: 45-54.
21. **Schofield, O.**, Evens, T. J., Millie, D. F. 1998. Photosystem II quantum yields and xanthophyll-cycle pigments of the macroalga, *Sargassum natans* (Phaeophyta): Dynamic responses under natural sunlight . *Journal of Phycology* 34(1): 104-112.
22. Moline, M. A., B. B. Prézelin, **Schofield, O.** 1998. Stable interannual successional patterns of phytoplankton communities in the coastal waters off Palmer Station, Antarctica. *Antarctic Journal of the United States*. 32:151-153.

23. Glenn, S. M., Haidvogel, D. B., **Schofield, O.**, Grassle, F. J., von Alt, C. J., Levine, E. R., Webb, D. C. 1998. Coastal Predictive Skill Experiments at the LEO-15 National Littoral Laboratory. *Sea Technology*. 39(4): 63-69.
24. **Schofield, O.**, Grzymiski, J., Moline, M. A., Jovine, R. V. M. 1998. Impact of temperature on photosynthesis in the red-tide dinoflagellate *Alexandrium fundyense* (Ca28). *Journal Plankton Research* 20(7): 1241-1258.
25. Kerkhof, L., Voytek, M., Mille, D. F., Sherrell, R., **Schofield, O.** 1999. Variability in bacterial community structure during upwelling in the coastal ocean. *Hydrobiologia* 401: 139-148.
26. **Schofield, O.**, Grzymiski, J., Bissett, P., Kirkpatrick, G., Millie, D. F., Moline, M. A. Roesler, C. 1999. Optical monitoring and forecasting systems for harmful algal blooms: Possibility or pipedream? *Journal of Phycology*. 35: 1477-1496.
27. Millie, D.F., Dionigi, C.P., **Schofield, O.**, Tester, P.A. 1999. The importance of understanding the molecular, cellular, and ecophysiological bases of harmful algal blooms. *Journal of Phycology* 35: 1353-1355.
28. Fahnenstiel, G. L., S. E. Lohrenz, K. Kelly, D. F. Millie, **Schofield, O.** 1999. Light absorption characteristics of individual phytoplankton cells from a natural community: Examples from Lake Michigan during the winter period. *Verh. Internat. Verein. Limnol.* 27: 342-347.
29. Kirkpatrick, G., Millie, D. F., Moline, M. A., **Schofield, O.** 2000. Absorption-based discrimination of phytoplankton species in naturally mixed populations. *Limnology and Oceanography* 42: 467-471.
30. **Gao, Y., Leustek, T., **Schofield, O.** 2000. Characterization of sulfate assimilation in marine algae focusing on the enzyme 5'-adenylsulfate (APS) reductase. *Plant Physiology* 123: 1087-1096.
31. Moline, M. A., Claustre, H., Frazer, T. K., Grzymiski, J., **Schofield, O.** 2001. Potential impact of cryptophyte blooms on carbon flow through higher trophic levels. In Antarctic Communities. Scientific Committee for Antarctic Research (SCAR), Cambridge University Press. 33: 263-271.
32. Bissett, W. P., **Schofield, O.**, Glenn, S., Cullen, J. J., Miller, W., Pluddeman, A., Mobley, C. 2001. Resolving the impacts and feedbacks of ocean optics on upper ocean ecology. *Oceanography* 14: 3-53.
33. **Schofield, O.**, Bergmann, T., Kohut, J., Glenn, S. 2001. Coastal ocean observatory for studying nearshore coastal processes. *Backscatter* 12: 34-37.
34. Bissett, P., **Schofield, O.**, Mobley, C. Crowley, M. F., Moline, M. A. 2001. Optical remote sensing techniques in biological oceanography. In: Methods in Marine Microbiology. Paul, J. (ed). Academic Press, London. 30: 519-538.
35. Evens, T. J., Kirkpatrick, G. J., Millie, D. F., Chapman, D., **Schofield, O.** 2001. Xanthophyll-cycling and photophysiological regulation of *Gymnodinium breve* in response to fluctuating natural irradiance. *Journal of Plankton Research* 23: 1177-1194.
36. Moline, M. A., E. Heine, J. Case, C. Herren and **Schofield O.** 2001. Spatial and temporal variability of bioluminescence potential in coastal regions. In: (J. F. Case, P. J. Herring, S. H. D. Haddock, L. J. Kricka and P. E. Stanley eds.) Bioluminescence and Chemiluminescence 2000. World Scientific Publishing Company, Singapore, pp. 123-126.
37. **Grzymiski, J., Orrico, C., **Schofield, O.** 2001. Monochromatic ultraviolet light induced damage to photosystem II efficiency and carbon fixation in the marine diatom *Thalassiosira pseudonanna* (3H). *Photosynthesis Research*. 68: 181-192.
38. Moline, O., **Schofield, O.**, Grzymiski, J. 2002. Impact of dynamic light and nutrient environments on phytoplankton communities in the coastal ocean. In: Modeling Dynamic Systems: Dynamic Modeling for Marine Conservation Ecological Understanding. Lindholm, J. and Ruth, M. (eds) Springer Verlag 144-163.
39. Fahnenstiel, G. L., Beckman, C., Lohrenz, S. E., Millie, D. F., **Schofield, O.**, McCormick, M. J. 2002. Standard Niskin and Van Dorn bottles inhibit phytoplankton photosynthesis in Lake Michigan. *Verh. Internat. Verein. Limnol.* 28:376-380.
40. **Schofield, O.**, Bergmann, T., Bissett, W. P., Grassle, F., Haidvogel, D., Kohut, J., Moline, M., Glenn, S. 2002. Linking regional coastal observatories to provide the foundation for a national ocean observation network. *Journal of Oceanic Engineering*. 27(2): 146-154.
41. Millie, D. F., Fahnenstiel, G. L., Lohrenz, S. E., **Schofield, O.** 2002. Relating episodic physical and meteorological forcing to phytoplankton group dynamics in Southeastern Lake Michigan during the spring isothermal. *Journal of Phycology* 38: 639-648.
42. **Bergmann, T., Paerl, H., Pinckney, J., Richardson, T., **Schofield, O.** 2002. Impact of light and nitrogen on the maximum quantum yield of photosystem II for natural phytoplankton populations from the Neuse River, NC. *Journal of Plankton Research*. 24: 923-933.
43. **Komada, T., **Schofield, O.**, Reimers, C. 2002. Fluorescence characteristics of organic matter released from coastal sediments during resuspension. *Marine Chemistry*. 79(2): 81-97

44. **Grzymiski, J., **Schofield, O.**, Falkowski, P. G., Bernhard, J. M. 2002. *Nonionella stella*, a modern analog to the endosymbiotic origin of diatoms: plastid description and function. *Limnology and Oceanography* 47: 1569-1580.
45. Millie, D. F., **Schofield, O.**, Kirkpatrick, G. J., Johnsen, G., Evens, T. J. 2002. Using absorbance and fluorescence spectra to discriminate microalgae. *European Journal of Phycology*. 37:313-322.
46. Chang G. C., Dickey T. D., **Schofield O.**, Weidemann A. D., Boss, E., Moline, M. A., Glenn. S. M. 2002. Nearshore physical forcing of bio-optical parameters in the New York Bight. *Journal of Geophysical Research* 10.1029/2001JC001018.
47. **Blackwell, S.M., Case, J., Glenn, S., Kohut, J., Moline, M., Purcell, M., **Schofield, O.** and C VonAlt. VA 2002. New AUV Platform for Studying Near Shore Bioluminescence Structure In: Stanley, P. E. and Kricka, L. J. editors. Bioluminescence & Chemiluminescence Progress and Current Applications. Singapore: World Scientific. p 197-200.
48. Millie, D. F., Fahnenstiel, G. L., Carrick, H. J., Lohrenz, S. E., **Schofield, O.** 2002. Spatial variation in Lake Michigan phytoplankton composition during sediment resuspension events. *Verh. Internat. Verein. Limnol.* 1216-1220.
49. **Grzebyk, D., **Schofield, O.**, Vetriani, C., Falkowski, P. 2003. The Mesozoic radiation of eukaryotic algae: the portable plastid hypothesis. *Journal of Phycology* 39: 259-267.
50. **Schofield, O.**, Bissett, W. P., Frazer, T. K., Iglesias-Rodriguez, D., Moline, M. A., Glenn, S. 2003. Development of regional coastal ocean observatories and the potential benefits to marine sanctuaries. *Marine Technology Society* 37: 54-67.
51. **Quigg, A., Finkel, Z. V., Irwin, A. J., Rosenthal, Y., Ho, T-Y., Reinfelder, J. R., **Schofield, O.**, Morel, F. M., Falkowski, P. G. 2003. The evolutionary inheritance of elemental stoichiometry in marine phytoplankton. *Nature* 425: 291-294.
52. Kirkpatrick, G. J., Orrico, C., Moline, M. A., Oliver, M., **Schofield, O.** 2003. Continuous hyperspectral absorption measurements of colored dissolved organic material in aquatic systems. *Applied Optics* 42(33): 6564-6568.
53. Johnson, D. M., Miller, J., **Schofield, O.** 2003. Dynamics and optics of the Hudson River outflow plume. *Journal of Geophysical Research*. 108, NO. C10, 3323, doi:10.1029/2002JC001485. 1-9.
54. **Schofield, O.**, Chant, R., Kohut, J. T., Glenn, S. M. 2003. The evolution of a nearshore coastal observatory and the establishment of the New Jersey Shelf Observing System. *Sea Technology* 44(11): 52-58.
55. Glenn, S. M., **Schofield, O.** 2003. Observing the oceans from the COOLroom: Our history, experience, and opinions. *Oceanography* 16(4): 37-52.
56. Millie, D. F., Fahnenstiel, G. L., Lohrenz, S. E., Carrick, H. J., Johngren, T., **Schofield, O.** 2003. Physical-biological coupling in Southern Lake Michigan: Influence of episodic sediment resuspension on phytoplankton. *Aquatic Ecology*, doi:10.1023/B:AECO.0000007046.48955.70, 37(4): 393-408.
57. **Bergmann, T., Fahnenstiel, G., Lohrenz, S., Millie, D. F., **Schofield, O.** 2004. The effect of a spring turbidity event on spectral light fields and phytoplankton community dynamics. *Journal of Geophysical Research* Vol. 109, No. C10, C10S15 10.1029/2002JC001575.
58. **Tozzi, S., **Schofield, O.**, M. A. Moline, T. Bergmann, M. Crowley, R. Arnone. 2004. Variability in measured and modeled remote sensing reflectance and comparison of SeaWiFS and in situ chlorophyll a distribution for coastal waters at LEO-15. *International Journal of Remote Sensing*. 5:1469-1472.
59. Moline, MA, Arnone, R, Bergmann, T, Glenn, S, Oliver, M, Orrico, C, **Schofield, O**, Tozzi, S. (2004) Variability in spectral backscatter estimated from satellites and its relation to in-situ measurements in optically complex coastal waters. *International Journal of Remote Sensing* 25:1465-1468.
60. **Schofield, O.**, Tivey., M. 2004. Building a window to the sea: Ocean Research Interactive Observing Networks (ORION). *Oceanography* 17: 105-111.
61. Falkowski, P. G., **Schofield, O.**, Katz, M. E., Schootenbrugge, B. V. D., Knoll, A. H. Why is the land green and the ocean red? In Coccolithophorids – from Molecular Processes to Global Impact. H. Thierstein, J. R. Young, (Eds.) Elsevier, Amsterdam, P. 429-453.
62. Glenn, S., **Schofield, O.**, Dickey, T. D., Chant, R. Kohut, Barrier, H., Bosch, J., Bowers, L., Creed, E., Haldeman, C., Hunter, E., Kerfoot, J., Mudgal, C., Oliver, M., Roarty, H., Romana, E., Crowley, M., Barrick D., and Jones C. 2004. The expanding role of ocean color and optics in the changing field of operational oceanography. *Oceanography* 17: 86-95.
63. **Schofield, O.**, Arnone, R., Bissett, W. P., Dickey, T., Davis, C., Finkel, Z., Oliver, M., Moline, M. A. 2004. Watercolors in the coastal zone: What can we see? *Oceanography* 17: 28-37.

64. **Finkel, Z. V., A. J. Irwin, **Schofield, O.** 2004. Size and photosynthesis in phytoplankton: How light limitation alters the $\frac{3}{4}$ size scaling of metabolic rates. *Marine Ecology Progress Series* 273: 269-279.
65. **Oliver, M. J., Kohut, J. T., Irwin, A. J., Glenn, S. M., **Schofield, O.**, Moline, M. A., Bissett, W. P. 2004. Bioinformatic approaches for objective detection of water masses. *Journal of Geophysical Research* vol 109 C07S04 doi: 10.1029/2003JC002072.
66. **Oliver, M. W., **Schofield, O.**, Bergmann, T., Glenn, S. M., Moline, M. A., Orrico, C. 2004. *In-situ* optically derived phytoplankton absorption properties in coastal waters and its utility for estimating primary productivity rates. : *Journal of Geophysical Research* 109, C07S11, doi: 10.1029/2002JC001627.
67. **Tozzi, S., **Schofield, O.**, Falkowski, P. G. 2004. Physical turbulence as a selective agent of two phytoplankton functional groups. *Marine Ecology Progress Series* 274:123-132.
68. Falkowski, P. G., Katz, M., Knoll, A., Raven, J., **Schofield, O.**, Taylor, M. 2004. The consequences of the evolution of eukaryotic phytoplankton. *Science*. 305: 354-360.
69. Moline, M. A., Claustre, H., Frazer, T. K., Vernet, M., **Schofield, O.** 2004. Environmental forcing of phytoplankton community composition and potential impact on zooplankton in Antarctic coastal waters. *Global Change Biology*. doi: 10.1111/j.1365-2486.2004.00825. 1-8.
70. Lohrenz, S. E., Fahnenstiel, G. L., Millie, D. F., **Schofield, O.**, Johengen T., Bergmann, T. Bio-Optical properties of spring phytoplankton communities in southeastern Lake Michigan and implications for regional primary production. *Journal of Geophysical Research*. 109, C10S14, DOI:10.1029/2004JC002383.
71. **Schofield, O.**, Glenn, S. M. 2004. On the evolution of coastal ocean observatories. *Journal of Geophysical Research*, 109, C12S01, DOI: 10.1029/2004JC002577.
72. Glenn, S. M., Arnone, R., Bergmann, T., Bissett, W. P., Crowley, M., Cullen, J., Gryzmski, J., Haidvogel, D., Kohut, J., Moline, M. A., Oliver, M., Orrico, C., Sherrell, R., Song, T., Weidemann, A., Chant, R., **Schofield, O.** 2004. The biogeochemical impact of summertime coastal upwelling in the Mid-Atlantic Bight. *Journal of Geophysical Research* 109 C12S02, DOI:10.1029/2003JC002265.
73. **Schofield, O.**, Bergmann, T., Oliver, M., Irwin, A., Kirkpatrick, G., Bissett, W. P. Orrico, C. Moline, M. A. 2004. Inverting inherent optical signatures in the nearshore coastal waters at the Long Term Ecosystem Observatory: *Journal of Geophysical Research* VOL. 109, C12S04, DOI:10.1029/2003JC002071.
74. Moline, M. A., Blackwell, S., Chant, R., Oliver, M. J., Bergmann, T., Glenn, S., **Schofield, O.** 2004. Episodic physical forcing and the structure of phytoplankton communities in the coastal waters of New Jersey. *Journal of Geophysical Research* VOL. 110, C12S05, doi:10.1029/2003JC001985.
75. Gryzebyk, D., Katz, M. E., Knoll, A. H., Quigg, A., Raven, J. A., **Schofield, O.**, Taylor, F. J. R. 2004. Response to comment on "The evolution of modern eukaryotic phytoplankton" *Science* 306 (5705)
76. **Wolfe, F., Grzebyk, D., **Schofield, O.**, Falkowski, P. G. 2005. The role and evolution of superoxide dismutases in algae. *Journal of Phycology* DOI: 10.1111/j.-1529-8817.2005.00086: 1-13.
77. Bissett, W.P., Arnone, R., DeBra, S., Dieterle, D. A., Dye, D., Kirkpatrick, G., **Schofield, O.**, Vargo, G. A.. 2005. Predicting the optical properties of the West Florida Shelf: Resolving the potential impacts of a terrestrial boundary condition on the distribution of colored dissolved and particulate matter. *Marine Chemistry* doi:10.1016/j.marchem.2004.09.007: .1-35.
78. **Schofield, O.**, Kohut, J., Glenn S. M. 2005. The New Jersey shelf Observing System (NJ SOS): Tracking plumes, particulates, and people in the coastal ocean. *Sea Technology* 46(9): 15-23.
79. Twardowski, M., Zaneveld, R. V., Moore, C. M., Mueller, J., Trees, C., **Schofield, O.**, Freeman, S., Helble, T., Hong, G. 2005. Diver visibility measured with a compact scattering-attenuation meter (SAM) compatible with AUVs and other small deployment platforms. *Photonics for Port and Harbor Security*, edited by M. J. DeWeert, T. T. Saito, Proceedings of SPIE Vol. 5780 (SPIE, Bellingham, WA, 2005) 0277-786X/05/\$15 · doi: 10.1117/12.603974
80. Kerfoot, J., Kirkpatrick, G., Lohrenz, S., Mahoney, K., Moline, M., **Schofield, O.** 2005. Vertical Migration of a *Karenia brevis* Bloom: Implications for Remote Sensing of Harmful Algal Blooms, in: Harmful Algae 2002: Proceedings of the 10th International Conference of Harmful Algae, Steidinger, K.A., Landsberg, J.H., Tomas, C.R., and Vargo, G.A. (eds). 2005. Florida Fish and Wildlife Commission, Florida Institute of Oceanography and Intergovernmental Oceanographic Commission of UNESCO, St. Petersburg, Florida, USA. 279-283.
81. **Finkel, Z., V., Katz, M. E., Wright, J. D., **Schofield, O.**, Falkowski, P. G. 2005. Climatically-driven macroevolutionary patterns in the size of marine diatoms over the Cenozoic. *Proceedings of National Academy of Sciences*. 102(25): 8927-2932.
82. **Jiang, L., **Schofield, O.**, Falkowski, P. G. 2005. Adaptive evolution of phytoplankton cell size. *American Naturalist*. 166(4): 496-505.
83. **Schofield, O.**, Jeandel, C. 2005. International Ocean Research Conference in Paris. *Oceanography* 18(3): 62-65.

84. Irwin, A., Finkel, Z., **Schofield, O.**, Falkowski P. 2006. Scaling-up from nutrient physiology to the size-structure of phytoplankton communities. *Journal of Plankton Research* 28: 1-13.
85. Iglesias-Rodriguez, D., **Schofield, O.**, Batley, J., Probert, I., Medlin, L.K., Hayes, P.K. 2006. Intraspecific genetic diversity in the marine coccolithophorid *Emiliania huxleyi*: The use of microsatellite analysis in marine phytoplankton populations studies. *Journal of Phycology* doi: 10.1111/j.1529-8817.2006.00231 526-536.
86. **Schofield, O.**, J. Kerfoot, K. Mahoney, M. Moline, M. Oliver, S. Lohrenz, and G. Kirkpatrick 2006. Vertical migration of the toxic dinoflagellate *Karenia brevis* and the impact on ocean optical properties. *Journal of Geophysical Research*, 111, C06009, doi:10.1029/2005JC003115
87. Craig, S. E., Lohrenz, S. E., Lee, Z., Kirkpatrick, G. J., **Schofield, O.**, Steward, R. G. 2006. Use of hyperspectral remote sensing reflectance for detection and assessment of the harmful alga, *Karenia brevis*. *Applied Optics*. 45(21): 5415-5425.
88. **Finkel, Z. V., Quigg, A. S., Raven, J. A., Reinfelder, J. R. **Schofield, O.**, Falkowski P. G. 2006. Irradiance and the elemental stoichiometry of marine phytoplankton. *Limnology and Oceanography* 51(6): 2690-2701.
89. **Wolfe-Simon, F., Trey, A., Starovoytov, V., Reinfelder, J. R., **Schofield, O.**, Falkowski, P. G. 2006. The localization and role of MnSOD in diatoms. *Plant Physiology* DOI:10.1104/pp.106.088963
90. **Litchman, E., Klausmeier, C. A., Miller, J. R., **Schofield, O.**, Falkowski, P. G. 2006. Multi-nutrient, multi-group model of the present and future oceanic phytoplankton communities. *Biogeosciences* 3: 585-606.
91. Glenn, S. M., **Schofield, O.**, Chant, R., Kohut, J., McDonnell, J. 2008. Educational needs in the changing field of operational oceanography: Training the people that will sustain Munk's 1+1=3 scenario. *Marine Technology Society OCEANS, 2005. Proceedings of MTS/IEEE*, 10.1109/OCEANS.2006.1640154, 2549- 2556
92. **Finkel, Z. V., Quigg, A. S., Chiambi, R., **Schofield, O.**, Falkowski, P. G. 2007. Phylogenetic diversity in Cd:P regulation by marine phytoplankton. *Limnology and Oceanography* 52(3): 1131-1138.
93. **Oliver, M., Petrov, D., Ackerley, D., Falkowski, P. G. **Schofield, O.** 2007. The mode and tempo of genome size evolution in eukaryotes. *Journal of Genome Research*. doi/10.1101/gr.6096207.
94. **Schofield, O.**, Kohut, J., Aragon, D., Creed, L., Graver, J., Haldeman, C., Kerfoot, J., Roarty, H., Jones, C., Webb, D., Glenn, S. M. 2007. Slocum Gliders: Robust and ready. *Journal of Field Robotics*. 24(6): 473-485. DOI: 10:1009/rob.20200
95. Moline, M. A., M. J. Oliver, C. D. Mobley, L. Sundman, S. M. Blackwell, T. Bergmann, W. P. Bissett, J. Case, E. H. Raymond, **Schofield, O.** 2007. Bioluminescence in a Complex Coastal Environment I: Temporal Dynamics of Night-time Water-leaving Radiance. *Journal of Geophysical Research*. 112, DOI:10.1029/2007JC004138
96. Glenn, S. M., **Schofield, O.**, Chant, R., Kohut, J., Roarty, H., Bosch, J., Bowers, L., Gong, D., Kergoot, J. 2007. Wind-driven response of the Hudson river plume and its effect on dissolved oxygen concentrations. *Environmental Research, Engineering and Management* 1(39): 14-19.
97. **Litchman E., Klausmeier C. A., **Schofield O.**, Falkowski P. G. 2007. The role of functional traits and trade-offs in structuring phytoplankton communities: scaling from cellular to ecosystem level. *Ecology Letters*. 10: 1170-1181.
98. **Oliver, M. J., M. Moline, C. Mobley, L. K. Sundman, and **O. Schofield** 2007. Bioluminescence in a complex coastal environment: 2. Prediction of bioluminescent source depth from spectral water-leaving radiance, *Journal of Geophysical Research* doi:10.1029/2007JC004136
99. **Finkel, Z. V., Sebbo, J., Feist-Burkhardt, S., Irwin, A. J., Katz, M. E., **Schofield, O.**, Young, J. R., Falkowski, P. G. 2007. A universal driver of macroevolutionary change in the size of marine phytoplankton over the Cenozoic. *Proceedings of the National Academy of Sciences* 104(51): 20416-20420. doi/10.1073/pnas.0709381104.
100. Chant, R. J., Glenn, S. M., Hunter, E., Kohut, J., Chen, R. F., Houghton, R. H., Bosch, J., **Schofield, O.** 2008. Bulge formation of a buoyant river outflow. *Journal of Geophysical Research*. Vol 113, C01017, DOI:10.1029/2007JC004100
101. **Castelao, R., Glenn, S., **Schofield, O.**, Chant, R., Wilkin, J., Kohut, J. 2008. Seasonal evolution of hydrographic fields in the central Middle Atlantic Bight from glider observations. *Geophysical Research Letters*, 35, L03617, doi:10.1029/2007GL032335
102. **Kahl, A., Vardi, A., **Schofield, O.** 2008. *Feature Article*: Effect of phytoplankton physiology on export flux. *Marine Ecology Progress Series* 354: 3-19.
103. **Schofield, O.**, Kohut, J., Glenn, S. M. 2008. Coastal observing networks and dawn in a new millennium of well sampled oceans. *Sea Technology*. 49: 31-36

104. **Castelao, R., **Schofield, O.**, Glenn, S. M., Kohut, J., Chant, R. 2008. Cross-shelf transport of fresh water in the New Jersey Shelf during spring and summer 2006. *Journal of Geophysical Research*. DOI:10.1029/2007JC004241
105. **Cahill, B., **O. Schofield**, R. Chant, J. Wilkin, E. Hunter, S. Glenn, and P. Bissett 2008. Dynamics of turbid buoyant plumes and the feedbacks on near-shore biogeochemistry and physics, *Geophysical Research Letters* doi:10.1029/2008GL033595
106. Glenn, S. M., Jones, C., Twardowski, M., Bowers, L., Kerfoot, J., Webb, D., **Schofield, O.** 2008. Studying resuspension processes in the Mid-Atlantic Bight using Webb slocum gliders. *Limnology and Oceanography* 53(6): 2180-2196.
107. Chao, Y., Zhijin L., Farrara, J. D., Moline, M. A., **Schofield, O.**, Majumdar, S. J. 2008. Synergistic applications of autonomous underwater vehicles and regional ocean modeling system in coastal ocean forecasting. *Limnology and Oceanography* 53(6): 2251-2263.
108. **Schofield, O.**, Chant, R., Cahill, B., Castelao, R., Gong, D., Kahl, A., Kohut, J., Montes-Hugo, M., Ramadurai, R., Ramey, P., Xu, Y., Glenn, S. M. 2008. Seasonal forcing of primary productivity on broad continental shelves. *Oceanography* 21(4): 104-117.
109. Moline, M. A., Frazer, T. K., Chant, R., Glenn, S., Jacoby, C. A., Reinfelder, J. R., Yost, J., Zhou, M., **Schofield, O.** 2008. Biological responses in a dynamic, buoyant river plume. *Oceanography* 21(4): 70-89.
110. Lohrenz, S. E., Fahnenstiel, G. L., **Schofield, O.**, Millie, D. F. 2008. Light availability and climate: key factors in the productivity of southeastern Lake Michigan's coastal ecosystem. *Oceanography* 21(4): 54-63.
111. Chant R. C., Wilkin J., Zhang W., Choi B. J., Hunter E., Castelao R., Glenn S., Jurisa J., **Schofield O.**, Houghton R., Kohut J., Frazer T., Moline M. A. 2008. Dispersal of the Hudson River Plume on the New York Bight: Integrating observational and numerical studies during LaTTE. *Oceanography* 21(4): 90-103.
112. **Schofield, O.**, Bosch, J., Glenn, S. M., Kirkpatrick, G., Kerfoot, J., Moline, M., Oliver, M., Bissett, W. P. 2008. Bio-optics in integrated ocean observing networks: potential for studying harmful algal blooms. In Real Time Coastal Observing Systems for Ecosystems Dynamics and Harmful Algal Blooms. Babin, M. Roelser, C. and Cullen, J. J. (Eds) UNESCO, Paris. 85-108.
113. Bissett, W. P., Arnone, R., Debra, S., Dye, D., Kirkpatrick, G., Mobley, C., **Schofield, O.** 2008. The integration of ocean color remote sensing with coastal nowcast/forecast simulations of Harmful Algal Blooms (HABs). In Real Time Coastal Observing Systems for Ecosystems Dynamics and Harmful Algal Blooms. Babin, M. And Cullen, J. J. (Eds) UNESCO, Paris. 695-732.
114. **Cermeno, P., Dutkiwicz, S., Harris, R. P., Follows, M., **Schofield, O.**, Falkowski, P. G. 2008. The role of nutricline depth in regulating the ocean carbon cycle. *Proceedings of the National Academy of Sciences*. doi:10.1073.pnas.0811302106
115. Iglesias-Rodriguez, M. D., Buitenhuis, E. T., Raven, J. A., **Schofield, O.**, Poulton, A., Gibbs, S., Halloran, P. R., de Baar, H. J. 2008. Response to: Phytoplankton calcification in a high CO₂ world. *Science* 322,1466c doi: 10.1126/science.1161501
116. **Montes-Hugo, M., Doney, S. C., Ducklow, H., Fraser, W., Martinson, D., Stammerjohn, S. E., **Schofield, O.** 2009. Recent changes in phytoplankton communities associated with rapid regional climate change along the Western Antarctic Peninsula. *Science*. 323, 1470 (2009), DOI: 10.1126/science.1164533
117. **Montes-Hugo, M., Ducklow, H., **Schofield, O.** 2009. Contribution by different marine bacterial communities to particulate beam attenuation. *Marine Ecology Progress Series*. 379: 13-22. Doi:10.3354/meps07883.
118. Glenn, S. **Schofield, O.** 2009. Growing a distributed ocean observatory: Our view from the COOL room. *Oceanography* 22(2): 78-92.
119. Moline, M. A., **Schofield, O.** 2009. Remote video assisted docking of untended underwater vehicles. *Journal of Atmosphere and Ocean Technology*. DOI 10.1175/2009JTECH0666.1
120. Dubinsky, Z., **Schofield, O.** 2009. Photosynthesis under extreme low and high light in the world's oceans. *Hydrobiologia*. DOI 10.1007/s10750-009-0026-0
121. **Castelao, R., Chant, R., Glenn, S. M. **Schofield, O.** 2010. The effects of tides and oscillatory winds on the subtidal inner shelf cross-shelf circulation. *Journal of Physical Oceanography*. DOI: 10.1175/2009JPO4273.1
122. **Montes-Hugo, M. A., Ducklow, H., Stammerjohn, S., C. Sweeney, S. Coney, D. Martinson, R. Frouin, M. Maltrud, **Schofield, O.** 2010. Spring wind patterns and transient changes on summer DIC and chlorophyll *a* concentration in surface waters of the Western Shelf of the Antarctic Peninsula. *Journal of Geophysical Research*. doi:10.1029/2009JC005267
123. ** Zhang, G., Wilkin, J. L., **Schofield, O.** 2010. Simulation of water age and residence time in New York Bight. *Journal of Physical Oceanography* doi: 10.1175/2009JPO4249.1
124. Benoit Bird, K., **Schofield, O.**, Moline, M. A. 2010. Zooplankton avoidance of a profiled open-path

- fluorometer. *Journal of Plankton Research* doi:10.1093/plankt/fbq053
125. **Castelao, R., Glenn, S. M., **Schofield, O.** 2010. Temperature, salinity and density variability in the central Middle Atlantic Bight. *Journal of Geophysical Research* doi:10.1029/2009JC006082
 126. **Schofield, O.**, Ducklow, H. W., Martinson, D. G., Meredith, M. P., Moline, M. A., Fraser, W. R. 2010. How do polar marine ecosystems respond to rapid climate change? *Science* 328, 1520 DOI: 10.1126/science.1185779
 127. **Kahl, A., Fraser, W., **Schofield, O.** 2010. Autonomous gliders reveal water column features associated with Adélie penguin foraging. *Integrative and Comparative Biology* doi: 10.1093/icb/icq098
 128. Oliver, M., Bidle, K., **Schofield, O.** 2010. Density dependent expression of a diatom retrotransposon. *Marine Genomics*. doi:10.1016/j.margen.2010.08.006
 129. **Schofield, O.**, Glenn, S., Orcutt, J., Arrott, M., Brown, W., Signell, R., Moline, M. A., Chao, Y., Chien, S., Thompson, D., Balasuriya, A., Oliver, M. 2010. Automated sensor networks to advance ocean science. *Transactions of the American Geophysical Union*, 91(39): 345–346, doi:10.1029/2010EO390001.
 130. Buesseler, K., McDonnell, A., Ducklow, H., **Schofield, O.**, Steinberg, D. 2010. New evidence for higher export flux over the continental shelf of the Antarctic Peninsula. *Geophysical Research Letters* doi:10.1029/2010GL045448R.
 131. **Schofield, O.**, Kohut, J., Glenn, S., Morell, J., Capella, J., Corredor, J., Orcutt, J., Arrott, M., Krueger, I., Meisinger, M., Peach, C., Vernon, F., Chave, A., Chao, Y., Chien, S., Thompson, D., Brown, W., Oliver, M., Boicourt, W. 2010. A regional Slocum glider network in the Mid-Atlantic coastal waters leverages broad community engagement. *Marine Technology Society* 44(6): 64-74.
 132. Glenn, S., Kohut, J., McDonnell, J., Seidel, D., Aragon, D., Haskins, T., Handel, E., Haldeman, C., Heifetz, I., Kerfoot, J., Lemus, E., Lichtenwalder, S., Ojanen, L., Roarty, H., Atlantic Crossing Students, Jones, C., Webb, D., **Schofield, O.** 2011. The Trans-Atlantic Slocum glider expeditions: A catalyst for undergraduate participation in ocean science and technology. *Marine Technology Society* 45: 75-90.
 133. Cermeno, P., Baek-Lee, J., Wyman, K., **Schofield, O.**, Falkowski, P. G. 2011. The frequency of nutrient pulses controls the rate of competitive exclusion in phytoplankton. *Marine Ecology Progress Series* doi: 10.3354/meps09088
 134. **Xu, Y., Chant, R. C., Castaleo, R., Gong, D., Glenn, S.M., **Schofield, O.** 2011. Seasonal dynamics in the chlorophyll *a* in the Mid-Atlantic Bight. *Continental Shelf Research*. 10.1016/j.csr.2011.05.019
 135. Johnsen, G., Moline, M. A., Peterson, L. H., Pinckney, J., Pozdnyakov, D. V., Egeland, E. S. **Schofield, O.** 2011. Optical monitoring of phytoplankton bloom pigment signatures. In Phytoplankton Pigments: Updates on Characterization, Chemotaxonomy and Applications in Oceanography. Roy, S., Egeland, E. K., Llewellyn, C., Johnsen G. (Eds). Cambridge University Press, Cambridge UK. 538-581.
 136. **Yi, C., Grobunov, M., **Schofield, O.**, Falkowski, P. G. 2011. Energy storage efficiency of photosynthesis in *Chlamydomonas reinhardtii* based on microsecond photoacoustics. *Photosynthesis Research* 108:215–224. DOI 10.1007/s11120-011-9682-9
 137. Ballantyne F., **Schofield, O.**, Levin, S. A. 2011. *Featured article*: The emergence of regularity and variability in marine ecosystems: The combined role of physics, chemistry and biology. *Scientia Marina* 75(4): 719-731. doi: 10.3989/scimar.2011.75n4719
 138. Falkowski, P., Algeo, T., Codispoti, L., Deutsch, C. A., Emerson, S., Hales, B., Huey, R., Jenkins, W., Kump, L. R., Levin, L., Lyons, T., Nelson, N. B., **Schofield, O.**, Summons, R., Talley, L., Thomas, E., Whitney, F., Pilcher, C. 2011. Ocean Deoxygenation: Past, Present, and Future. *EOS, Transactions of the American Geophysical Union* 92(46): 409-420.
 139. Ducklow, H., A. Clarke, R. Dickhut, S.C. Doney, H. Geisz, K. Huang, D.G. Martinson, M.P. Meredith, H.V. Moeller, M. Montes-Hugo, **O. Schofield**, S.E. Stammerjohn, D. Steinberg, and W. Fraser, 2012. Marine pelagic ecosystems: the West Antarctic Peninsula, in Antarctica: An Extreme Environment in a Changing World, ed. A.D. Rogers, Wiley. pp 121-149.
 140. **Bernard, K. S., Steinberg, D. K., **Schofield O.** 2012. Summertime grazing impact of the dominant macrozooplankton off the Western Antarctic Peninsula. *Deep Sea Research*. doi:10.1016/j.dsr.2011.12.015
 141. Ducklow, H. W., **Schofield, O.**, Vernet, M., Stammerjohn, S., Erickson, M. 2012. Multiscale control of bacterial production along the western Antarctic Peninsula: A regional and decadal-scale investigation. *Journal of Marine Systems*. doi:10.1016/j.jmarsys.2012.03.003
 142. **Mass, T., Drake, J., Haramaty, L., Rosenthal, Y., **Schofield, O.**, Sherrell, R., Falkowski, P. G. 2012. Aragonite precipitation from nano-polyps in coral cell culture. *Plos One* 7(4): e35049
 143. **Schofield, O.**, Meredith, M., Newman, L., Sparrow, M., Urban, E. 2012. Implementing a southern ocean observing system. *EOS, Transactions of the American Geophysical Union* 93(26): 241-243.
 144. Rintoul, S., Meredith, M., Newman, L., **Schofield, O.** 2012. The Southern Ocean Observing System.

- Oceanography 25(3): 24-25.
145. Yager, P. L., Stammerjohn, S., Sherrell, R., Alderkamp, A. C., **Schofield, O.**, Ducklow, H., Wilson, S., Lowry, K. E., Duken, G. L., Bertilsson, S., Riemann, L., Ndungu, K., Arrigo, K., Severmann, S., Moksnes, P. O., Post, A. F. 2012. The Amudsen Sea polynya international research expedition (ASPIRE). *Oceanography* 25: 30-43.
 146. Oliver, M., Moline, M. A., Robbins, I., Fraser, W., Patterson, D., **Schofield, O.** 2012. Letting penguins lead: Dynamic modeling of penguin location guide autonomous robotic sampling. *Oceanography* 25(3): 120-121. doi.org/10.5670/oceanog.2012.84
 147. **Miles, T., Glenn, S. M., **Schofield, O.** 2012. Spatial variability in fall storm induced sediment resuspension on the Mid-Atlantic Bight. *Continental Shelf Research*. doi.org/10.1016/j.csr.2012.08.006
 148. **Schofield, O.**, Glenn, S. M., Irwin, A., Oliver, M., Moline, M. A. *Earth System Monitoring: Ocean Observatories and Information*. 2012. Robert A. Meyers and Orcutt, J. (Eds) Encyclopedia of Sustainability Science and Technology. Springer Science, New York.
 149. **Xu, Y., Cahill, B., Wilkin, J., **Schofield, O.** 2012. Role of wind in regulating phytoplankton blooms on the Mid-Atlantic Bight. *Continental Shelf Research*. doi:10.1016/J.CSR.2012.09.011
 150. **Saba G. K., **Schofield O.**, Torres J. J., Ombres E. H., Steinberg D. K. 2012. Increased feeding and nutrient excretion of adult Antarctic krill, *Euphausia superba*, exposed to enhanced carbon dioxide (CO₂). *PLoS ONE* 7(12): e52224. doi:10.1371/journal.pone.0052224
 151. Gangopadhyay, A., Schmidt, A., Agel, L., **Schofield, O.**, Clark, J. 2012. Multi-scale forecasting in the western north Atlantic: Sensitivity of model forecast skill to glider data assimilation. *Continental Shelf Research*. dx.doi.org/10.1016/j.csr.2012.09.013
 152. Oliver, M. A., Irwin, A., Moline, M. A., Fraser, W., Patterson, D., **Schofield, O.**, Kohut, J. 2013. Adelie penguin foraging location correlated with local tides. *PloS ONE* e55163. doi:10.1371/journal.pone.0055163
 153. **Schofield, O.**, Moline, M. A., Cahill, B., Frazer, T., Kahl, A., Oliver, M., Reinfelder, J., Glenn, S., Chant, R. 2013. Phytoplankton productivity in a turbid buoyant coastal plume. *Continental Shelf Research*. dx.doi.org/10.1016/j.csr.2013.02.005
 154. Meredith, M. P., **Schofield, O.**, Newman, L., Urban, E., Sparrow, M. 2013. Development and long-term vision for the Southern Ocean Observing System. *Current Opinion in Environmental Sustainability*. doi.org/j.cosust.2013.02.002
 155. **Sipler, R. E., Bronk, D. A., Seitzinger, S. P., Lauck, R. J., McGinness, L. M., Kirkpatrick, G. J., Heil, C. A., Kerkhof, L., **Schofield, O.** 2013. *Trichodesmium* sp. derived dissolved organic matter is a source of nitrogen capable of supporting the growth of toxic red tide *Karenia brevis*. *Marine Ecology Progress Series*. 483: 31-45 doi: 20.3354/MEPS10258.
 156. **Schofield, O.**, Chao, Y. 2013. Accomplishment and future perspective of coastal ocean observing systems. *Continental Shelf Research*. dx.doi.org/10.1016/j.csr.2013.04.001.
 157. **Schofield, O.**, Ducklow, H., Bernard, K., Doney, S., Fraser-Patterson, D., Gorman, K., Martinson, D., Meredith, M., Saba, G., Stammerjohn, S., Steinberg, D., Fraser, W. 2013. Penguin biogeography along the West Antarctic Peninsula: Testing the canyon hypothesis with Palmer LTER observations. *Oceanography* 26 78-80.
 158. Fraser, W., Patterson-Fraser, D., Ribic, C. A., **Schofield, O.**, Ducklow, H. 2013. A non-marine source of variability in Adelie penguin demography. *Oceanography* 26: 77-79.
 159. Ducklow, H., Fraser, W. R., Meredith, M. P., Stammerjohn, S. E., Doney, S. C., Martinson, D. G., Sailley, S. F., **Schofield, O.**, Steinberg, D. K., Venerables, H. J., Amsler, C. D. 2013. West Antarctic Peninsula: An ice-dependent coastal marine ecosystem in transition. *Oceanography* 26: 122-135.
 160. **Sailley, S., Doney, S. C., Ducklow, H., Moeller, H., **Schofield, O.**, Fraser, B. 2013. Carbon fluxes and pelagic ecosystem dynamics around the West Antarctic Peninsula Adelie penguin colonies: An inverse model analysis. *Marine Ecology Progress Series* doi:10.3354/MEPS10534
 161. **Schofield, O.**, Glenn, S. M., Moline, M. A. 2013. The robot ocean network. *American Scientist* 101: 434-441.
 162. Muller-Karger, F., Roffer, M., Walker, N., Oliver, M., **Schofield, O.**, Abbott, M., Graber, H., Leben, R., Goni, G. 2013. Satellite remote sensing in support of an integrated ocean observing system. *Geoscience and Remote Sensing. IEEE*, 1(4): 8-18. doi: 10.1109/MGRS.2013.2289656
 163. **Schofield, O.**, Kohut, J., Saba, G., Xu, Y., Wilkin, J., Glenn, S. M. 2014. Ocean observing and prediction. 2014. In Encyclopedia of Natural Resources. Wang, Y. Q. (editor). Taylor Francis, New York City, NY. Doi:10.1018/E-ENRW-120048087 802-807.
 164. **Sipler, R. E., McGinness, L. M., Kirkpatrick, G. J., Kerkhof, L. J., **Schofield, O.** 2014. Bacteriocidal effects of brevetoxin on natural bacterial communities. *Harmful Algae* doi:10.1016/j.hal.2014.04.009

165. Swart, S., Liu, J., Bhaskar, P., Newmann, L., Finney, K., Meredith, M., **Schofield, O.** 2014. The SOOS Asian Workshop: Exploring possibilities for collaboration. *Advances in Polar Science*. doi: 10.13679/j.advps.2014.2.00001
166. Jiping, L., Swart, S., Bhaskar P. V., Newmann, L., Meredith, M., **Schofield, O.**, Jianfeng, H.E. 2014. The SOOS Asian workshop on Southern Ocean research and observations. *Advances in Polar Science*. doi: 10.13679/j.advps.2014.2.00121
167. **Saba, G. K., Fraser, W. R., Saba, V. S., Iannuzzi, R. A., Coleman, K. E., Doney, S. C., Ducklow, H. W., Martinson, D. G., Miles, T. N., Patterson-Fraser, D. L., Stammerjohn, S. E., Steinberg, D. K., **Schofield, O.** 2014. Winter and spring controls on the summer food web of the coastal West Antarctic Peninsula. *Nature Communications* 5: 4318 doi: 10.1038/ncomms5318
168. Constable A., Costa D., Murphy E., Hofmann E., **Schofield O.**, Press A., Johnson N.M., Newman L. 2014. Assessing status and change in Southern Ocean ecosystems. 2014. In De Broyer C., Koubbi P., Griffiths H.J., Raymond B., Udekem d'Acoz C. d', et al. (eds.). *Biogeographic Atlas of the Southern Ocean*. Scientific Committee on Antarctic Research, Cambridge, pp. 404-407
169. **Miles, T., Seroka, G., Kohut J., **Schofield O.**, Glenn S. 2015. Glider observations and modeling of sediment transport in Hurricane Sandy. *Journal of Geophysical Research Oceans* doi:10.1002/2014JC010474.
170. **Kavanaugh, M., Abdala, F. N., Ducklow, H., Glover, D., Fraser, W., Martinson, D., Stammerjohn, S., **Schofield, O.**, Doney, S. 2015. Effect of continental shelf canyons on phytoplankton biomass and community composition along the western Antarctic Peninsula. *Marine Ecology Progress Series*. doi: 10.3354/MEPS11189
171. Steinberg, D. M., Ruck, K. E., Gleiber, M., Garzio, L., Cope, J. S., Bernard, K. S., Stammerjohn, S. E., **Schofield, O.**, Quetin, L. B., Ross, R. M. 2015. Long-term (1993-2013) changes in macrozooplankton off the Western Antarctic Peninsula. *Deep Sea Research II*. doi:10.1016/j.dsr.2015.02.009
172. Alderkamp, A-C., van Dijken, G. L., Lowry, K. E., Connelly, T. L., Lagerstrom, M., Sherrell, R. M., Haskins, T., Rogalsky, E., **Schofield, O.**, Stammerjohn, S. E., Yager, P. L., Arrigo, K. R. 2015. Iron availability drives phytoplankton photosynthesis rates in the Amundsen Sea Polynya, Antarctica. *Elementa*. doi: 10.12952/journal.elementa.000043
173. **Schofield, O.**, Jones, C., Kohut, J., Kremer, U., Miles, T., Saba, G., Webb, D., Glenn, S. 2015. Building a coordinated community fleet of autonomous gliders for sampling coastal systems. *Marine Technology Society*. 49(3): 9-16
174. Brum, J. R., Hurwitz, B. L., **Schofield, O.**, Ducklow, H. W., Sullivan, M. B. 2015. Seasonal time bombs: Dominant temperate viruses affect Southern Ocean microbial dynamics. *The ISME Journal*. doi:10.1038/ismej.2015.125
175. **Stukel, M. R., Asher, E., Couto, N., **Schofield, O.**, Strebel, S., Tortell, P., Ducklow, H. W. 2015. The imbalance of new and export production in the Western Antarctic Peninsula, a potentially “leaky” ecosystem. *Global Biogeochemical Cycles*. Doi:10.1002/2015GB005211
176. **Miles, T. N., Lee, S., Wahlin, A., Ha, K. H., Assman, K., **Schofield, O.** 2015. Glider observations of the Dotson Ice Shelf outflow. *Deep Sea Research*. doi:10.1016/j.dsr2.2015.08.008
177. **Schofield, O.**, Miles, T., Aldercamp A-C, Lee, S, Haskin. C., Roaglsky E., Sipler, R., Sherrell R., Yager, P. 2015. *In situ* phytoplankton distributions in the Amundsen Sea polynya measured by autonomous gliders. *Elementa: Science of the Anthropocene*. doi: 10.12952/journal.elementa.000073
178. Meredith, M., Lee, S., Wåhlin, A., **Schofield, O.**, Ducklow, H., Newman, L, Lee, H. 2015. The interdisciplinary marine system of the Amundsen Sea, Southern Ocean: recent advances and the need for sustained observations. *Deep Sea Research Part II Topical Studies in Oceanography* DOI: 10.1016/j.dsr2.2015.12.002
179. **Gleiber, M. R., Steinberg, D. K., **Schofield, O.** 2015. Copepod summer grazing impact and fecal pellet production along the Western Antarctic Peninsula. *Journal of Plankton Research* doi:10.1093/plankt/fbv070
180. Glenn, S. M., Miles, T. N., Seroka, G. N., Xu, Y., Yu, F., Forney, R. K., Roarty, H., **Schofield, O.**, Kohut, J. 2016. Stratified coastal ocean interactions with tropical cyclones. *Nature Communications* DOI:10.1038/ncomms10887
181. Newmann, L., **Schofield, O.**, Wahlin, A., Constable, A., Swart, S., Williams, M., Mazloff, M., Firing, Y., Bricher, P. 2016. Understanding the Southern Ocean through sustained observations. *Bulletin of the Australian Meteorological and Oceanographic Society*. 28: 170-174.
182. Constable, A. J., Costa, D. P., **Schofield, O.**, Newman, L., Urban, E. R., Fulton, B., Melbourne-Thomas, J., Ballerini, T., Boyd, P. W., Brandt, A., de la Mare, B., Edwards, M., Eleaume, M., Emmerson, L., Fennel, K., Fielding, S., Griffiths, H., Gutt, J., Hindell, M. A., Hofmann, E. E., Jennings, S., Jensen, O., Kohut, J., La, H., Manderson, J., McCurdy, A., Mitchell, G., Moltmann, T., Muelbert, M., Murphy, E., Press, T., Raymond, B.,

- Reid, K., Reiss, C., Rice, J., Salter, I., Smith, D., Song, S., Southwell, C., Swadling, K., Van de Putte, A., Willis, Z. 2016. Determining essential variables (ecosystem Essential Ocean Variables – eEOVs) for observing dynamics and change in marine ecosystems using the Southern Ocean as a case study. *Journal of Marine Systems*, doi: 10.1016/j.jmarsys.2016.05.003
183. **Shapiro, J., Dixon, L. K., **Schofield, O.**, Kirkpatrick, B. A., Kirkpatrick, G. J. 2016. Sensors for ocean observing: The optical phytoplankton discriminator. In *Coastal Ocean Observing Systems*. Liu, Y., Kerkring, H., Weisberg, R. H. (editors) Elsevier Amsterdam 326-347.
184. **Li, Z., Cassar, N., Huang, K., **Schofield, O.**, Ducklow, H. 2016. Interannual variability in net community production at the Western Antarctic Peninsula region (1997-2014). *Journal of Geophysical Research* DOI:10.1002/2015JC011378
185. **Seroka, G., Miles, T., Xu, Y., Kohut, J., **Schofield, O.**, Glenn, S. 2016. Hurricane Irene (2011) Hurricane Irene sensitivity to stratified coastal ocean cooling. 2016. *Monthly Weather Review* <http://dx.doi.org/10.1175/MWR-D-15-0452.1>
186. **Schofield, O.**, Newman, L., Bricher, P., Constable, A., Swart, S., Wahlin, A. 2016. Towards implementation of a Southern Ocean Observing System. *Marine Technology Society* 50(3): 63-68.
187. **Carvalho, F., Kohut, J., Oliver, M. J., Sherrell, R. M., **Schofield, O.** 2016. Mixing and phytoplankton dynamics in a submarine canyon in the West Antarctic Peninsula. *Journal of Geophysical Research* DOI: 10.1002/2016JC011650
188. Obryk, M. K., Doran, P. T., Friedlaender, A. S., Gooseff, M., Priscu, J. C., **Schofield, O.**, Stammerjohn, S. E., Steinberg, D. K., Ducklow, H. W. 2016. Responses of Antarctic marine and freshwater ecosystems to changing ice conditions. *Bioscience* 66: 864-879. doi:10.1093/biosci/biw109
189. Yager, P. L., Sherrell, R. M., Stammerjohn S. E., Ducklow, H. W., **Schofield, O.**, Ingall, E. D., Wilson, S. E., Lowry, K. E., Williams, C. M., Riemann, L., Bertilsoosn, S., Nielsen, T. G., Alderkamp, A-C., Dinaquet, J., Kjellerup, S., Logares, R., Melara, A. J., Mu, L., Newstead, R. G., Post, A., Richert, I., Swalethorp, R., van Dijken, G. 2016. A carbon budget for the Amundsen Sea Polynya, Antarctica: Estimating net community production and export in a highly productive polar ecosystem. *Elementa: Science of the Anthropocene*. doi: 10.12952/journal.elementa.000140
190. **Carvalho, F., Kohut, J., Oliver, M. J., **Schofield, O.** 2017. Estimating ecological relevant mixed layer depths in Antarctica's coastal seas. *Geophysical Research Letters*. 44, doi:10.1002/2016GL071205
191. **Schofield, O.**, Saba, G., Coleman, K., Carvalho A-F., Couto, N., Finkel, Z., Irwin, A., Kahl, A., Montes-Hugo, M., Waite, N. 2017. Decadal variability phytoplankton community composition in the coastal waters of a warming West Antarctic Peninsula. *Deep Sea Research*. doi/10.1016/j.dsr.2017.04.014
192. Benard, K. S., Cimino, M., Fraser, W., Kohut, J., Oliver, M., Patterson-Fraser, D., **Schofield, O.**, Statscewich, H., Steinberg, D. K., Winsor, P. 2017. Factors that affect the nearshore aggregations of Antarctic krill in a biological hotspot. *Deep Sea Research II*. doi/10.1016/j.dsr.2017.05.008
193. **Seroka, G., Miles, T., Xu, Y., Kohut, J., **Schofield, O.**, Glenn, S. 2017. Rapid shelf-wide cooling response of a stratified coastal ocean to hurricanes. *Journal of Geophysical Research* DOI 10.1002/2017JC012756
194. **Couto, N., Martinson, D., Kohut, J., **Schofield, O.** 2017. Distribution of Upper Circumpolar Deep Water on the warming continental shelf of the West Antarctic Peninsula. *Journal of Geophysical Research* DOI:10.1002/2017JC012840
195. **Annett, A. L., Fitzsimmons, J., Séguret, M., Lagerström, Meredith, M., **Schofield, O.**, Sherrell, R. M. 2017. Controls on dissolved and particulate iron distributions in surface waters of the Western Antarctic Peninsula shelf. *Marine Chemistry* DOI: 10.1016/j.marchem.2017.06.004
196. Hendry, K., Henley, S., **Schofield O.** 2017. Understanding a changing West Antarctic Peninsula. *EOS*, 98: <https://doi.org/10.1029/2017EO084155>.
197. **Schofield, O.**, Brown, M., Kohut, J., Nardelli, S., Saba, G., Waite, N. Ducklow, H. 2018. Changes in upper ocean mixed layer and phytoplankton productivity along the West Antarctic Peninsula. *Philosophical Transactions of the Royal Society*. doi 10.1098/rsta.2017.0173
198. McDonnell, J., deCharon, A., Lichtenwlaner, S. C., Hunter-Thomson, K., Halversen, C., **Schofield, O.**, Glenn, S., Ferraro, C., Lauter, C., Hewlett, J. 2018. Education and public engagement in OOI: Lessons learned from the field. *Oceanography* 191: 118-126
199. **Schofield, O.**, Glenn, S., Kohut, J., Miles, T., Roarty, H., Saba, G., McDonnell, J. 2018. Developing practical data skills in undergraduate students using ocean observatories. *Marine Technology Society* 52(1): 1-7.
200. **Kim, H., Ducklow, H. W., Abele, D., Bartlett, E., Buma, A. G., Meredith, M. P., Rozema, P. D., **Schofield, O.**, Venables, H. J., Schloss, I. R. 2018. Interdecadal variability of the phytoplankton biomass along the coastal West Antarctic Peninsula. *Philosophical Transactions of the Royal Society*. doi 1098/rsta2017.0049

201. Ramos, A. G., Garcia-Garrido, V. J., Mancho, A. M., Wiggins, S., Coca, J., Glenn, S., **Schofield, O.**, Kohut, J., Aragon, D., Kerfoot, J., Haskins, T., Miles, T. N., Haldeman, C., Standskov, N., Allsup, B., Jones, C., Shapiro, J. 2018. Lagrangian coherent structure assisted path planning for transoceanic autonomous underwater vehicle missions. *Scientific Reports* doi: 10.1038/s41598-018-23028-8
202. Ducklow, H. W., Stukel, M. R., Eveleth, R., Doney, S. C., Jickells, T., **Schofield, O.**, Baker, A. R., Brindle, J., Chance, R., Cassar, N. 2018. Spring-summer net community production, new production, particle export and related water column biogeochemical processes in the marginal sea ice zone of the Western Antarctic Peninsula 2012-2014. *Philosophical Transactions of the Royal Society* doi: 10.1098/rsta.2017.0177
203. Greer, A. T., Shiller, A. M., Hofmann, E. E., Wiggert, J. D., Warner, S. J., Parra, S. M., Pan, C., Book, J. W., Joung, D. J., Dykstra, S., Kruase, J. W., Dzwonkowski, B., Soto, I. M., Cambazoglu, K., Deary, A. L., Briseno-Avena, C., Boyette, A. D., Kastler, J. A., Sanial, V., Hode, L., Nwankwo, U., Chiaverano, L. M., O'Brien, S. J., Fitzpatrick, P. J., Lau, Y. H., Dinniman, M. S., Martin, K. M., Ho, P., Mojzsis, A. K., Howden, S. D., Hernandez, F. J., Church, I., Miles, T. N., Sponaugle, S., Moum, J. N., Arnone, R. A., Cowen, R. K., Jacobs, G. A., **Schofield, O.**, Graham, W. M. 2018. Functioning of coastal river-dominated ecosystems and implications for oil spill response: From observations to mechanisms and models. *Oceanography*. 31(3) doi.org/10.5670/oceanog.2018.302.
204. **Schofield, O.**, Kohut, J. 2018. Sampling the Southern Ocean. Antarctic Environments Portal. DOI:10.18124/D4863P. <https://environments.aq/information-summaries/sampling-the-southern-ocean-technology-for-observing-the-marine-system/>
205. Bushnell, M., Glenn, S., Kohut, J., McDonnell, J., Miles, T., Saba, G., **Schofield, O.** 2018. Workforce development supporting the Blue Economy: Using recent community developed material in operational oceanography curricula a tribute to Vembu Subramanian. *Marine Technology Society*. 52(3): 51-54.
206. **Yi, X., Glenn, S., Carvalho, F., Jones, C., Kohut, J., McDonnell, J., Miles, T., Seroka, G., **Schofield O.** 2018. Glider technology enabling a diversity of mesoscale ocean sampling capabilities. In Challenges and Innovations in Ocean In-Situ Sensors, Delory and Pearlman (Eds). Elsevier, York. Pp. 367-374.
207. **Schofield, O.**, Aragon, D., Jones, C., Kohut, J., Miles, T. N., Roarty, H., Saba, G., Yi, X., Glenn, S. 2018. Maturing glider technology providing a modular platform capable of mapping ecosystems in the ocean. In Challenges and Innovations in Ocean In-Situ Sensors, Delory and Pearlman (Eds). Elsevier, York. 173-193.
208. **Lin, Y., Gifford, S., Ducklow, H., **Schofield, O.**, Cassar, N. 2019. Towards quantitative marine microbiome community profiling using internal standards ISME doi: 10.1128/AEM.02634-18
209. Clark, E., Branch, A., Chien, S., Mirza, F., Farrara, J., Chao, Y., Fratantoni, D., Aragon, D., **Schofield, O.**, Flexas, M., Thompson A. 2019. Precise station keeping for underwater gliders using a predictive ocean current model. *IEEE Journal of Ocean Engineering*. doi:10.1109/JOE.2018.2886092
210. Henley, S., **Schofield, O.**, Hendry, K., Schloss, I., Steinberg, D., Moffat, C., Peck, L., Costa, D., Bakker, C. E., Hughes, C., Rozema, P., Ducklow, H., Abele, D., Sefels, J., van Leeuwe, M. A., Brussaard, C., Buma, A. G. J., Kohut, J., Sahade, R., Friedlaender, A., Venables, H., Meredith, M. 2019. Variability and change in the west Antarctic Peninsula marine system: research priorities and opportunities. *Progress in Oceanography*. doi: 1016/j.pcean.2019.03.003
211. **McKee, D., Martinson, D. G., **Schofield, O.** 2019. Origin and attenuation of mesoscale structure in circumpolar deep water intrusions to an Antarctic shelf. *Journal of Physical Oceanography*. doi:10.1175/JPO-D-18-0133.1
212. Newman, L., Heil, P., Trebilco, R., Katsuma, K., Constable, A., van Wijk, E., Assmann, K., Beja, J., Bricher, P., Coleman, R., Costa, D., Diggs, S., Farneti, R., Fawcett, S., Gille, S., Hendry, K. R., Henley, S., Hofmann, E., Maksym, T., Mazloff, M., Meijers, A., Meredith, M., Moreau, S., Ozsoy, B., Robertson, R., Schloss, I., **Schofield, O.**, Shi, J., Sikes, E., Smith, I. J., Swart, S., Wahlin, A., Williams, G., Williams, M. J. M., Herraiz-Borreguero, L., Miloslavich, P., Spreen, G. 2019. Delivering sustained, coordinated, and integrated observations of the Southern ocean for global impact. *Frontiers* 6: 1-31. Doi.10.3389/fmars.2019.00433
213. **Brown, M. S., Munro, D. R., Feehan, C. J., Sweeney, C., Ducklow, H. W., **Schofield, O.** 2019. Enhanced oceanic CO₂ uptake along the rapidly changing West Antarctic Peninsula. *Nature Climate Change*. DOI: 10.1038/s41558-019-0552-3
214. **Carvalho, F., Gorbunov, M., Kohut, J., Oliver, M. J., Fitsimmons, J., **Schofield, O.** 2019. Testing the Canyon Hypothesis: Evaluating light and nutrient controls of phytoplankton growth in penguin foraging hotspots along the West Antarctic Peninsula. *Limnology and Oceanography*. DOI: 10.1002/lno.11313

PUBLICATIONS IN PREPARATION (**Paper by students and post-doctoral researchers)

215. **Yi, X., Miles, T. N., **Schofield, O.** Decadal and interannual variability of phytoplankton blooms in the Mid-Atlantic Bight. *Progress in Oceanography* (In prep)
216. **Carvalho, F., Gorbunov, M., Haskins, C., Oliver, M. J., Kohut, J., Aragon, D., **Schofield, O.** Mapping variable chlorophyll fluorescence using autonomous underwater gliders. *Limnology and Oceanography Methods* (submitted).
217. **Schofield, O.**, Fraser, W., Steinberg, D., Cimino, M., Doney, S., Friedlaender, A., Martinson, D., Stammerjohn, S., Ducklow, H. Shifting sea ice and its affect on the productivity and structure of the marine food webs along the West Antarctic Peninsula. *Frontiers* (In prep)
218. Conroy, J.A., Thibodeau, P. S., **Schofield, O.**, Steinberg, D. K. Diel vertical distribution patterns of zooplankton along the West Antarctic Peninsula, in prep. (In prep)
219. Stukel, M. R., Ducklow, H. W., Schofield, O. Seasonal variability in carbon:²³⁴thorium ratios of suspended and sinking particles in coastal Antarctic waters: Potentially important roles for diatoms and euphausiid fecal pellets. *Marine Chemistry* (In prep)
220. **Sherman, J., Gorbunov, M., **Schofield, O.**, Falkowski, P. G. Photosynthetic energy conversion efficiency along the West Antarctic Peninsula (In prep)
221. Waite, N., Steinberg, D., **Schofield, O.** The relationship between the phytoplankton and zooplankton communities along the changing West Antarctic Peninsula. (In prep)
222. Chai, F., Johnson, K., Claustre, H., Xing, X., Wang, Y., Boss, E., Riser, S., Fennel, K., Schofield, O. New era of forging ocean ecosystem health with a global Biogeochemical-Argo array and other mobile platforms. *NREE* (In prep)

SYMPOSIUM EXTENDED ABSTRACTS (** Graduate student, *** Undergraduate student)

1. **Schofield, O.**, Bergmann, T., Grzyski, J., Glenn, S. 1999. Spectral fluorescence and inherent optical properties during upwelling events off the coast of New Jersey. *SPIE Ocean Optics XIV*
2. Kirkpatrick, G., **Schofield, O.**, Millie, D. F., Moline, M. A. 1999. Optical discrimination of phytoplankton species in naturally mixed populations. *SPIE Ocean Optics XIV*
3. Chang, G. C., Dickey, T. D., Bissett, W. P., **Schofield, O.** 2000. High temporal resolution optical and physical time series data: Coastal Mixing and Optics and LEO-15. *Ocean Optics XV*
4. **Schofield, O.**, Bergmann, T., Bissett, W. P., and Moline, M. A. 2000. Deconvolving phytoplankton community composition absorption from bulk measurements in turbid coastal waters. *Ocean Optics XV*
5. Moline, M. A., Bissett, W. P., Glenn, S., Haidvogel, D., **Schofield, O.** 2000. An operational multi-scale real-time long-term ecosystem observatory (LEO-15) for the coastal ocean. *Ocean Optics XV*
6. **Tozzi, S., **Schofield, O.**, Moline, M. A., Bergmann, T., Crowley, M., Arnone, R. 2000. Variability in measured and modeled remote sensing reflectance and comparison of SeaWiFS and *in situ* chl *a* distribution for coastal waters at LEO-15. *Ocean Optics XV*
7. **Bergmann, T., **Schofield, O.**, Cullen, J., Glenn, S. Moline, M. A. 2000. Concurrence of inherent optical properties and particulate organic carbon concentrations in the Middle Atlantic Bight: Applications of ocean color imagery in coastal waters *Ocean Optics XV*
8. **Schofield, O.**, S. Glenn, R. Chant, M. A. Moline, P. Bissett, D. Haidvogel, and J. Wilkins, 2002. The evolution of a nearshore coastal observatory and the establishment of the New Jersey Shelf Observing System. *Oceanology International* 2002.
9. Creed, E.L., C. Mudgal, S.M. Glenn, **O.M. Schofield**, C.P. Jones and D.C. Webb, 2002. Using a fleet of Slocum Battery Gliders in a regional scale coastal ocean observatory. *MTS/IEEE Conference Proceedings, Biloxi, MS. Vol. 3, pp. 1234-1238.*
10. Creed, E., Kerfoot, J., Mudgal, C., Glenn, S., **Schofield, O.**, Jones, C., Webb, D., Campbell, T., Twardowski, M., Kirkpatrick, G., J. Hillier, 2003. Automated control of a fleet of Slocum Gliders within an operational coastal observatory, *Oceans 2003 MTS/IEEE Conference Proceedings, San Diego, CA, V1, pp. 726-730.*
11. **Schofield, O.**, R. Chant, J. Kohut and S. Glenn. 2004 The growth of the New Jersey Shelf Observing System for monitoring plumes and blooms on the Mid-Atlantic continental shelf. *OCEANS 2004.*
Jones, C., E. Creed, S. Glenn, J. Kerfoot, J. Kohut, C. Mudgal, O. Schofield (2005) Slocum Gliders - A Component of Operational Oceanography *Autonomous Undersea Systems Institute Symposium Proceedings 2005.*
13. Creed, E.L., S. Glenn, **O.M. Schofield**, H. Barrier, R.F. Petrecca, J.A. Dobarro, S.D. McLean, A.H. Barnard, K.M. Brown, R.S. Adams, S. Feener (2005) LEO-15 Observatory - The Next Generation *Oceans 2005.*

14. Glenn, S.M., **O.M. Schofield**, R. Chant, J. Kohut, J. McDonnell, S.D. McLean (2006) The Leo-15 Coastal Cabled Observatory - Phase II for the Next Evolutionary Decade of Oceanography. *SSC06 - Scientific Submarine Cable 2006*.
15. **Schofield, O.**, Chant, R. M., Kohut, J., Glenn, S. M. (2007). Evolution of the Coastal Ocean Observation Lab. *Oceans 2007*.
16. **Schofield, O.**, Glenn, S. M., Chant, R., Kohut, J., McDonnell, J. (2008). Exploring the ocean in the COOL room. Special Education issue of the Rising Tides. NASA
17. Chave, A. D., Arrott, M., Farcas, C., Krueger, I., Messinger, M., Orcutt, J. A., Vernon, F. L., Peach, C., **Schofield, O.**, Kleinhert, J. E. (2009). Cyberinfrastructure for the US ocean observatories initiative: Enabling interactive observation in the ocean. *IEEE Oceans 2009*.
18. **Schofield, O.**, Kohut, J., Glenn, S. M. (2009). Using Webb gliders to maintain a sustained ocean presence. *SPIE Defense Symposium*
19. Montes-Hugo, M. A., Gould, R., Arnone, R., Ducklow, H., Carder, K., English, D., **Schofield, O.**, Kerfoot, J. (2009). Beyond the first optical depth: Fusing optics from ocean color imagery and gliders. *SPIE Remote Sensing Symposium*.
20. Thompson, D. A., Chien, S., Arrott, M., Balasuriya, A., Meisinger, M., Petillo, S. **Schofield, O.** (2009). Mission planning in a dynamic ocean SensorWeb. International Conference on Automated Planning and Scheduling.
21. Beegle-Krause, C. J., Arthur A. Christensen, J. D., Howlett, E., Glenn, S., Kohut, J., **Schofield, O.**, Terrill, E. J., Thomas, J., Tintore, J. 2009. Observations as assets in decision support. Ocean Observations 2009. (Venice Italy)
22. Thompson, D. R., Chao, Y., Li, P., Cahill, B., Levin, J., **Schofield, O.**, Arrott, M., Meisinger, M. (2009). Spatiotemporal Path Planning for Strong, Dynamic, Uncertain Currents. International Conference on Robotics and Automation (Anchorage, Alaska)
23. Arrott, M., Chave, A. D., Farcas, C., Farcas, E., Kleinert, J. E., Krueger, I., Meisinger, M., Orcutt, J. A., Peach, C., **Schofield, O.**, Singh, M., Vernon, F. L. 2009. Integrating marine observatories into a System-of-Systems: Messaging in the US Ocean Observatory Initiative. IEEE (Bilouxi, MS)
24. Thompson, D. R., Chien, S., Chao, Y., Li, P., Cahill, B., Levin, J., **Schofield, O.**, Balasuriya, A., Petillo, S., Arrott, M., Meisinger, M. 2010. Spatio-temporal path planning in strong, dynamic, uncertain currents. Conference on Robotics and Automation. (Anchorage, Ak)
25. ** Woithe, H. C., Chigirev, I., Aragon, D., Iqbal, M., Shames, Y., Glenn, S. M., **Schofield, O.**, Seskar, I., Kremer, U. (2010). Slocum glider energy measurement and simulation infrastructure. Our Ocean Conference (Sydney, Australia)
26. Testor, P., G. Meyers, C. Pattiaratchi, R. Bachmayer, D. Hayes, S. Pouliquen, L. Petit de la Villeon, T. Carval, A. Ganachaud, L. Gourdeau, L. Mortier, H. Claustre, V. Taillandier, P. Lherminier, T. Terre, M. Visbeck, J. Karstensen, G. Krahnemann, A. Alvarez, M. Rixen, P.-M. Poulain, S. Osterhus, J. Tintore, S. Ruiz, B. Garau, D. Smeed, G. Griffiths, L. Merckelbach, T. Sherwin, C. Schmid, J. A. Barth, **O. Schofield**, S. Glenn, J. Kohut, M. J. Perry, C. Eriksen, U. Send, R. Davis, D. Rudnick, J. Sherman, C. Jones, D. Webb, C. Lee, and B. Owens (2010), Gliders as a component of future observing systems, paper presented at Proceedings of OceanObs'09: Sustained Ocean Observations and Information for Society (Vol. 2), , ESA Publication WPP-306, Venice, Italy, 21-25 September 2009, doi:10.5270/OceanObs09.cwp.89.
27. Chave, A., Ampe, T., Arrott, M., Graybeal, J., Meisinger, M., James, M., Orcutt, J., Peach, C., **Schofield, O.**, Vernon F. (2011). Ocean Observatory Initiative cyberinfrastructure. Scientific Use of Submarine Cables. (Tokoyo, Japan)
28. Orcutt, J., Keahey, K., Arrott, M., Howe, B., **Schofield, O.** (2011). Community-based Earth observatories: Implementation and Integration. EarthCube White paper (Washington, DC)
29. Muller-Karger, F., Roffer, M., Walker, N., Oliver, M., **Schofield, O.**, Abbott, M., Craber, H., Lebem, R. (2012). Satellite remote sensing in support of IOOS: Remote sensing observations for the IOOS global and coastal and regional associations. IOOS Decadal Review (Baltimore, MD)
30. Ackelson, S. G., Boicourt, W., Brown, W., Dickey, T., Kirkpatrick, G., Moline, M. A., Plant, N., **Schofield, O.** (2012). Integrated ocean observing decadal challenges. IOOS Decadal Review (Baltimore, MD)
31. Rudnick, D. L., Baltas, R., Crowley, M., Lee, C. M., Lembke, C., **Schofield, O.** (2012). A national glider network for sustained observation of the coastal ocean. IOOS Decadal Review (Baltimore, MD)
32. Glenn, S. M., Kohut, J., **Schofield, O.** (2012). The future of observatory enabled education: Responding to the gathering storm. IOOS Decadal Review (Baltimore, MD)
33. ** Woithe, H. C., Eichorn, M., **Schofield, O.**, Kremer, U. (2013). Assessing automated and human path planning for the Slocum glider. International Symposium of Unmanned Untethered Submersible Technology

(Providence, RI).

34. **Schofield, O.**; Roarty, H.; Saba, G.; Xu Yi; Kohut, J.; Glenn, S.; Manderson, J.; Oliver, M., 2012. Phytoplankton dynamics and bottom water oxygen during a large bloom in the summer of 2011. *Oceans, 2012* , vol., no., pp.1,6, 14-19 Oct. 2012 doi: 10.1109/OCEANS.2012.6405078
35. Glenn, S.; **Schofield, O.**; Kohut, J.; Bowers, L.; Crowley, M.; Dunk, R.; Kerfoot, J.; Miles, T.; Palamara, L.; Roarty, H.; Seroka, G.; Yi Xu; Titlow, J.; Brown, W.; Boicourt, W.; Atkinson, L.; Seim, H. 2012. Impact of ocean observations on hurricane forecasts in the Mid-Atlantic: Forecasting lessons learned from Hurricane Irene. *Oceans, 2012* , vol., no., pp.1,5, 14-19 Oct. 2012 doi: 10.1109/OCEANS.2012.6404929
36. ***Dobson, Collin, J. Mart, N. Strandskov, J. Kohut, **O. Schofield**, S. Glenn, C. Jones, C. Barrera. 2013. The Challenger Glider Mission: A Global Ocean Predictive Skill Experiment. Proceedings Oceans IEEE MTS (San Diego, CA)
37. ***Sacatelli, R., Schofield, T., Todoroff, K., Carandang, A., Eng, A., Lowry, I., Mather, H., Ramos, A., Swart, S., Dottori, M., Strandskov, N., Kohut, J., **Schofield, O.**, Glenn, S., Ocean Predictive Skill Assessments in the South Atlantic: Crowd-Sourcing of Student-Based Discovery MTS IEEE Oceans 2014 Proceedings
38. Crowley, M., **Schofield, O.**, Glenn, S., Whoriskey, F., Gliderpalooza 2013 to Modelpalooza 2014: Joint U.S. & Canadian Ocean Glider Operations Supporting Multidisciplinary Scientific Research and Education MTS IEEE Oceans 2014 Proceedings
39. Haldemann, C., **Schofield, O.**, Valdez, T. I., Jones, J. A., Webb, D. C. 2015. Implementation of energy harvesting system for powering thermal gliders for long duration ocean research. MTS/IEEE 'Oceans 2015 proceedings.
40. Glenn, S. M., **Schofield, O.**, Saba, G., Miles, T., Roarty, H., Kohut, J. 2015. The Ocean is Our Classroom: A 4-Year Research Track for Undergraduate Exploration, Research and Discovery in Oceanography. MTS/IEEE 'Oceans 2015 proceedings
41. **Schofield, O.**, Kohut, J., Kremer, U., Miles, T., Saba, G., Glenn, S. M., Jones, C., Webb, D. 2015. Gliders as a maturing technology: Using gliderpalooza as means to develop an integrated glider community MTS/IEEE 'Oceans 2015 proceedings
42. **Brown, W., **Schofield, O.**, Kohut, J., Wilkin, J., Boicourt, W. 2015. The Mid-Atlantic autumn cold pool during gliderpalooza 2013. MTS/IEEE 'Oceans 2015 proceedings
43. **Carvalho, F., Kohut, J., Gorbunov, M., **Schofield, O.** 2016. Mapping Antarctic phytoplankton physiology using autonomous gliders. MTS/IEEE Oceans 2016 proceedings
44. Glenn, S., Miles, T., Seroka, G., Forney, R., Roarty, H., **Schofield, O.**, Kohut, J., Xu, Y. & Yu, F. 2016. Stratified coastal ocean processes in hurricanes and typhoons enhance ahead-of-eye cooling and reduce storm intensity *OCEANS 2016 - Shanghai*. Institute of Electrical and Electronics Engineers Inc., 7485440
- 45.***Morrison, A., Ramsay, L., Arroyo, M., Ashbrook, K., Czerewko, O., Lee, S., Lintz, C., Payne, E., Kohut, J., Glenn, S., **Schofield, O.** & Miles, T. 2016. Model comparison for transatlantic ocean glider flight: Student analysis of modern circumnavigation. *OCEANS 2015 - MTS/IEEE Washington*. Institute of Electrical and Electronics Engineers Inc., 7404505
46. ** Haskins, C., **Schofield, O.** 2016. Glider measurements of phytoplankton physiology in penguin foraging zones along the Western Antarctic Peninsula. *OCEANS 2015 - MTS/IEEE Washington*. Institute of Electrical and Electronics Engineers Inc., 7404376
47. *** Ramsay, L., Morrison, A., Kohut, J., **Schofield, O.**, Miles, T., Glenn, S. & Lintz, C. 2016. Glider advancements in efficiency: Enhancing factors necessary for ocean-wide flights *OCEANS 2015 - MTS/IEEE Washington*. Institute of Electrical and Electronics Engineers Inc., 7404553
48. ** Couto, N., **Schofield, O.**, Kohut, J. 2016. Comparison between glider-derived geostrophic velocities and shipboard ADCP measurements. *OCEANS 2016 MTS/IEEE Monterey, OCE 2016*. Institute of Electrical and Electronics Engineers Inc., 7761286.
- 49.**Couto, N., Dinniman, M., Graham, J., Kohut, J., **Schofield**. 2017. Pathways and retention times in a biologically productive canyon systems on the rapidly changing the West Antarctic Peninsula. MTS/IEEE Oceans 2017 proceedings.
50. Glenn, S., **Schofield, O.**, Kohut, J., McDonnell, J., Miles, T., Saba, G., Roarty, H. & Crowley, M. 2017. Workforce development for the blue economy: Rutgers masters in integrated ocean observing *OCEANS 2017 Anchorage*. Institute of Electrical and Electronics Engineers Inc., Vol. 2017-January, p. 1-4.
51. McDonnell, J., Kohut, J., **Schofield, O.**, Hunter-Thomson, K., Ferraro, C., Hotaling, L. & Van Dyk, P. 2017. Polar ICE: Bringing the poles to classrooms. *OCEANS 2017 Anchorage*. Institute of Electrical and Electronics Engineers Inc., Vol. 2017-January, p. 1-7.

BOOK REVIEWS

- Schofield, O.**, Moline, M. A., Millie, D. F. 1997. The Physics and Physiology of Photosynthesis for Aquatic Ecosystems. *Journal of Phycology* 33(6): 1085-1086.
- Millie, D. F., Klaer, D., **Schofield, O.** 1998. Review of Phytoplankton Dynamics in the Great Lakes. *Journal of Paleolimnology*. 19: 83-84.

EDITORIALS

- Schofield, O.**, Glenn, S. M. 2007. Technology and a new day for oceanography. *Sea Technology*. August 2007, Volume 48, No. 8
- Glenn, S. M., **Schofield, O.**, Kohut, J. 2010. Celebrating Hank Stommel's Slocum Mission – Another dawn in the new age of oceanography. *Operational Oceanography*. February 2010, Volume 3, No. 1.
- Glenn, S. M., **Schofield, O.**, Kohut, J. 2013. The impact of ocean observations on hurricane intensity forecasts: Lessons learned from hurricanes Irene and Sandy. *Operational Oceanography* Volume 6 No. 1

INTERNATIONAL AND NATIONAL REPORTS

1. Prézélin, B. B., Baker, K. S., Bidigare, R. R., Boucher, N. B., Lewis, M. R., Nelson, N. B., **Schofield, O.**, Smith, R. C., Stegmann, P. M., Waters, K. 1994. A handbook of bio-optical nomenclature. U. S. JGOFS planning report. 18:159-165.
2. Glenn, S. M., Arango H., Chant R., Creed E., Henderson L., Munchow A., **Schofield O.**, and Wiggins J. 1996 A project-driven data management system for the Institute of Marine and Coastal Sciences Rutgers University. *Contrib.* 95-31
3. Workshop participants. (1998). Executive summary to the application of remote sensing to red-tide forecasts in the Gulf of Mexico. NOAA report
4. Jahnke, R., Atkinson, L., Barth, J., Chavez, F., Daly, K., Edson, J., Franks, P., O'Donnell, J., **Schofield, O.** (2002). Coastal Ocean Processes and Observatories: Advancing Coastal Research. Coastal Ocean Report Number 8.
5. Detrick, R., Baggeroer, A., Delong, E., Duennebier, F., Gargett, A., Heath, G. R., Hyon, J., Johnson, T., Michel, D., Oltman-Shay, J., Pouliquen, S., **Schofield, O.**, Weller R. (2003) Enabling Ocean Research in the 21st Century: Implementation of a Network of Ocean Observatories. Ocean Studies Board, Division of Life Sciences, National Research Council.
6. **Schofield, O.**, von Alt, C. (2003). Making progress on harmful algal blooms: Lessons from the Gulf of Mexico. In ALPs: Autonomous and Lagrangian Platforms and Sensors, Rudnick, D. L and Perry, M. J. (eds), Workshop Report. 33-36.
7. Jahnke, R., Bane, J., Barnard, A., Barth, J., Chavez, F., Dam, H., Dever, E., DiGiacomo, P., Edson, J., Geyer, R., Glenn, S. M., Johnson, K., Moline, M., O'Donnell, J., Oltman-Shay, J., Persson, O., **Schofield, O.**, Sosik, H., Terrill E. (2003). Coastal Observatory Research Arrays: A Framework for Implementation Planning. Coastal Ocean Report Number 9.
8. **Schofield, O.**, Tivey, M. (2005). Ocean Research Interactive Observatory Networks. National Science Foundation. 295 pp.
9. Spindel, R., Barth, J., Brink K., Daly, K., Delaney, J., Detrick, R., Frye, D., Jacobs, G., Jahnke, R., Juniper, K., Luther, G., Massion, G., Meeson, B., Mikhalevsky, P., Orcutt, J., **Schofield, O.**, Weller, R. (2005). Ocean Observatories Initiative Science Plan: Revealing the Secrets of Our Ocean Planet. ORION Executive Steering Committee. 2005. Ocean Observatories Initiative Science Plan. Washington, DC, 102 pp.
10. Hales, B., W. –J. Cai, B. G. Mitchell, C. L. Sabine, and **O. Schofield.** (eds.) 2008. *North American Continental Margins: A synthesis and Planning Workshop*. Report of the North American Continental Margins Working Group for the U.S. Carbon Cycle Scientific Steering Group and Interagency Working Group, U.S. Carbon Cycle Science Program, Washington, DC, 110 pp.
11. Barron, E. J., Fine, R. A., Bellingham, J. G., Boss, E. S., Boyle, E. A., Edwards, M., Johnson, K. S., Kelley, D. S., Kite-Powell, H., Ramberg, S., Rudnick, D. L., **Schofield, O.**, Taburri, M., Wiebe, P. H., Wright, D. J. 2011. Critical infrastructure for ocean research and societal needs in 2030. Ocean Studies Board, National Research Council.
12. Bell, R. E., Weller, R. A., Bromwich, D. H., Carlstrom, J. E., Cheng, C. C., Clauer, R. C., Dorman, C. E., Dunbar, R. R., Marchant, D. R., Parsons, M. A., Pennycook, J., Ravishankara, A. R., Scambos, T. A., Schlesinger, W. H., **Schofield, O.**, Severinghaus, J. P., Takacs-Vesbach, C. 2015. A strategic vision for NSF investments in Antarctic and Southern Ocean research. Ocean Studies Board, National Research Council.

13. Newman, L., Wahlin, A., **Schofield, O.**, Swart, S., Constable, A., Bricher, P. 2016. Southern Ocean Observing System 3-Year Progress Report. Zenodo. 10.5281/zenodo.21419

CHIEF SCIENTIST (For Research expeditions longer than 3 days)

- 1998 R.V. Laurentian, Lake Michigan (1.5 Weeks) Hydrological optics of a coastal turbidity plume
 1998 R. V. NorthStar, Mid-Atlantic Bight (3 Weeks) Impact of upwelling coastal optical properties
 1999 R.V. Laurentian, Lake Michigan (2 Weeks) Hydrological optics of a coastal turbidity plume
 1999 R.V. Walford, Mid-Atlantic Bight (4 Weeks) Coastal predictive skill experiments on coastal upwelling
 2000 R.V. Laurentian Lake Michigan (2 Weeks) Hydrological optics of a coastal turbidity plume
 2000 R.V. Endeavor, Mid-Atlantic Bight (20 days) Utilization of KSS laser lidar for assessing thermocline depth
 2000 R.V. Walford, Mid-Atlantic Bight (4 Weeks) Coastal predictive skill experiments on coastal upwelling
 2001 R.V. Endeavor (20 days) Hyperspectral Remote Sensing
 2001 R.V. Walford (4 Weeks) Coastal predictive skill experiments focused on coastal upwelling
 2005 R.V. Oceanus (2 Weeks) Langragian transport and transformation experiment
 2006 R.V. Oceanus (1 Week) Langragian transport and transformation experiment
 2006 R. V. Sharp (1 week) Novel acoustic methods within a coastal observatory
 2007 R. V. Sharp Mid-Atlantic Shelf/Slope (3 weeks) Novel acoustic methods within a coastal observatory
 2014 R. V. Gould Antarctica, (8 weeks) Ecosystem dynamics along the West Antarctic Peninsula
 2017 R. V. Gould Antarctica, (8 weeks) Ecosystem dynamics along the West Antarctic Peninsula
 2017 R. V. Gould Antarctica (2.5 weeks) Ecosystem dynamics along the West Antarctic Peninsula
 2020 R. V. Gould Antarctica, (8 weeks) Ecosystem dynamics along the West Antarctic Peninsula

FIELD EXPEDITIONS (Only expeditions longer than 3 days, over 200 hundred 1-2 day expeditions)

- 1986 Sargasso Sea. (6 weeks) Photophysiology of photosynthetic picoplankton
 1987 Santa Barbara Frontal Boundary (1 week) Biology of sewage seep methane reducing mussels
 1987 Bransfield Strait Antarctica (8 weeks) Overwintering mechanisms in the Antarctic krill
 1988 Bransfield Strait & Palmer Station Antarctica (12 weeks) Grazing ecology of larval Antarctic krill
 1988 Santa Barbara Frontal Boundary (4 weeks) Variability in photosynthetic quantum yields
 1990 Bellinghausen Sea Antarctica (12 weeks) Impact of Antarctic ozone hole of spring phytoplankton blooms
 1993 Bellinghausen Sea & Palmer Station (20 weeks) Impact of Antarctic ozone hole of phytoplankton physiology
 1996 Gulf of Mexico (1 week) Impact of high light stress on algal biology
 1998 Lake Michigan (1.5 weeks) Hydrological optics of a coastal turbidity plume
 1998 Coastal Predictive Skill Experiments off New Jersey (3 weeks) Impact of upwelling coastal optical properties
 1999 Lake Michigan (2 weeks) Hydrological optics of a coastal turbidity plume
 1999 Coastal Predictive Skill Experiments off New Jersey (4 weeks) Impact of upwelling coastal optical properties
 2000 Lake Michigan, R.V. Laurentian (2 Weeks) Hydrological optics of a coastal turbidity plume
 2000 Mid-Atlantic Bight, R.V. Endeavor (20 days) Utilization of KSS laser lidar for assessing thermocline depth
 2000 Mid-Atlantic Bight, R.V. Walford (4 Weeks) Coastal predictive skill experiments focused on coastal upwelling
 2000 Gulf of Mexico, R.V. SunCoaster (3 weeks) Physiology of toxic Gymnodinium breve red-tides
 2001 Mid-Atlantic Bight, R.V. Endeavor (20 days) Hyperspectral Remote Sensing
 2001 Mid-Atlantic Bight, R.V. Walford (4 weeks) Coastal predictive skill experiments focused on coastal upwelling
 2001 Gulf of Mexico, R.V SunCoaster (1 week) Physiology of toxic Gymnodinium breve red-tides
 2002 Santa Barbara Channel, R.V. Sproul (1 week) Chloroplasts sequestration in deep-sea foramanifera
 2003 Gulf of Mexico, R.V Suncoaster (1 week) Autonomous vehicles for detecting the presence of red-tide
 2004 Mid-Atlantic Bight, R. V. Connecticut (1 week) Hudson river outflow into coastal shelf
 2005 Mid-Atlantic Bight, R. V. Oceanus (2 Weeks) Langragian transport and transformation experiment
 2006 Mid-Atlantic Bight, R.V. Oceanus (1 Week) Langragian transport and transformation experiment
 2010 Antarctica, R. V. Gould (8 weeks) Ecosystem dynamics along the West Antarctic Peninsula
 2012 Antarctica, R. V. Gould (8 weeks) Ecosystem dynamics along the West Antarctic Peninsula
 2012 Antarctica, R. V. Gould (3 weeks) Ecosystem dynamics along the West Antarctic Peninsula
 2013 Antarctica, R. V. Gould (8 weeks) Ecosystem dynamics along the West Antarctic Peninsula
 2015 Antarctica, R. V. Gould (8 weeks) Ecosystem dynamics along the West Antarctic Peninsula
 2018 Antarctica, R. V. Gould (8 weeks) Ecosystem dynamics along the West Antarctic Peninsula

CONSULTING EXPERIENCE

- March 25-31 1995 "Application of fluorescence kinetics for defining physiology of field populations of cyanobacteria" for Dr. Hans Pearl at Institute of Marine Sciences, University of North Carolina, Morehead City
- January 17-21 1996. "Off-flavor metabolite synthesis in coastal shrimp aquaculture farms" for Minister Jose Monogollon, C. I. Agrosoledad, Cartengha, Colombia
- May 24-31 1996 "Application of novel optical instrumentation for commercial aquaculture ponds" for Dr. Chris Diongi, Agricultural Research Service-U.S. Department of Agriculture, Stoneville, Mississippi
- April 7-12 1997 "Optical characterization of the Suwannee river, Florida" for Dr. Tom Frazer, University of Florida, Gainesville Florida
- May 22-24 1998 "Light-limitation of autotrophic biomass in Florida wetland communities" for Southwest Florida Water Quality Management District
- June 10-17 2000 "Measuring the inherent optical properties for the coccolithophorid *Emiliana huxleyi* during the European Coccocosm mesocosm experiments" for Dr. David Halpern, Jet Propulsion Labs, NASA
- August 2007 "Preparation of the Preliminary Science User Prospectus" for the Joint Ocean Institutions (JOI) to compete for a \$350 million National Science Foundation MREFC award

GRANT AWARDS

Research Grants (>\$70,000,000 in awarded grants)

- U.S. Department of Agriculture Cooperative Agreement 1996 to 2000 "Off-flavor metabolite synthesis in noxious algae and the impact of a dynamic light field" PI Oscar Schofield (\$ 48,000)
- NRI-U.S. Department of Agriculture Cooperative Agreement. Competitive Grants Program 1996 to 1999 "Nitrogen-driven eutrophication of the Neuse River, NC: Phytoplankton ecophysiological responses to changing N input dynamics" PIs Hans Paerl, Jay Pinckney, Oscar Schofield, David Millie, Gary Kirkpatrick (\$ 237,780)
- Environmental protection Agency Competitive Grants Program 1997 to 1999 "Impact of atmospheric nitrogen deposition on eutrophication in the Neuse River Estuary" PIs Hans Paerl, Jay Pinckney, subcontracts to Drs. Oscar Schofield, David Millie, Gary Kirkpatrick (\$298,700)
- Department of Defense-Office of Naval Research, Models and Prediction Section 1997 to 2002 "Coastal Ocean Modeling and Observation Program: Real-Time Adaptive Sampling" PIs Scott Glenn, Dale Haidvogel, Oscar Schofield (\$1,050,000)
- NOAA-National Undersea Research Program 1997 to 1998 "Phytoplankton Biomass at LEO-15 and the Calibration of In situ Fluorometers" PI Oscar Schofield 1997-1998 (\$9,950)
- National Science Foundation 1997 to 2002 "Impact of episodic transport and resuspension on coastal phytoplankton processes: A case study of the Lake Michigan Recurrent Plume" PIs Gary Fahnenstiel, Oscar Schofield, Steve Lohrenz, David Millie, Linda Goad (\$1,302,632)
- NOAA-Ecology of Harmful Algal Blooms Program 2000 to 2001 "Predicting *Gymnodinium breve* bloom dynamics in the Gulf of Mexico" (Schofield budget for 2 cruises in years 2000 and 20001 is \$115,000) Project Coordinator Karen Steindinger and 21 PIs
- NASA 1998-1999 "Real-Time Site License for SeaWiFs Satellite Data" PIs Scott Glenn and Oscar Schofield
- Department of Commerce Phase I SBIR. 1998-1999 "Construction of a submersible fiber-optic spectroradiometer and spectrofluorometer" Subcontract from Poulous Technology to Oscar Schofield (subcontract of \$15,000 from Poulous Technologies)
- National Ocean Partnership Program (NOPP) 1998 to 1999 "Demonstration of a relocatable regional ocean atmosphere modeling system with coastal autonomous sampling networks" PIs Scott Glenn, Dale Haidvogel, Roni Avissar, Frederick Grassle, Oscar Schofield, Christopher von Alt, Edward Levine, Douglass Webb, Donald Barrick, Belinda Lipa, Joel Young, Richard Signell (\$990,000)
- CMER-National Marine Fisheries 1999 "Selective Feeding of the Early Winter Flounder Pleuronectes americanus." PIs Oscar Schofield and Patricia Shaheen (\$21,491)
- Department of Defense-Office of Naval Research, Ocean Optics Section 1999-2001 "Hyperspectral remote sensing of the coastal ocean: Adaptive sampling and forecasting of nearshore in situ optical properties" PIs Oscar Schofield, Scott Glenn, Dale Haidvogel, Frederick Grassle, Paul Bissett, Mark Moline, Chris von Alt (\$1,498,304)
- NOAA Coastal Ocean Program 2000-2002 "Pfiesteria and Pfiesteria-like species monitoring and assessments in the lower St. Johns River, Florida" P-Is Karen Steindinger, John Burns, Jan Landsberg, David Millie, Patricia Tester, Carmelo Tomas (\$102,000 to Schofield via subcontract)

- Department of Defense-Office of Naval Research, Ocean Optics Section 2000 “Expansion of Hyperspectral remote sensing of the coastal ocean: Adaptive sampling and forecasting of nearshore in situ optical properties” PIs Oscar Schofield, Scott Glenn (\$75,900)
- Department of Commerce Phase II SBIR. 2000-2001 “Optimization a submersible fiber-optic spectroradiometer and spectrofluorometer” Subcontract from Poulous Technology to Oscar Schofield (subcontract of \$32,000 from Poulous Technlogies)
- National Ocean Partnership Program (NOPP) 2000 to 2002 “Renewal of Multi-scale model-driven sampling with autonomous systems at a national littoral laboratory” PIs Scott Glenn, Oscar Schofield, Frederick Grassle, Dale Haidvogel, Edward Levine, Donald Barrick, Belinda Lipa, Mark Moline (\$600,000)
- National Science Foundation, Bio-Complexity Program 2000-2005 “Evolution and Radiation of Eucaryotic Phytoplankton Taxa (EREuPT)” PIs Paul Falkowski, Andrew Knoll, Kenneth Miller, Oscar Schofield, Constantino Vetriani (\$4,000,000)
- Department of Defense Office of Naval Research, Models and Prediction Section 2000 to 2003 “Coastal Ocean Modeling and Observation Program: Development and Demonstration of Rapid Environmental Assessment Techniques at a National Littoral Laboratory” PIs Scott Glenn, Dale Haidvogel, Oscar Schofield, John Wilkins (\$1,530,000)
- Department of Defense-Office of Naval Research, Ocean Optics Section 2001 “Expansion of Hyperspectral remote sensing of the coastal ocean: Adaptive sampling and forecasting of nearshore in situ optical properties” PIs Oscar Schofield, Scott Glenn (\$89,800)
- Department of Defense-Office of Naval Research, DURIP 2001 “Integration of an Autonomous Glider Fleet into a Shelf-wide Coastal Ocean Observatory” PIs Scott Glenn and Oscar Schofield (\$185,000)
- Department of Defense-Office of Naval Research, Ocean Optics Section 2002 to 2003 “Renewal of Hyperspectral remote sensing of the coastal ocean: Adaptive sampling and forecasting of nearshore in situ optical properties” PIs Oscar Schofield, Scott Glenn, Dale Haidvogel, Frederick Grassle, Paul Bissett, Mark Moline (\$610,000)
- Strategic Research Opportunity Announcement, Rutgers University. 2001-2002. “Development of a Robotic Fleet of Autonomous Underwater Gliders for a New Jersey Continental Shelf Regional Ocean Observatory” Scott Glenn, Oscar Schofield, Frederick Grassle (\$135,000)
- Department of Defense-Office of Naval Research, Phase I STTR Program 2001-2002. “Autonomous Operation of a Coordinated Underwater Glider Fleet” Clayton Jones, Douglass Webb, Scott Glenn, Oscar Schofield (\$96,647)
- National Science Foundation Engineering Development Award 2002-2003. “Development of Nested, Autonomous Phytoplankton Monitoring Technology” Gary Kirkpatrick, Oscar Schofield, Scott Glenn, Mark Moline, Clayton Jones (\$637,000)
- Department of Defense-Office of Naval Research, Phase II STTR Program 2002-2003. “Autonomous Operation of a Coordinated Underwater Glider Fleet” Clayton Jones, Douglass Webb, Scott Glenn, Oscar Schofield (\$600,000)
- Department of Defense-Office of Naval Research, DURIP 2002 “A Nested BiStatic Radar Array” Josh Kohut, Oscar Schofield, Scott Glenn (\$100,000)
- NASA Exobiology Program 2002-2004 “The chloroplast conundrum: the biology and ecology of a chloroplast-sequestering foraminifer inhabiting an aphotic, sulfide-enriched deep-sea environment” Joan Bernhard, Oscar Schofield, Joe Grymski (\$317,970)
- NOAA EcoHab 2003-2004 “The Field testing of an Autonomous Phytoplankton Monitoring Technology” Oscar Schofield, Scott Glenn (\$70,000)
- National Science Foundation Coastal Ocean Processes Program 2003-2008 “COLLABORATIVE RESEARCH: Lagrangian studies of the transport, transformation, and biological impact of nutrients and contaminant metals in an buoyant plume. Robert Chant, Scott Glenn, Oscar Schofield, John Reinfelder, John Wilkins, Mark Moline, Robert Chen, Thomas Frazer, Mung Zuo, Paul Bissett (\$4,200,000)
- Department of Defense-Office of Naval Research 2003-2004. “Developing the Ability to Map In Situ Optical Properties in Coastal Waters Using Slocum Coastal Gliders” Oscar Schofield, Scott Glenn, Clayton Jones (\$208,200)
- Department of Defense- Office of Naval Research EcoHab 2003-2005 “Optical Detection and Assessment of the Harmful Alga, *Karenia brevis*” Steve Lohrenz, Oscar Schofield, Gary Kirkpatrick (\$495,098)
- United States-Israel Binational Science Foundation 2003-2007 “Time Resolved Photosynthesis Energy Budget Combining Photoacoustics, Fluorescence and Oxygen” Zvy Dubinsky, Oscar Schofield, Maxim Grobunov (\$175,000)
- Department of Defense-Office of Naval Research 2003 “Mapping *In Situ* Optical Properties using Slocum Coastal Gliders during the MIREM Mine Countermeasures Exercise” Oscar Schofield and Scott Glenn (\$23,000)

- Department of Defense-Office of Naval Research 2003-2004. “Renewal of Developing the Ability to Map *In Situ* Optical Properties in Coastal Waters Using Slocum Coastal Gliders” Oscar Schofield, Scott Glenn (\$95,000)
- National Ocean Partnership Program (NOPP) 2004-2005 “An Integrated Wireless Coastal Communications Network” PIs David Porter, Scott Glenn, Oscar Schofield (\$46,266)
- Department of Defense- Office of Naval Research 2004-2006 “Mapping the spatial dynamics in optically significant nepheloid layers using autonomous underwater gliders” PIs Oscar Schofield, Scott Glenn, Michael Twardowski (\$225,000)
- National Ocean Partnership Program (NOPP) 2005-2008 “Development of fluorescent induction and relaxation systems for the measurement of biomass and primary productivity on Webb Slocum gliders” PIs Oscar Schofield, Scott Glenn, Paul Falkowski, Scott MacLean, Maxim Grobunov, Clayton Jones (\$600,000)
- Department of Defense- Office of Naval Research 2005 “Expansion of Optical Detection and Assessment of the Harmful Alga, *Karenia brevis*” PI Oscar Schofield (\$53,000)
- National Ocean Partnership Program (NOPP) 2005-2008. “Novel Acoustic Techniques to Measure Schooling in Pelagic Fish in the Context of an Operational Coastal Ocean Observatory” PIs K. Benoit-Bird, C. Jones, O. Schofield, S. Glenn, J. Quinlan (\$1,367,980)
- Department of Defense- Office of Naval Research 2005-2006 “Adaptive Sampling in a Research Observatory During the Shallow Water 2006 Acoustics Experiment” PIs S. M. Glenn, O., Schofield, J. Kohut (\$400,000)
- NOAA CICEET program. 2005-2006. Improving the spatial mapping within the National Estuarine Research System using bio-optical technologies. A pilot effort for the Jacques Cousteau NERR. O. Schofield (\$62,937).
- Department of Defense- Office of Naval Research 2006 ‘Establishing an ONR autonomous underwater glider technology center’ PIs S. M. Glenn, O. Schofield, J. Kohut, C. Jones (\$666,666)
- Department of Defense- Office of Naval Research 2006 “Mapping *in situ* apparent optical properties using coastal Slocum Webb gliders” PIs Schofield, O., and S. M. Glenn (\$175,255)
- Department of Energy 2006-2009 “Active Microbes Responding to Inputs from the Orinoco River Plume” PIs Kerkhof, L., Corredor, J., Schofield, O., Glenn, S. (\$1,287,000)
- Department of Defense, Major University Research Initiative program (MURI) 2006-2011. “Rapid environmental assessment using an integrated coastal ocean observation and modeling system” PIs Schofield, O, Glenn, S. M., Fennel, K., Wilkin, J., McGillicuddy, D., He, R., Gawarkiewicz, G., Moline, M. A. (\$4,916,133)
- National Aeronautics and Space Administration, Earth-Sun System Division 2006-2009 “Bioinformatic mapping of ocean biogeochemical provinces” PIs Schofield, O., Oliver, M., Falkowski, P. G. (\$491,000)
- National Science Foundation Office of Polar Program 2006-2007. “Collaborative Research: Slocum Glider in Western Antarctic Peninsula Continental Shelf Waters Pilot Study” PIs Martinson, D. G., Schofield, O., Jones, C. (\$80,000)
- Department of Defense- Office of Naval Research 2007 “Characterizing storm impacts on nearshore nepheloid layers using optical Slocum gliders” Schofield, O., Glenn, S. (\$25,000)
- Joint Oceanographic Institutions and National Science Foundation 2007-2013 “Network for ocean research, interaction, and application – NORIA” Schofield, O., and Glenn, S. M. (\$410,998)
- NOAA Coastal Services Center “Phased Deployment and Operation of the Mid-Atlantic Regional Coastal Ocean Observing System (MARCOOS) – Rutgers scientists (Glenn S. M. lead PI of program, with Janice McDonnell, Josh Kohut, Oscar Schofield, John Wilkin) and 19 other academic and commercial institutions. (\$9,000,000)
- Department of Defense- Office of Naval Research 2007-2010 “Using Gliders to Resolve Dynamics of Dust and Phytoplankton in the Mediterranean” Oscar Schofield and Scott Glenn (Rutgers) and Chuck Tress (NATO SCALANT) (\$250,046)
- National Science Foundation Computer Network Systems Division 2007-2008. “CSR-CSI: DDDAS-The Pervasive Dynamical Ecosystem for Oceanographic Research” PIs Metaxas, D., Ulrich, K., Glenn, S., Schofield, O. (\$399,865)
- Department of Defense- Office of Naval Research 2008 “Mapping *In situ* optical properties in coastal waters using Slocum gliders during the Naval RIMPAC 2008” Oscar Schofield and Scott Glenn (Rutgers) (\$58,693)
- Department of Defense-Office of Naval Research, DURIP 2008 “Characterizing continental shelves with satellites and gliders” Oscar Schofield, Scott Glenn, Josh Kohut, Mathew Oliver (\$351,000)
- National Science Foundation Office of Polar Program 2008-2013. “West Antarctic Palmer LTER” PIs Ducklow, H., Martinson, D. G., Schofield, O., Steinberg, D., Stammerjohnn, S., Fraser, W., Baker, K. S. (\$5,100,100)
- National Science Foundation, Computer Sciences Directorate, Major Research Infrastructure Development Grant 2008-2011 “Development of Next Generation Collaborative Underwater Robotic Instrumentation” Metaxas, D., U. Kremer, Manish P., Schofield, O., Glenn, S. (\$2,000,000)

- Norwegian Partnerships in Higher Education program Norway -North America 2008-2011 “Technology for marine monitoring and ocean observation” Johnsen, G., Moline, M. A., Berge J. Glenn, S. M., Schofield, O. (\$1,700,000 Norwegian Krona)
- Gordon and Betty Moore Foundation 2008-2011 “From Microbes to Mammals: A Robotic Network to Study Climate Induced Changes in an Antarctic Marine Ecosystem” Schofield, O., Glenn, S. M., Martinson, D. G., Steinberg, D. (\$1,347,416)
- National Aeronautics and Space Administration, Earth-Sun System Division 2009-2012. “Satellite Driven Studies of Climate Mediated Changes in Antarctic Food-Webs”. Oliver, M., Kohut, J., Irwin, A., Fraser, W., Schofield, O. (\$747,880)
- National Science Foundation, Office of Polar Programs 2009-2011. “Collaborative research aboard icebreaker ODEN: ASPIRE Amundsen sea polynya international research expedition.” Yager, P., Sherrell, R., Ducklow, H., Stammerjohn, S., Schofield, O. (\$1,109,008)
- Department of Defense, subcontract through Teledyne-Brown 2009-2010 “Littoral Battlespace Sensing” Glenn, S.M., O. Schofield, J. Kohut (\$272,432)
- NOAA Integrated Ocean Observing System (IOOS) 2010-2011, Renewal, Phased Deployment and Operation of the Mid-Atlantic Regional Coastal Ocean Observing System (MARCOOS), Glenn, S.M., plus 34 Co-PI’s (\$1,700,000)
- National Science Foundation, Office of Physical Oceanography 2010-2013. “Collaborative Research: The propagating response of the inner shelf to wind relaxations in a coastal upwelling system” Washburn, L., Ohlman, C., Moline, M. A., Schofield, O. (\$1,109,008)
- National Science Foundation, Ocean Acidification Program 2010-2014. “The molecular basis of ocean acidification effects on calcification in zooxanthellae corals” Falkowski, P. G., Rosenthal, Y., Schofield, O., Sherrell, R. (\$1,882,193)
- Office of Naval Research 2011-2015. “Development and ocean endurance test of Slocum thermal-recharging gliders (Slocum-TREC)” Chao, Y., Jones, J. A., Valdez, T. I., Webb, D., Paterson, T., Schofield, O. (\$2,800,000)
- NOAA Integrated Ocean Observing System (IOOS) 2011-2016, Phased Deployment and Operation of the Mid-Atlantic Regional Association Coastal Ocean Observing System (MARACOOS), Glenn, S.M., plus 34 Co-PI’s (\$12,000,000)
- National Science Foundation OOI Program. 2012-2014. “OOI project scientists and glider software development” Schofield, O. (\$253,059)
- NOAA CINAR 2012. “Undergraduate development of ecological proxies using ocean observatory data in support of marine fisheries research” Schofield, O. (\$16,713)
- Rutgers SEBS Agricultural Experiment Station 2012 “Functional genomic analysis of the Antarctic cryptophyte, *Geminigera cryophila*, under variable salinity and nutrient regimes.” Saba, G., Schofield, O. (\$8,000)
- National Science Foundation, CARPA program 2012-2013 “Antarctic Quest” Schofield, O., Siedel, D. (\$210,906)
- Korean KORPI program 2013-2014 “Deployment of Autonomous Underwater Slocum Gliders to Measure Biophysical Regulation of Phytoplankton in the Amundsen Sea” Schofield O. (\$260,000)
- National Science Foundation 2013-2015. “EarthCube building blocks: A broker framework for next generation geoscience (BCube).” (\$74,999)
- Vetelsen Foundation 2013-2014 “Development of the Challenger Mission” Glenn, S., Schofield O. (\$50,000)
- NASA 2014-2017 “Climate-driven impacts on the marine ecology, biogeochemistry, and carbon cycle of the West Antarctic Peninsula” Doney S., Glover D., Kavanaugh M., Ducklow, H., Schofield, O. (\$1,093,645)
- National Science Foundation 2014-2020 “LTER Palmer, Antarctica (PAL): Land-Shelf-Ocean Connectivity, Ecosystem Resilience and Transformation in a Sea-Ice Influenced Pelagic Ecosystem” Ducklow, Conners, Doney, Fraser, Friedlander, Martinson, Schofield, Simmons, Stammerjohn, Steinberg (\$6,761,997)
- Gulf of Mexico Research Initiative 2014-2017 “CONsortium for oil spill exposure pathways in Coastal River-Dominated Ecosystems (CONCORDE)” Schofield is a co-PI in a 12 PI research consortia (\$586,197 to Rutgers contribution to the effort)¹⁰
- Vetelsen Foundation 2014-2015 “Development of the Challenger Mission” Glenn, S., Schofield O. (\$50,000)
- Consortium of Ocean Leadership 2015-2017 “Rutgers cyberinfrastructure Operations and Maintenance for the Ocean Observing Initiative” Parashar, Schofield, Glenn (\$11,811,756)
- Vetelsen Foundation 2015-2016 “Development of the Challenger Mission” Glenn, S., Schofield O. (\$100,000)
- NOAA Integrated Ocean Observing System (IOOS) 2016-2021, Phased Deployment and Operation of the Mid-Atlantic Regional Association Coastal Ocean Observing System (MARACOOS), Glenn, S.M., plus 34 Co-PI’s (\$12,000,000)
- Vetelsen Foundation 2016-2017 “Development of the Challenger Mission” Glenn, S., Schofield O. (\$125,000)

Jet Propulsion Lab 2017 “Using a glider to calibrate NASA SWOT coastal altimetry satellites” (\$49,581)
 Teledyne Webb Inc. 2017-2020. “Teledyne-Webb Graduate student fellowship” (\$136,000)
 Vetelsen Foundation 2018 “Development of the Challenger Mission” Glenn, S., Schofield O. (\$100,000)
 Jet Propulsion Lab 2019 “Using a glider to calibrate NASA SWOT coastal altimetry satellites” (\$108,581)
 Schmidt Foundation 2019-2020 “Development of SLO-Trec thermal glider” Schofield O. & Chao Y. (\$100,000)
 NOAA 2019-2024. CINAR: A Cooperative Institute for the North Atlantic Region A Proposal to the Office of
 Oceanic Atmospheric Research National Oceanographic and Atmospheric Administration (mechanism for
 funneling money to University partners, Rutgers (Schofield, RU PI), University of Maryland Eastern Shores, Gulf
 of Maine Research Institute, University of Massachusetts Dartmouth. University of Rhode Island, University of
 Maine, University of Maryland)
 National Science Foundation’s Biological Field Stations and Marine Laboratories 2019-2020. “Expanding the
 biological/physical sampling at Rutgers Marine Field Station at Tuckerton” Oscar Schofield, Kenneth Able,
 Thomas Grothues, Josh Kohut, Grace Saba (\$149,679)
 Vice Chancellor Research Initiative 2019-2020. “Objective driven experimental design under uncertainty for Earth
 science observational systems” Shantenu Jha, Robert Kopp, Oscar Schofield, Rebecca Jackson (\$60,000)

TEACHING GRANTS (>\$3,000,000 in awarded grants)

Dialogue Grant, Rutgers Teaching Excellence Center 1997 “Development of a New Course, Oceanographic
 Methods and Data Analysis” PIs Oscar Schofield, Clare Reimers (\$8,000)
 National Ocean Partnership Program (NOPP) 1997 to 1998 “Bringing the ocean into the precollege classroom
 through field investigations at the National Underwater Laboratory” Michael DeLuca, Janice McDonnell, Ken
 Able, Scott Glenn, and Oscar Schofield (\$100,000)
 NSF 1999-2001 “Instrumentation to Support the Revision of Analytical Chemistry for Today’s Students: Aqueous
 Systems with Environmental Significance” PIs Gregory Herzog, Clare Reimers, John Reinfelder, Oscar Schofield,
 Theodore Chase (\$100,000)
 Cook College, Special Projects Funding Grant 2005 “Enhancement of Oceanographic Methods and Data Analysis”
 PI Oscar Schofield (\$18,000)
 Cook College, Special Projects Funding 2006 “Enhancing the Teaching Collaboratory for the Rutgers University
 (R.U.) Coastal Ocean Observation Lab (COOL)” Glenn, S. M., Schofield, O., Chant, R. J., Kohut, J., McDonnell,
 J. (\$20,000)
 National Science Foundation, Ocean Sciences 2007-2012. “Collaborative Proposal: COSEE Center - Centers for
 Ocean Sciences Education Excellence - Networked Ocean World (COSEE-NOW)” McDonnell, J., Petrone, C.,
 Hoatling, L., Schofield, O., Glenn, S. (\$1,166,002)
 Rutgers Internal Computing Fund 2013 “Classroom Portable Computers for Ocean Observing Undergraduate
 Curriculum” (\$8000)
 National Science Foundation, Ocean Sciences 2015-2018 “Polar Interdisciplinary Coordinated Education (ICE)”
 (\$929,919) Schofield, McDonnell, Kohut
 New Brunswick Office of Rutgers Chancellor. 2015-2016 “Binding the Rutgers student body through the Raritan
 River Initiative” (\$250,000)
 New Brunswick Office of Rutgers Chancellor. 2016-2017 “Advancing multidisciplinary research, enhancing the
 student experience and applying science to inform planning and public policy: Initiating the Rutgers Raritan River
 Consortium” (\$175,000)
 New Brunswick Office of Rutgers Chancellor. 2017-2018 “Advancing multidisciplinary research, enhancing the
 student experience and applying science to inform planning and public policy: Initiating the Rutgers Raritan River
 Consortium” (\$175,000)
 National Science Foundation, Ocean Sciences 2018-2020 “Engaging Faculty and Students in Learning with OOI
 Data Explorations” (\$981,608) McDonnell, Schofield, Lichtenwalder

PRESENTATIONS

I) Invited Seminars

Schofield, O., Prézélin, B. B. (February 1992). Regression Analysis of the Operational and Maximum Quantum
 Yield in the Southern California Bight, at the Ocean Sciences Meeting (Santa Fe, NM) in a Special Session,
 "Optically-Derived Models of Phytoplankton Production", chaired by Marlon R. Lewis (Dalhousie University)
 and Everett J. Fee (Freshwater Inst., Winnipeg)

- Schofield, O. (March 1994). Fluorescence and its Applications for Defining the Physiological Ecology of Field Phytoplankton Populations. Southern Regional Research Center, U.S. Department of Agriculture-Agricultural Research Service (New Orleans, LA)
- Schofield, O. (November 1994). Impact of the Antarctic Ozone Hole on Natural Phytoplankton Communities During Austral Spring 1993. School of Environmental Science, Tulane University (New Orleans, LA)
- Schofield, O. (December 1994). The Utilization of Radiant Energy by Algae and the Linkages to the Bio-optical Properties of Marine Phytoplankton. In the DIALOG Symposium (organized by the American Society of Limnology and Oceanography) at the Bermuda Biological Station, (Bermuda)
- Schofield, O. (March 1995). Phytoplankton Productivity in the Southern Ocean: What is the Impact of the Antarctic Ozone Hole?. University of North Carolina (Morehead City, NC)
- Schofield, O. (March 1995). Regulation of Phytoplankton Production by the Mixed Layer Depth in the Southern Ocean. Department of Ecology and Evolution, Tulane University (New Orleans, LA)
- Schofield, O. (May 1995). Utility of Fluorescence for Studying the Physiological Ecology of Phytoplankton: Defining the Impact of the Antarctic Ozone Hole on Field Populations. Department of Marine Sciences, Texas A&M University (College Park, TX)
- Schofield, O. (October 1995). UVB Degradation of Photosystem II: Implications for the Productivity Rates and Community Ecology of Aquatic Algae. Poconos Comparative Lake Symposium, LeHigh University (Bethlehem, PA)
- Schofield, O. (June 1996). Physical Forcing of Phytoplankton Productivity in Antarctic Coastal Waters, LeHigh University (Bethlehem, PA)
- Schofield, O. (January 1997). Using Fluorescence to Define the Physiological Ecology of Phytoplankton: Are We Close to the Finish Line or Are We on a Road to Nowhere? University of Mississippi and Stennis Space Center (Stennis Space Center, MS)
- Schofield, O. (April 1997). Fluorescence-based Models to Predict Phytoplankton Productivity: Will They Work? (University of Florida, Gainesville FL.)
- Schofield, O. (May 1997). Ultraviolet-B Inhibition on Photosystem II and Carbon Fixation in Marine Phytoplankton: Studies from the Laboratory to the Antarctic Ozone Hole. (Delaware Graduate College of Marine Studies, Lewes DE)
- Schofield, O. (November 1997). Physical Forcing of Phytoplankton Productivity and Community Ecology in Nearshore Antarctic Coastal Waters. (Lamont-Doherty-Columbia University, NY)
- Schofield, O. (January 1998). The Bio-Optics of Recurrent Phytoplankton Blooms in Antarctic Coastal Waters: Physical Forcing of Phytoplankton Community Composition. (Smithsonian Environmental Research Center, Edgewater MD)
- Schofield, O. (January 1998). The Utilization of Light by Phytoplankton: The Problems and Potential for Bio-Optics in the Coastal Ocean (University of California at Santa Barbara, CA)
- Schofield, O. (June 1998). Biological Forecasting in the Coastal Ocean: Possibility or Pipe-Dream? LeHigh University (Bethlehem, PA)
- Schofield, O., Kirkpatrick, G., Millie, D. F., Moline, M. A., Glenn, S. (August 1998). Design Strategies for Forecasting Systems for Harmful Algal Blooms. in a Special Symposium on the "Molecular, Cellular, & Ecophysiological Bases of Noxious & Harmful Algal Blooms" (Phycological Society, Flagstaff AZ) *Journal of Phycology* 34(3): 52
- Schofield, O. (January 1999). Hyperspectral Applications for Species Identification. at SMP-JGOFS workshop on "Satellite Applications for Defining the Distribution of Functional Groups of Marine Phytoplankton for Biogeochemical Models" (Rutgers University, NJ)
- Schofield, O. (February 1999). Coastal Ocean Observation Networks and Summer Time Predictive Skill Experiments (Cal-Tech, CA)
- Schofield, O. (February 1999). The New Jersey Long term Ecosystem Observatory (LEO-15). Florida Atlantic University (Fort Lauderdale, FL)
- Schofield, O. (April 1999). The New Jersey Long Term Ecosystem Observatory: Bio-Optical Forecasting Networks Possibility or Pipe Dream? (Monterey Bay Aquarium Research Institute, CA)
- Schofield, O. (September, 1999). Coastal Ocean Observation Networks and Summer Time Predictive Skill Experiments: Biological Forecasting Networks Possibility or Pipe Dream? (Texas A&M University, TX)
- Schofield, O. (November, 1999). Impact of Long Term Warming Trends on the Antarctic Coastal Ecosystem (Rutgers University, NJ)
- Schofield, O. (November, 1999). The New Jersey Long Term Ecosystem Observatory: Bio-Optical Forecasting Networks Possibility or Pipe Dream? (Old Dominion University, VA)

- Schofield, O. (December, 1999). Quantifying and Characterizing Ocean Primary Productivity (National Academy of Sciences of Mexico, Puerto Morelos, Mexico)
- Schofield, O. (January, 2000). Characterizing the Scales of Variability in the Bio-optical Properties in the Coastal Ocean: The Promise and Problems of Undersea Observatories. (University of Southern Mississippi and Naval Research Laboratory, MS)
- Schofield, O., Glenn, S. M., Haidvogel, D., Grassle, F., von Alt, C. (January, 2000). The 1999 Coastal Predictive Skill Experiment: An Operational Multi-scale Real-time Long-term Ecosystem Observatory (LEO-15) for the Coastal Ocean. (AGU/ASLO Ocean Sciences, San Antonio, TX)
- Schofield, O. (February 2000). Application of Modern and Future Ocean Observatories for Defining the Temporal and Spatial Variability in Natural Bioluminescence Fields. Symposium hosted by the American Institute of Biological Sciences (AIBS) and the Office of Naval Research (San Diego, CA)
- Schofield, O. (September 2000). Integrated Ocean Observatories and the Blue-print for a National Coastal Observatory. Symposium hosted by the Marine Technology Society (Naval Research Laboratories at Stennis Space Center)
- Schofield, O. (September 2000). Melding Physical and Biological Observation Systems for Assessing Water Quality. Symposium on "Carolina Coastal Waters and Health" hosted by University of North Carolina Center for Marine Science (Wilmington, NC)
- Schofield, O. (January 2001). Using Coastal Ocean Observatories to Characterize Biological Dynamics: The Long term Ecosystem Observatory. Hosted by the Ocean Hemisphere Project and the International Observatory Network (Mt. Fuji, Japan)
- Schofield, O. (March 2001). Characterizing the Changing Ecology of the Coastal Ocean Using the New Generation Ocean Robotic Observatories: A Jaunt from the Antarctic to the Eastern Coast of The United States. University of Bristol (University of Bristol, United Kingdom)
- Schofield, O., Moline, M. A., Bissett, W. P., Haidvogel, D., Glenn, S. M. (February 2002). Evolution of LEO into a shelf-wide observatory. At Ocean Sciences Meeting in a Special Session "Multidisciplinary Ocean Observations and Observatories", chaired by John Orcutt (Honolulu, HI)
- Schofield, O. and Glenn, S. M. (April 2002). The Changing Nature of Ocean Observation and the National Ocean Observation Network. University of Washington (Seattle, WA)
- Schofield, O. (May 2002). Coastal Ocean Observatories Along the Eastern United States and the Gulf of Mexico. Coastal Ocean Program Symposium on "Coastal Ocean Observatories". Skidaway Oceanographic Institute, (Savannah, GA.)
- Schofield, O and Glenn S. (June 2002). Dawn in the New Millennium: Synoptic Oceanography Going Operational. Tutorial in the session "Application of Automated Technology to Detect Environmental Change" chaired by Dr. Karen Steindinger at the American Society of Limnology and Oceanography (Victoria, British Columbia) ASLO 2002 p 103.
- Glenn S. and Schofield, O. (July 2002). Regional Ocean Observatories. Invited testimony to the Presidential Ocean Commission. Rutgers University Marine Field Station (Tuckerton, NJ)
- Schofield, O. (December 2002). Documenting biogeochemical change in the coastal oceans and the evolving role of coastal ocean observatories. Marine Sciences Research Center, SUNY (Stony Brook NY)
- Glenn S. M. and Schofield, O. (December 2002). The evolution of the New Jersey Shelf observing system (NJ-SOS). University of Maine (Portland, ME)
- Schofield, O., Glenn, S. M. (February 2003). An autonomous fleet of underwater Slocum Gliders. ONR Joint Review of Technology Applicable to Mine Counter Measures and Associated Missions. Coastal Systems Station (Panama City, FL)
- Schofield, O., Glenn, S. (May 2003). Documenting changes in coastal waters using the ocean observatories. Lamont Doherty Earth Observatory, New York.
- Schofield O., Kirkpatrick, G., Oliver, M., Falkowski, P. (June 2003). The utility of optics for biologists in the new millennium. HAB-Watch Symposium (Villenfranche, France)
- Schofield O., Kirkpatrick, G., Oliver, M., Falkowski, P. (June 2003). Where are we and where do we go from here for HAB research?. HAB-Watch Symposium (Villenfranche, France)
- Schofield O., Chant, R. Glenn, S. M. (July 2003). The evolution of the New Jersey shelf observing system. IUGG/IAG/IGPP (Sapparo, Japan)
- Schofield, O. Plenary Talk: (January 2004). Plenary Lecture: Ocean observing systems and technology. American Geophysical Union (Portland Oregon)
- Schofield, O. Plenary talk (January 2004). The future of ocean observation in the millennium. American Society of Limnology and Oceanography. (Honolulu, Hawaii)

- Schofield, O., Glenn, S. M. (February, 2004). Utility of seafloor cables for hyperspectral optics. American Society of Limnology and Oceanography. (Honolulu, Hawaii)
- Schofield, O., Glenn, S. M. (April, 2004). The development of a national ocean observing system. (NASA Goddard, Greenbelt, Maryland)
- Schofield, O., Glenn, S. M. (April, 2004). Recent developments in autonomous underwater vehicles. (Alliance of Coastal Technologies, Portland, Maine)
- Schofield, O., Glenn, S. M. (May, 2004). Documenting the changes in Mid-Atlantic Bight biogeochemistry using a robotic fleet of Webb Gliders. (Southampton Oceanography, Southampton, United Kingdom)
- Schofield, O. (September 2004). The transport and transformation of organic matter associated with buoyant plumes in the Mid-Atlantic Bight. Lamont Doherty Earth Observatory (New York).
- Schofield, O. (January 2005). The utility for a geostationary satellite for biological oceanography. Science advisory team GOES-R Hyperspectral Environmental Suite (HES) Coastal Waters (CW) Imager (Portland, OR)
- Schofield, O. (February 2005). The evolution of the ocean observing networks. Virginia Institute of Marine Sciences (Gloucester Point, VA).
- Schofield, O., Glenn, S. M. (August 2005). Ocean Observatories: 1(Orion) + 1(IOOS) = 3. Executive Office of Science & Technology Policy (Washington DC)
- Schofield, O. (September 2005). The optics of nearshore buoyant plumes. Science advisory team GOES-R Hyperspectral Environmental Suite (HES) Coastal Waters (CW) Imager (Portland, OR)
- Schofield, O. (September 2005). Carbon dynamics on large continental shelves. North Atlantic Carbon Program (Boulder, CO)
- Schofield, O. (November 2005). The view from the COOL room. University of Connecticut (Groton, CT)
- Schofield, O., Kohut, J. (December 2005). Cook's COOL room: Opening a window to the sea. New Jersey Agricultural Experiment Station Board of Managers. (New Brunswick, NJ)
- Schofield, O. (February 2006). Using robots-radar-satellites to study biogeochemical dynamics on the Mid-Atlantic Bight (University of Delaware, Newark, DE)
- Schofield, O. (April 2006). Science using the ORION network. ORION Design & Implementation Workshop (Salt Lake, Utah)
- Schofield, O. and Tommy Dickey (May 2006). Monaco eulerian observatory. (International Atomic Agency, Monaco)
- Schofield, O. (June 2006). H-GOES risk reduction using optical gliders. (Monterey Bay, California)
- Schofield, O. (August 2006). Dawn in the age of the robots: Enabling polar research in the coming International Polar Year. (National Science Foundation Office of Polar Programs, Washington DC)
- Schofield, O. (August 2006). Coastal component to the NSF ORION program" before a Blue Ribbon Panel convened by NSF in Monterey Bay California
- Schofield, O. (October 2006) The future of ocean observations. (Kaoshiung University School of Engineering, Taiwan)
- Schofield, O., Glenn, S. M. (January 2007). The future technologies that will explore the world's oceans (hosted by University of Tianjin, Port Office of Tianjin, and the Tianjin Department of Environmental Prediction)
- Schofield, O. (March 2007). Innovating science for maintaining a healthy ocean. (Dalhousie University, Halifax Canada)
- Glenn, S. M., Schofield, O. (March 2007). The evolution of the Northeast Observing System. (University of Massachusetts, Dartmouth)
- Glenn, S. M., Schofield, O. (September 2007). Rutgers Coastal Ocean Observation Lab: Robots, Radars and Remote Sensing. (New Jersey State Assembly, Trenton NJ)
- Schofield, O. (October 2007). The evolution of the Coastal Ocean Observation Laboratory. (Oceans 2007, Vancouver, Canada)
- Schofield, O. (October 2007). Biogeography of the global ocean: Making sense of a dynamic world. (Ocean Microbe Meeting, Bermuda, United Kingdom)
- Schofield, O. (December 2007). The science justification for the Ocean Observatory Initiative (OOI). (NSF Preliminary Design Review for OOI program, Washington DC)
- Schofield, O. (January 2008). Dawn in the phycological millennium for oceanography (British Phycological Society, Bristol England)
- Schofield, O. (February 2008). Robots, Radars & Remote Sensing unveiling the biological complexity in the oceans: A decadal view from the COOL Room. (University of Wisconsin, Milwaukee)
- Schofield, O. (February 2008). Hot days in the Southern ocean: Climate change and the biological response along the Antarctic Peninsula (University of Wisconsin, Milwaukee)

- Schofield, O. (February 2008). The cyberinfrastructure for the Ocean Observatory Initiative. (NSF Computer Science Division, Washington DC)
- Schofield, O. (March 2008). COSEE Networked Ocean World. (Ocean Sciences, Orlando Florida)
- Schofield, O. (April 2008). Unveiling the biological complexity in the coastal oceans: A decadal view from the COOL Room. (University of Southern California)
- Schofield, O. (April 2008). Hot days in the Southern Ocean. Climate induced migration of the West Antarctic Peninsula (Oregon State University)
- Schofield, O. (April 2008). Lessons learned from a decade building the Coastal Ocean Observation Lab (Oregon State University)
- Schofield, O. (July 2008). Dawn in a new era of ocean observing: Potential payoffs for managing the Mid-Atlantic Bight. (National Marine Fisheries Service, Sandy Hook, NJ)
- Schofield, O., Glenn, S. (October 2008). Using Slocum Webb Gliders to maintain a sustained science presence in the ocean. Exploration Technology Symposium (Stennis Space Center, MS)
- Schofield, O. (November 2008). Science overview for the NSF Ocean Observatory Initiative. Final Design Review for the OOI (National Science Foundation, Arlington VA)
- Schofield, O. (March 2009). Warm days in the West Antarctica Peninsula: The impact of regional warming on the marine ecosystem (Princeton University, NJ)
- Schofield, O. (March 2009). Revised Science overview for the NSF Ocean Observatory Initiative. Final Design Review for the OOI (National Science Foundation, International Videoconference)
- Schofield, O. (March 2009). My personal story of why high school kids need to learn science: Preparing for the gathering storm (Department of 4H, Rutgers, NJ)
- Schofield, O. (April 2009). Development of ocean observatories by the United States (EuroSITES Annual review meeting, Cape Verde)
- Schofield, O. (April 2009). Using Webb gliders to maintain a sustained ocean presence. (SPIE Defense Security and Sensing Symposium, Orlando Florida)
- Schofield, O. (June 2009). Developments of ocean observatory systems for the United States. (Neptune Canada/VENUS Seminar, Victoria Canada)
- Schofield, O., Glenn S. (July 2009). Role of gliders for future biogeochemical studies (Ocean Carbon Biogeochemistry Meeting, Woods Hole, Massachusetts)
- Schofield, O. (July 2009). Dawn in the new age of oceanography with the ocean observatories (REU Lecture, Mote Marine Laboratory, Florida)
- Schofield, O. (October 2009). Ocean observing for next 20 years (Tawain Technology Conference plenary talk, Kaushioug, Tawain)
- Schofield, O. (November 2009). Dawn in the age of robotic oceanography (SOLAs plenary talk, Barcelona Spain)
- Schofield, O. (November 2009). How will the OOI cyberinfrastructure help scientists? (OOI Community workshop, Baltimore, Maryland)
- Glenn, S. M., Schofield, O. (February 2010). Assessing the educational impacts of ocean observatories (Ocean Sciences, Portland, OR)
- Peach, C. L., Collier, R., Kelley, D. S., Thorrold, A., Duncan, S., Orcutt, J. A., Vernon, F. L., Chave, A. D., Arrott, M., Schofield, O., Meisinger, M. J., Farcas, C., Farcas, E., Krueger, I., Kleinert, J., Keen, C. S. (February 2010) Ocean observatory educational infrastructure for 21st century learners (Ocean Sciences, Portland, OR)
- Ducklow, H., Fraser, B., Martinson, D., Schofield, O., Stammerjohn, S. E. (February 2010). Long-term observations of climate change and ecosystem response along the western Antarctic Peninsula, 1975-2009 (Ocean Sciences, Portland, OR)
- Schofield, O., Ducklow, H., Arrott, M., Kahl, A., Martinson, D., Steinberg, D. K., Fraser, B., Gorman, K., (February 2010). Bathymetric structuring of biological hotspots in the West Antarctic Peninsula. (Ocean Sciences, Portland, OR)
- Glenn, S. M., Schofield, O. (March 2010). Entraining the Global Generation in Earth Science: Our View from the COOLroom. (National Science Teachers Association, Philadelphia, PA)
- Schofield, O. (April 2010). Ocean observing in the melting poles: A case example from the West Antarctic Peninsula. (Department of Earth and Oceans, University of Massachusetts)
- Schofield, O. (April, 2010). Building a robust cyberinfrastructure to enable science for the National Science Foundation's Ocean Observatory Initiative (Arizona State University, Tempe, AZ)
- Schofield, O. (May 2010). Hot days in the Southern Ocean: Climate change and ecosystem response. (Southampton University and the United Kingdom National Oceanographic Office, United Kingdom)

- Schofield, O. (October 2010). Understanding a changing water planet: Building the new automated ocean sensor networks. Pop Tech 2010 conference, special session on “Cloud Computing” (Camden ME)
- Schofield, O. (October 2010). The Ocean Observatory Initiative and the Observing Science (Simulation) Experiment. To the Board for Ocean Leadership (Washington DC).
- Schofield, O. (October 2010). Dawn in the age of robotic oceanography. (Tawain Technology Conference plenary talk, National Kaohsiung Marine University, College of Ocean Engineering, Kaohsiung, Taiwan)
- Schofield, O. (November 2010). My journey to study the world’s oceans: The challenges/opportunities for the next generation of ocean explorers. Public Plenary to Mount Allison University (Sackville, Canada)
- Schofield, O. (November 2010). My journey exploring the world’s oceans. Princeton for a TIGER Talk to high school students. (Princeton, New Jersey)
- Schofield, O., Glenn, S. M. (December 2010). The potential for the ocean observatories. United States State Department. (Washington DC)
- Schofield, O. (March 2011). Exploring the world’s oceans. Princeton Plasma Lab’s Science Saturday’s to high school students. (Princeton, New Jersey)
- Schofield, O., Oliver M., Moline, M., Kohut, J. (March 2011). The potential of using autonomous gliders to study the ecology of polar oceans. (Gordon Keenan Conference, Ventura, California)
- Schofield, O. (April 2011). Hot days along the western Antarctic Peninsula. Woods Hole Oceanographic Institution. (Falmouth, Massachusetts)
- Schofield, O. (April 2011). Decadal changes in seasonal dynamics in the Mid-Atlantic Bight? Woods Hole Oceanographic Institution. (Falmouth, Massachusetts)
- Schofield, O. (May 2011). Dawn in the age of robotic oceanography. University of Maryland Faculty Convocation. (Baltimore, Maryland)
- Schofield, O. (May 2011). Project scope of the ocean observatory initiative. Year 1 review of the OOI interannual review. (Woods Hole Oceanographic Institute)
- Schofield, O. (May 2011). Cyberinfrastructure: Rise of the machines. Ocean Carbon Biogeochemistry meeting. (Woods Hole Oceanographic Institute, MA)
- Schofield, O. (June 2011). COSYNA SAC meeting 2011: An overview of some of the larger United States ocean observing efforts. (Helm-Hotz Association, Hamburg, Germany)
- Schofield, O. (July 2011). Hot days in the Southern Ocean: Challenges confronting the current REU generation. (Mote Marine Laboratory, Sarasota Florida)
- Schofield, O. (July 2011). Phytoplankton dynamics along the Western Antarctic Peninsula (British Antarctic Survey, Cambridge, UK)
- Schofield, O. (September 2011). Hot days in the Southern Ocean: Rise of the machines (Colgate University, Hamilton New York)
- Schofield, O. (October 2011). The understanding of East Coast dynamics using special tools (gliders, HF Radar, satellite, and models): The experience of the COOL Room. (Congresso Latino-Americano de Ciencias do Mar, Santa Catarina, Brazil)
- Schofield, O. (November 2011). The developing national backbone of a CODAR backbone for the United States. (Congresso Latino-Americano de Ciencias do Mar, Santa Catarina, Brazil)
- Schofield, O. (December 2011). Palmer LTER: Geological forcing of the coastal Antarctic ecosystems (NSF site review: Palmer Station, Antarctica)
- Schofield, O., Kohut, J., Glenn, S. (February 2012). What has COSEE meant for our research? (Ocean Sciences, AGU/ASLO meeting, Salt Lake City, USA)
- Schofield, O. (March 2012). Ecological impacts of warming along the Antarctic Peninsula (Lamont Doherty Earth Observatory, NY)
- Schofield, O. (May 2012). Teen climate summit: Hot days in the melting Southern Ocean (New Brunswick, NJ)
- Schofield, O. (May 2012). Dawn in the age of ocean observatories (Princeton Plasma Laboratory, NJ)
- Schofield, O., Neuman, L., Meredith, M. (July 2012). The Southern Ocean Observing System (SOOS). Scientific Committee of Antarctic Research Summit (Portland, OR)
- Schofield, O. (September 2012). Climate induced shifts in food webs of the West Antarctic Peninsula (Colgate University, Hamilton NY)
- Schofield, O. (November 2012). Building a robotic network to study the Mid-Atlantic Bight: From upwelling to hurricanes (Rutgers Department of Ecology and Evolution)
- Schofield, O. (November 2012). How is rapid climate induced shifts in West Antarctic Peninsula altering the marine ecosystem? (University of Georgia, Athens GA)

- Schofield, O. (December 2012). Hot days in West Antarctic Peninsula and its impact on the marine ecosystem. (Rutgers, New Brunswick, NJ)
- Schofield, O. (March 2013). Dawn in the age of robotic oceanography. (Old Dominion University, VA)
- Schofield, O. (March 2013). Hot days along the West Antarctic Peninsula (Texas A&M Corpus Christi, Distinguished Lecture Series, Texas)
- Schofield, O. (May 2013). The Southern Ocean Observing System (SOOS). (Sixth Session of the Global Ocean Observing System Regional Alliances forum, Honolulu, Hawaii)
- Schofield, O. (May 2013). The Center of Southern Ocean Biogeochemical and Ocean Modeling. (Southern Ocean Observing System Science Steering Committee meeting and Southern Ocean Asian Science Workshop, Shanghai, China)
- Schofield, O. (June 2013). Why we need a Southern Ocean Observing System. (XXV Meeting of the Council of Managers of National Antarctic Programs, Seoul, Korea)
- Schofield, O. (June 2013). Dawn in the new age of robotic oceanography. (XXV Meeting of the Council of Managers of National Antarctic Programs, Seoul, Korea)
- Schofield, O. (August 2, 2013). What is the Southern Ocean Observing System? Ocean Studies Board (Monmouth University, New Jersey)
- Schofield, O. (August 9, 2013). *Invited Plenary Talk: Dawn in the age of robotic phycology*. International Phycological Congress (Orlando, Florida)
- Schofield, O., Kohut, J., Glenn, S. M. (September 11, 2013). Ocean Observatories. United Kingdom MON Workshop on New Monitoring Technologies. (Southampton, United Kingdom)
- Schofield, O. (October 30, 2013). Dawn in the age of robotic oceanography. Duke University (Beaufort, North Carolina)
- Schofield, O. (November 22, 2103). Coalition for Marine Conservation, Community Development, and Educational Partnerships in the Banda Islands – Maluku. Cultural @ America Center (Jakarta, Indonesia)
- Schofield, O. (April 1, 2014). In the dawn of robotic oceanography: Sensors to enable the new ocean networks. Marine Technology Society's TechSurge Ocean Sensors. (Weehawken, NJ)
- Schofield, O. (July 23, 2014). Opportunities with the Ocean Observatory Initiative. Ocean Carbon Biogeochemistry Annual Meetings (Woods Hole Oceanographic Institute, MA).
- Schofield, O. (August 5, 2014). Hot days in the Southern Ocean (Monterey Bay Research Institute)
- Schofield, O., Roarty, H., Kohut, J., Glenn, S. M. (August 7, 2014). Korea Rutgers Collaboration projects in 2014. Frontier Technologies of Ocean Observing. (San Francisco, CA)
- Schofield, O., Neuman, L., Wahlin, A., Constable A. (August 23, 2014). Update on the evolving Southern Ocean Observing System. Annual Meeting for the Scientific Committee for Antarctic Research (Auckland, New Zealand).
- Schofield, O. (August 24, 2014). Update Southern Ocean Observing System. Committee of Antarctic Managers (Auckland, New Zealand).
- Schofield, O. (November 8, 2014). Shifting ecology in the West Antarctic Linked to Rapid Ice Melt. Geosciences Department, Princeton University (Princeton, NJ)
- Schofield, O. (November 18, 2014). Gliders and their application to coupled physical-biological systems (Gothenburg, Sweden).
- Schofield, O. (April 1, 2014). Gussenhoven Seminar Speaker “Understanding the Hot Days along West Antarctic Peninsula in the Dawn of Robotic Oceanography” (Chapel Hill, North Carolina)
- Schofield, O. (July 23, 2015) “Dawn in the Age of Robotic Oceanography” Teacher outreach summer program (Stennis Space Center)
- Schofield, O. (July 21, 2015) “The Ocean Observatory Initiative” Ocean Carbon and Biogeochemistry Annual meeting (Woods Hole Oceanographic Institute, MA)
- Schofield, O. (July 23, 2015) “The Palmer LTER: Warming temperatures along the West Antarctic Peninsula” Ocean Carbon and Biogeochemistry Annual meeting (Woods Hole Oceanographic Institute, MA)
- Schofield, O. and Glenn, S. (January 5, 2016) “Ocean Observing Initiative Cyberinfrastructure” (National Science Foundation, Washington DC)
- Glenn, S. and Schofield, O. (February 16, 2016). “A decade of glider development” Oceanology International (London, UK)
- Schofield, O. (May 11, 2016) “Gliders a maturing technology to study ecosystem dynamics in the ocean” NOAA Ecosystem Sciences Management Group (Woods Hole Oceanographic Institute, MA)
- Schofield, O. (June 10, 2016) “Rutgers’s future in the Raritan River” Sustainable Raritan Symposium (New Brunswick, NJ)

- Schofield, O. (September 20, 2016). Dawn in the age of robotic oceanography. (Montclair University, New Jersey).
- Schofield, O., Kohut, J., McDonnell, J., Glenn, S. (September 21, 2016). RU COOL's scalable focus on immersing society in the ocean through observing systems: The ocean is our classroom. (MTS/IEEE TownHall, Monterey Bay, California)
- Schofield, O. (October 19, 2016). Updates on the goals and strategies for building a Southern Ocean Observing System (SOOS) (GOOS webinar)
- Schofield, O. (November 9, 2016). Evolution of coastal observing technology: Bring in the robots. (State University of New York at Stony Brook, New York)
- Schofield, O. (February 22, 2017). Autonomous underwater vehicles entraining the next generation of oceanographers (Scripps, La Jolla, California)
- Schofield, O. (May 2017). Biological dynamics along the West Antarctic Peninsula: How much can we extrapolate nearshore stations to the shelf as a whole? (Royal Society Chicheley Hall, United Kingdom)
- Schofield, O. (June 2017). Evolution of the Southern Ocean Observing System (Alfred Wegner Institute, Bremerhaven, Germany)
- Schofield, O. (July 2017) Plenary talk: Dawn in the age of robotic oceanography (Ocean Carbon Biogeochemistry Summer Meeting, Woods Hole Oceanographic, Massachusetts)
- Schofield, O. (November 2017) Public plenary talk: Robots to Help Meet the Challenges Facing Humanity on a Changing Ocean Planet (Harbor Branch Oceanographic Institute, Florida)
- Schofield, O. (November 2017). Evolution of Ocean Technologies and the Opportunities Ahead (Florida Atlantic University, Florida)
- Schofield, O. (April 2018). Trends in technology to support Southern Ocean research and conversation. In the Policy Symposium held during the CAMLR meeting (U. Tasmania, Hobart, Australia)
- Schofield, O. (April 2018). Climate cycles and ecosystem dynamics along the West Antarctic Peninsula (UC Santa Barbara, California)
- Schofield, O. (May 2018). Modeling the transport of circumpolar deep water on West Antarctic Peninsula (Hangzhou, China)
- Schofield, O. (February 2019). Dawn of the use of gliders to map ocean ecosystems. (American Society of Limnology and Oceanography, San Juan, Puerto Rico)
- Schofield, O. (February 2019). Plenary ASLO Hutchinson Lecture: Opening a window to the ocean in a time of change. (American Society of Limnology and Oceanography, San Juan, Puerto Rico)
- Schofield, O. (March 2019). The Ambassador John Price & Marcia Price World Affairs Lecture Series: Why we need a global ocean observing system. (Utah Council for Civilian Diplomacy, Salt Lake City)
- Schofield, O. (March 2019). How climate trends are melting sea ice and altering the ecology of West Antarctic Peninsula (U. Maine, Orono, Maine)
- Schofield, O. (August, 2019), Global Ocean Observing System GRA forum XI: Status of the Southern Ocean Observing System (Tokoyo, Japan)
- Schofield, O. (October 2019). The changing ecology along the melting West Antarctic Peninsula (Scripps, La Jolla, California)
- Schofield, O. (November 2019). Ocean Gliders in Tropical Cyclone Forecasting: Findings and Potential for the Future (Hydromet-Variayn, Barbados)

Contributed Presentations

(** presentation by student or post-doctoral researcher)

- Boucher, N., **Schofield, O.**, and B.B. Prézelin (1988) Enhancement effects and diel variations in wavelength-dependent absorption properties, carbon fixation rates and quantum yield of photosynthesis in *Synechococcus* clone WH7803 (DC2). ASLO, San Francisco EOS.
- Bidigare, R.R., **Schofield, O.**, and B.B. Prézelin (1988) Photosynthetic action spectra, absorption properties of pigmentation of marine *Synechococcus* clone WH7803 (DC2): The role of zeaxanthin and quantum yield reduction. ASLO, San Francisco EOS.
- Schofield, O.**, Prézelin, B. B., Stegmann, P., Lewis, M. R., and R. C. Smith (1990) Comparison of spectral photosynthesis in surface and subsurface chlorophyll maxima across a transect of the Southern California Bight. Ocean Sciences Meeting, New Orleans. ASLO 90.
- Boucher, N. P., **Schofield, O.**, Matlick, H. A., Prézelin, B. B., Smith, R. C., and R. R. Bidigare. (1990) Patterns of primary productivity and photosynthesis-irradiance parameters across the Southern California Bight during the Watercolors '88 cruise. Ocean Sciences Meeting, New Orleans. ASLO 90.

- Nelson, N. B., **Schofield, O.**, Stegmann, P. M., Smith, R. C., Prézelin, B. B. (1992). Fluorescence-based estimates of spectral photosynthetic rates in the Southern California Counter Current (SCCC). Ocean Sciences Meetings, Santa Fe ASLO 92. p. 29.
- Prézelin, B. B., **Schofield, O.**, Boucher, N. B., Smith, R. C., Baker, K. S., Bidigare, R. R., Coley, T. (1992) Comparison of biweekly spatial variability in hydrographic and production parameters across the Southern California Bight. Ocean Sciences Meeting, Santa Fe. ASLO 92. p. 30.
- Kroon, B., Prézelin, B. B., **Schofield, O.** (1992) Chromatic regulation of quantum yields values for ϕ_{Phe^0} , ϕ_{O_2} and ϕ_{CO_2} in the red-tide dinoflagellate *Heterocapsa pygmaea*. (Pyrrophyta) International Photosynthetic Congress, Hawaii.
- Schofield, O.**, Prézelin, B. B., Kroon, B. (1993) Chromatic regulation of quantum yields values for photosystem II charge separation, oxygen evolution and carbon fixation in *Heterocapsa pygmaea*. (Pyrrophyta). Western Regional Photosynthesis Conference, Pacific Grove.
- Kroon, B., **Schofield, O.**, Prézelin, B. B. (1994). Icecolors '93: UV-B radiation specifically decreases photosystem II (PsII) quantum yield in a field community of Antarctic ice algae exposed to natural sunlight. Ocean Sciences Meeting, San Diego. 75(3): 200.
- Schofield, O.**, Kroon, B., Prézelin, B. B. (1994). Icecolors '93: Diurnal UV-induced effects on the quantum yield of photosystem II charge separation in Antarctic frazil ice-algae and its relationship to photosynthetic carbon fixation rates during the austral spring 1993. Ocean Sciences Meeting, San Diego. 75(3):217.
- Moline, M., **Schofield, O.**, Prézelin, B. B. (1994). PALMER LTER 1991: Temporal variability in physical, chemical and optical parameters: Effects on phytoplankton bloom dynamics. Ocean Sciences Meeting, San Diego. EOS 75(3):217.
- Prézelin, B. B., **Schofield, O.**, Kroon, B. (1994). Icecolors '93: Q_{UVB}-specific inhibition of photosystem II quantum yield accounts for most of the UVB suppression of carbon fixation in ice algae under the influence of the Antarctic ozone hole. Scientific Committee for Antarctic Research (SCAR) supplement, Venice Italy. p. 220.
- Moline, M., Prézelin, B. B., **Schofield, O.**, Smith, R. C. (1994). Temporal dynamics of coastal Antarctic phytoplankton: physical/chemical/biological linkages through a summer diatom bloom. Scientific Committee for Antarctic Research (SCAR), Venice Italy p. 189.
- Schofield, O.**, Prézelin, B. B., Kroon, B. M. (1994). The utilization of radiant energy by algae and the linkages to the bio-optical properties of marine phytoplankton. DIALOG Symposium, Bermuda Biological Station, Bermuda p. 68.
- Schofield, O.**, Moline, M., Prézelin, B. B. (1995). Photoacclimation in coastal a phytoplankton bloom and impact on the radiation utilization efficiency for carbon fixation. American Society of Limnology and Oceanography, Reno ASLO 95. p. 50.
- Moline, M., **Schofield, O.**, Prézelin, B. B. (1995). Spatial and temporal relationships of photosynthetic parameters to inorganic nutrients and pigmentation in Antarctic phytoplankton. American Society of Limnology and Oceanography, Reno ASLO 95. p. 37.
- Kroon, M. A., **Schofield, O.**, Prézelin, B. B. (1995). Fluorescence characteristics of Antarctic phytoplankton. American Society of Limnology and Oceanography, Reno ASLO 95. p. 27.
- Millie, D., Pinckney, J., **Schofield, O.**, Paerl, H. (1995). Relating photosynthetic pigments to microalgal growth and production in the Neuse River, North Carolina. American Society of Limnology and Oceanography, Reno ASLO 95. p. 37.
- Schofield, O.**, Millie, D., Prézelin, B. B., Kroon, B. M. A. (1995). Utility of fluorescence to predict photosynthetic-irradiance parameters for the dinoflagellate, *Heterocapsa pygmaea*. Phycological Society of America, Breckenbridge, CO. PSA Journal of Phycology 31: 83.
- Millie, D., **Schofield, O.**, Tester, P., Kirkpatrick, G. (1995). What are the requirements the for harmful algal blooms. Phycological Society of America, Breckenbridge, CO. Journal of Phycology 31: 56.
- Millie, D. F., Pinckney, J., Paerl, H., **Schofield, O.** (1995). Neuse River phytoplankton: using photopigments to characterize community dynamics and photophysiological process. Estuarine Research Federation, Corpus Christi, TX.
- Paerl, H., Pinckney, J., Millie, D. F., **Schofield, O.** (1995). Neuse River phytoplankton: Synergistic nutrient and hydrological controls of bloom dynamics- Timing is everything (well almost). Estuarine Research Federation, Corpus Christi, TX.
- Pinckney, J., Paerl, H., Millie, D. F., **Schofield, O.** (1995). Neuse River phytoplankton: Taxa-specific growth responses to nutrient additions. Estuarine Research Federation, Corpus Christi, TX.

- Schofield, O.**, Moline, M. A., Prézelin, B. B. (1996) Variability in the quantum yields for photosynthetic activity in coastal Antarctic phytoplankton and the impact on the bio-optical productivity models. Ocean Sciences Meeting, San Diego, CA EOS 76(3): 188.
- Millie, D., **Schofield, O.**, Kirkpatrick, G., Tester, P. (1996). Using bio-optical characteristics as “biomarkers” for harmful algal blooms: A case study of the Florida red-tide dinoflagellate, *Gymnodinium breve* Davis. . Ocean Sciences Meeting, San Diego CA. Ocean Sciences Meeting, EOS 76(3):188.
- Schofield, O.**, Millie, D. F., Grzyski, J. (1996). Utility of submersible optical instruments for studying marine phytoplankton: What biological information can we extract? Phycological Society of American, Santa Cruz, CA Journal of Phycology 32(3): 43.
- Millie, D. F., Pinckney, J., Paerl, H., **Schofield, O.**, Vinyard, B (1996) Characterization of physical and chemical factors forcing microalgal bloom initiation. Phycological Society of American, Santa Cruz, CA Journal of Phycology 32(3): 33.
- **Bergmann, T., **Schofield, O.**, J. Grzyski, M. Crowley, S. Glenn (1996). Variability in inherent and apparent optical properties during an upwelling event in the Mid-Atlantic Bight. Sea-Space Conference, Yokohama, Japan.
- **Moline, M. A., Grzyski, J., **Schofield, O.**, Jovine, R. (1997). Impact of temperature on photoinhibition in the red-tide dinoflagellate *Alexandrium fundyense* (Ca28). American Society of Limnology and Oceanography, Santa Fe, NM ASLO 97: 56.
- Schofield, O.**, P. Bergmann, M. Crowley, S. Glenn, J. Grzyski (1997). Variability in inherent and apparent optical properties during an upwelling event in the Mid-Atlantic Bight. American Society of Limnology and Oceanography, Santa Fe, NM ASLO 97: 298.
- Kerkhoff, L., **Schofield, O.**, Millie, D. F. (1997). Exploring the linkages between bacterial and phytoplanktonic diversity in the coastal ocean, American Society of Limnology and Oceanography, Santa Fe, NM ASLO 97: 208.
- **Grzyski, J., **Schofield, O.**, Moline M. A. (1997). An ultraviolet action spectra for photosystem II activity in marine phytoplankton. American Society of Limnology and Oceanography, Santa Fe, NM ASLO 97: 177.
- Millie, D. F., **Schofield, O.**, Grzyski, J., Zimba, P., Dionigi, C., Kirkpatrick, G. (1997). Using *in situ* fluorescence-excitation/emission spectra to characterize noxious cyanobacterial assemblages in hypereutrophic aquaculture systems. Proceedings of Harmful Algal Blooms. Vigo Spain. p. 139.
- Glenn, S. M., Haidvogel, D. B., **Schofield, O.** (1997). Forecasting and adaptive physical and bio-optical sampling of coastal upwelling at the Leo-15 National Littoral Laboratory. Symposium of "Coupled Ocean Observation/Modeling Systems" at Massachusetts Institute of Technology, MS.
- Crowley, M., McDonnell, J., Glenn, S., **Schofield, O.**, De Luca, M., Bogdon, M. (1998) Using Real Time Satellite and In Situ Data on the Internet to Study Biological Responses to Upwelling Off the New Jersey Coast. 7th Education Conference, Phoenix AZ.
- Schofield, O.**, Moline, M. A., Vargo, G., Steward, R., Kirkpatrick, G. (1998) Spectral inherent optical and fluorescence properties of natural populations of the toxic dinoflagellate, *Gymnodinium breve*, in the Gulf of Mexico Ocean Sciences Meeting, San Diego, CA. EOS 78: 42.
- **Moline, M. A., Frazer, T., Habermann, K., Claustre, H., Grzyski, J., **Schofield, O.** (1998) Environmental forcing of phytoplankton community composition and potential impact on zooplankton in Antarctic coastal waters. Ocean Sciences Meeting, San Diego, CA. EOS 78: 21.
- **Grzyski, J., Jovine, R. V. M., Moline, M. A., **Schofield, O.** (1998). Interaction of light and temperature on the photo-physiology of *Alexandrium fundyense* (CA28): Possible importance in the initiation of dinoflagellate blooms? Ocean Sciences Meeting, San Diego, CA. EOS 78: 32.
- **Bergmann, P., **Schofield, O.**, Moline, M. A., Grzyski, J., Glenn S. (1998) Impact of upwelling on nearshore inherent and apparent optical properties in the Mid-Atlantic Bight. Ocean Sciences Meeting, San Diego, CA. EOS 78: 32.
- Millie, D., Fahnenstiel, G., **Schofield, O.**, Lohrenz, S. (1998). Impact of a recurrent coastal plume on Lake Michigan phytoplankton; A preliminary assessment. Phycological Society Meetings, Flagstaff, AZ. 34(3): 41.
- Schofield, O.**, Kirkpatrick, G., Millie, D. F., Moline, M. A., Glenn, S. (August 1998). Design Strategies for Forecasting Systems for Harmful Algal Blooms. in a Special Symposium on the "Molecular, Cellular, & Ecophysiological Bases of Noxious & Harmful Algal Blooms" (Phycological Society, Flagstaff AZ) Journal of Phycology 34(3): 52.
- Moline, M. A., Frazer, T., Vernet, M., Claustre, H., Grzyski, J., **Schofield, O.** (1998) Environmental regulation of phytoplankton community composition and the potential impact on zooplankton in coastal waters along the Antarctic peninsula.. Scientific Committee for Antarctic Research (SCAR), New Zealand.

- Schofield, O.**, Bergmann, P., Gryzmski, J., Moline, M. A., Glenn, S. (1998). Spectral fluorescence emission and inherent optical properties during upwelling events off the coast of New Jersey. Ocean Optics, Maui, HW.
- Kirkpatrick, G. J., **Schofield, O.**, Millie, D. F. (1998) Optical discrimination of a phytoplankton species in natural mixed populations Ocean Optics, Maui, HW.
- Glenn, S., Crowley, M., Grassle, F., Haidvogel, D., **Schofield, O.**, von Alt, C. (1998). Adaptive sampling of coastal upwelling at the long-term ecosystem observatory at LEO-15. American Geophysical Union, San Francisco, CA., AGU
- **Bergmann, T., **Schofield, O.**, Kirkpatrick, G., Millie, D. F., Paerl, H., Pinckney, J. (1999). Impact of light and nitrogen on the maximum quantum yield of photosystem II for natural phytoplankton populations from the Neuse River, NC. American Society of Limnology and Oceanography, Santa Fe, NM ASLO 99: 22.
- Lohrenz, S. E., **Schofield, O.**, Fahnenstiel, G. L., Millie, D. F., (1999). Optical Gradients in a recurrent coastal turbidity plume in southeastern Lake Michigan. American Society of Limnology and Oceanography, Santa Fe, NM ASLO 99: 111.
- Millie, D. F., Fahnenstiel, G., **Schofield, O.**, Lohrenz, S. (1999). Impact of a recurrent sediment plume on Lake Michigan phytoplankton. American Society of Limnology and Oceanography, Santa Fe, NM ASLO 99: 124.
- Schofield, O.**, Moline, M. A., Steward, R., Kirkpatrick, G. (1999). Fluorescence-based deconvolution of the bulk inherent optical properties during a *Gymnodinium breve* bloom in the Gulf of Mexico. American Society of Limnology and Oceanography, Santa Fe, NM ASLO 99: 159.
- Moline, M., Bergmann, T., Glenn, S., Gryzmski, J., **Schofield, O.** (1999). Evolution in the inherent and apparent optical properties during an episodic upwelling event at the LEO-15 1998 Coastal Predictive Skill experiments. American Society of Limnology and Oceanography, Santa Fe, NM ASLO 99: 126.
- Bissett, P. W., **Schofield, O.**, Davis, C. O. (1999). Comparison of measured and predicted optical properties at LEO-15 during the Coastal Predictive Skill Experiments. American Society of Limnology and Oceanography, Santa Fe, NM ASLO 99: 25.
- **Grzymski, J., Bergmann, T., Moline, M., **Schofield, O.** (1999). Deconvolving the inherent optical properties for nearshore coastal waters during upwelling at LEO-15. American Society of Limnology and Oceanography, Santa Fe, NM ASLO 99: 77.
- Cullen, J. T., Grzymski, J., Sherrell, R. M., **Schofield, O.**, Glenn, S. (1999). Estimating suspended particulate mass and particulate organic carbon from in situ optical data in a coastal upwelling system on the New Jersey Shelf. American Society of Limnology and Oceanography, Santa Fe, NM ASLO 99: 51.
- Millie, D. F., Pederson, B. A., Tester, P. A., Pinckney, J. L., Fahnenstiel, G. L., Lohrenz, S. E., Kirkpatrick, G. J., **Schofield, O.** (1999). Illustrating the utility of photopigments for characterizing phytoplankton in coastal systems. Phycological Society Meetings, San Diego, CA.
- Schofield, O.**, Bergmann, T., Crowley, M., Glenn, S. M., Arnone, R. (1999). Using the Long-term ecosystem Observatory (LEO-15) to characterize nearshore *in situ* optical properties and the relationship to satellite derived estimates of the inherent optical properties. Sea Space Conference, New Brunswick, NJ.
- **Bergmann, T., **Schofield, O.**, Kirkpatrick, G., Millie, D. F., Paerl, H., Pinckney, J. (1999). Effects of light and nutrients in photochemical quantum yields for phytoplankton populations from the Neuse River. Estuarine Research Federation, New Orleans, LA.
- Millie, D. F., Pinckney, J., Tester, P. A., **Schofield, O.**, Paerl, H. P. (1999). Evaluating two statistical approaches for characterizing microalgal composition via photopigment biomarkers. Estuarine Research Federation, New Orleans, LA.
- Schofield, O.**, Glenn, S., Haidvogel, D., Grassle, F., von Alt, C. (1999). The 1999 Coastal Predictive Skill Experiment: An Operational Multi-scale Real-time Long-term Ecosystem Observatory (LEO-15) for the Coastal Ocean. American Geophysical Union, San Francisco, CA.
- **Bergmann, T., Grzymski, J., **Schofield, O.**, Moline, M., Newton, T. (1999). Characterizing the variability in the inherent and apparent optical properties during the LEO-15 1999 Coastal Predictive Skill experiments. AGU/ASLO Ocean Sciences, San Antonio, TX 80(49): 244.
- Glenn, S. M., **Schofield, O.**, J. Grassle, von Alt, C., Webb, D. (2000). An overview of the 1999 Coastal Predictive Skill Experiment at LEO-15. AGU/ASLO Ocean Sciences, San Antonio, TX. 80(49): 244.
- **Grzymski, J. , Cullen, J. , Peters, E., Glenn, S.M., Sherrell, R., **Schofield, O.** (2000). Relationship Between Light Attenuation and Suspended Particulate Material During Nearshore Coastal Upwelling. AGU/ASLO Ocean Sciences, San Antonio, TX. 80(49): 245.
- Schofield, O.**, Glenn, S. M., Haidvogel, D., Grassle, F., von Alt, C. (January, 2000). The 1999 coastal predictive skill experiment: An operational multi-scale real-time long-term ecosystem observatory (LEO-15) for the coastal ocean. AGU/ASLO Ocean Sciences, San Antonio, TX. 80(49): 244.

- Weidemann, A., **Schofield, O.**, Glenn, S. M., Bowers, T. (2000). Diurnal Optical Variability During Upwelling at LEO-15. AGU/ASLO Ocean Sciences, San Antonio. TX. 80(49): 245.
- Lohrenz, S. E., **Schofield, O.**, Fahnenstiel, G. L., Millie, D. F. (2000). Distributions of Inherent Optical Properties in a Recurrent Coastal Turbidity Plume in Southeastern Lake Michigan. AGU/ASLO Ocean Sciences, San Antonio. TX. 80(49): 226.
- **Tozzi, S., Bergmann, T., Gryzmski, J., **Schofield, O.** (2000). Variability of the Spectral Signatures of Coastal Waters Measured and Modeled for LEO-15. . AGU/ASLO Ocean Sciences, San Antonio. TX. 80(49): 117.
- Fahnenstiel, G., Lohrenz, S., **Schofield, O.**, Millie, D., Bergmann, T. (2000). Phytoplankton process and optical characteristics in southern Lake Michigan: Effects of the recurrent coastal plume. IGLAR, New Zealand.
- Moline, M. A., Bissett, W. P., Case, J., Glenn, S., Herren, C., **Schofield, O.** (2000). Bioluminescence Exercises at LEO-15: Summer 1999. Symposium hosted by the American Institute of Biological Sciences (AIBS) and the Office of Naval Research (San Diego, CA).
- Bissett, W. P., **Schofield, O.**, Moline, M. A. (2000). Integrating Bioluminescence into Nowcast/Forecast Systems. Symposium hosted by the American Institute of Biological Sciences (AIBS) and the Office of Naval Research (San Diego, CA).
- Moline, M. A., **Schofield, O.**, Glenn, S., Tozzi, S., Crowley, M., Demarest, M., Arnone, R., Bissett, W. P. (2000). Assessment of phytoplankton dynamics at the long term ecosystem observatory (LEO-15) using in water optics and remote sensing. ASLO Ocean Sciences, Copenhagen. Denmark.
- Moline, M. A., Case, J., **Schofield, O.** (2000). High-resolution temporal sampling of nearshore vertical structure of bioluminescence. 11th International Symposium on Bioluminescence and Chemiluminescence, Asimolar, CA
- Moline, M. A., Case, J., Herren, C., **Schofield, O.** (2000). Spatial and temporal variability of bioluminescence potential in coastal regions. 11th International Symposium on Bioluminescence and Chemiluminescence, Asimolar, CA.
- **Grzymski, J., Bernhard, J., Falkowski, P., Moline, M. A., **Schofield, O.** (2000). A modern analog of early eukaryogenesis in the Santa Barbara Basin. Gordon Conference. Narragansett, RI.
- Chang, G. C., Dickey, T. D., Bissett, W. P., **Schofield, O.** (2000). High temporal resolution optical and physical time series data: Coastal Mixing and Optics and LEO-15. Ocean Optics 2000, Monaco.
- Schofield, O.**, Bergmann, T., Bissett, W. P., and Moline, M. A. (2000). Deconvolving phytoplankton community composition absorption from bulk measurements in turbid coastal waters, Ocean Optics 2000, Monaco.
- Moline, M. A., Bissett, W. P., Glenn, S., Haidvogel, D., **Schofield, O.** (2000). An operational multi-scale real-time long-term ecosystem observatory (LEO-15) for the coastal ocean. Ocean Optics 2000, Monaco.
- **Tozzi, S., **Schofield, O.**, Moline, M. A., Bergmann, T., Crowley, M., Arnone, R. (2000). Variability in measured and modeled remote sensing reflectance and comparison of SeaWiFS and *in situ* chl *a* distribution for coastal waters at LEO-15. Ocean Optics 2000, Monaco.
- **Bergmann, T., **Schofield, O.**, Cullen, J., Glenn, S. Moline, M. A. (2000). Concurrence of inherent optical properties and particulate organic carbon concentrations in the Middle Atlantic Bight: Applications of ocean color imagery in coastal waters Ocean Optics 2000, Monaco.
- Chang, G., Dickey, T., **Schofield, O.** (2001). Physical processes related to bio-optical properties on the New York Bight inner continental shelf. ALSO, Albuquerque, NM.
- Millie, D. F., Fahnenstiel, G. L., Carrick, H. J., Lohrenz, S. E., **Schofield, O.** (2001) Spatial variation in Lake Michigan phytoplankton composition during sediment resuspension events. International Society of Limnology, Melbourne, Australia
- Schofield, O.**, Bergmann, T., Crowley, M., Glenn S. (2001) Integration of the international real-time ocean color data to the New Jersey Long Term Ecosystem (LEO-15). American Meteorological Society, Albuquerque New Mexico.
- Glenn, S. M., **Schofield, O.**, Haidvogel, D., Grassle, J. F. (2001). Development of a regional physical/bio-optical coastal observing system for rapid environmental assessment in the New York Bight. American Meteorological Society, Albuquerque New Mexico.
- Glenn, S. M., **Schofield, O.**, Haidvogel, D., Grassle, J. F. (2001). New Jersey shelf real-time observing system. American Meteorological Society, Albuquerque New Mexico.
- Moline, M. A., Claustre, H., Frazer, T., **Schofield, O.**, Vernet, M. (2001). Shift in the Antarctic Peninsula food web in response to regional warming. Gordon Conference, Ventura, California
- Millie, D. F., Fahnenstiel, G. L., Carrick, H. J., Lohrenz, S. E., **Schofield, O.** (2001). Relating phytoplankton dynamics And Production to sediment resuspension in southern Lake Michigan. Phycological Society of America Annual Meeting, Estes Park, Colorado

- Millie, D. F., Kirkpatrick, G. J., **Schofield O.**, Johnsen, G., Evens, T. J. (2001). Using absorbance and fluorescence spectra to discriminate microalgal phylogenetic groups and taxa. Phycological Society of America Annual Meeting, Estes Park, Colorado
- Schofield, O.**, Bissett, W. P., Haidvogel, D., Moline, M. A., Glenn, S. (2001). Using the long-term ecosystem observatory for rapid environmental assessment in coastal waters. Oceanography Society Meeting, Miami, Florida
- Gould, R. W., Arnone, R. A., Goode, W. A., Ladner, S. D., Rhea, R. H., Stavn, R. H., **Schofield, O.** (2001). Particle size, concentration, and optical scattering relationships off coastal New Jersey. Oceanography Society Meeting, Miami, Florida
- Glenn, S. M., **Schofield, O.**, Chant, R., Grassle, F. (2001). New Jersey Shelf Observing System (NJSOS). Oceanology, Miami, Florida
- Chang, G. C., Dickey, T. D., **Schofield, O.**, Glenn, S. M., Weidemann, A. D. (2001). Temporal and spatial variability of physical and bio-optical properties on the New York Bight inner continental shelf. Joint International Association for the Physical Sciences of the Oceans / International Association for Biological Oceanography Assembly. Mar Del Plata, Argentina
- Kerfoot, J., Mahoney, K., Kirkpatrick, G., Lohrenz, S., **Schofield, O.** (2002). Vertical migration of a toxic *Karenia brevis* red-tide and the impact on ocean color remote sensing reflectance. Ocean Sciences Meeting, Honolulu, Hawaii
- Aramgo, H., Bissett, W. P., Glenn, S., **Schofield, O.** (2002). Coupled Physical/Bio-Optical Model Experiments at LEO-15. Ocean Sciences Meeting, Honolulu, Hawaii
- Glenn, S., **Schofield, O.**, Chant, R., Grassle F. (2002). A Model for a National Network of Regional Coastal Ocean Observatories. Ocean Sciences Meeting, Honolulu, Hawaii
- Mudgal, C., Glenn, S., **Schofield, O.**, Jones, C., Webb, D. (2002). Coordinating a Fleet of Autonomous Underwater Glider Using a Decision Theoretic Approach in a Multi-agent System. Ocean Sciences Meeting, Honolulu, Hawaii
- Ho, T-Y., Quigg, A., Finkel, Z.V., **Schofield, O.**, Falkowski, P.G. and Morel, F.M.M. 2002 Essential Trace Metal Quotas in Marine Phytoplankton. Ocean Sciences Meeting, Honolulu, Hawaii
- Crowley, M., Kahl, A., Prasad, K., Bergmann, T., **Schofield, O.**, Glenn, S. (2002). Comparisons of Satellite and In Situ Chlorophyll-a Measurements in Coastal Upwelled Waters. Ocean Sciences Meeting, Honolulu, Hawaii
- **Kahl, A., Crowley, M., Arnone, R., Bergmann, T., Orrico, C., **Schofield, O.** (2002). Comparisons of SeaWiFs derived Inherent Optical Properties to In Situ Coastal Measurements at LEO. Ocean Sciences Meeting, Honolulu, Hawaii
- **Bergmann, T., Fahnenstiel, G., Lohrenz, S., Millie, D., **Schofield, O.** (2002). The Effects of a Spring Resuspension Event on In-situ Optical Parameters and Phytoplankton Light Utilization. Ocean Sciences Meeting, Honolulu, Hawaii
- Bissett, W. P., Jolliff, J., Walsh, J. J., Dieterle, D. A., **Schofield, O.**, Kirkpatrick, G., Coble, P., Arnone, R. (2002). Forecasting the Colored Dissolved Organic Matter Dynamics on the West Florida Shelf. Ocean Sciences Meeting, Honolulu, Hawaii
- **Blackwell, S., von Alt, C., Case, J., Glenn, S. M., Moline, M., Purcell, M., **Schofield, O.** (2002). Development of an AUV to Measure Bioluminescence in the Coastal Ocean. Ocean Sciences Meeting, Honolulu, Hawaii
- Boss, E., Roesler, C., **Schofield, O.**, Sieracki, M. (2002). Taxonomic recognition of plankton using optics. Ocean Sciences Meeting, Honolulu, Hawaii
- **Finkel, Z., Irwin, A. J., **Schofield, O.** (2002). Resource Limitation Alters Allometric Scaling of Metabolic Rates in Phytoplankton. Ocean Sciences Meeting, Honolulu, Hawaii
- **Grzebyk, D., **Schofield, O.**, Vetriani, C., Falkowski, P. (2002). The Comparative Evolution of Plastid Genomes in Eukaryotic Algae. Ocean Sciences Meeting, Honolulu, Hawaii
- Johnson, D. R., Miller, J., **Schofield, O.** (2002). Physical Dynamics and Optical Character of the Hudson River Outflow Plume. Ocean Sciences Meeting, Honolulu, Hawaii
- Kirkpatrick, G.H., Oliver, M., Berg, B., Orrico, C., Moline, M. A., Lohrenz, S. E., **Schofield, O.** (2002). Continuous, Real-Time Determination Of Hyperspectral Absorption Of Colored Dissolved Organic Material. Ocean Sciences Meeting, Honolulu, Hawaii
- Kohler, D., Bissett, P., Daviss, C., Bowles, J., Dye, D., Britt, J., Bailey, J., Steward, R., **Schofield, O.**, Moline, M. A., Glenn, S. M., Orrico, C. (2002). Characterization and Calibration of a Hyperspectral Coastal Ocean Remote Sensing Instrument. Ocean Sciences Meeting, Honolulu, Hawaii

- Moline, M. A., Bissett, W. P., Chant, R., Glenn, S. M., **Schofield, O.** (2002). Inferring Physical Processes Using Phytoplankton Structure and Bulk Optical Properties in Coastal Waters. Ocean Sciences Meeting, Honolulu, Hawaii
- **Oliver, M., Moline, M. A., **Schofield, O.**, Bergmann, T., Bissett, W. P., Glenn, S. M. (2002). Bio-Optical Estimates of Phytoplankton Productivity from an Autonomous In Situ Profiler in the Coastal Waters of the Mid-Atlantic Bight. Ocean Sciences Meeting, Honolulu, Hawaii
- **Orrico, C., Bergmann, T., Bissett, W. P., Moline, M. A., **Schofield, O.** (2002). Deconvolution of Spectral Measurements to Derive Optically Active Constituents in Turbid Coastal Waters. Ocean Sciences Meeting, Honolulu, Hawaii
- Schofield, O.**, Falkowski, P. (2002). The Evolution and Radiation of Eucaryotic Phytoplankton Taxa (EREUPT) Ocean Sciences Meeting, Honolulu, Hawaii
- **Sebbo, J., Bergmann, T., Kerfott, J., Tozzi, S., **Schofield, O.** (2002). Light Stress and TEP Production in Phytoplankton Communities in Turbid Coastal Waters. Ocean Sciences Meeting, Honolulu, Hawaii
- Chant, R., **Schofield, O.**, Glenn, S. M. (2002). The spatial and temporal relationship between biomass and hydrography on New Jersey's inner shelf during the summer of 2001. Ocean Sciences Meeting, Honolulu, Hawaii
- Schofield, O.**, Glenn, S. M., Chant, R., Moline, M. A., Bissett, W. P., Haidvogel, D., Wilkins, J. (2002). The evolution of a nearshore coastal observatory and the establishment of the New Jersey Shelf Observing System. Oceanology International 2002. London, England Oceanology 2002. p.50.
- **Quigg, A., Finkel, Z.V., Ho, T-Y., Reinfeldter, J.R., **Schofield, O.**, Morel, F.M.M. and Falkowski, P.G. 2002 Extending Redfield ratios for marine phytoplankton: trace metals. Environmental Bioinorganic Chemistry Gordon Conference, New Hampshire, USA.
- Falkowski, P., **Schofield, O.**, Grzebyk, D. (2002). Why are the ocean red and the land is green? At the "Coccolithophores-from molecular processes to global impact" Conference at Centro Stefano Franscini, Ascona, Switzerland.
- Millie, D. F., Fahnenstiel, G. L., Carrick, H. J., Lohrenz, S. E., **Schofield, O.** (2002). Lake Michigan During the Spring Isothermal Period: Impact of Synoptic-Scale Sediment Resuspension. ASLO 2002 p. 80.
- **Litchman, E., Klausmeier, C.A., van de Schootbrugge B. O., **Schofield O.**, Falkowski P.G. (2002). Applying Phytoplankton Community Models to Understanding Phytoplankton Distributions in the Paleocean. JGOFS Synthesis and Modeling Symposium Workshop, Woods Hole.
- **Bergmann, T., Budd, J., Fahnenstiel, G., Lohrenz, S., Millie, D., Schofield O. (2002). Assessing the relative impact of resuspended sediment and phytoplankton community composition on remote sensing reflectance. Ocean Optics XVI, Santa Fe, NM.
- Kohut, J., Glenn, S., **Schofield, O.** (2002). Evolution of the New Jersey Shelf Observing System. MONCOZE meeting, Nansen Center, Bergen Norway
- Schofield, O.**, Bergmann, T., Bissett, W. P., Kirkpatrick, G., Oliver, M., Orrico, C., Moline, M. A., Glenn, S. (2002). Inversion of the Inherent Optical Properties and Their Utility for Delineation of Water Masses in Turbid Coastal Waters. Ocean Optics XVI, Santa Fe, NM.
- Moline, M. A., Bergmann, T., Bissett, W. P., Case, J., Herren, C., Mobley, C. D., Oliver, M., **Schofield, O.**, Sundman L. (2002). Integrating optics and biology: Estimation of bioluminescence leaving radiance from an autonomous vertical profiler. Ocean Optics XVI, Santa Fe, NM.
- **Oliver, M., Bergmann, T., Glenn, S., Moline, M., Orrico, C., **Schofield, O.** (2002). Application of Optical Inversion Model: Implications for Constituent Specific Absorption and Bio-Optical Modeling of Primary Production. Ocean Optics XVI, Santa Fe, NM.
- **Finkel, Z. V., Irwin, A. J., Falkowski, P., **Schofield, O.** 2002. Cell Size and optima; pigment concentrations under sub-saturating growth irradiance. Ocean Optics XVI, Santa Fe, NM.
- Glenn, S. M., **Schofield, O.** (2003). Development of Coastal Ocean Observatories for Synoptic Oceanography (Invited Presentation) American Meteorological Society Long Beach CA.
- **Quigg, A., Finkel, Z.V., Ho, T-Y., Reinfeldter, J.R., **Schofield, O.**, Morel, F.M.M. and Falkowski, P.G. (2003). Trace metals as a selective agent in phytoplankton evolution. ASLO Aquatic Sciences meeting, Salt Lake City, Utah.
- **Finkel, Z. V., Irwin, A. J., Falkowski, P., **Schofield, O.** (2003). Effect of resource limitation on the $\frac{3}{4}$ size scaling of metabolic rates. ASLO Aquatic Sciences meeting, Salt Lake City, Utah.
- Litchman, E., C.A. Klausmeier, **O. Schofield** and P.G. Falkowski. 2003. Resource-based niches of phytoplankton functional groups. Ecological Society of America Annual Meeting. Savannah, GA.

- Glenn, S. M., **Schofield, O.**, Dickey, T. (2003). The evolution of the Northeast observing system for the United States. International Union of Geodesy and Geophysics. Sapparo, Japan.
- Schofield, O.** (2003). The evolution of the eukaryotic algae in the world's oceans. National Science Foundation Biocomplexity Symposium, Washington DC.
- Moline, M. A., Blackwell, S., Purcell, M., Kirkpatrick, G., Hillier, J., **Schofield, O.**, Bissett, W. P., Terrill, E. (2004). Near synoptic autonomous spatial sampling of coastal multi/hyperspectral apparent/inherent optical properties. American Society of Limnology and Oceanography. (Honolulu, Hawaii) p. 30.
- Kirkpatrick, G., Millie, D. F., Moline, M. A., Lohrenz, S. E., **Schofield, O.** (2004). Utilizing automated absorbance-based optical discrimination to map phytoplankton distributions. American Society of Limnology and Oceanography. (Honolulu, Hawaii) p. 31.
- Schofield, O.**, Glenn, S. M., Kirkpatrick, G., Moline, M. A., Jone C. (2004). Mapping red tide using autonomous underwater Webb Gliders. American Society of Limnology and Oceanography. (Honolulu, Hawaii) p. 34.
- Lohrenz, S. E., Kirkpatrick, G., **Schofield, O.**, Mahoney, K. L., Kerfoot, J., Lee, Z. P. (2004). Hyperspectral assessment of bloom events of the harmful algal, *Karenia brevis*. American Society of Limnology and Oceanography. (Honolulu, Hawaii) p. 48.
- **Wolfe, F. L., **Schofield, O.**, Falkowski, P. G. (2004). The diverse molecular evolution of iron and manganese superoxide dismutases in oxygenic photoautotrophs. American Society of Limnology and Oceanography. (Honolulu, Hawaii) p. 63.
- Matteson, R. S., Moline, M. A., Bellingham, J. G., Blackwell, S. M., Chavez, F. P., Haddock, S., McManus, M. A., Oliver, M. J., **Schofield, O.** (2004). Distribution of optical constituents in response to episodic upwelling in Monterey Bay. American Society of Limnology and Oceanography. (Honolulu, Hawaii) p. 69.
- Iglesias-Rodriguez, M.D., **Schofield, O.**, Batley, J., Medlin, L. K., Hayes, P. K. (2004). Extensive intraspecific genetic diversity in the marine coccolithophorid *Emiliana huxleyi*: The use of microsatellite analysis in marine phytoplankton populations. American Geophysical Union, (Portland OR.) p. 40
- Kirkpatrick, G., D. Millie, M. Moline, S. Lohrenz R. Weisberg and **O. Schofield**. 2004. Recent results from the BreveBuster: has *Karenia brevis* lost the element of surprise? XIth International Conference on Harmful Algal Blooms (Cape Town, South Africa)
- Kohut, J., Bosch, J. A., Oliver, M. J., Glenn, S. M. and **Schofield, O.** 2004. Evolution of Fronts in the Mid-Atlantic Bight (MAB): What Exit on the Ocean Highway off New Jersey? American Geophysical Union Fall Meeting, (San Francisco, CA)
- Oliver, M. J., Finkel, Z. V., **Schofield, O.**, Falkowski, P. G. A (2004). Hypothesis of Genome Structure in Marine Phytoplankton. 56th Annual Meeting of The Society of Protozoologists, (Bryant, College, Smithfield, Rhode Island).
- Kirkpatrick, G., D. Millie, R. Weisberg, M. Moline, S. Lohrenz and **O. Schofield**. 2005. Utilizing automated, absorbance-based optical discrimination to map HAB distribution. HABSOS-GCOOS Workshop, (St Petersburg, Florida).
- **Oliver, M. J., Z. Finkel, **Schofield, O.**, Falkowski, P. G., de Vargas, C. (2005). Retrotransposons in Diatom Taxa. The International Ocean Research Conference, UNESCO Headquarters, (Paris, France).
- Kohut, J., Chant, R., Glenn, S., **Schofield, O.**, Oliver, M. J. (2005). Observed response of the Hudson river plume to wind forcing. The International Ocean Research Conference, UNESCO Headquarters, (Paris, France).
- Glenn, S., **Schofield, O.**, Chant R., Kohut J. (2005). Linking IOOS & NWQMN: Applications of New Estuarine & Coastal Observing Technologies. Linking Elements of the Integrated Ocean Observing System (IOOS) Workshop, (Rutgers University, New Jersey).
- Glenn, S., **Schofield, O.**, Kohut, J., Chant, R., McDonnell, J. (2005). Educational needs in the changing field of operational oceanography. (Oceans 2005 IEEE, Washington DC).
- Schofield, O.**, Glenn, S. M., Kohut, J. (2005). The ocean view from the COOLRoom. (Oceans 2005 IEEE, Washington DC).
- Kohut, J., Chant, R. C., Houghton, R., Gardner, B., Wilkin, J., Reinfelder, J., Chen, R., Bissett, P. Moline, M. A., **Schofield, O.**, Zhou, M. (2005). Lagrangian Transport & Transformation Experiment - "An Interdisciplinary Process Study of the Hudson River Plume in an Operational Research Observatory" . (Oceans 2005 IEEE, Washington DC).
- Frazer, T. F., Kohut, J., Chant, R. C., Houghton, R., Reinfelder, J., Chen, R., Bissett, P. Moline, M. A., **Schofield, O.**, Zhou, M. (2005). Lagrangian Transport & Transformation Experiment: An Interdisciplinary Process Study of the Hudson River Plume in an Operational Research Observatory - Phytoplankton, Zooplankton and Metals. The International Ocean Research Conference, UNESCO Headquarters, (Paris, France).

- Chant, R. C., Glenn, S. M., Kohut, J., **Schofield, O.** (2005). 7 Years & 11,000 km later: Slocum coastal electric gliders are central to ANY operational ocean observatory. The International Ocean Research Conference, UNESCO Headquarters, (Paris, France).
- Kirkpatrick, G., D. Millie, C. Heil, M. Moline, S. Lohrenz, R. Stumpf and **O. Schofield.** 2005. Detection of *Karenia brevis* in an early bloom stage using the Brevebuster. National HAB Symposium, October 3-6, 2005, Pacific Grove, California
- Schofield, O.**, Moline, M. A., Claustre, H., Frazer, T. F., Vernet, M. (2005). Shift in the Antarctic Peninsula Food Web in Response to Regional Warming. The International Ocean Research Conference, UNESCO Headquarters, (Paris, France).
- Iglesias-Rodriguez, M.D., **Schofield, O.**, Batley, J., Medlin, L. K., Hayes, P. K. (2005). Genetic variability in natural populations of the bioluminescent dinoflagellate species *Lingulodinium polyedrum*. The International Ocean Research Conference, UNESCO Headquarters, (Paris, France).
- Schofield, O.**, Oliver, M., Moline, M. A. (2005). Variability in photosynthetic quantum yields in coastal Antarctic waters. The International Ocean Research Conference, UNESCO Headquarters, (Paris, France).
- Glenn, S. M., Kohut, J., **Schofield, O.** (2005). Coastal Observatory of the Future: R.U. Cool. The International Ocean Research Conference, UNESCO Headquarters, (Paris, France).
- Kirkpatrick, G., D. Millie, R. Stumpf, S. Wilhelm, S. Lohrenz, M. Moline, R. Weisberg and **O. Schofield.** 2005. Applications of the optical phytoplankton discriminator as an *in situ* component of an ocean observing system for HAB detection and tracking. Estuarine Research Federation, 18th Biennial Conference. (Norfolk, Virginia.)
- **Oliver, M. J., Petrov, D., Ackerley, D., Falkowski, P., **Schofield, O.** (2006). The rapid evolution of diatom and dinoflagellate genomes. AGU/ASLO/TOS Ocean Sciences (Honolulu, Hawaii)
- Hales, B., Cai, W., Mitchell, B. G., Sabine, C., **Schofield, O.** (2006). North American continental margins: A planning workshop. AGU/ASLO/TOS Ocean Sciences (Honolulu, Hawaii)
- Schofield, O.**, Kerfoot, J., Kohut, J., Roarty, H., Jones, C., Glenn, S. M. (2006). Studying particle dynamics on continental shelves using Slocum Webb gliders. AGU/ASLO/TOS Ocean Sciences (Honolulu, Hawaii)
- **Kahl, A., **Schofield, O.** (2006). Using settling velocity to model particle stickiness in a mesocosm. AGU/ASLO/TOS Ocean Sciences (Honolulu, Hawaii)
- Frazer, T. K., **Schofield, O.**, Moline, M. A., Glenn, S. M., Kohut, J., Chant, R. J., Keller, S. R., Oliver, M. J., Reinfelder, J. R., Zhou, M., Chen, R. F. (2006). LaTTE 2005: Super size me. AGU/ASLO/TOS Ocean Sciences (Honolulu, Hawaii)
- Glenn, S. M., **Schofield, O.**, Chant, R. J., Kohut, J. (2006). Educational needs in the changing field of operational oceanography. AGU/ASLO/TOS Ocean Sciences (Honolulu, Hawaii)
- Kerfoot, J., Glenn, S. M., Kohut, J., **Schofield, O.**, Roarty, H. (2006). Correction for thermal lag effects in non-pumped temperature-conductivity sensors on the Slocum coastal electric glider. AGU/ASLO/TOS Ocean Sciences (Honolulu, Hawaii)
- Glenn, S. M., **Schofield, O.**, Chant, R. J., Kohut, J. (2006). Observed response of the Hudson river plume to wind forcing in an operational research observatory. AGU/ASLO/TOS Ocean Sciences (Honolulu, Hawaii)
- Kirkpatrick, G. J., Millie, D. F., Lohrenz, S. E., Moline, M. A., Robbins, I., **Schofield, O.** (2006). An *in situ* sensor of phytoplankton community structure based on light absorption. AGU/ASLO/TOS Ocean Sciences (Honolulu, Hawaii)
- Bosch, J. A., **Schofield, O.**, Kohut, J., Glenn, S. M. (2006). East coast plumes and blooms: Monitoring the on-ramp to the ocean highway off New Jersey. AGU/ASLO/TOS Ocean Sciences (Honolulu, Hawaii)
- Kirkpatrick, G. J., Moline, M. A., Lohrenz, S. E., **Schofield, O.** (2006) Phytoplankton community composition observed by autonomous underwater vehicle. International Conference of harmful Algal Blooms (Copenhagen, Denmark)
- Schofield, O.**, Kohut, J., Glenn, S. (2006). A history of the Rutgers University Coastal Ocean Observation Lab (RU COOL). US/EU Baltic International Symposium - Klaipeda, Lithuania
- Glenn, S., Chant, R., Gardner, B., Houghton, R., Wilkin, J., Reinfelder, J., Chen, R., Bissett, W. P., Frazer, T., Moline, M., **Schofield, O.**, Zhou, M. (2006). Lagrangian Transport & Transformation Experiment - An Interdisciplinary Process Study of the Hudson River Plume in a Sustained Coastal Observatory. US/EU Baltic International Symposium - Klaipeda, Lithuania
- Glenn, S. M., **Schofield, O.**, Chant, R., Kohut, J., McDonnell, J. (2007). Implementing a new paradigm in ocean observing: A view from the COOLroom. PACON international meeting (Honolulu, Hawaii)
- Mauzerall, D., Gorbunov, M., Dubinsky, Z., **Schofield, O.** (2007). The use of light emitting diodes (LED) to simplify photoacoustic measurements. Photosynthetic Congress (Woods Hole, Massachusetts)

- **Sipler, R., **Schofield, O.**, Sietzinger, S. (2008). The effects of brevetoxin on natural microbial populations. Ocean Sciences Meeting (Orlando FL.)
- Chen R., Cai C., Chant R., Gardner B., Huang G., Reinfelder J., **Schofield O.** (2008). Carbon Cycling in the Hudson River Plume. Ocean Sciences Meeting (Orlando FL.)
- Frazer, T.K; Glenn, S. M., Jacoby, C.A.; Keller, S.R.; Kohut, J., Moline, M.A.; Reinfelder, J.R.; **Schofield, O.**; Yost, J. (2008). Phytoplankton and zooplankton dynamics in a buoyant river plume. Ocean Sciences Meeting (Orlando FL.)
- Schofield, O.**, Glenn S., McDonnell J. (2008). Education and outreach in a Network Ocean World. Ocean Sciences Meeting (Orlando FL.)
- **Cahill, B., **Schofield, O.**, Hunter, E., Wilkin, J., Bissett, W. P. (2008). The evolution of coastal optics associated with a turbid plume and feedbacks on nearshore dynamics. Ocean Sciences Meeting (Orlando FL.)
- Xu Y., Chant R. J., **Schofield, O.** (2008). Seasonal and inter-annual variability in sea-surface temperature and chlorophyll-a in the New York Bight: Springtime in Winter? Ocean Sciences Meeting (Orlando FL.)
- Glenn, S. M., Jones, C., Twardowski, M., Bowers, L., Kerfoot, J, Kohut, J., Webb, D., **Schofield, O.** (2008). Observing storm-induced sediment resuspension processes in the Mid-Atlantic Bight with Slocum Gliders Ocean Sciences Meeting (Orlando FL.)
- Lohrenz, S. E., Millie, D. F., **Schofield, O.**, Fahnenstiel, G. L (2008). Optical characterization of physical and biogeochemical processes in Lake Michigan. Ocean Sciences Meeting (Orlando FL.)
- Kirkpatrick, G J; Pederson, B A; Bowker, R; Millie, D F; Moline, M A; Kamykowski, D; **Schofield, O.** (2008). Temporal and spatial scales in phytoplankton community structure on the West Florida continental shelf. Ocean Sciences Meeting (Orlando FL.)
- Wright, D D; Frazer, T K; Moline, M; **Schofield, O.**; Reinfelder, J R. (2008). Trophic transfer of trace metals in a buoyant river plume. Ocean Sciences Meeting (Orlando FL.)
- Chant, R J; Wilkin, J; Hunter, E; Jurisa, J; Zhang, W; Castelao, R; Kohut, **Schofield, O.**; Glenn, S (2008). Dispersal of a buoyant river discharge interaction between wind, morphology, and remotely forced flows. Ocean Sciences Meeting (Orlando FL.)
- Schofield, O.**, Moline, M. A., Glenn, S., Frazer, W., Martinson, D., Ducklow, H., Montes-Hugo, M. (2008). Dawn in the era of the well sampled ocean. Ocean Sensors 2008 (Wandermunde, Germany)
- McDonnell, J., Glenn, S., **Schofield, O.**, Wilkin, J., Chant, B., Kohut, J. (2008). COSEE-Networked Ocean World (NOW). Liberty Science Center (Jersey City, NJ)
- Glenn, S., Bowers, L., Chant, R., Dunk, R., Kerfoot, J., Kohut, J., McDonnell, J., Montagna, D., Roarty, H., **Schofield, O.**, Wilkin, J. (2008). Ocean observatories and their growing role in the Energy Industry. Rutgers Energy Institute (New Brunswick, NJ)
- Glenn, S., **Schofield, O.**, Chant, R., Wilkin, J., Kohut, J., McDonnell, J. (2008). Observing Storm-Induced Sediment Resuspension Processes in the Middle Atlantic Bight with Slocum Gliders. US/EU-Baltic 2008 International Symposium (Tallinn, Estonia)
- Glenn, S., **Schofield, O.**, Chant, R., Kerkhof, L., Wilkin, J., Kohut, J., McDonnell, J., Webb, D., Jones, C., Twardowski, M., McLean, S. (2008). Enabling Discovery Based Science with Webb Gliders. US/EU-Baltic 2008 International Symposium (Tallinn, Estonia)
- Schofield, O.**, Oliver, M., Irwin, A. (2008). Satellite Bioinformatics as a tool to actively track and monitor the ocean. 2008 National Water Quality Meeting (Atlantic City, NJ)
- Glenn, S., **Schofield, O.**, Bowers, L., Kerfoot, J., Kohut, J., Jones, C., Webb, D. (2008). Observing storm-induced sediment resuspension processes in the Mid-Atlantic Bight. 2008 National Water Quality Meeting (Atlantic City, NJ)
- Schofield, O.**, Glenn, S., Bowers, L., Kerfoot, J., Kohut, J., Jones, C., Webb, D. (2008). Gliders are robust tools for water quality monitoring. 2008 National Water Quality Meeting (Atlantic City, NJ)
- **Montes-Hugo, M., **Schofield, O.**, Ducklow, H. W., Martinson, D., Smith, R. C., (2008). Climate mediated changes in phytoplankton productivity and air-sea CO₂ exchange on the Western Shelf of the Antarctic Peninsula over the last 30 years. PICES Conference (Gijón, Spain)
- Schofield, O.** (2008). The Ocean Observatories Initiative: Opportunities for increasing ocean literacy. OOI EPE cyber-workshop (Portland, OR)
- Chave, A., Arrott, M., Orcutt, J., Krueger, I., Vernon, F., **Schofield, O.**, Peach, C. (2008). Toward a cyberinfrastructure for the Ocean Observatories Initiative: Enabling interactive observation within the oceans. American geophysical Union (San Francisco, CA).
- Schofield, O.**, Glenn, G., Kohut, J., Jones, C., Webb, D. 2008. Webb Gliders: Sensors, Applications and the Future. EGO Workshop & Glider School (NURC NATO La Spezia, Italy)

- Kohut, J., Glenn, S., Aragon, D., **Schofield, O.**, Ullman, S.. 2008. Rapid Response of the Mid-Shelf Front to a Passing Storm. EGO Workshop & Glider School (NURC NATO La Spezia, Italy)
- Glenn, S., **Schofield, O.**, Chant, R., Wilkin, J., Kohut, J., McDonnell, J. 2008. Observing storm-induced sediment resuspension processes in the Middle Atlantic Bight with Slocum gliders. EGO Workshop & Glider School (NURC NATO La Spezia, Italy)
- **Garzio, M., Baker, K., Kahl, A., Savard, S., **Schofield, O.** 2009. Interannual variability in phytoplankton at Palmer Station Antarctica. LTER BiAnnual meeting (Estes Park, Colorado)
- **Kahl, A., Ducklow, H., Fraser, W., Martinson, D., **Schofield, O.** 2009. Autonomous robotic surveys of Adélie penguin foraging “hot spots” offshore Palmer Station Antarctica. LTER BiAnnual meeting (Estes Park, Colorado)
- Schofield, O.**, Kahl, A., Ducklow, H., Fraser, W., Martinson, D., Jones, C. 2009. Studying ecosystem dynamics using Webb gliders at Palmer Station Antarctica. LTER BiAnnual meeting (Estes Park, Colorado)
- **Xu, Y., Cahill, B., Chant, R. **Schofield, O.** 2010. Role of water column stability in regulating phytoplankton blooms in the Mid-Atlantic Bight. Ocean Sciences Meeting (Portland, Oregon)
- **Cahill, B., Levin, J., Zavala-Garay, J., Wilkin, J., Hyde, K., **Schofield, O.** 2010. Towards an improved estimate of ecosystem dynamics in the Mid-Atlantic Bight. Ocean Sciences Meeting (Portland, Oregon)
- Oliver, M., Fraser, W., Irwin, A., **Schofield, O.**, Kohut. 2010. Satellite Driven Analysis of Climate Mediated Changes in Antarctic Food-Webs. Ocean Sciences Meeting (Portland, Oregon)
- Kerfoot, J., Glenn, S. M., **Schofield, O.**, Aragon, D., Haldeman, C., Jones, C., Pingal, D. 2010. Correction and Comparison of Pumped and Non-Pumped CTD sensors on the Slocum. Ocean Sciences Meeting (Portland, Oregon)
- Schofield, O.**, McDonnell, J. D., Glenn, S. M., Yoder, J. 2010. Success and challenges in aquatic observing systems education and outreach. Ocean Sciences Meeting (Portland, Oregon)
- Barrera, C., Kohut, J. T., Martins, A. M., Rueda, M., Glenn, S. M., **Schofield, O.**, Jones, C., Moran, R., Llinas, O. 2010. Trans-Atlantic Glider Technology School (TAGTS): Engaging students in long duration underwater glider missions through a Trans-Atlantic partnership. Ocean Sciences Meeting (Portland, Oregon)
- Castelao, R., Glenn, S. M., **Schofield, O.** 2010. Temperature, salinity and density variability in the central Middle Atlantic Bight: Five years of glider observations. Ocean Sciences Meeting (Portland, Oregon)
- Orcutt, J., Vernon, F. L., Peach, C. L., Arrott, M., Chave, A. D., **Schofield, O.**, Meisinger, M. J., Farcas, C., Farcas, E., Krueger, I., Klein, J. (February 2010). The cyberinfrastructure model for the NSF Ocean Observatories Initiative: A 20-year prospective. Ocean Sciences Meeting (Portland, Oregon)
- Glenn, S. M., Roarty, H., Kohut, J. T., Brown, W. S., Atkinson, L. P., Boicourt, W. C., Miles, T., Kerfoot, J., **Schofield, O.**, 2010. Observations of storm response and sediment transport on the Middle Atlantic Bight continental shelf. Ocean Sciences Meeting (Portland, Oregon)
- Shulman, I., Arnone, R. A., Teague, W. J., Gould, R. W., Joliff, J. K., Anderson, S. C., deRadam S., Wijesekera, H. W., Lee, Z., Lubac, B., Book, J. W., Chavez, F., **Schofield, O.**, Moline, M. A., Ryan, J. P. 2010. Bio-Optical studies of predictability and assimilation for the coastal environment (BIOSPACE). Ocean Sciences Meeting (Portland, Oregon)
- Schofield, O.** 2010. The ocean observatories initiative observing science (simulation) experiment. American Geophysical Union (San Francisco, CA)
- Xu, Y., Cahill, B., Wilkin, J., **Schofield, O.** 2011. The wind mixing for the regulation of phytoplankton blooms in the Mid-Atlantic Bight. Ocean Sciences Meeting (San Juan, Puerto Rico)
- Schofield, O.**, Kohut, J., Glenn, S. M. 2011. Observatory simulation experiment: Rise of the machines. European Glider Organization Biaannual meeting. (Las Palmas, Gran Canarias)
- Glenn, S. M., Kohut, J., **Schofield, O.** 2011. Coordinated response to the Deepwater Horizon oil spill. European Glider Organization Biaannual meeting. (Las Palmas, Gran Canarias)
- Haskins, C., **Schofield, O.** 2011. Glider measurements of phytoplankton physiology in penguin foraging zones. Gordon Conference. (Ventura, California)
- **Saba, G., Jones, B., Iglesias-Rodriguez, D., Ducklow, H., **Schofield, O.** 2012. Differential response of natural phytoplankton communities to enhanced carbon dioxide (CO₂) along the Western Antarctic Peninsula. Ocean Sciences (Salt Lake City, Utah).
- ** Xu, Y., Chant, B., **Schofield, O.** 2012. Inter-annual variability of climate and phytoplankton blooms in the Mid-Atlantic Bight. Ocean Sciences (Salt Lake City, Utah).
- Schofield, O.**, Kohut, J., Manderson, J., Saba, G., Glenn, S. M. 2012. Phytoplankton dynamics and bottom water oxygen during an exceptional bloom in the summer of 2011. Ocean Sciences (Salt Lake City, Utah).

- Schofield, O.**, Kohut, J., Glenn, S. 2012. What has COSEE NOW meant to our research and outreach efforts? Ocean Sciences (Salt Lake City, Utah).
- Vardaro, M., Barth, J., **Schofield, O.**, Luther, D., Kelley, D. 2012. Ocean Observatories Initiative sampling strategy and core instrumentation. Ocean Sciences (Salt Lake City, Utah).
- Brown, W., **Schofield, O.**, Glenn, S., Kohut, J., Boicourt, W., Flagg, C., Gangopadhyay, A., Xu, Y. 2012. An observational/modeling investigation of the Mid-Atlantic cold pool evolution and variability. Ocean Sciences (Salt Lake City, Utah).
- Meredith, M., Newman, L., **Schofield, O.**, Gunn, J., Sparrow, M., Urban, E., Rintoul, S., Wadley, V., Speer, K., Hofmann, E., Summerhayes, C., Bellerby, R. 2012. The Southern Ocean Observing System (SOOS): Towards implementation. The Challenger Society (University of East Anglia, United Kingdom)
- Schofield, O.**, Kohut, J., Glenn, S. (2012). Dawn in the age of robotic oceanography: Utility in studying extreme events. American Society of Limnology and Oceanography (Otsu, Japan).
- Brown, W., Boicourt, W., Flagg, C., Gangopadhyay, A., **Schofield, O.**, Glenn, S., Kohut, J. (2012). Mapping the Mid-Atlantic cold pool evolution and variability with ocean gliders and numerical models. Marine Technology Society (Hampton Roads, Virginia)
- Schofield, O.**, Glenn, S., Kohut, J., Manderson, J., Saba, G., Oliver, M. (2012). Phytoplankton dynamics and bottom water oxygen during a large bloom in the summer of 2011. Marine Technology Society (Hampton Roads, Virginia)
- Glenn, S., **Schofield, O.**, Kohut, J., Roarty, H., Kerfoot, J., Oliver, M., Seim, H., Seroka, G., Palamara, L., Bowers, L., Dunk, R., Crowley, M., Boicourt, W., Brown, W., Atkinson, L. (2012). Impact of ocean observations on Hurricane Irene intensity forecasts. Marine Technology Society (Hampton Roads, Virginia)
- Carvalho, A. F., **Schofield, O.**, Saba, G., Kohut, J., Ducklow, H. (2014). The role of light availability and nutrient delivery in controlling phytoplankton bloom in Palmer Canyon in West Antarctic Peninsula. (Ocean Sciences, Honolulu, Hawaii)
- Brown, W., **Schofield, O.**, Glenn, S., Kohut, J., Boicourt, W. (2014). The evolution of the 2007 Mid-Atlantic cold pool. (Ocean Sciences, Honolulu, Hawaii)
- **Brum, J. R., Hurwitz, B. L., **Schofield, O.**, Ducklow, H. W., Sullivan, M. B. (2014). Seasonal time bombs: Temperate viruses dominate the Southern Ocean and substantially affect microbial dynamics. (Ocean Sciences, Honolulu, Hawaii)
- Crowley, M. F., Glenn, S. M., **Schofield, O.**, Whoriskey, F., Brown, W. (2014). Gliderpalooza 2013: So much more than gliders. (Ocean Sciences, Honolulu, Hawaii)
- **Ellis, D. P., Washburn, L., Ohlman, C., Moline, M., **Schofield, O.** (2014). Evaluating the performance of underwater gliders as virtual moorings off Pt. Sal, California. (Ocean Sciences, Honolulu, Hawaii)
- Glenn, S. M., Miles, T., Seroka, G., Xu, Y., **Schofield, O.** (2014). Using ocean observatory data to motivate hurricane ocean and atmospheric model sensitivity studies in the Mid-Atlantic. (Ocean Sciences, Honolulu, Hawaii)
- Glenn, S., **Schofield, O.**, Kohut, J. (2014). Leveraging ocean observatories and web-based educational tools for sustained undergraduate research in ocean science. (Ocean Sciences, Honolulu, Hawaii)
- **Kavanaugh, M. T., Doney, S. C., Ducklow, H. W., **Schofield, O.**, Stammerjohn, S. E. (2014). Role of submarine canyons on phytoplankton dynamics along the Western Antarctic peninsula. (Ocean Sciences, Honolulu, Hawaii)
- **Miles, T. N., Glenn, S., **Schofield, O.**, Kohut, J., Seroka, G. (2014). Sediment transport in hurricane Sandy. (Ocean Sciences, Honolulu, Hawaii)
- Saba, G. K., Fraser, W. R., Saba, V. S., Ducklow, H. W., **Schofield, O.** (2014). Austral winter and spring controls on the food web at Palmer station, West Antarctic Peninsula. (Ocean Sciences, Honolulu, Hawaii)
- Schofield, O.**, Richter, K., Glenn, S. M., McDonnell, J. (2014). Developing a range of ocean acidification learning tools. (Ocean Sciences, Honolulu, Hawaii)
- Schofield, O.**, Saba, G., Finkel, Z., Irwin, A., Ducklow, H. (2014). Biogeochemical and ecological consequences of phytoplankton community composition along a melting West Antarctic Peninsula. (Ocean Sciences, Honolulu, Hawaii)
- Schofield, O.**, Meredith, M., Newman, L. (2014). Building a Southern ocean observing system. (Ocean Sciences, Honolulu, Hawaii)
- **Seroka, G. N., Glenn, S., **Schofield, O.**, Miles, T., Xu, Y. (2014). Coastal ocean impact on Hurricane Irene intensity. (Ocean Sciences, Honolulu, Hawaii)

- Sherrell, R. M., Lagerstrom, M., Stammerjohn, S., Yager, P. L., **Schofield, O.** (2014). Working of in an intense natural iron fertilization region during climate warming: Bioactive metal dynamics in Amudsen Sea polynya, West Antarctica. (Ocean Sciences, Honolulu, Hawaii)
- **Stukel, M. R., Ducklow, H. W., **Schofield, O.**, Erickson, M. E., Strelbel, S. (2014). The balance of new and export production in the Bismarck strait, Western Antarctic Peninsula. (Ocean Sciences, Honolulu, Hawaii)
- Washburn, L., Ohlman, C., Ellis, D., **Schofield, O.**, Moline, M. (2014). Observations of poleward flows around the bio-geographic boundary at Pt. Conception, CA, using ocean observing technologies. (Ocean Sciences, Honolulu, Hawaii)
- **Xu, Y., Glenn, S., **Schofield, O.**, Miles, T., Seroka, G. (2014). The heat and momentum balance during summer storm Irene in the Mid-Atlantic Bight. (Ocean Sciences, Honolulu, Hawaii)
- Santoro, M., **Schofield, O.**, Pearlman, J., Nativi, S. (2015). B-Cubed Ocean Scenario. (European Geophysical Union, Brussels, Belgium)
- **Seroka, G., Miles, T., Glenn, S., Xu, Y., Forney, R., Roarty, H., **Schofield, O.**, Kohut, J. (2016). Enhanced Ahead-of-Eye TC Coastal Ocean Cooling Processes and their Impact on Air-Sea Heat Fluxes and Storm Intensity (Ocean Sciences, New Orleans, LA)
- Schofield, O.**, McDonnell, J., Kohut, J., Glenn, S. (2016). RU COOL's scalable educational focus on immersing society in the ocean through ocean observing systems. (Ocean Sciences, New Orleans, LA)
- Geller, L., Weller, R., **Schofield, O.** (2016). Recommendations of the National Academies' Study: *A Strategic Vision for NSF Investments in Antarctic and Southern Ocean Research*. (Ocean Sciences, New Orleans, LA)
- Miles, T. N., **Schofield, O.**, Hoon Lee, S., Yager, P., Ha, H. (2016). Glider observations of the Dotson Ice Shelf outflow and its connection to the Amudsen Sea Polynya. (Ocean Sciences, New Orleans, LA)
- ** Li, Z., Cassar, N., Huang, K., Ducklow, H., **Schofield, O.** (2016). The effect of sea-ice dynamics on Net Community Production (NCP) at the western Antarctic Peninsula (WAP) region. (Ocean Sciences, New Orleans, LA)
- Sherrell, R., Fitzsimmons, J., Rocanova, J., **Schofield, O.**, Meredith, M. (2016). The 3D Distribution of Dissolved and Colloidal Fe, Mn, Zn, Cu, Ni, Cd and Pb in the Western Antarctic Peninsula Shelf Region; Implications for Natural Fe Fertilization. (Ocean Sciences, New Orleans, LA)
- Schofield, O.**, Saba, G., Miles, T. N., Carvalho, F., Couto, N. (2016). Decadal variability in phytoplankton community structure along the West Antarctic Peninsula. (Ocean Sciences, New Orleans, LA)
- Kavanaugh, M., **Schofield, O.**, Ducklow, H., Doney, S. (2016). Ocean Color Reveals Multi-scale Responses of Phytoplankton to Changing Sea Ice and Ocean Temperatures along the Western Antarctic Peninsula. (Ocean Sciences, New Orleans, LA)
- Reinfelder, J., Sontag, P., **Schofield, O.**, Ducklow, H. (2016). Dissolved elemental mercury and dimethylmercury in continental shelf surface waters west of the Antarctic Peninsula. (Ocean Sciences, New Orleans, LA)
- Carvalho, F., Kohut, J., **Schofield, O.**, Oliver, M., Gorbunov, M. (2016). Deciphering the Temporal and Spatial Complexity in Submarine Canyons in Antarctica: the Role of Mixed Layer Depth in Regulating Primary Production. (Ocean Sciences, New Orleans, LA)
- Crowley, M., Vardaro, M., Belabbassi, L., Smith, M., Garzio, L., Knuth, F., Glenn, S., **Schofield, O.**, Lichtenwalner, C., Kerfoot, J. (2016). The Ocean Observatories Initiative: Data, Data and More Data. (Ocean Sciences, New Orleans, LA)
- Newman, L., **Schofield, O.**, Wahlin, A., Constable, A., Swart, S. (2016). An Observing System for the Southern Ocean. (Ocean Sciences, New Orleans, LA)
- Smith, M., Vardaro, M., Crowley, M., Glenn, S., **Schofield, O.**, Belabbassi, L., Garzio, L., Knuth, F., Fram, J., Kerfoot, J. (2016). The Ocean Observatories Initiative: Data Acquisition Functions and Its Built-In Automated Python Modules. (Ocean Sciences, New Orleans, LA)
- Schofield, O.**, Ducklow, H., Steinberg, D., Saba, G., Miles, T., Carvalho, F., Cuoto, N., Waite, N., Kahl, A., Finkel, Z., Irwin, A., Saba, V. (2016). Decadal dynamics in phytoplankton communities in the West Antarctic Peninsula. (International SCAR meeting, Kuala Lumpur, Malaysia)
- **Randolph, K., Dierssen, H. M., **Schofield, O.**, Munro. (2016). Estimates of Phytoplankton Community Composition in the Productive Coastal Waters of Antarctica and Potential Impacts on Carbon Cycling. (American Geophysical Union, San Francisco)
- **O'Brien, S. J., Dykstra, S. L., Quas, L., Dzwonkowski, B., Howden, S., Wallace, D. J., Church, I., **Schofield, O.**, Miles, T., Wiggert, J. D. (2017). Characterizing Spatial and Temporal Changes of the Suspended Particulate Matter in the Mississippi Sound and Mississippi Bight. (GoMRI Gulf of Mexico Conference, Tampa, FL)

- Schofield, O.** Brown, M., Carvalho, F., Couto, N., Miles, T., Nardelli, S., Waite, N., Saba, G. 2017. Decadal variability in phytoplankton community structure along rapidly changing West Antarctic Peninsula. Marine Technology Society (Anchorage, Alaska)
- Glenn, S., **Schofield, O.**, Kohut, J., Saba, G., Miles, T., McDonnell, J., Hotaling, L., Crowley, M., Roarty, H. 2017. Workforce development for the blue economy: Rutgers masters in Operational Oceanography. Marine Technology Society (Anchorage, Alaska)
- **Cuoto, N., Kohut, J., **Schofield, O.**, Dinniman, M., Graham, J. 2017. Pathways and retention times to a biologically productive canyon on the West Antarctic Peninsula. Marine Technology Society (Anchorage, Alaska)
- ** Brown MS, Munro DR, Sweeney C, **Schofield, O.** 2018. Impacts of phytoplankton dynamics on biogeochemistry along the West Antarctic Peninsula. Ocean Sciences (Portland, OR)
- **Brown, M. S., Bowman, J. S., Lin, Y., Cassar, N., **Schofield, O.** 2020. Unexpected low diversity of a key phytoplankton groups along the West Antarctic Peninsula. Ocean Sciences (San Diego, CA)
- ** Sherman, J, Gorbunov, M. Y., **Schofield, O.**, Falkowski, P. G. 2020. Photosynthetic energy conversion efficiency along the West Antarctic Peninsula. Ocean Sciences (San Diego, CA)