

OSCAR MAX ERIC SCHOFIELD

Coastal Ocean Observation Lab, Institute of Marine and Coastal Sciences
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Born: 10/16/1965

EDUCATION AND PROFESSIONAL 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, Institute of Marine and Coastal Science, Rutgers University
2001-2007 Associate Professor, Institute of Marine and Coastal Science, Rutgers University
2007-present Professor, Institute 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-present) Co-Director of the Coastal Ocean Observation Laboratory
(1999-present) member Rutgers Environmental Biophysics and Molecular Biology Program
(2000-present) member of Rutgers Ocean Systems Engineering Center
(2001-present) Adjunct Professor, California Polytechnic State University, San Luis Obispo, CA.

RESEARCH INTERESTS

Environmental regulation of primary productivity in aquatic ecosystems, Evolution of phytoplankton and impact of 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-Present)
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 Increment Program (FASIP) Award (1998-2007)
Rutgers Cook College TEAM Award (2006)
Technology Collaboration Award by the Naval Research Lab at Stennis Space Center (2007)
Honorary member of the British Phycological Society (2008)

TEACHING EXPERIENCE

Post-Doctoral Advisor for

Dr. Mark Moline, Institute of Marine and Coastal Sciences, Rutgers University, NJ (1996-1997)

Presently: Faculty at California Polytechnic State University

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 (2006-2007)

Presently: Research Faculty at Rutgers University

Dr. Renato Castelao, Institute of Marine and Coastal Sciences, Rutgers University, NJ (2006-2008)

Presently: Research Faculty at Rutgers University

Dr. Martin Montes-Hugo, Institute of Marine and Coastal Sciences, Rutgers University, NJ (2007-present)

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 a Research Scientist 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 an AAAS Congressional Fellow

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 Mount Allison 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 Harvard University*

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-present) *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) *Presently Ph.D. student at University of Delaware*

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)

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-present)

Xu Yi “Physical regulation of biogeochemical fluxes of continental shelves” Institute of Marine and Coastal Sciences, Rutgers University, (Ph.D. 2006-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)

Katarzyna Niewiadomska, Laboratoire d'Océanographie de Villefranche (Ph.D. In progress)

Dong Lai Gong, Institute of Marine and Coastal Sciences, Rutgers University, NJ (Ph.D. In progress)

Cheng Yi, Institute of Marine and Coastal Sciences, Rutgers University, NJ (Ph.D. In progress)

Undergraduate Summer 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’.

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 Evan Goodwill-Randal “Slocum Gliders, storms, and sediment resuspension” (*Research Internship*)
- 2008 Michael garzio “Phytoplankton bloom dynamics and exudation rates” (*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”
 2008 Major Revision of the Undergraduate Course “Oceanographic Methods and Data Analysis” 11:6289:364

Year: Courses Taught (course number)

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
 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

COMMUNITY OUTREACH

1997-Pres. IMCS Project Tomorrow Instructor (over 2,000 Pre-Collegiate Teachers Registered)
 (<http://marine.rutgers.edu/pt/home.htm>)
 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
 2008 Podcast for the New Jersey Network on “Ocean Observatories”

SOCIETY MEMBERSHIPS

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

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 Langragian 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
 2004-2006 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 Lecturer for the Short Course "An oceanographic life beyond chlorophyll a : measuring primary productivity
 from space" sponsored by Ocean Optics 2006 in Montreal Canada
 2006 Steering Committee for "Artificial Intelligence and Autonomous Systems Symposium" Monterey Bay
 2006 Advisory Committee for the "Undersea Vehicle Technology Center"
 2007-2008 Board of Directors of the Canadian "Ocean Entity Society"
 2007-2008 Oversight 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

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, 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 in 2005-present)
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)
Agricultural Experiment Faculty Search for Marine Extension (2007)

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

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.**, Grzymski, 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.**, Grzymski, 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., Diongi, 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., Grzymski, 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. **Grzyski, 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.**, Grzyski, 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. **Grzyski, 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., Johengren, 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 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. **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.
92. **Schofield, O.**, Bosch, J., Glenn, S. M., Kirkpatrick, G., Kerfoot, J., Moline, M., Oliver, M., Bissett, W. P. 2007. 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.
93. Bissett, W. P., Arnone, R., Debra, S., Dye, D., Kirkpatrick, G., Mobley, C., **Schofield, O.** 2007. 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.

94. **Oliver, M., Petrov, D., Ackerley, D., Falkowski, P. G. **Schofield, O.** The mode and tempo of genome size evolution in eukaryotes. *Journal of Genome Research*. doi/10.1101/gr.6096207.
95. **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
96. 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
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* 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

PUBLICATIONS ACCEPTED OR IN PRESS (**Paper by students and post-doctoral researchers)

106. Johnsen, G., **Schofield, O.**, Pinckney, J. Egeland, E. Monitoring of phytoplankton blooms and other local scale features: How to trace phytoplankton pigment signatures in situ. In *Pigments in Oceanography*. UNESCO, Paris. (In press)
107. Chao, Y., Farrara, J. D., Zhijin, L., Moline, M. A., **Schofield, O.** Synergistic applications of autonomous underwater vehicles and regional ocean modeling system in coastal ocean forecasting. *Limnology and Oceanography* (in press)
108. Glenn, S. M., Jones, C., Twardowski, M., Bowers, L., Kerfoot, J., Webb, D., **Schofield, O.** Studying resuspension processes in the Mid-Atlantic Bight using Webb slocum gliders. *Limnology and Oceanography* (in press)
109. Glenn, S. M., **Schofield, O.**, Chant, R., Kohut, J., McDonnel, J. Educational needs in the changing field of operational oceanography: Training the people that will sustain Munk's 1+1=3 scenario. *Marine Technology Society* (in press).

PUBLICATIONS IN REVISION OR SUBMITTED (**Paper by students and post-doctoral researchers)

- Dubinsky, Z., **Schofield, O.** Photosynthesis under extreme low and high light in the world's oceans. *Hydrobiologia* (submitted)
- **Bergmann, T., Seebo, J., **Schofield, O.** Photoacclimation and mixotrophy in cryptomonads. *J. Phycology*. (submitted).
- Schofield, O.**, Oliver, M., Moline, M. A. Mixing and photoacclimation in coastal Antarctica: Impact on photosynthetic quantum yields. *Marine Ecology Progress Series*. (In revision)

- Schofield, O.**, Chant, R., Hunter, E., Moline M. A., Reinfelder, J., Glenn, S. M., Frazer, T. Optical transformations in a turbid buoyant plume. *Journal of Geophysical Research* (submitted)
- **Cetinic I., Todd R. E., Jones B. H., Davis R. E., Moline, M. A. Rudnick D. L., **Schofield, O.** Resolving urban plumes using Autonomous Gliders in the Coastal Ocean. *Journal of Geophysical Research* (submitted)
- **Cermeno, P., **Schofield, O.**, Harris, R. P., Falkowski, P. G. Nutricline depth and its role in regulating the relative Distribution of diatoms and coccolithophorids in the ocean. *Nature*. (submitted)
- **Yost, J., Chant, R., Frazer, T. F., Reinfelder, J., **Schofield, O.**, Moline, M. A. Phytoplankton community structure and dynamics within a buoyant river plume. *Continental Shelf Research*. (submitted)
- Frazer, W., Martinson, D. G., Jones, C., **Schofield, O.**, Kerfoot, J., Kohut, J., Glenn, S. M. Adélie penguin foraging, food web and physical system dynamics along the western Antarctic Peninsula. *Geophysical Research Letters* (submitted)
- Martinson, D. G., Frazer, W., **Schofield, O.**, Kerfoot, J. Cross-shelf transport pathways along the western Antarctic Peninsula. *Geophysical Research Letters* (submitted)
- **Kahl, A., Schofield, O., Garzio, M., Falkowski, P. G., Song, J. On the nature of phytoplankton exudate and its role in carbon export efficiency. *Proceedings of the National Academy of Sciences*

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

- **Gong, D., Kohut, J., **Schofield, O.**, Glenn, S. Characterizing summer time shelf-slope exchange processes in the New Jersey Shelf
- ** Montes-Hugo M., Ducklow, H., Stammerjohn, S., Martinson, D., **Schofield, O.** Climate induced changes in the primary production of the western Antarctic peninsula.
- **Matteson, R., S. M. Blackwell, J. Bellingham, F. Chavez, S. Haddock, M. Oliver, **O. Schofield**, M. A. Moline. Bio-optical response to episodic upwelling in Monterey Bay, CA. *Deep-Sea Research*
- **Montes-Hugo, M. A., Ducklow, H., Vernet, M. A., **Schofield, O.** Contribution of heterotrophic bacteria to particulate beam attenuation in polar and non-polar marine waters.
- **Oliver, M., Bidle, K., **Schofield, O.**, Falkowski, P. G. Nutrient induced expression of retrotransposable elements in diatoms: Implications for plankton evolution in a stressful ocean.
- **Wolfe-Simon, F., **Schofield, O.**, Hey, J., Falkowski, P. G. The evolution of iron and manganese superoxide dismutases in marine phytoplankton
- Schofield, O.**, Cahill, B., Chant, R. C., Benoit-Bird, K., Kahl, A., Xu, Y., Glenn, S. M. Trophodynamics of the Mid-Atlantic Bight. *Continental Shelf Research*.
- Schofield O.**, Montes-Hugo, M., Clarke, A., Frazer, W., Martinson, D., Prezelin, B., Smith, R. S., Vernet, M., Ducklow, H. Phytoplankton community dynamics in the changing waters along the West Antarctic Peninsula. Iglesias-Rodriguez, D., **Schofield, O.** The evolution of marine bioluminescence. *Journal of Marine Systems*
- **Xu, Y., Chant, R. C., Castaleo, R., **Schofield, O.** Decadal dynamics in the seasonal phytoplankton dynamics in the Mid-Atlantic Bight.
- **Kahl, A., Cermeno, P., **Schofield, O.** Exudate dynamics and its role on the efficiency of the export flux.
- **Montes-Martin, M., **Schofield, O.**, Vernet, M., Ducklow, H. Importance of the phytoplankton community composition in air-sea CO₂ dynamics.
- **Cahill, B., Bissett, W. P., Chant, R. C., Wilkin, J., **Schofield, O.** Geochemical signatures associated with altered river flow dynamics on continental shelves.

SYMPOSIUM EXTENDED ABSTRACTS

- Schofield, O.**, Bergmann, T., Grzymalski, J., Glenn, S. 1999. Spectral fluorescence and inherent optical properties during upwelling events off the coast of New Jersey. *SPIE Ocean Optics XIV*
- Kirkpatrick, G., **Schofield, O.**, Millie, D. F., Moline, M. A. 1999. Optical discrimination of phytoplankton species in naturally mixed populations. *SPIE Ocean Optics XIV*
- 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*
- 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*
- 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*
- **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*

- **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*
- 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.
- 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.
- 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.
- 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*.
- 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*.
- 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*.
- Schofield, O.**, Chant, R. M., Kohut, J., Glenn, S. M. (2007). Evolution of the Coastal Ocean Observation Lab. *Oceans 2007*.
- 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

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. August 2007, Volume 48, No. 8

NATIONAL REPORTS

- Prézelin, 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.
- 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
- Workshop participants. (1998). Executive summary to the application of remote sensing to red-tide forecasts in the Gulf of Mexico. NOAA report
- 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.
- Detrick, R., Baggeroer, A., Delong, E., Duennebie, 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.
- 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.
- 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.

Schofield, O., Tivey, M. (2005). Ocean Research Interactive Observatory Networks. National Science Foundation. 295 pp.

Spindel, R., Barth, J., Brink K., Daly, K., Delaney, J., Detrick, R., Frye, D., Jacobs, G., Janhke, 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.

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 Weeks) Langragian transport and transformation experiment

FIELD EXPEDITIONS (Only expeditions longer than 3 days, over a 150 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 R.V. Laurentian Lake Michigan (2 Weeks) Hydrological optics of a coastal turbidity plume
 2000 R.V. Endeavor (20 days) Utilization of KSS laser lidar for assessing thermocline depth
 2000 R.V. Walford (4 Weeks) Coastal predictive skill experiments focused on coastal upwelling
 2000 R.V. SunCoaster (3 weeks) Physiology of natural populations of toxic Gymnodinium breve red-tides
 2001 R.V. Endeavor (20 days) Hyperspectral Remote Sensing
 2001 R.V. Walford (4 weeks) Coastal predictive skill experiments focused on coastal upwelling
 2001 R.V. SunCoaster (1 week) Physiology of natural populations of toxic Gymnodinium breve red-tides
 2002 R.V. Sproul (1 week) Chloroplast sequestration in deep-sea foramanifera in the Santa Barbara Channel
 2003 R.V. Suncoaster (1 week) Autonomous vehicle operations for detecting the presence of red-tide
 2004 R. V. Connecticut (1 week) Langragian Advection Transport and Transformation Experiment
 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 (3 weeks) Novel acoustic methods within a coastal observatory
 2009 R. V. Gould (6 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 \$330 million National Science Foundation MREFC award

GRANT AWARDS

Research Grants (\$49,302,827 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 Technologies)
- 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 Metaxasa, 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., Stammerjohn, 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)

TEACHING GRANTS (\$1,412,002 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” PIs Michael DeLuca, Janice McDonnell, CoPIs Ken Able, Scott Glenn, and Oscar Schofield (\$100,000)
- NSF 1999 to 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)

PRESENTATIONS

I) Invited Seminars

- Schofield, O., Prézelin, 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 phylogenetic 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)

II) Contributed presentations and published abstracts

(** 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_{He}° , 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., Grzyski, 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, HI.
- Kirkpatrick, G. J., **Schofield, O.**, Millie, D. F. (1998) Optical discrimination of a phytoplankton species in natural mixed populations Ocean Optics, Maui, HI.
- 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., Grzymiski, 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.
- **Grzymiski, 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., Grzymiski, 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., Grzymiski, 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.
- **Grzymiski, 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., Grzymiski, 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.
- **Grzyski, 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., Prasaad, 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., Fahenestiel, 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, GH., 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., Bergamnn, 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., Reinfelder, 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., Reinfelder, 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*. Sapporo, 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.)