### CURRICULUM VITAE

#### PERSONAL INFORMATION

Name:	Grace Kathleen Saba, PhD
Position:	Assistant Research Professor
Office Address:	Institute of Marine and Coastal Sciences
	Rutgers University
	71 Dudley Rd.
	New Brunswick, NJ 08901
	Office phone: (848) 932-3466; Email: saba@marine.rutgers.edu

### **EDUCATION**

Aug 2003 – Jan 2010	PhD in Marine Science
	College of William & Mary
	Virginia Institute of Marine Science, Department of Biological Sciences
Sept 2000 – June 2002	B.S. in Aquatic Biology
	University of California, Santa Barbara

### **RESEARCH/PROFESSIONAL EXPERIENCE**

July 2014 - present	Operations Director of MARACOOS (Mid-Atlantic Regional Association Coastal Ocean
	Observing System) at Rutgers University
	Responsibilities: Coordinating collaborative underwater glider and modeling efforts (i.e.,
	Gliderpalooza 2014, http://maracoos.org/blogs/main/)
Dec 2012 – present	Assistant Research Professor
	Rutgers University
	Description: Plankton ecology, physiology, biogeochemistry, food web dynamics, ocean acidification, physical-biological coupling, Antarctic science.
Feb 2010 – Dec 2012	Post Doctoral Research Associate (Supervisor: Dr. Oscar Schofield)
	Rutgers University
	Description: Plankton ecology, physiology, biogeochemistry, food web dynamics, ocean acidification, physical-biological coupling, Antarctic science.
Aug 2003 – Jan 2010	Ph.D. Student
	Virginia Institute of Marine Science (VIMS), College of William & Mary
	(Advisor: Dr. Deborah K. Steinberg)
	Description: Ph.D. dissertation research entitled "The Role of Copepods and Heterotrophic
	Dinoflagellates in the Production of Dissolved Organic Matter (DOM) and Inorganic Nutrients "
Ian 2003 - June 2003	Lab Assistant III Marine Science Institute/Minerals Management Service
Juli 2005 Julie 2005	University of California Santa Barbara (Supervisor: Dr. Russell Schmitt)
	Description: Submitted reports to the US Department of Interior's Minerals Management
	Service for projects involving the social economic and environmental impacts of coastal
	as and all production
June 2001 - Dec 2002	Lab Assistant I. Marine Science Institute
Julie 2001 – Dec 2002	University of California Santa Barbara (Supervisor: Dr. Alice Alldredge)
	Description: Projects included determining dissolved organic carbon composition in
	marine snow particles excretion of Transparent Exonolymer Particles (TEP) by Calanus
	<i>nacificus</i> copeneds (senior honors project) and bacterial degradation of TEP
Juna 2001 Dag 2002	Lab Assistant I. Marine Science Institute
Julie 2001 – Dec 2002	University of California Sonta Parbara (Supervisor: Dr. James Childress)
	Description: Dhysiology/metabolism of hydrothermal yeart along myssols worms
	Description. Thysiology/metabolism of hydrothermal vent claims, mussels, worms

#### **TEACHING/MENTORING EXPERIENCE**

Jan 2015 – May 2015	Co-teaching undergraduate/graduate course entitled "Ocean Ecology" Institution: Rutgers University
Feb 2010 – May 2010	Guest Lecturer in undergraduate/graduate course entitled "Biological Oceanography" Institution: Rutgers University, Instructor: Dr. Oscar Schofield
Feb 2010 – May 2010	Guest Lecturer in undergraduate course entitled "Ocean Observing Systems" Institution: Rutgers University, Instructor: Dr. Oscar Schofield
Aug 2009 – Dec 2009	Teaching assistant and guest lecturer in graduate course entitled "Biological Oceanography" Institution: Virginia Institute of Marine Science, Instructor: Dr. Deborah Steinberg
Jun 2007 – present	Mentor for undergraduate student research: Lori Price, VIMS (recently graduated with Master's in marine science); Miram Gleiber, VIMS (just defended her Master's in marine science and will soon start a Ph.D. program at Oregon State University); Amelia Snow, Rutgers (currently working as a technician in marine science lab); Emily Pirl, Rutgers (currently working as a technician in marine science lab); Amanda Williams, Rutgers (currently finishing her undergraduate degree); Ryan Fantasia, Rutgers (currently finishing her undergraduate degree); Ryan Fantasia, Rutgers (currently finishing her undergraduate degree); Grace Coogan, Occidental College (currently finishing her undergraduate degree) Alec Meacham, Livingston NJ High School (currently in his senior year of high school)

#### PUBLICATIONS

- Saba, G.K., Fraser, W.R., Saba, V.S., Iannuzzi, R.A., Coleman, K.E., Doney, S.C., Ducklow, H.W., Martinson, D.G., Miles, T.N., Patterson-Fraser, D.L., Stammerjohn, S.E., Steinberg, D.K., and Schofield, O. 2014. Winter and Spring Controls on the Summer Food Web of the coastal West Antarctic Peninsula. Nature Communications, 5: 4318, doi: 10.1038/ncomms5318.
- Schofield, O., Kohut, J., Saba, G., Yi, X., Wilkin, J., and S. Glenn. Ocean observing and prediction. 2014. In: Y.Q. Wang, Ed., Encyclopedia of Natural Resources. Taylor Francis, New York, NY. doi:10.1018/E-ENRW-120048087.
- Schofield, O., Ducklow, H., Bernard, K., Doney, S., Patterson-Fraser, D., Gorman, K., Martinson, D., Meredith, M., Saba, G., Stammerjohn, S., Steinberg, D., and W. Fraser. 2013. Penguin biogeography along the West Antarctic Peninsula. Oceanography 26: 78-80.
- Saba, G.K., and D.K. Steinberg. 2012. Abundance, composition, and sinking rates of fish fecal pellets in the Santa Barbara Channel. Scientific Reports 2: doi:10.1038/srep00716.
- Saba, G.K., Schofield, O., Torres, J.J., Ombres, E.H., and D.K. Steinberg. 2012. Increased feeding and nutrient excretion of adult Antarctic krill, *Euphausia superba*, exposed to enhanced carbon dioxide (CO<sub>2</sub>). PLoS ONE: doi:10.1371/journal.pone.0052224.
- Saba, G.K., Steinberg, D.K., and D.A. Bronk. 2011. The relative importance of sloppy feeding, excretion, and fecal pellet leaching in the release of dissolved carbon and nitrogen by *Acartia tonsa* copepods. Journal of Experimental Marine Biology and Ecology 404: 47-56.
- Saba, G.K., Steinberg, D.K., Bronk, D.A., and A.R. Place. 2011. The effects of harmful algal species and food concentration on zooplankton grazer production of dissolved organic matter and inorganic nutrients. Harmful Algae 10: 291-303.
- Saba, G.K., Steinberg, D.K., and D.A. Bronk. 2009. Effects of diet on release of dissolved organic and inorganic nutrients by the copepod *Acartia tonsa*. Marine Ecology Progress Series 386: 147-161.
- Steinberg, D.K. and G.K. Saba. 2008. Nitrogen consumption and metabolism in marine zooplankton. In: Capone, D.G., Bronk, D.A., Mulholland, M.R., and E.J. Carpenter, eds., Nitrogen in the Marine Environment, 2nd Edition. Academic Press, Boston. p 1135-1196.
- Goldthwait, S.A., Carlson, C.A., **Henderson, G.K.**, and A.L. Alldredge. 2005. Effects of physical fragmentation on remineralization of marine snow. Marine Ecology Progress Series 305: 59-65.

## **GRANTS RECEIVED**

2014	Physiological ecology and habitat suitability: combining experiments and surveys to inform stock assessments. NOAA Habitat. Amount awarded: \$88,011.
2013	Collaborative Research: Synergistic effects of elevated carbon dioxide (CO <sub>2</sub> ) and temperature on the metabolism, growth, and reproduction of Antarctic krill ( <i>Euphausia superba</i> ). National Science Foundation. Amount awarded: \$732,435.
2012	Functional genomic analysis of the Antarctic cryptophyte, <i>Geminigera cryophila</i> , under variable light regimes. NJAES Competitive Intramural Research Awards Program. Amount awarded: \$8000.
2006	EPA STAR Graduate Fellowship \$1000 Student Research Grant \$500 VIMS Travel Grant
2005	\$1000 VIMS Equipment Grant \$100 VIMS GSA Conference Fund
2003	Virginia Institute of Marine Science/School of Marine Science Funded Fellowship

### **EDUCATION AND OUTREACH**

2014	Invited speaker for Rutgers Ocean Days 2014
2013-present	Lead PI of Project PARKA (Planting AntaRctica in KAnsas); http://coseenow.net/project-parka/
2013	Invited speaker for Rutgers IMCS and Institute of Instructional Design teacher professional
	development event "STEM Educators' Series"
2012	Invited speaker for Princeton Harmony Schools science fair, Toddler-Kindergarten
2012	Invited speaker for Stony Brook University outreach program entitled "Polar Climate Change
	Research: A Workshop for Educators"
2012	Participant in COSEE NOW outreach program "Gear Professional Development Series"
2012	Participant in COSEE NOW outreach program "Science Stories 2012"
2003-2010	Marine Science Day, Virginia Institute of Marine Science (VIMS)

# SYNERGISTIC ACTIVITIES

2014	Invited speaker: NOAA's James J. Howard Marine Sciences Laboratory at Sandy Hook, NJ
2012-present	Editorial Board Member of Scientific Reports journal
2012	Keynote speaker at the XXXII Scientific Committee on Antarctic Research (SCAR) meeting (Portland OR)
2012	Invited talk at Ocean Acidification Town Hall Meeting at the XXXII SCAR meeting (Portland, OR)
2011	Invited speaker: Graduate School of Oceanography, University of Rhode Island
2011	Invited speaker: Atmospheric and Ocean Sciences, Princeton University
2010-present	Serve on National Science Foundation (NSF) review panels and review NSF proposals
2010-present	Review manuscripts for Geophysical Research Letters, Marine Biology, Limnology &
	Oceanography, Journal of Plankton ResearchPolar Biology, Functional Ecology, Aquatic
	Microbial Ecology, Biogeochemistry
2010	Co-Chair of "Biological Oceanography General Contributions" session at Ocean Sciences
	Meeting (Portland, OR)
2005-present	Oral and poster presentations at scientific conferences including ASLO, Ocean Sciences, Ocean
	Acidification, and Estuarine Research Federation

## HONORS AND AWARDS

2005	Top 50 student poster presentation from the Estuarine Research Federation (Norfolk, VA)
2004	Craig L. Smith Memorial Educational Scholarship Award (VIMS)
2004, 2011	Antarctic Service Medal
2003, 2005	NSF Graduate Fellowship Honorable Mention
2002	Beatrice M. Sweeney Award (UCSB)
2002	Highest Honors and Distinction in the major (UCSB)
2002	Department of Biological Sciences Senior Honors Research Program (UCSB)