GRACE K. SABA
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PROFESSIONAL PREPARATION

University of California, Santa Barbara	Aquatic Biology	B.S., 2002
College of William and Mary	Marine Science	Ph.D., 2010
Rutgers University	Marine and Coastal Sciences (post-doc)	2010 – 2011

APPOINTMENTS

Sept 2015 – present	Assistant Professor, DMCS, Rutgers University
Nov 2011 – Aug 2015	Assistant Research Professor, DMCS, Rutgers University

TEACHING AT RUTGERS

- Sea Monsters and Weird Biology in Earth's Oceans (11:628:130) (2019 – present)
- Oceanography Seminar (16:712:605, 16:712:606) (2017 – present)
- The Biology of Living in the Ocean: Water Column Ecosystems & Processes/Biological Oceanography (11:628:461/16:712:520) (2016 – present)
- Ocean Methods and Data Analysis: Biology/Chemistry (11:628:363) (2016 – present)
- Ocean Ecology/Biological Oceanography (11:628:462/16:712:522) (2014 – 2016)
- Ocean Methods and Data Analysis (11:628:364) (2014 – 2015)

PUBLICATIONS (NOTES: HENDERSON IS MAIDEN NAME; * = SABA STUDENT OR POST-DOC)

Published, In Press, In Revision, In Review, and Submitted

Saba, G.K., Wright-Fairbanks, E., Chen, B., Cai, W.-J., Barnard, A.H., Jones, C.P., Branham, C.W., Wang, K., Miles, T. *In press*. The development and validation of a profiling glider Deep ISFET pH sensor for high resolution coastal ocean acidification monitoring. Frontiers in Marine Science.

Hunter-Thomson, K., Kohut, J., **Saba, G**. *In press.* Connecting to Empowering Students with Polar Science through Real World Data. Current: The Journal of Marine Education.

Testor, P., DeYoung, B., Rudnick, D., Glenn, S., Hayes, D., Lee, C., Pattiaratchi, C., Turpin, V., Heslop, E., **Saba, G.**, and 88 others. 2019. Ocean gliders: A component of the integrated Global Ocean Observing System (GOOS). Frontiers in Marine Science, https://doi.org/10.3389/fmars.2019.00422.

Cross, J.N., Turner, J., Cooley, S.R., Newton, J., Azetsu-Scott, K., Braby, C.E., Canesi, K., Chambers, C., Dugan, D., Goldsmith, K., Gurney-Smith, H., Harper, A., Jewett, L., Joy, D., King, T., Kurz, M., Morrison, R., Motyka, J., Ombres, E., Paguirigan, M., Regula-Whitefield, C.M., **Saba, G.K.**, Silva, E., Smits, E., Vreeland-Dawson, J., Wickes, L. 2019. Building the Knowledge-to-Action Pipeline in North America: Connecting Ocean Acidification Research and Actionable Decision Support. Frontiers in Marine Science 6: 356, doi:10.3389/fmars.2019.00356.

*Slesinger, E., Andres, A., Young, R., Seibel, B., Saba, V., Phelan, B., Rosendale, J., Wieczorek, D., **Saba, G**. 2019. The effect of ocean warming on black sea bass (*Centropristis striata*) aerobic scope and hypoxia tolerance. PLoS ONE 14 (6): e0218390. https://doi.org/10.1371/journal.pone.0218390.

Goldsmith, K.A., Lau, S., Poach, M.E., Sakowicz, G.P., Trice, T.M., Ono, R.C., Nye, J., Shadwick, E.H., St.Laurent, K.A., **Saba, G.K.** 2019. Scientific Considerations for Acidification Monitoring in the U.S. Mid-Atlantic Region. Estuarine, Coastal and Shelf Science 225: 106189, https://doi.org/10.1016/j.ecss.2019.04.023.

Saba, G.K., Goldsmith, K.A., Cooley, S.R., Grosse, D., Meseck, S.L., Miller, W., Phelan, B., Poach, M., Rheault, R., St. Laurent, K., Testa, J., Weis, J.S., Zimmerman, R. 2019. Recommended Priorities for Research on Ecological Impacts of Coastal and Ocean Acidification in the U.S. Mid-Atlantic. Estuarine, Coastal and Shelf Science 225: 106188, https://doi.org/10.1016/j.ecss.2019.04.022.

Schofield, O., Aragon, D., Jones, C., Kohut, J., Miles, T. N., Roarty, H., **Saba, G.**, Yi, X., Glenn, S. 2018. Maturing glider technology providing a modular platform capable of mapping ecosystems in the ocean. In Challenges and Innovations in Ocean In-Situ Sensors, Delory and Pearlman (Eds). Elsevier, York. pp. 173-193.

Schofield, O., Glenn, S., Kohut, J., Miles, T., Roarty, H., **Saba, G.**, McDonnell, J. 2018. Developing practical data skills in undergraduate students using ocean observatories. Marine Technology Society 52(1): 1-7.

Chave, R., Buermans, J., Lemon, D., Taylor, J.C., Lembke, C., DeCollibus, C., **Saba, G.K.**, Reiss, C.S. 2018. Adapting Multi-Frequency Echo-sounders for Operation on Autonomous Vehicles. OCEANS'18 MTS/IEEE, Charleston, SC, USA, 2018, pp. 1-6.

Kohut, J., Glenn, S., McDonnell, J., Miles, T., **Saba, G.**, Schofield, O. 2018. Workforce Development Supporting the Blue Economy: A Master's Program of Integrated Ocean Observing at Rutgers University. OCEANS'18 MTS/IEEE, Charleston, SC, USA, 2018, pp. 1-8.

Saba, G.K., Wright-Fairbanks, E., Chen, B., Cai, W.-J., Barnard, A.H., Jones, C.P., Branham, C.W., Wang, K., Miles, T. 2018. Developing a profiling glider pH sensor for high resolution coastal ocean acidification monitoring. OCEANS'18 MTS/IEEE, Charleston, SC, USA, 2018, pp. 1-8.

Schofield, O., Brown, M., Kohut, J., Nardelli, S., **Saba, G.**, Waite, N. 2018. Changes in the upper ocean mixed layer and phytoplankton productivity along the West Antarctic Peninsula. Philosophical Transactions of the Royal Society A. 376: 20170173, http://dx.doi.org/10.1098/rsta.2017.0173.

Schofield, O., **Saba, G.K.**, Coleman, K., Carvalho, A.F., Couto, N., Ducklow, H., Finkel, Z., Irwin, A., Kahl, A., Miles, T., Montes-Hugo, M., Stammerjohn, S., Waite, N. 2017. Decadal variability in coastal phytoplankton community composition in a changing West Antarctic Peninsula. Deep-Sea Research I 124: 42-54.

Fountain, A.G., **Saba, G.K.**, Adams, B., Doran, P., Fraser, W., Gooseff, M., Obryk, M., Priscu, J.C., Stammerjohn, S., Virginia, R. 2016. The impact of a large-scale climate event on Antarctic ecosystem processes. Bioscience 66(10): 848-863.

Gutt, J., Constable, A., Cummings, V., Hosie, G., McIntyre, T., Mintenbeck, K., Murray, A., Peck, L.S., Ropert-Coudert, Y., **Saba, G.**, Schofield, O., Schloss, I., Stefels, J., Takahashi, K. 2016. Vulnerability of Southern Ocean biota to climate change. Antarctic Environments Portal, http://nora.nerc.ac.uk/513335/.

Schofield, O., Jones, C., Kohut, J., Kremer, U., Miles, T.N., **Saba, G.K.**, Webb, D., Glenn, S. 2015. Developing Coordinated Communities of Autonomous Gliders for Sampling Coastal Ecosystems. Marine Technology Society Journal 49(3): 9-16.

Saba, G.K., Fraser, W.R., Saba, V.S., Iannuzzi, R.A., Coleman, K.E., Doney, S.C., Ducklow, H.W., Martinson, D.G., Miles, T.N., Patterson-Fraser, D.L., Stammerjohn, S.E., Steinberg, D.K., Schofield, O. 2014. Winter and Spring Controls on the Summer Food Web of the coastal West Antarctic Peninsula. Nature Communications, 5: 4318, doi: 10.1038/ncomms5318.

Schofield, O., Kohut, J., **Saba, G.**, Yi, X., Wilkin, J., Glenn, S. Ocean observing and prediction. 2014. In: Y.Q. Wang, Ed., Encyclopedia of Natural Resources. Taylor Francis, New York, NY. pp. 802-807.

Schofield, O., Ducklow, H., Bernard, K., Doney, S., Patterson-Fraser, D., Gorman, K., Martinson, D., Meredith, M., **Saba, G.**, Stammerjohn, S., Steinberg, D., Fraser, W. 2013. Penguin biogeography along the West Antarctic Peninsula. Oceanography 26: 78-80.

Saba, G.K., Steinberg, D.K. 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., Steinberg, D.K. 2012. Increased feeding and nutrient excretion of adult Antarctic krill, *Euphausia superba*, exposed to enhanced carbon dioxide (CO_2). PLoS ONE: doi:10.1371/journal.pone.0052224.

Schofield, O., Roarty, H., **Saba, G.**, Xu, Y., Kohut, J., Glenn, S., Manderson, J., Oliver, M. 2012. Phytoplankton dynamics and bottom water oxygen during a large bloom in the summer of 2011. Oceans, 2012, doi: 10.1109/OCEANS.2012.6405078.

Saba, G.K., Steinberg, D.K., Bronk, D.A. 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., Place, A.R. 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., Bronk, D.A. 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. **Saba, G.K.** 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.**, Alldredge, A.L. 2005. Effects of physical fragmentation on remineralization of marine snow. Marine Ecology Progress Series 305: 59-65.

FUNDING

2019 Optimizing Ocean Acidification Observations for Model Parameterization in the Coupled Slope Water System of the U.S. Northeast Large Marine Ecosystem. NOAA Ocean Acidification Program/IOOS. Project location: Rutgers University. Amount requested (09/01/2019-8/31/2022): $1,499,895. (Lead PI). Person-months per year committed to project: 0.5 month/year (summer).

2019 Buoyant river outflows as a control on microplastic fate and transport: sources, transformations, dispersion and sinks. NOAA National Ocean Service. Project location: Rutgers University. Amount awarded (09/01/2019-8/31/2021): $319,766. (co-PI; Lead PI of project = Robert Chant, Rutgers). Person-months per year committed to project: 0.5 (summer).

2018 Assessing the susceptibility of Atlantic sea scallops and surf clams to ocean acidification using glider-based coastal monitoring and larval transport models. NJ Sea Grant Consortium/NOAA. Project location: Rutgers University. Amount awarded (08/01/2018-7/31/2020): $94,000. (Lead PI). Person-months per year committed to project: 0.1 months (academic).

2018 Continued development of the Mid-Atlantic Coastal Acidification Network (MACAN): 2018-2021. NOAA Ocean Acidification Program. Project location: Rutgers University. Amount awarded (06/01/2018-05/31/2021): $45,000. (Lead PI). Person-months per year committed to project: 0.5 (summer).

2018 River plumes as a control on microplastic entry into the food chain. NJ Sea Grant Consortium/NOAA. Project location: Rutgers University. Amount awarded (02/01/2018-1/31/2020): $185,736. (co-PI; Lead PI of project = Nicole Fahrenfeld, Rutgers). Person-months per year committed to project: 0.5 (summer).

2018 Towards a better understanding of fish contribution to carbon flux. Ocean Carbon and Biogeochemistry (NSF). Project location: Rutgers University. Amount awarded (2/01/2018-1/31/2020): $17,396. (Lead PI). Person-months per year committed to project: 0.1 (academic).

2018 Vulnerability of the largest U.S. estuary to Acidification: Implications of declining pH for shellfish hatcheries in the Chesapeake Bay. NOAA Ocean Acidification Program. Project location: Rutgers University. Amount awarded (01/01/2018-12/31/2020): $270,000. (co-PI; Lead PI of project = Elizabeth Shadwick, Virginia Institute of Marine Science). Person-months per year committed to project: 0.1 (academic).

2017 Using bio-acoustics on an autonomous surveying platform to examine phytoplankton-zooplankton and fish interactions in the western Ross Sea. NSF PLR-Antarctic Research (EAGER). Project location: Rutgers University. Amount awarded (08/15/2017-7/31/2019): $299,988. (Lead PI). Person-months per year committed to project: 0.5 (summer).

2017 Continuation of the Mid-Atlantic Coastal Acidification Network, MACAN. NOAA Ocean Acidification Program. Project location: Rutgers University. Amount awarded (06/01/2017-05/30/2018): $10,000 (co-PI but Rutgers lead PI; Lead PI of project = Gerhard Kuska, MARACOOS). Person-months per year committed to project: 0.5 (summer).

2016 Collaborative Research: Developing a profiling glider pH sensor for high resolution coastal ocean acidification monitoring. NSF OCE OTIC. Project location: Rutgers University. Amount awarded (10/01/2016-09/30/2019): $882,647. (Lead PI; co-PIs = Travis Miles, Rutgers and Wei-Jun Cai, University of Delaware). Person-months per year committed to project: 1.0 (summer).

2016 Mid-Atlantic Regional Resilience: Linking Coastal Ocean Information to Enhance Economic, Social and Ecological Resilience. NOAA NOS: Regional Coastal Resilience. Project location: Rutgers University. Amount awarded (08/01/2016-05/15/2018): $103,242. (co-PI but Rutgers lead PI; Lead PI of project = Mid-Atlantic Regional Ocean Council). Person-months per year committed to project: 0.5 (summer).

2016 Development of the Mid-Atlantic Coastal Acidification Network, MACAN. NOAA Ocean Acidification Program. Project location: Rutgers University. Amount awarded (06/01/2016-05/30/2017): $5,000 (co-PI but Rutgers lead PI; Lead PI of project = Gerhard Kuska, MARACOOS). Person-months per year committed to project: 0.5 (summer).

2016 Mid-Atlantic Regional Association Coastal Ocean Observing System (MARACOOS): Preparing for a Changing Mid-Atlantic. NOAA IOOS. Project location: Rutgers University. Amount awarded: $2,365,365 (06/01/2016-05/30/2021). (co-PI; Lead PI of project = Scott Glenn, Rutgers). Person-months per year committed to project: 0.1 (summer).

2015 Indicators of habitat change affecting three key commercial species of the U.S. Northeast Shelf: A design to facilitate proactive management in the face of climate change. NOAA OAR COCA. Project location: Rutgers University. Amount awarded (08/01/2015-07/31/2019): $747,743. (co-PI but Rutgers lead PI; Lead PI of project = Vincent Saba, NOAA NMFS). Person-months per year committed to project: 1.0 (summer).

2014 Physiological ecology and habitat suitability: combining experiments and surveys to inform stock assessments. NOAA Habitat. Project location: Rutgers University. Amount awarded (07/01/2014-06/30/2017): $88,011. (co-PI but Rutgers lead PI; Lead PI = Jon Hare, NOAA NMFS).

2013 Collaborative Research: Synergistic effects of elevated carbon dioxide (CO_2) and temperature on the metabolism, growth, and reproduction of Antarctic krill (*Euphausia superba*). NSF PLR-Antarctic Research. Project location: Rutgers University. Amount awarded (05/01/2013-04/30/2016): $732,435. (Lead PI; co-PI = Brad Seibel, URI).

2012 Functional genomic analysis of the Antarctic cryptophyte, *Geminigera cryophila*, under variable light regimes. NJAES Competitive Intramural Research Awards Program. Project location: Rutgers University. Amount awarded (03/01/2012-2/28/2014): $8000. (Lead PI; co-PI = Oscar Schofield, Rutgers).

INVITED TALKS

Saba, G.K., 2019. The Mid-Atlantic Coastal Acidification Network (MACAN). Invited presentation for the Ocean Acidification Alliance meeting: Coast to Coast State Convening Regional Impacts of Ocean and Coastal Acidification and State-Led Efforts to Respond. Brooklyn, NY.

Saba, G.K., 2019. State of Ocean and Coastal Acidification in the Mid-Atlantic. Invited seminar presented for the Marine Extension Program Seminar Series (MEPSS) with Rutgers Cooperative Extension.

Saba, G.K., 2019. The Mid-Atlantic Coastal Acidification Network (MACAN). Invited presentation and Ocean Acidification Breakout Session Lead. Mid-Atlantic Ocean Forum. Monmouth University, Monmouth, NJ.

Saba, G.K., 2018. State of Ocean and Coastal Acidification in the Mid-Atlantic. Invited seminar presented at Monmouth University.

Saba, G.K., 2018. Merging science and technology to investigate a changing ocean. Invited presentation and panel participation in the Women in Engineering PROGRESS Panel. OCEANS'18 MTS/IEEE, Charleston, SC.

Saba, G.K. 2018. Ecosystem Response to Antarctic Climate Variability and Change. Invited keynote presentation at 4th International Symposium on the Effects of Climate Change on the World's Oceans (ECCWO), Washington, DC.

Saba, G.K. 2018. An Introduction to the Mid-Atlantic Coastal Acidification Network (MACAN) Invited seminar presented at New Jersey Sea Grant. Sandy Hook, NJ.

Saba, G.K. 2017. Developing a Robust, Comprehensive Observation System and Investigating the Impacts of Environmental Variability on Organism Tolerance to Stressors. Fabien Cousteau Ocean Learning Center Oceans Future Symposium. Microsoft Technology Center, New York City, NY.

Saba, G.K. 2015. From organisms to ecosystems: Individual physiological responses and trophic dynamics in a changing climate. Invited seminar presented at University of California, Santa Barbara.

Saba, G.K. 2014. Physical-biological coupling, trophic dynamics, and plankton processes in a changing climate. Invited seminar presented at University of Delaware.

Saba, G.K. 2014. Physical-biological coupling, trophic dynamics, and plankton processes in a changing climate. Invited seminar presented at University of Central Florida.

Saba, G.K. 2014. Physical-biological coupling, trophic dynamics, and plankton processes in a rapidly changing Antarctic system. Invited seminar presented at University of Washington.

Saba, G.K. 2014. The West Antarctic Peninsula: Merging Rapid Change with Great People. Invited presentation for "Entertaining Science" at the Cornelia Café. Grenwich Village, New York City, NY.

Saba, G.K. 2013. Antarctica, Climate Change, and Krill. Invited presentation for Rutgers IMCS and Institute of Instructional Design teacher professional development event "STEM Educators' Series".

Saba, G.K. 2012. Impacts of Ocean Acidification on Marine Organisms and Polar Ecosystems. Invited keynote presentation at XXXII Scientific Committee on Antarctic Research (SCAR), Portland, OR.

Saba, G.K. 2012. Ocean Acidification and Impacts on Antarctic Food Webs. Invited speaker for Stony Brook University outreach program entitled "Polar Climate Change Research: A Workshop for Educators".

CONFERENCE PROCEEDINGS (NOTE: HENDERSON IS MAIDEN NAME; * = SABA STUDENT OR POST-DOC)

Saba, G.K., Wright-Fairbanks, E., Chen, B., Cai, W.-J., Barnard, A.H., Jones, C.P., Branham, C.W., Wang, K., Miles, T. The development and validation of a profiling glider deep ISFET-based pH sensor for high resolution observations of coastal and ocean acidification. Poster presented at the OceanObs'19 meeting, Honolulu, HI. September 2019.

Saba, G.K., Wright-Fairbanks, E., Chen, B., Cai, W.-J., Barnard, A.H., Jones, C.P., Branham, C.W., Wang, K., Miles, T. The development and validation of a profiling glider deep ISFET-based pH sensor for high resolution observations of coastal and ocean acidification. Talk presented at the 8th EGO meeting and International Glider Workshop, New Brunswick, NJ. May 2019.

*Wiltsee, L., Wright-Fairbanks, E., Miles, T., **Saba, G.K.** Glider-based assessment of the susceptibility of important commercial fishery habitats to ocean acidification. Talk presented at the 8th EGO meeting and International Glider Workshop, New Brunswick, NJ. May 2019.

*Wright-Fairbanks, E., **Saba, G.K.**, Chen, B., Cai, W.-J., Barnard, A.H., Jones, C.P., Branham, C.W., Wang, K., Miles, T. Glider-based observation of pH and saturation state variability in commercial shellfishery management zones in the Mid-Atlantic Bight. Poster presented at the 8th EGO meeting and International Glider Workshop, New Brunswick, NJ. May 2019.

Saba, G.K. MACAN Workshop Introductory remarks: Recent Successes of MACAN. Talk presented at the MACAN workshop, Baltimore, MD. May 2019.

*Wright-Fairbanks, E., **Saba, G.K.**, Chen, B., Cai, W.-J., Barnard, A.H., Jones, C.P., Branham, C.W., Wang, K., Miles, T. The development and validation of a profiling glider pH sensor for high resolution observations of coastal and ocean acidification. MACAN Webinar. March 2019. Link.

*Slesinger, E., Young, R., Andres, A., Seibel, B., Saba, V., Phelan, B., Wieczorek, D., Rosendale, J., **Saba, G**. The effect of ocean warming on black sea bass aerobic scope and hypoxia tolerance. Poster presented at Rutgers Climate Symposium, New Brunswick, NJ. November 2018.

*Wright-Fairbanks, E., **Saba, G.K.**, Chen, B., Cai, W.-J., Barnard, A.H., Jones, C.P., Branham, C.W., Wang, K., Miles, T. Development of a deep-sea glider pH sensor to monitor coastal acidification. Poster presented at Rutgers Climate Symposium, New Brunswick, NJ. November 2018.

Saba, G.K., Merging science and technology to investigate a changing ocean. Invited presentation and panel participation in the Women in Engineering PROGRESS Panel. OCEANS'18 MTS/IEEE, SC, USA. October 2018.

Chave, R., Buermans, J., Lemon, D., Taylor, J.C., Lembke, C., DeCollibus, C., **Saba, G.K.**, Reiss, C.S. Adapting Multi-Frequency Echo-sounders for Operation on Autonomous Vehicles. Talk presented at OCEANS'18 MTS/IEEE, Charleston, SC, USA. October 2018.

Kohut, J., Glenn, S., McDonnell, J., Miles, T., Saba, G., Schofield, O. Workforce Development Supporting the Blue Economy: A Master's Program of Integrated Ocean Observing at Rutgers University. Talk presented at OCEANS'18 MTS/IEEE, Charleston, SC, USA. October 2018.

Saba, G.K., Wright-Fairbanks, E., Chen, B., Cai, W.-J., Barnard, A.H., Jones, C.P., Branham, C.W., Wang, K., Miles, T. Developing a profiling glider pH sensor for high resolution coastal ocean acidification monitoring. Talk presented at OCEANS'18 MTS/IEEE, Charleston, SC, USA. October 2018.

Goldsmith, K., **Saba, G.K.** Managing Global Acidification on a Regional Scale: How the US Mid-Atlantic and Northeast Coastal Acidification Networks (MACAN and NECAN) Are Working to Understand Impacts through Partnerships. Joint webinar for Coastal-Marine EBM Tools Network. October 2, 2018. Link.

Kohut, J., Schofield, O., Glenn, S., **Saba, G.**, Miles, T. McDonnell, J. Globalizing frontier technologies for ocean and atmosphere observing and forecasting: Promoting E.U.-U.S. partnerships for research, education and service to society. Instituto Hidrografico, Lisbon, Portugal. September 2018.

Kohut, J., Schofield, O., Glenn, S., **Saba, G.**, Miles, T. McDonnell, J. Globalizing frontier technologies for ocean and atmosphere observing and forecasting: Promoting Spanish-U.S. partnerships for research, education and service to society. Puertos Del Estados, Madrid, Spain. September 2018.

Andres, A., *Slesinger, E., **Saba, G.**, Saba, V., Phelan, B., Rosendale, J., Wieczorek, D., Seibel, B. An investigation of the effects of rising temperature on metabolic scope in the Spiny Dogfish, *Squalus acanthias*. Talk presented at American Fisheries Society, Atlantic City, NJ. August 2018.

*Charpentier, C.L., Young, R., Cossio, A., Reiss, C., Buermans, J., **Saba, G.K.** (presenter). Fishing with robots: Understanding the Ross Sea food web through integration of acoustic and AUV technology. Talk presented at American Fisheries Society, Atlantic City, NJ. August 2018.

Saba, G.K. Fish in the future ocean: Lessons from physiological studies. Talk presented at American Fisheries Society, Atlantic City, NJ. August 2018.

*Slesinger, E., Young, R., Andres, A., Seibel, B., Saba, V., Phelan, B., Rosendale, J., Wieczorek, D., **Saba, G.** Effects of ocean warming on Black Sea Bass (*Centropristis striata*) aerobic scope and hypoxia tolerance. Talk presented at American Fisheries Society, Atlantic City, NJ. August 2018.

Goldsmith, K., **Saba, G.K.** MACAN Monitoring Plan. Webinar presented for the Mid-Atlantic Coastal Acidification Network (MACAN) webinar series. March 6, 2018. Link.

Andres, A., Seibel, B., Slesinger, E., **Saba, G.**, Saba, V., Phelan, B., Young, R. An investigation of the effects of rising temperature on metabolic scope in the Spiny Dogfish, *Squalus acanthias.* Talk presented at Ocean Sciences, Portland, OR. February 2018.

Saba, G.K., Goldsmith, K. The Mid-Atlantic Coastal Acidification Network (MACAN): Developing regional research priorities and a monitoring plan to address community needs. Poster presented at Ocean Sciences, Portland, OR. February 2018.

Schofield, O., Glenn, S., Kohut, J., Miles, T., Roarty, H., **Saba, G.**, McDonnell, J. Marine technology expanding ocean literacy and diversity of wider university audiences. Talk presented at Ocean Sciences, Portland, OR. February 2018.

Saba, G.K., Goldsmith, K. MACAN Research Priorities. Webinar presented for the Mid-Atlantic Coastal Acidification Network (MACAN) webinar series. February 6, 2018. Link.

Saba, G.K., Goldsmith, K. MACAN and Monitoring. Webinar presented for the Mid-Atlantic Ocean Data Portal How Tuesday Series. October 24, 2017. Link.

*Slesinger, E., **Saba, G.**, Young, R., Andres, A., Saba, V., Phelan, B., Rosendale, J., Wieczorek, D., Seibel, B. Effects of temperature on black sea bass (*Centropristis striata*) metabolic rate and aerobic scope. Talk presented at ICES 2017 Annual Science Conference (ASC), Fort Lauderdale, FL. September 2017.

Saba, G.K., Goldsmith, K. Monitoring in the Mid-Atlantic. Talk presented at the first Mid-Atlantic Coastal Acidification Network (MACAN) workshop. Annapolis, MD, USA. May 2017.

Saba, G.K., Miles, T., Cai, W.-J., Barnard, A., Jones, C. Developing a profiling glider pH sensor for high resolution coastal ocean acidification monitoring. Poster presented at the first U.S. Underwater Glider Workshop, INFINITY Science Center, Pearlington, MS. January 2017.

*Slesinger, E., **Saba, G.K.**, Young, R., Andres, A., Saba, V., Phelan, B., Rosendale, J., Wieczorek, D., Seibel, B. Effects of temperature on Black Sea Bass (*Centropristis striata*) metabolic rate: Integrating physiological studies and climate change models to predict potential changes in distribution. Poster presented at Rutgers Climate Symposium, New Brunswick, NJ. November 2016.

Schofield, O., Ducklow, H., Steinberg, D., **Saba, G.**, Miles, T., Carvalho, F., Cuoto, N., Waite, N., Kahl, A., Finkel, Z., Irwin, A., Saba, V. Decadal dynamics in phytoplankton communities in the West Antarctic Peninsula. Talk presented at XXXIV Scientific Committee on Antarctic Research (SCAR), Kuala Lumpur, Malaysia. August 2016.

Kohut, J., Manderson, J., Palamara, L., Saba, V., **Saba, G.K.**, Hare, J., Curchitser, E., Moore, P., Seibel, B., and G. DiDomenico. Toward dynamic ocean management: Fisheries assessment and climate projections informed by community developed habitat models based on dynamic coastal oceanography. Poster presented at Ocean Sciences, New Orleans, LA. February 2016.

Schofield, O., **Saba, G.K.**, Miles, T. N., Carvalho, F., Couto, N. Decadal variability in phytoplankton community structure along the West Antarctic Peninsula. Talk presented at Ocean Sciences, New Orleans, LA. February 2016.

Saba, G.K., Bockus, A., Fantasia, R., Shaw, C., Sugla, M., Seibel, B. Temperature and pH effects on feeding and growth of Antarctic krill. Poster presented at Ocean Sciences, New Orleans, LA. February 2016.

Glenn, S., Kohut, J., Schofield, O., **Saba, G.K.**, Miles, T. The ocean is our classroom: A 4-year research track for undergraduate exploration, research and discovery in oceanography. A talk presented at MTS/IEEE Oceans, Washington DC. October 2015.

Bockus, A., **Saba, G.K.**, Seibel, B.A. The synergistic effects of ocean acidification and warming on Antarctic krill (*Euphausia superba*): Acid-base balance, metabolism and growth. First Ocean Global Change Biology Gordon Research Conference, Waterville Valley, NH. July 2014.

Hunter-Thomson, K.I., **Saba, G.K.**, Krehbiel, M.D. Ocean acidification, krill, and Kansas: scientists share research experience in Antarctica to inspire high school teachers and students. Talk presented at Ocean Sciences, Honolulu, HI. February 2015.

Saba, G.K., Fraser, W.R., Saba, V.S., Iannuzzi, R.A., Coleman, K.E., Doney, S.C., Ducklow, H.W., Martinson, D.G., Miles, T.N., Patterson-Fraser, D.L., Stammerjohn, S.E., Steinberg, D.K., Schofield, O. 2014. Austral winter and spring controls on the food web at Palmer Station, West Antarctic Peninsula (WAP). Poster presented at Ocean Sciences, Honolulu, HI. February 2015.

Schofield, O., Kahl, A., **Saba, G.K.**, Finkel, Z., Irwin, A., Moline, M., Vernet, M., Prezelin, B., Ducklow, H. Climate induced shifts in the phytoplankton community biomass and community structure along the West Antarctica Peninsula. Poster presented at the Long Term Ecological Research All Scientists Meeting (LTER ASM), Estes Park, CO. September 2012.

Saba, G.K., Saba, V., Fraser, W., Stammerjohn, S., Ducklow, H., Martinson, D., Steinberg, D.K., Schofield, O. Large scale forcing through the Antarctic food web: Physical drivers of the interannual variability at Palmer Station, Antarctica. Poster presented at the Long Term Ecological Research All Scientists Meeting (LTER ASM), Estes Park, CO. September 2012.

Saba, G.K., Schofield, O., Torres, J., Hudson, E., Steinberg, D.K. Increased feeding and nutrient excretion of adult Antarctic krill, *Euphausia superba*, exposed to enhanced carbon dioxide (CO_2). Talk presented at XXXII Scientific Committee on Antarctic Research (SCAR), Portland, OR. July 2012.

Saba, G.K., Jones, B., Coleman, K., Ducklow, H., Erickson, M., Garzio, M., Iglesias-Rodriguez, D., Miles, T., Schofield, O. 2012. Differential response of natural phytoplankton communities to enhanced carbon dioxide (CO_2) along the West Antarctic Peninsula. Talk presented at Ocean Sciences, Salt Lake City, UT. February 2012.

Saba, G.K., Steinberg, D.K., Bronk, D.A., Place, A.R. The effects of harmful algal species and food concentration on zooplankton grazer production of dissolved organic matter and inorganic nutrients. Poster presented at Ocean Sciences, Portland, OR. February 2010.

*Price, L.M., **Saba, G.K.**, Steinberg, D.K. 2008. Zooplankton grazing on two ecologically important harmful algal species in the Chesapeake Bay. Poster presented at Ocean Sciences, Orlando, FL. February 2008.

Saba, G.K., Steinberg, D.K., Bronk, D.A. 2008. Grazing and nutrient release from *Acartia tonsa* copepods feeding on toxin-producing *Karlodinium veneficum*: Interactions of top-down and bottom-up control. Talk presented at Ocean Sciences, Orlando, FL. February 2008.

Saba, G.K., Steinberg, D.K. 2007. The impacts of carnivorous feeding by *Acartia* copepods on production of dissolved organic matter (DOM). Talk presented at ASLO, Santa Fe, NM. February 2007.

Henderson, G.K., Steinberg, D.K., Bronk, D.A. 2006. Dissolved organic matter (DOM) composition and release rates from meso- and micro-zooplankton grazers in the Chesapeake Bay: Implications of prey type. Talk presented at Ocean Sciences, Honolulu, HI. February 2006.

Henderson, G.K., Steinberg, D.K., Bronk, D.A**.** The role of mesozooplankton and microzooplankton grazers in the production of dissolved organic matter (DOM). Poster presented at Estuarine Research Federation (ERF), Norfolk, VA. October 2005.

SYMPOSIUM LEADERSHIP

Saba, G.K. 2019. Co-chair (with Irene Schloss and Craig Smith), Rapid climate change drives ecosystem shifts along the West Antarctic Peninsula Breakout Session. Antarctic Thresholds-Ecosystem Resilience and Adaptation (AnT-ERA) Workshop. Coimbra, Portugal.

Saba, G.K. 2019. Co-chair (with Catherine Edwards, Skidaway), New Sensors and Sampling Strategies Breakout Session. 8th EGO meeting and International Glider Workshop. New Brunswick, NJ.

Saba, G.K. 2019. Co-chair (with Kari St.Laurent, DNREC), Ocean Acidification Breakout Session. Mid-Atlantic Ocean Forum. Monmouth, NJ.

Saba, G.K. 2018. Chair, session entitled Fish in the Future Ocean: Lessons from Physiological Studies. American Fisheries Society. Atlantic City, NJ.

RESEARCH CRUISE/FIELDWORK PARTICIPATION

July 2018/Apr 2019	Cruises in Raritan Bay (NJ) to determine microplastic aggregation and ingestion
Jan/Feb 2017/2018	Laboratory studies of thermal optima: Spiny dogfish, NOAA J.J. Howard Laboratory
Jul/Aug 2016/2017	Laboratory studies of thermal optima: Black sea bass, NOAA J.J. Howard Laboratory
Jan 2014, 2015	Synergistic effects of Elevated Carbon Dioxide (CO_2) and Temperature on the Metabolism, Growth, and Reproduction of Antarctic Krill (*Euphausia superba*), Palmer Station, Antarctica
Nov 2013	NOAA/NEFSC Ecosystem Monitoring cruise, U.S. Northeast Shelf, R/V Pisces
Jan 2012	Palmer Long-Term Ecological Research (PAL-LTER) Annual cruise, West Antarctic Peninsula, R/V Laurence M. Gould
Jan 2011	PAL-LTER Annual cruise, West Antarctic Peninsula, R/V Laurence M. Gould
Apr 2006	NSF Biocomplexity project cruise, Santa Barbara Channel, R/V Point Sur
Apr 2005	NSF Biocomplexity project cruise, Chesapeake Bay, R/V Cape Henlopen
Dec 2004	IVARS: Interannual Variations in the Ross Sea, Antarctica, USCGC Polar Star
July 2004	NSF Biocomplexity project cruise, Chesapeake Bay, R/V Cape Henlopen
Dec 2002	Hydrothermal vent cruise, 9^0 North, East Pacific Rise, DSV2 Alvin dive #3850
Dec 2002	Hydrothermal vent cruise, 9^0 North, East Pacific Rise, R/V New Horizon
Aug 2002	Marine Snow cruise, Santa Barbara Channel, R/V Point Sur
Dec 2001	Hydrothermal vent cruise, 9^0 North, East Pacific Rise, R/V New Horizon
Apr 2001	Marine Snow cruise, Santa Barbara Channel, R/V Point Sur

SERVICE

DEPARTMENT

Member, Search committee for SEBS Teaching Faculty (non-tenure track) (2018)
Member, Search committee for SEBS Post-Doctoral Associate (2018)
Member, Graduate Admissions Committee (2018 – present)
Member, EOAS Polar Change Strategic Planning Committee (2017)
Member, Scholastic Review Committee, Graduate Program in Oceanography (2016 – present)
Chair/Member, Senior Award Committee (2016 – present)

REGIONAL/NATIONAL

Lead, Fish Carbon Working Group (2018 – present)
Member, Advisory Council of the Marine Academy of Science and Technology (MAST) (2017 – present)
Co-coordinator of the Mid-Atlantic Coastal Acidification Network (MACAN) (2016 – present)

Member, Steering Committee of the Mid-Atlantic Coastal Acidification Network (MACAN) (2016 – present)
Ocean Acidification Innovation Lead for MARACOOS, Rutgers University (2015 – present)
Operations Director of MARACOOS, Rutgers University (2014 – 2015)

INTERNATIONAL
Co-Lead of the Ocean Health and Ecosystems Task Team for Ocean Gliders (2019 – present)
Executive Steering Team Member, Ocean Gliders (2019 – present)
Member, Antarctic Thresholds-Ecosystem Resilience and Adaptation working group (2019 – present)

ADVISING

GRADUATE
Elizabeth Wright-Fairbanks (July 2017 – present)
Emily Slesinger (July 2016 – present)

POST-DOCTORAL
Corie Charpentier (September 2017 – July 2018): Took a permanent position at Ransom Everglades School

THESIS COMMITTEE MEMBER
Colleen McBride (Department of Ocean Sciences, Memorial University, Canada, current M.S. candidate)
Schuyler Nardelli (DMCS, Rutgers University, current Ph.D. candidate)
Angela Martin (Department of Natural Sciences, University of Agder, Norway, current Ph.D. candidate)
Jaclyn Specht (DMCS, Rutgers University, M.S. awarded in 2017)

UNDERGRADUATE
Emma Huntzinger, Rutgers (SEBS Honors Tutorial)
Madelyn Engelman, Rutgers
Kiernan Bates, Rutgers
Catherine McTighe, Rutgers
Karolina Zbaski, Rutgers
Timothy Stolarz, Rutgers
Camille Adkison, Rollins College (RIOS)
Kasey Walsh, Rutgers (Project SUPER; G.H. Cook Honor's)
Meridian Mathes, Rutgers (Project SUPER)
Brandon Grosso, Rutgers
Laura Wiltsee, Rutgers
Catherine Powell, Rutgers
Grace Chung, Rutgers (Aresty)
Rachael Young, Rutgers (G.H. Cook Honor's)
Bekah Lane, Emporia State University (RIOS)
Gabrielle Quadrado, Rutgers (Study Abroad Summer Intern, Brazil)
Brendan Campbell, Rutgers (G.H. Cook Honor's)
Monisha Sugla, Rutgers (G.H. Cook Honor's)
Oliver Ho, Rutgers (G.H. Cook Honor's)
Ryan Fantasia, Rutgers
Grace Coogan, Occidental College (Summer Intern)
Amanda Williams, Rutgers
Emily Pirl, Rutgers
Amelia Snow, Rutgers (G.H. Cook Honor's)
Miram Gleiber, VIMS
Lori Price (Garzio), VIMS

SABA GRADUATE STUDENT FELLOWSHIPS, GRANTS, AND AWARDS

2019 Manasquan River Tuna and Marlin Club Award (Emily Slesinger)
2018 Mid-Atlantic Sea Grant/NOAA OAP Graduate Research Fellowship (Elizabeth Wright-Fairbanks)

2018 American Fisheries Society John E. Skinner Memorial Award Honorable Mention (Emily Slesinger)
2018 Rutgers TA & GA Professional Development Fund Award (Emily Slesinger)
2018 Rutgers Off-Campus Dissertation Development Award (Emily Slesinger)
2017 Excellence Fellowship (Elizabeth Wright-Fairbanks)

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)

OUTREACH ACTIVITIES

2016	Science Days, NOAA James. J. Howard Marine Science Laboratory
2013-2016	Lead PI of Project PARKA (Planting AntaRctica in KAnsas); http://coseenow.net/project-parka/
2012	Princeton Harmony Schools science fair, Toddler-Kindergarten
2012	Participant in COSEE NOW outreach program "Gear Professional Development Series"
2012	Participant in COSEE NOW outreach program "Science Stories 2012"

SYNERGISTIC ACTIVITIES

Editorial Board Member of *Scientific Reports* journal (July 2012-July 2018); Serve on NSF review panels and review NSF proposals (2010-present); Review manuscripts for Antarctic Science, Aquatic Microbial Ecology, Biogeochemistry, Biogeosciences, Estuaries & Coasts, Functional Ecology, Geophysical Research Letters, Global Biogeochemical Cycles, Journal of Plankton Research, Limnology & Oceanography, Marine Biology, Nature Climate Change, Polar Biology (2010-present); Chair sessions at international conferences (2010-present).