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Professional Preparation

2009 Ph.D. Oceanography, Scripps Institution of Oceanography, UC, San Diego
2002 B.S. Biology and Marine Science, University of Miami

Professional Experience

Fall 2012-pres. **Assistant Professor** — Department of Biological Sciences and School of the Earth, Ocean, & Environment; University of South Carolina; Columbia, SC, USA

Fall 2012-pres. **Research Associate** — Baruch Institute; University of South Carolina; Columbia, SC, USA

Spring 2012 **Lecturer** — Department of Geosciences; Princeton University; Princeton, NJ, USA.

2011-2012 **Associate Research Scholar, Nippon Foundation Senior Nereus Fellow** — Program in Atmospheric and Oceanic Sciences; Princeton University; Princeton, NJ, USA.
Subject: Influence of climate variability and change on global fisheries

2009-2011 **Postdoctoral Fellow** — University Corporation for Atmospheric Research; NOAA Geophysical Fluid Dynamics Laboratory; Princeton, NJ, USA
Subject: Projected effects of climate change on fisheries of the Eastern North Pacific

2002-2003 **NOAA Fisheries Observer** — Alaska Fisheries Science Center; Northwest Observers, Inc.; Bering Sea and Gulf of Alaska; Sisters, OR

Interests

Fisheries oceanographer investigating ecosystem responses to climate variability and change. This research involves consideration of theory, observations (time series and process studies), and models.

The research group works to understand the impact of climate processes--both natural and anthropogenic--on fisheries and ecosystem productivity. By investigating the influence of physical processes on nutrient composition, the carbonate system, oxygen content, and the structure of planktonic assemblages, we hope to better understand the implications of long-term climate changes for the productivity of living marine resources.

Most Relevant Publications Past 3 Years

Checkley, DM Jr., RG Asch, and **RR Rykaczewski**. 2017. Climate, anchovy, and sardine. *Annual Review of Marine Science* 9:469-493, doi:10.1146/annurev-marine-122414-033819.

Lynch, AL, RG Asch, WWL Cheung, CP Paukert, **RR Rykaczewski**, and WHH Sauer. 2017. Special issue: Impacts of climate change on marine and inland fishes and fisheries. *Reviews in Fish Biology and Fisheries* 27(2):293-296, doi:10.1007/s11160-017-9483-0

- Cheung, WWL, TL Frölicher, RG Asch, M Jones, ML Pinsky, G Reygondeau, KB Rodgers, **RR Rykaczewski**, JL Sarmiento, CA Stock, and JR Watson. 2016. Building confidence in projections of the responses of living marine resources to climate change. *ICES Journal of Marine Science* 73:1283-1296, doi:10.1093/icesjms/fsv250.
- Rykaczewski, RR**, JP Dunne, WJ Sydeman, M García-Reyes, BA Black, and SJ Bograd. 2015. Poleward displacement of coastal upwelling-favorable winds in the ocean's eastern boundary currents through the 21st century. *Geophysical Research Letters* 42:6424-6431, doi:10.1002/2015GL064694.
- Grieve, BD, EN Curchitser, and **RR Rykaczewski**. 2016. Range expansion of the invasive lionfish in the Northwest Atlantic with climate change. *Marine Ecology Progress Series* 546:225–237, doi:10.3354/meps11638.
- Bakun, A, BA Black, SJ Bograd, M García-Reyes, AJ Miller, **RR Rykaczewski**, and WJ Sydeman. 2015. Anticipated effects of climate change on coastal upwelling ecosystems. *Current Climate Change Reports* 1:85-93, doi:10.1007/s40641-015-0008-4.

Synergistic Activities

- Editorial positions: Fisheries Oceanography (associate editor since 2015), Progress in Oceanography (associate editor since 2016)
- PICES FUTURE Scientific Steering Committee, member (since 2017)
- PICES Advisory Panel on Circulation Research in East Asian Marginal Seas (AP-CREAMS; since 2018)
- PICES Working Group on Climate and Ecosystem Predictability, co-chair (WG-CEP; since 2017)
- CLIVAR Research Focus Group on Upwelling Systems, panel member (since 2016; co-chair since 2018)
- SECOORA (Southeast Coastal Ocean Observing Regional Association), representative for the University of South Carolina, College of Arts and Sciences (since 2017)
- Clarke, L, R He, S Arnott, J Ballenger, M Karnauskas, K. Lindeman, R Mordecai, J Morley, P Ortner, C Paris, M Pinsky, M Reichert, M Roffer, R Rykaczewski, P Sheng, G Voulgaris, and W White. 2016. Policy Considerations for South Atlantic Climate Variability, Fisheries and Essential Fish Habitats. (A report prepared for the South Atlantic Fishery Management Council.)

Honors and Awards

- 2017-2020 Peter and Bonnie McCausland Fellow of Biological Sciences (University of South Carolina)
- 2016 Distinguished Undergraduate Research Mentor Award (University of South Carolina)
- 2016 Finalist for the Mungo Teaching Award (University of South Carolina)
- 2016 “Breakthrough Star” award (for junior faculty at the University of South Carolina)