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A) PROFESSIONAL PREPARATION

University of California at Santa Cruz
Bachelor of Arts, Chemistry **1994**
University of South Florida, College of Marine Science
Ph.D., Biological Oceanography **2012**

B) APPOINTMENTS

Scientific Researcher **2017-present**
University of South Florida, College of Marine Science
Postdoctoral Scholar **2012-2016**
University of South Florida, College of Marine Science
Director of Marine Studies **2006-2011**
Canterbury School of Florida, St. Petersburg, FL
Research Assistant **1998-2005**
College of Marine Science, University of South Florida

C) PRODUCTS

Montes, E., Djurhuus, A., Muller-Karger, F.E., **Otis, D.B.**, Kelble, C.R., and Kavanaugh, M.T. "Dynamic Satellite Seascapes as a Biogeographic Framework for Understanding Phytoplankton Assemblages in the Florida Keys National Marine Sanctuary, United States". *Front. Mar. Sci.* Vol. 7(575). 2020. DOI:10.3389/fmars.2020.00575

Djurhuus, A., Closek, C.J., Kelly, R.P., Pitz, K.J., Michisaki, R.P., Starks, H.A., Walz, K.R., Andruszkiewicz, E.A., Olesin, E., Hubbard, K., Montes, E., **Otis, D.B.**, Muller-Karger, F.E., Chavez, F.P., Boehm, A.B., and Breitbart, M. "Environmental DNA reveals seasonal shifts and potential interactions in a marine community" *Nature Comm.* Vol. 11(254). 2020. DOI:10.1038/s41467-019-14105-1

Otis, D.B., Le Hénaff, M., Kourafalou, V.H., McEachron, L., and Muller-Karger, F.E. "Mississippi River and Campeche Bank (Gulf of Mexico) Episodes of Cross-Shelf Export of Coastal Waters Observed with Satellites." *Remote Sensing.* Vol. 11(6). 2019. DOI 10.3390/rs11060723

Le Hénaff, M., Muller-Karger, F.E., Kourafalou, V.H., **Otis, D.B.**, Johnson, K.A., McEachron, L., and Kang, H. "Coral Mortality Event in the Flower Garden Banks of the Gulf of Mexico in July 2016: A Consequence of Cross-Shelf Transport of Flood Waters?" 2019. *Continental Shelf Research.*

McCarthy, M.J., **Otis, D.B.**, Mendez-Lazaro, P., and Muller-Karger, F.E., “Water Quality Drivers in 11 Gulf of Mexico Estuaries”. *Remote Sensing*. Vol. 10(255). 2018. DOI 10.3390/rs10020255.

McCarthy, M.J., Muller-Karger, F.E., **Otis, D.B.**, and Mendez-Lazaro, P., “Impacts of 40 years of land cover change on water quality in Tampa Bay, Florida”. *Cogent Geoscience*. Vol. 4, 2018. DOI 10.1080/23312041.2017.1422956.

Laureano-Rosario, A.E., Symonds, E.M., Rueda-Roa, D., and **Otis, D.B.**, “Environmental Factors Correlated with Culturable Enterococci Concentrations in Tropical Recreational Waters: A Case Study in Escambron Beach, San Juan, Puerto Rico”. *Environmental Research and Public Health*. Vol. 14, No. 1602. 2017. DOI 10.3390/ijerph14121602.

McCarthy, M.J., Kolna, K.E., El-Mezeyen, M.M., Laureano-Rosario, A.E., Mendez-Lazaro, P., **Otis, D.B.**, Toro-Farmer, G., Vega-Rodriguez, M., and Muller-Karger, F.E., “Satellite Remote Sensing for Coastal Management: A Review of Successful Applications”. *Environmental Management*, 2017. DOI 10.1007/s00267-017-0880-x.

Mendez-Lazaro, P., Muller-Karger, F.E., **Otis, D.**, McCarthy, M., Rodriguez, E., “A Heat Vulnerability Index to Improve Urban Public Health in San Juan, Puerto Rico”, *International Journal of Biometeorology*. 2017. DOI 10.1007/s00484-017-1319-z.

Mendez-Lazaro, P., Muller-Karger, F.E., **Otis, D.**, McCarthy, M., Pena-Orellana, M., “Assessing climate change effects on dengue incidence in San Juan, Puerto Rico” *International Journal of Environmental Research and Public Health*, Vol.11, pp. 9409-9428. 2014.

Otis, D.B., Carder, K.L., English, D.C., Ivey, J.E. “CDOM transport from the Bahamas Banks” *Coral Reefs*, Vol. 23, No. 1, pp.152-160. 2004.

Lenes, Jason M., Walsh, J.J., **Otis, D.B.**, Carder, K.L. “Iron fertilization of *Trichodesmium* off the west coast of Barbados: A one-dimensional numerical model”. *Deep Sea Research Part 1: Oceanographic Research Papers*, Vol. 52, Issue 6, pp. 1021-1041. 2005.

D) SYNERGISTIC ACTIVITIES

- Member of the ECosystem Spaceborne Thermal Radiometer on Space Station (ECOSTRESS) Science and Applications Team.

- Research cruises: NOAA Ship Nancy Foster, NOAA legs NF-16 02/03, NF-15 02/03; R/V Walton Smith, NOAA’s South Florida Program, seven cruises between April 2015 and August 2018.

- Processing and analysis of large satellite and environmental datasets using MATLAB, IDL, and SeaDAS software packages.

- Creation of data dashboards for National Marine Sanctuaries in the Flower Garden Banks and the Florida Keys which incorporate multiple satellite data products from MODIS and VIIRS as well as in-situ data from buoys and river discharge gages.