

FRANK MULLER-KARGER University of South Florida USA

Frank E. Muller-Karger is a biological oceanographer (Professor) at the College of Marine Science, University of South Florida (Saint Petersburg, Florida, USA). Muller-Karger conducts research on how marine ecosystems change in time. He uses time series of observations collected by traditional oceanographic methods and by satellite sensors to study changes in water quality, primary production, and biodiversity in coastal and marine environments. This research helps in understanding how large-scale phenomena, like climate change or other disturbances, affect ecosystems including people. The focus of his present work is to assess the importance of continental margins, including areas of upwelling, river discharge, and coral reefs in the global carbon budget. Muller-Karger combines the observations from different satellites to measure ocean color, sea surface temperature, winds, salinity and sea surface elevation and how these change. He uses field-based time series to measure the vertical structure of plankton and how particles settle in the ocean. Much of this work focuses on improving methods to measure the diversity of phytoplankton using remote sensing. He has a keen interest in linking science and education. Muller-Karger was appointed by President George W. Bush to serve on the U.S. Commission on Ocean Policy in 2001 and has served on the Ocean Studies Board of the National Research Council/National Academies of the USA. He previously received the NASA Jet Propulsion Laboratory Award for Outstanding Contributions and the NASA Administrator Award for Exceptional Contribution and Service for supporting development of satellite technologies for ocean observation. He has B.S., M.S. and Ph.D. degrees in marine science and a Masters degree in management, and has authored or co-authored over 120 scientific publications. He speaks fluent Spanish and German.