

DISL Faculty

Baker, Ronald, Ph.D. (James Cook Univ., Australia) Dr. Baker's research focuses on the functional roles of coastal ecosystems in support of fisheries, particularly their role as nurseries for fishery species. Research opportunities include field and laboratory-based studies of coastal food webs, species-habitat interactions, and the efficacy of restoration projects. rbaker@disl.org

Belgrad, Benjamin, Ph.D. (University of South Carolina) Dr. Belgrad is a marine ecologist who works within Dr. Smee's laboratory. Dr. Belgrad's research focuses on how the environment shapes individual variation and how variation alters community interactions. Recent work has leveraged individual differences to improve habitat and species restoration techniques. Primary study organisms include oysters, snails, crabs, and fish, incorporating laboratory and field experiments with agent-based modeling (chemosensory biology). bbelgrad@disl.org

Carmichael, Ruth, Ph.D. (Boston Univ.). Dr. Carmichael's research focuses on how human activities and pollution affect animals (e.g., shellfish, marine mammals) and their habitats (water quality), using traditional ecological, biogeochemical/elemental and telemetry methods to understand responses. Carmichael is liaison for the DISL/FDA Joint Fellowship Program and Director of DISL's Manatee Sighting Network and the Alabama Marine Mammal Stranding Network. rcarmichael@disl.org

Dorgan, Kelly, Ph.D. (Univ. of Maine). Dr. Dorgan is an ecologist whose research focuses on interactions between infaunal organisms and marine sediments. She is interested in the mechanics of worm burrowing as well as the impacts of worms on sediment structure and biogeochemical cycling. kdorgan@disl.org

Dzwonkowski, Brian, Ph.D. (Univ. of Delaware). Research interests lie in coastal physical oceanography (things related to the structure and flow of water (currents, tides, stratification) and how physical processes impact biogeochemical cycling and ecosystem function. bdzwonkowski@disl.org

Hoadley, Kenneth D. Ph.D. (Univ. of Delaware). Research focuses on the transfer of energy and complex responses to climate perturbations within unique symbioses such as that between the dinoflagellate taxa (Symbiodiniaceae) and reef corals. Dr. Hoadley's lab uses a combination of physiological and molecular techniques to identify responses to environmental stress. khoadley@disl.org

Kiel Reese, Brandi, Ph.D. (Texas A & M University). Research integrates Geology, Molecular Microbiology, and Geochemistry. Specializes in combining state-of-the-art culture-independent molecular techniques (metatranscriptomics, metagenomics) with high throughput culturing and advanced geochemical analysis to describe the total microbial environment. This systems biology approach to understanding microbial ecology has spanned marine and freshwater; shallow sediments within estuaries and coastal hypoxic zones. bkierreese@disl.org

Krause, Jeffrey, Ph.D. (Oregon St. Univ.). Research focuses on how phytoplankton (marine single-cell plants), especially diatoms, cycle energy and elements in the ocean, and the processes promoting the efficient transfer of their material to higher organisms (e.g. primary and secondary consumers). jkrause@disl.edu

Lehrter, John, Ph.D. (Univ. of Alabama). Research focuses on understanding nutrient, organic matter, and oxygen cycling in coastal systems and how these cycles are related to aspects of water quality (eutrophication, hypoxia, coastal acidification). Research includes use of remotely sensed data and numerical modeling to aid coastal management. jlehrter@disl.org

Martin, Charlie, Ph.D.

Powers, Sean, Ph.D. (Texas A&M). Research focuses on the ecology of marine fish and invertebrates, particularly those that support commercial and recreational fisheries. The ultimate goal of his research program is to provide scientifically sound information to direct conservation and restoration efforts of marine fisheries and habitats. spowers@disl.org

Robertson, Alison, Ph.D. (James Cook Univ., Australia). Research focuses on the drivers, ecological role, and physiological mechanisms, and responses of marine biota and humans to secondary metabolites of harmful algae. Robertson uses integrated 'omics technologies to understand both regulation and response in marine and freshwater systems, particularly sub-lethal effects on cellular and organismal behavior, reproduction, immune system, and nervous system function. arobertson@disl.org

Scyphers, Steven, Ph.D. (University of South Alabama). Research focuses on integrating environmental sociology and ecology to better understand and address some of the major environmental challenges facing coastal communities. His lab's work focuses on sustainable coastal fisheries, shoreline development, ecosystem restoration, and climate adaptation. sscyphers@disl.org

Smee, Lee, Ph.D. (Georgia Institute of Technology) Research focuses on chemical signaling between predators and prey communities, including work related to oyster reef ecology, mangrove encroachment, pesticide effects on blue crabs, and biogeography of seagrass communities in the Gulf of Mexico. ismee@disl.org

Steinmuller, Havalend, Ph.D. Research focuses on biogeochemical cycling of carbon and nutrients within coastal systems, including oyster reefs, saltmarsh, mangrove swamps, and brackish and freshwater wetlands.

Tarnecki, Andrea, Ph.D. (Auburn University). Research focuses on interactions between marine microbes and aquatic organisms, particularly oysters. Techniques include a combination of culture-based and culture-independent methods to understand the influence of environmental parameters and aquaculture practices on microbial dynamics related to oyster health and seafood safety. Tarnecki is Director of the Auburn University Shellfish Lab. atarnecki@disl.org

Titus, Benjamin, Ph.D.