

## DISL Faculty Advisors

**Baker, Ronnie**, 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, with a focus on the diets of early juveniles of fishery species. rbaker@disl.org

**Bloodgood, Jennifer**, Ph.D./DVM (University of Georgia). Dr. Bloodgood is the network veterinarian for live animal response and necropsy of cetaceans and manatees with the Alabama Marine Mammal Stranding Network and DISL's Manatee Sighting Network. She conducts and supports research related to marine mammal health, pathology, and diagnostic assessments, with implications for ecosystem and human health. jbloodgood@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

**Cloyed, Carl**, Ph.D. (University of Louisville) Dr. Cloyed is an evolutionary ecologist who works within Dr. Ruth Carmichael's laboratory. Dr. Cloyed's research focuses on how environmental factors shape niche variation within and among species and drive animal movement and predator-prey interactions. Research opportunities include using stable isotopes to better understand links between freshwater input and community dynamics in and around Mobile Bay. ccloyed@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. [bkielreese@disl.org](mailto:bkielreese@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](mailto: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](mailto:jlehrter@disl.org)

**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](mailto:spowers@disl.org)

**Robertson, Alison**, Ph.D. (James Cook Univ., Australia). Research focuses on toxicity and health impacts of natural toxins and human pollutants in marine and freshwater systems, particularly sub-lethal effects on behavior, reproduction, immune system, and nervous system function. [arobertson@disl.org](mailto:arobertson@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](mailto:ismee@disl.org)