Commercial fisheries in the Gulf of Mexico represent an historic multi-billion-dollar industry that supplies fresh bountiful harvests of finfish, shrimp, oysters, clams and crab to US and international markets. Commercial ocean fishing is one of the most dangerous occupations in the world with a workforce that is largely self-employed and uninsured. Florida has the highest fatality rate for the industry in the Southeastern US, and nationally is third to Alaska and Massachusetts. While fatalities are monitored and reported by US Coast Guard and NIOSH, non-fatal occupational injuries and illnesses within this workforce are largely unreported, and thus specific hazards and associated risk factors are poorly understood. To support this vital industry and its workforce, this gap is being addressed by Dr. Kane and his team, with support from the NIOSH Southeastern Coastal Center for Agricultural Health and Safety. Kane is conducting a surveillance study to assess seafood worker safety in the southeastern US, with focus on the Gulf coastal workforce in Florida, Alabama and Mississippi. This community-based research study developed and implemented in-person questionnaires and workplace observations to examine sector-specific fishery hazards and adverse outcomes associated with occupational injuries and illnesses in the region. Lessons learned to support the occupational health and well-being of Gulf seafood workers will be discussed, including opportunities for stakeholder engagement and interventions.