



ISIS Publications List

Date: March 2020

This is an effort to collect publications using the ISIS DPI, to date. Please let us know if we inadvertently omitted yours and welcome your help to keep this list up to date.

Cowen RK and Guigand CM (2008) In situ Ichthyoplankton Imaging System (ISIS): System design and preliminary results. *Limnol Oceanogr-Meth* 6:126-132

Cowen RK, Greer AT, Guigand CM, Hare JA, Richardson DE, Walsh HJ (2013) Evaluation of the in situ ichthyoplankton imaging system (ISIS): Comparison with the traditional (bongo net) sampler. *Fish Bull* 111:1-12

Dzwonkowski B, Greer AT, Briseño-Avena C, Krause JW, Soto IM, Hernandez FJ, Deary AL, Wiggert JD, Joung D, Fitzpatrick PJ, and others (2017) Estuarine influence on biogeochemical properties of the Alabama shelf during the fall season. *Cont Shelf Res* 140:96-109

Dzwonkowski B, Fournier S, Reager JT, Milroy S, Park K, Shiller AM, Greer AT, Soto I, Dykstra SL, Sanial V (2018) Tracking sea surface salinity and dissolved oxygen on a river-influenced, seasonally stratified shelf, Mississippi Bight, northern Gulf of Mexico. *Cont Shelf Res* 169:25-33

Faillettaz R, Picheral M, Luo JY, Guigand C, Cowen RK, Irisson J (2016) Imperfect automatic image classification successfully describes plankton distribution patterns. *Methods in Oceanography* 15-16:60-77

Greer AT (2018) In-situ shadowgraph imaging. *Mar Technol Soc J* 52:62-65

Greer AT, Boyette AD, Cruz VJ, Cambazoglu MK, Dzwonkowski B, Chiaverano LM, Dykstra SL, Brisen-Avena C, Cowen RK, Wiggert JD (in press) Contrasting fine-scale distributional patterns of zooplankton driven by the formation of a diatom-dominated thin layer. *Limnol Oceanogr*

Greer AT, Brisen-Avena C, Deary AL, Cowen RK, Hernandez FJ, Graham WM (2017) Associations between lobster phyllosoma and gelatinous zooplankton in relation to oceanographic properties in the northern Gulf of Mexico. *Fisheries Oceanography* 26:693-704

Greer AT, Cowen RK, Guigand CM, McManus MA, Sevdjian JC, Timmerman AHV (2013) Relationships between phytoplankton thin layers and the fine-scale vertical distributions of two trophic levels of zooplankton. *J Plankton Res* 35:939-956

Greer AT, Shiller AM, Hofmann EE, Wiggert JD, Warner SJ, Parra SM, Pan C, Book JW, Joung D, Dykstra S, and others (2018) Functioning of coastal river-dominated ecosystems and implications for oil spill response: From observations to mechanisms and models. *Oceanography* 31:90-103

Greer AT and Woodson CB (2016) Application of a predator - prey overlap metric to determine the impact of sub-grid scale feeding dynamics on ecosystem productivity. *ICES J Mar Sci* 73:1051-1061

Greer AT, Chiaverano LM, Ditty JG, Hernandez FJ (2019) In situ observations of fish larvae encased within a pelagic gelatinous matrix. *Mar Ecol Prog Ser* 614:209-214

Greer AT, Woodson CB, Guigand CM, Cowen RK (2016) Larval fishes utilize Batesian mimicry as a survival strategy in the plankton. *Mar Ecol Prog Ser* 551:1-12

Greer AT, Cowen RK, Guigand CM, Hare JA (2015) Fine-scale planktonic habitat partitioning at a shelf-slope front revealed by a high-resolution imaging system. *J Mar Syst* 142:111-125

Greer AT, Chiaverano LM, Luo JY, Cowen RK, Graham WM (2018) Ecology and behaviour of holoplanktonic scyphomedusae and their interactions with larval and juvenile fishes in the northern Gulf of Mexico. *ICES J Mar Sci* 75:751-763

Greer AT, Woodson CB, Smith CE, Guigand CM, Cowen RK (2016) Examining mesozooplankton patch structure and its implications for trophic interactions in the northern Gulf of Mexico. *J Plankton Res* 38:1115-1134

Greer AT, Cowen RK, Guigand CM, Hare JA, Tang D (2014) The role of internal waves in larval fish interactions with potential predators and prey. *Prog Oceanogr* 127:47-61

Luo JY, Irisson JO, Graham B, Guigand C, Sarafraz A, Mader C, Cowen RK (2018) Automated plankton image analysis using convolutional neural networks. *Limnol Oceanogr-Meth* 16:814-827

Luo JY, Grassian B, Tang D, Irisson JO, Greer AT, Guigand CM, McClatchie S, Cowen RK (2014) Environmental drivers of the fine-scale distribution of a gelatinous zooplankton community across a mesoscale front. *Mar Ecol Prog Ser* 510:129-149

McClatchie S, Cowen R, Nieto K, Greer A, Luo JY, Guigand C, Demer D, Griffith D, Rudnick D (2012) Resolution of fine biological structure including small narcomedusae across a front in the southern California Bight. *Journal of Geophysical Research C: Oceans* 117

Parra SM, Greer AT, Book JW, Deary AL, Soto IM, Culpepper C, Hernandez FJ, Miles TN (2019) Acoustic detection of zooplankton diel vertical migration behaviors on the northern Gulf of Mexico shelf. *Limnol Oceanogr* 64:2092-2113

Robinson KL, Luo JY, Sponaugle S, Guigand CM, Cowen RK (2017) A tale of two crowds: Public engagement in plankton classification. *Frontiers in Marine Science* 4:82

Schmid MS, Cowen RK, Robinson K, Luo JY, Briseño-Avena C, Sponaugle S (2020) Prey and predator overlap at the edge of a mesoscale eddy: Fine-scale, in-situ distributions to inform our understanding of oceanographic processes. *Sci Rep* 10:921

Sevadjian JC, McManus MA, Ryan J, Greer AT, Cowen RK, Woodson CB (2014) Across-shore variability in plankton layering and abundance associated with physical forcing in Monterey Bay, California. *Cont Shelf Res* 72:138-151

Timmerman AHV, McManus MA, Cheriton OM, Cowen RK, Greer AT, Kudela RM, Ruttenberg K, Sevadjian J (2014) Hidden thin layers of toxic diatoms in a coastal bay. *Deep-Sea Res Pt II* 101:129-140