1083-92-156 Christina L Hamlet* (chamlet@tulane.edu) and Laura A. Miller. Flow Generated by Changing Pulse Patterns of the Upside Down Jellyfish.

The mostly sessile upside-down jellyfish Cassiopea spp. is used to study the effects of jellyfish kinematics on the flow of surrounding fluid. Using the immersed boundary method, we investigate the bulk flow of fluid around the pulsing bell of a 2D jellyfish. The influence of the timing of pauses between muscle contractions and presence of secondary structures as well as the implications for particle transport are discussed. (Received August 26, 2012)