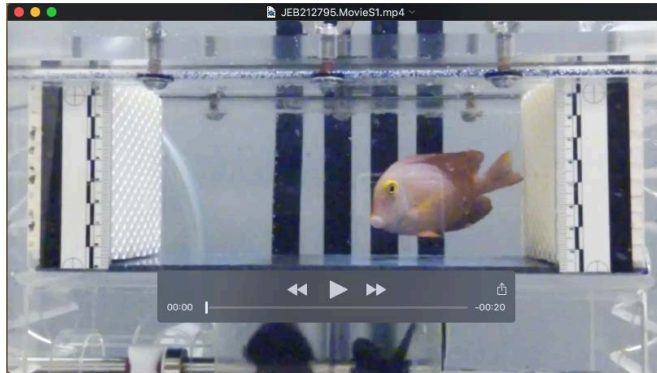
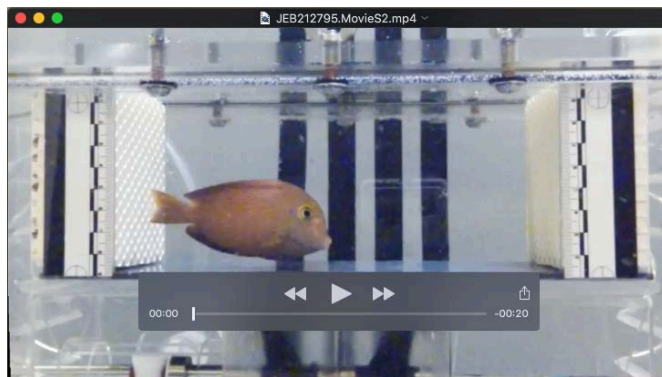


## Supplementary Information



Movie 1: Video of a goldring surgeonfish, *Ctenochaetus strigosus*, swimming in a bidirectional oscillatory flow with an average velocity of  $3.0 \text{ BL s}^{-1}$  (peak velocity of  $4.7 \text{ BL s}^{-1}$ ) and a frequency of 0.3 Hz.



Movie 2: Video of a goldring surgeonfish, *Ctenochaetus strigosus*, swimming in a unidirectional oscillatory flow with an average velocity of  $4.2 \text{ BL s}^{-1}$  (peak velocity of  $5.2 \text{ BL s}^{-1}$ ) and a frequency of 0.3 Hz.