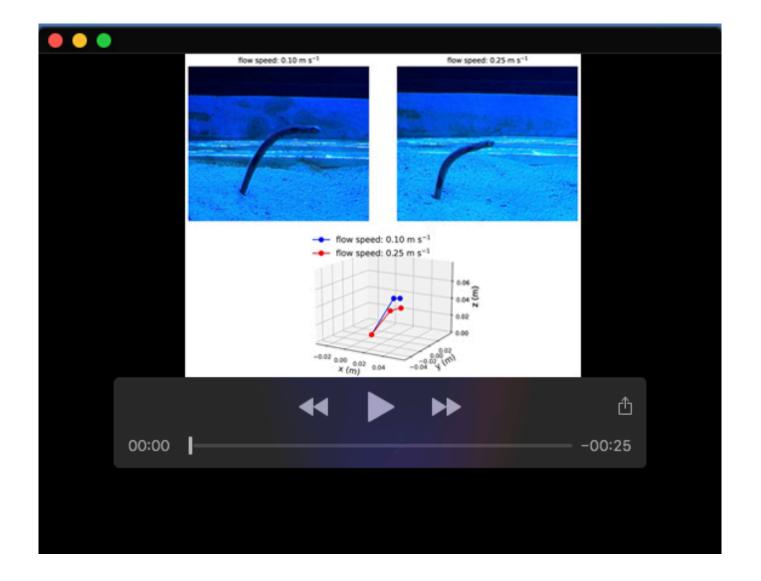


**Fig. S1. Drag coefficient and drag force.** Data for each individual were averaged from ten frames at each flow speed. Values are means  $\pm$  s.d. among individuals (n=3 individuals). Circles are from experimental measurements. Squares simulate values at 0.25 m s<sup>-1</sup> assuming the length and the posture are the same as those at 0.10 m s<sup>-1</sup>. Triangles simulate values at 0.25 m s<sup>-1</sup> assuming the posture remains the same as that at 0.10 m s<sup>-1</sup> while maintaining the same exposed length at 0.25 m s<sup>-1</sup>.



**Movie 1. 3D reconstructed garden eel movement.** Upper left and right panels show the videos taken during experiments at flow speeds of 0.10 and 0.25 m s<sup>-1</sup>, respectively. Blue and red lines in bottom panel show the corresponding 3D reconstructed eel movements at flow speeds of 0.10 and 0.25 m s<sup>-1</sup>, respectively.