The micro-swimmer model used at all Reynolds scales.

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We use a simple model of swimmer inspired from literature of micro-swimmers moving in a viscous liquid (the so-called Stokes regime). However, we numerically explore the model, even at intermediate and high Reynolds numbers where inertia prevails over viscous force. As a result, we obtain universal laws that can be recovered by scaling arguments. From the Stokes to turbulent regimes, our results compare very well with experimental data previously published on millimeter to meter size aquatic species. We have also collected data on a wide variety of micro-organisms that corroborate our numerical results.