

Supporting Information Text

Numerical Simulations

A Matlab program is provided in the Supporting Information. It calculates thrust, torque, and drag for any helical flagellum using the regularized Stokeslet method, Lighthill's formulation of slender body theory, or Johnson's version of slender body theory; resistive force theory results are also provided for comparison. This program can be downloaded from PNAS website as a Zipped file. To run this program, one unzips the file to a folder, adds the folder to the Matlab Path, then execute the command "Simulation_GUI". Detailed instruction can be found in the headers of Matlab scripts.