



an Open Access Journal by MDPI

# Hydrodynamics of Swimming

Guest Editors:

## Prof. Dr. Sean P. Colin

 Marine Biology, Roger Williams University, Bristol, RI 02809, USA
Whitman Center, Marine Biological Laboratory, Woods Hole, MA 02543, USA

#### Prof. Dr. John H. Costello

Biology Department,
Providence College, Providence,
RI 02918, USA
Whitman Center, Marine
Biological Laboratory, Woods
Hole, MA 02543, USA

Deadline for manuscript submissions: closed (1 November 2021)

#### Message from the Guest Editors

Dear Colleagues,

For a long time, the study of the hydrodynamics of swimming animals has been limited by our ability to quantify and calculate essential body-fluid interactions around propulsive elements and, as a result, has largely been dependent on a few critical models to predict thrust on the basis of trailing wakes. Relatively recent advances have enabled researchers to quantify and predict flow adjacent to important propulsive elements and to calculate variables, such as pressure, that reveal how animals manipulate hydrodynamics for effective, efficient swimming.

This Special Issue of *Fluids* is dedicated to recent advances using experimental observations or computational techniques that are contributing to a new and more indepth understanding of the hydrodynamics of swimming animals.

**Special**sue

Prof. Dr. Sean P. Colin Prof. Dr. John H. Costello *Guest Editors* 



mdpi.com/si/51361





an Open Access Journal by MDPI

### **Editor-in-Chief**

**Prof. Dr. D. Andrew S. Rees** Department of Mechanical Engineering, University of Bath, Bath BA2 7AY, UK

#### Message from the Editor-in-Chief

*Fluids* (ISSN 2311-5521) is an international journal on all aspects of fluids in open access format: research articles, reviews and other contents are released on the internet immediately after acceptance. You are invited to contribute a research article or a comprehensive review for consideration and publication in *Fluids*. The scientific community and the general public have unlimited free access to the content as soon as it is published. Please consider *Fluids* as an exceptional, exciting enterprise ready to reward your trust, attention, and active participation.

### **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions. **High Visibility:** indexed within Scopus, ESCI (Web of Science), Inspec, CAPlus / SciFinder, and other databases. **Journal Rank:** CiteScore - Q2 (*Mechanical Engineering*)

### **Contact Us**

*Fluids* Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/fluids fluids@mdpi.com X@FluidsMdpi