

Biophysical Journal Call for Papers

Special Issue: The Past, Present, and Future of Muscle Biophysics

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Muscle is a fascinating and complex system at the nexus of biochemistry, biophysics, and physiology. Biophysical studies continue to play a pivotal role in revealing the fundamental mechanisms of muscle contraction, relaxation, and dysfunction in both health and disease.

We are organizing a special issue of Biophysical Journal to highlight how biophysical research has empowered advances in our understanding of muscle. We invite submissions for original research articles, as well as review and perspective articles (by invitation only), that reflect this theme and showcase biophysical insights into cardiac, skeletal, and smooth muscle.

Areas of interest include, but are not limited to:

- Electrophysiology and ion channels
- Excitation-contraction coupling
- Sarcomeric organization and dynamics
- Muscle mechanics and mechanotransduction
- Structure-function relationships of contractile proteins
- Single-molecule biophysics and molecular kinetics
- Advanced imaging and structural techniques
- Thermodynamics, metabolism, and energetics of muscle contraction
- Computational multi-scale modeling and systems biophysics

If you are interested in writing a review or perspective article, please email an abstract of 300 words or less to greenberg@wustl.edu or samharris@arizona.edu by July 1, 2026. Proposals will be selected to ensure a diverse range of topics that best highlight biophysical contributions to the field.

Deadline for submission: November 1, 2026

- Instructions for authors can be found at: <https://www.cell.com/biophysj/authors>.
- Please include a cover letter stating that you would like to contribute to the Muscle Biophysics special issue and please describe why the work fits into the issue.
- All articles will be reviewed upon receipt and will appear online as soon as accepted, even if submitted early.
- Normal publishing charges will apply.
- Questions can be addressed to the BJ Editorial Office at BJ@biophysics.org or to (240) 290-5600.



To submit, visit <https://www.editorialmanager.com/biophysical-journal/>