

OPEN Postdoctoral Scholar Position:
Bacterial motility and active matter transport

Guasto Lab
Tufts University

Posted: April 21, 2021

The Guasto Lab at Tufts University is seeking a qualified and motivated postdoctoral scholar for experimental research related to bacterial flagellar locomotion and active matter transport. This work is funded by the National Science Foundation (NSF), and there is broad flexibility in the specific research projects. The candidate is expected to have a strong background in experimental research with experience and interests in at least one of the following areas: soft matter, biophysics, fluid mechanics, or microfluidics. No prior experience with microbiology is necessary. The candidate should hold a Ph.D. in physics, engineering, or a related field by the start of the appointment. Opportunities also exist to gain mentoring, proposal writing, and/or teaching experience.

The initial appointment will provide funding for up to two years (contingent on satisfactory performance) and may potentially be extended for additional years pending funding. The ideal start date is September 1, 2021 with some flexibility. More information on recent research and publications from the Guasto Lab may be found at <http://engineering.tufts.edu/me/guasto/>. Tufts University is located in Medford, Massachusetts in the Boston metro area, a short distance from both Cambridge and downtown Boston.

Interested applicants should send a brief email stating their interests in this position, as well as a CV including laboratory experience, list of publications, and the names and email addresses of at least two references to Prof. Jeff Guasto (Jeffrey.Guasto@tufts.edu). Review of applications will begin immediately and will continue until the position is filled.

Recent Publications:

- [1] J.S. Guasto, et al. "Flagellar kinematics reveals the role of environment in shaping sperm motility." *Journal of the Royal Society Interface* 17, 20200525 (2020)
- [2] D.M. Walkama, N. Waisbord, and J.S. Guasto. "Disorder suppresses chaos in viscoelastic flows." *Physical Review Letters* 124, 164501 (2020)
- [3] A. Dehkharghani, N. Waisbord, J. Dunkel, and J.S. Guasto. "Bacterial scattering in microfluidic crystal flows reveals giant active Taylor-Aris dispersion." *PNAS* 116:23, 11119-11124 (2019)