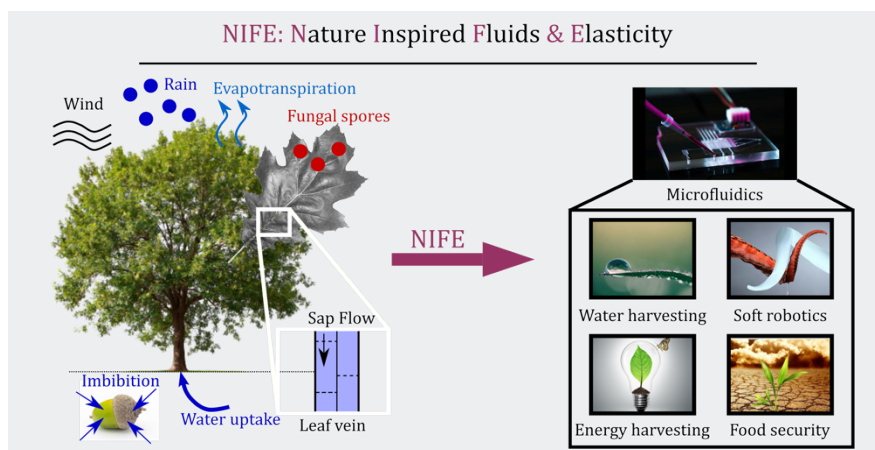


OPEN Postdoctoral Scholar Position: Dynamics of Biological Multiphase Flow

Nature Inspired Fluids and Elasticity Lab, Auburn University

The Nature Inspired Fluids and Elasticity (NIFE) Lab at Auburn University is seeking a qualified and motivated postdoctoral scholar for experimental research related to bioinspired flow control leveraging couplings between fluids and elasticity. The candidate is expected to have a strong background in experimental research with experience and interests in at least one of the following areas: hydrogels, plant biophysics, elasticity, or microfluidics. 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 be extended for additional years, funding permitted. The start date is October 1st, 2021, with some flexibility. More information on recent research and publications from the NIFE Lab may be found at <https://www.nifelab.com/>. Auburn University is located in Auburn, Alabama, an hour and a half from Atlanta's airport and four hours away from the beaches of the Gulf of Mexico.

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. Jean-François Louf (jeanfrancois.louf@gmail.com). Review of applications will begin immediately and will continue until the position is filled.

Selected Publications:

- [1] J-F. Louf, et al. "Under pressure: Hydrogel swelling in a granular medium" *Science Advances*, 7:eabd2711 (2021)
- [2] J-F. Louf, et al. "Bending and Stretching of Soft Pores Enable Passive Control of Fluid Flow." *Physical Review Letters* 125, 098101 (2020)
- [3] J-F. Louf, et al. "Universal poroelastic mechanism for hydraulic signals in biomimetic and natural branches." *PNAS* 114, 11034-11039 (2017)