



International Conference on Micro Nano Fluidics (ICOM 2025)



October 31 – November 2, 2025, IIT Guwahati

Speaker/affiliation: Prof. Shaurya Prakash, Ohio State University, Columbus

Tentative topic of the invited talk

Microfluidic Isolation of Extracellular Vesicles for Evaluating Cancer Biomarkers

Abstract of the invited talk

Cancer continues to be a challenging disease to diagnose early and treat, despite the many advances enabled since the establishment of the National Cancer Institute, which has seen well over \$40B investment by the US federal government alone. To advance the science and technology for enabling better care and provide earlier diagnosis, our lab has developed an innovative micro-nanofluidic device that allows for both size-based and immunoaffinity-based capture of extracellular vesicles (EVs) within the same device. These EVs provide the ability to conduct multiple analyses for biomarkers to detect cancer providing a potential growth area for point-of-care diagnostics from patient biofluids.