

Abstract Submitted
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Semipermeable Vesicle in Stokes Flows ASHLEY GANNON, BRYAN
QUAIFE, Florida State University, YUAN YOUNG, New Jersey Institute of Tech-
nology, SHUWANG LI, Illinois Institute of Technology — I will describe our re-
cent work on multicomponent vesicles in various Stokes flows. Our multicomponent
vesicles are representative of cell membranes containing aquaporins and are only
permeable to water, and our model depends on the membrane forces and the lipid
species. I will discuss our results for vesicles in unbounded quiescent flow, shear
flow, Poiseuille flow, and finally a vesicle moving through a constriction.

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