

Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: Molecular dynamics simulations of pushing lamin filaments from a meshwork of $\lambda = 0.5$. Analysis presented in **Fig. 6**.

File Name: Supplementary Movie 2

Description: Molecular dynamics simulations of pushing lamin filaments from a meshwork of $\lambda = 5.6$. Analysis presented in **Fig. 6**.