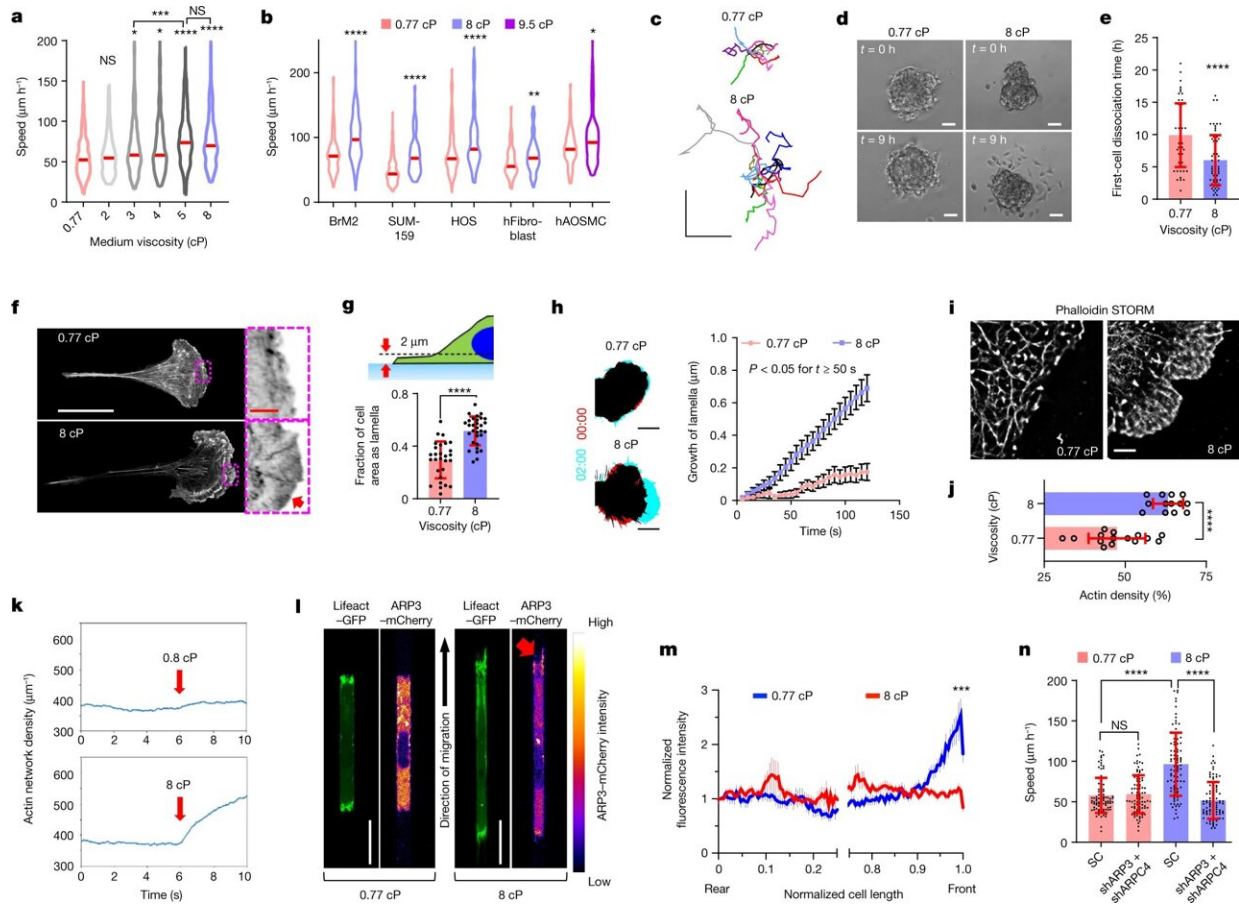


# New clue discovered as to how and why cancer cells spread

December 5 2022, by Gillian Rutherford



Viscosity enhances cell migration and promotes an ARP2/3-mediated dense actin network at the leading edge. **a,b**, Speeds of MDA-MB-231 cells (**a**) and other indicated cell types (**b**) inside confining channels at prescribed viscosities. The red lines represent the median of  $\geq 69$  cells from  $\geq 3$  experiments. **c**, Cell trajectories on 2D collagen-coated surfaces after 10 h. **d**, Cells disseminating from 3D spheroids. **e**, The time required for the first cell dissociation from each

spheroid ( $n \geq 53$ ) from 3 experiments. **f**, Airyscan images of phalloidin stained cells on collagen-coated substrates. The red arrow indicates high F-actin staining along the cell edge. **g**, The fraction of cell-projected area with a Lifeact–GFP-rich lamella for  $n \geq 28$  cells from 3 experiments. **h**, The leading edge of Lifeact–GFP-expressing cells on collagen-coated surfaces at  $t = 0$  min (red) and  $t = 2$  min (cyan) (left). Right, leading-edge lamella growth in  $n \geq 19$  cells from 3 experiments. Data are the moving average  $\pm$  s.e.m. *P*

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