



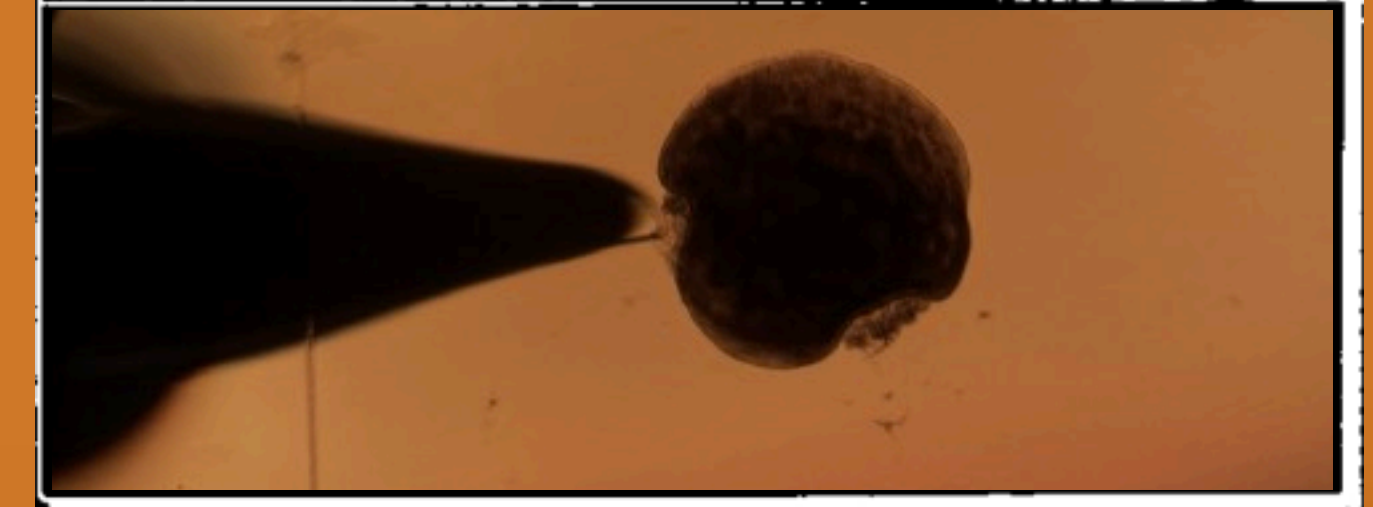




🏹 LABEL-FREE BIOELECTRICITY?

POLYCHROMATIC POLARIZATION MICROSCOPY:
MICRO-SCALE COLOR FROM PROTEIN ORIENTATION

Brine shrimp: colorless, ~4mm long, Protein state $\sim V(\text{mem})$ under Lingian framework.



VIBRATING PROBE: NON-INVASIVE BIOELECTRIC MEASUREMENT

Monitor live ion fluxes next to a cell; concentration difference close to cell vs. far from cell describes flux in real time. Poking a cell alters voltage.