

Figure S1: Model of the nuclear elastic forces. We model nuclear mechanics with three springs connected at a hinge at the center of the nucleus. The two springs at the sides are connected to the centrosomes and stretched, while the spring at the center is compressed against the actin cortex at the top. B: The computed nuclear elastic force $F_{nucl}(S)$ (blue curve) is small at small pole-to-pole distance and is approximately a linear spring (red line) when the separation is significant. C: Illustration of the vectors that appear in the model equations (MT forces – green, nucleus forces – blue, schematic centrosome velocities - black).