

# Review of: "Emerin regulation of nuclear stiffness is required for fast amoeboid migration in confined environments"

Jinghui Sun

**Potential competing interests:** The author(s) declared that no potential competing interests exist.

1. In Figure 2K, does the "Emerin+cPLA2 RNAi" group mean that both Emerin and cPLA2 are subjected to RNAi silencing? Does the lack of additive effect between the two indicate that they are the same signaling pathway? Figure 4 shows that Emerin is an upstream signaling protein of Lamin A, cPLA2, so how did the authors confirm the upstream and downstream relationship of these proteins?
2. In Liu et al. 2015, the single-cell contractility index was tested, can this index reflect the stiffness of the cells? In other words, can the h/d ratio of cells be used to represent cell stiffness? There are many direct methods for measuring cell stiffness, including magnetic twisting cytometry, atomic force microscopy (AFM), micropipette aspiration et al., among them, AFM is one of the most common techniques used to study the elastic properties of cells. The basic principle of this method is to indent a cell with an AFM tip of selected geometry and measure the applied force from the bending of the AFM cantilever. Fitting the force-indentation curve to the Hertz model for the corresponding tip geometry can give quantitative measurements of cell stiffness.
3. It would be better to show the results of immunofluorescence staining (Fig. 1H, 2H), cell migration (Fig. Fig. 1J', 2K) in the results graph.