

## Supplemental File: Time-lapse data details

### ***MCF-7 image data***

*Acquired by:* Albert Yeh, Laboratory of Sridhar Ramaswamy, Centers for Cancer Research, Regenerative Medicine, Human Genetics Research, and Systems Biology, Massachusetts General Hospital, Boston, MA 02114

*Cell type:* MCF-7 tagged with NLS-mCerulean fusion protein (NLS = nuclear localization signal), grown in DMEM

*Acquisition technique:* Serial imaging performed using an inverted microscope fitted in a standard-sized tissue culture incubator (Nikon Biostation CT)

*Resolution:* 10x magnification

*Time interval between frames:* 20 minutes

### ***Drosophila embryo image data***

*Acquired by:* Victoria Foe, Center for Cell Dynamics, Friday Harbor Labs, University of Washington, Friday Harbor, WA 98250

*Cell type:* A portion of a time lapse movie of a syncytial blastoderm stage *Drosophila* embryo with a GFP-histone gene which renders chromatin fluorescent in live embryos. The movie shows nuclear divisions 10 and 11.

*Acquisition technique:* Imaging performed on a Bio-Rad Radiance 2000 laser scanning confocal microscope using a 1.3NA oil objective.

*Resolution:* 40x magnification

*Time interval between frames:* 7 seconds