

A study of macrophage mechanical properties and functional modulation based on the Young's modulus of PLGA-PEG fibers

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Supporting Information

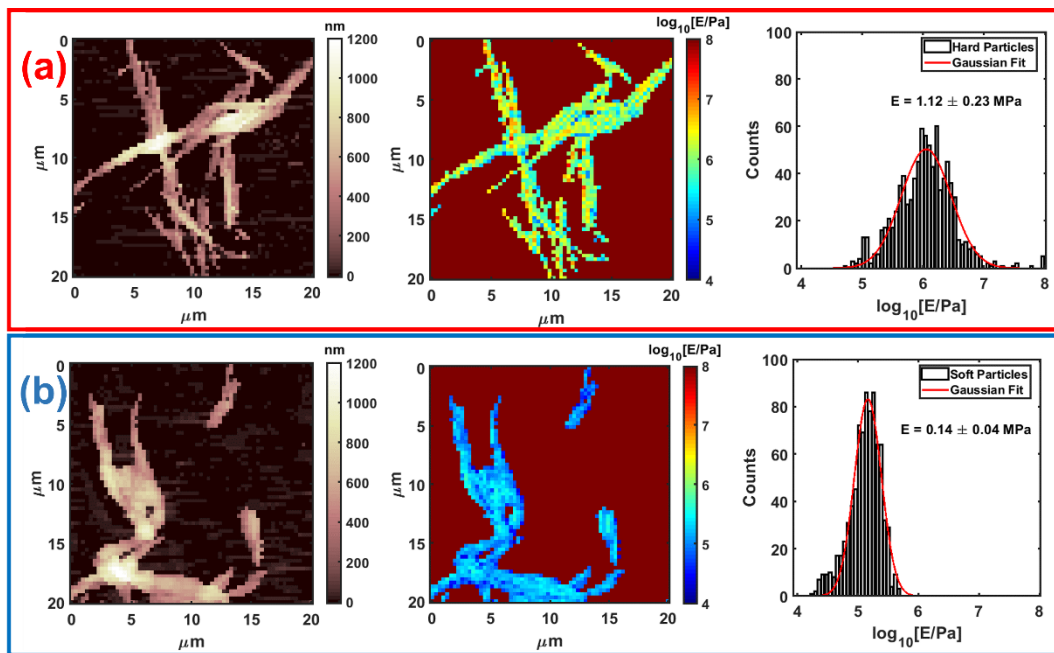


Figure S1. Representative images of PLGA-PEG fibers on mica. From left to right, morphology, Young's modulus map and histogram chart for (a) hard and (b) soft.

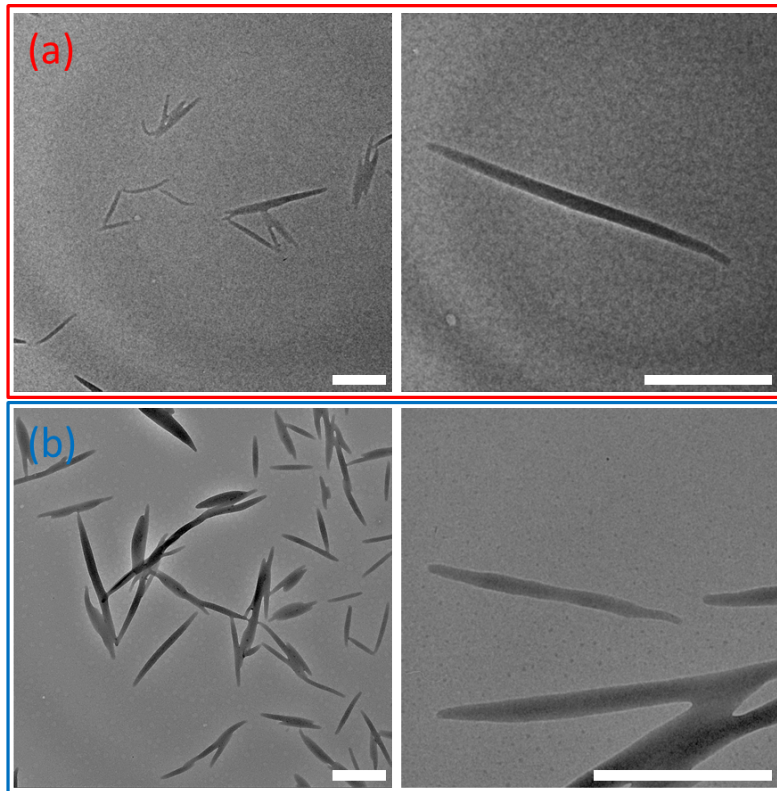


Figure S2. TEM images of (a) hard and (b) soft fibers. (Scale bar: 1 μm)

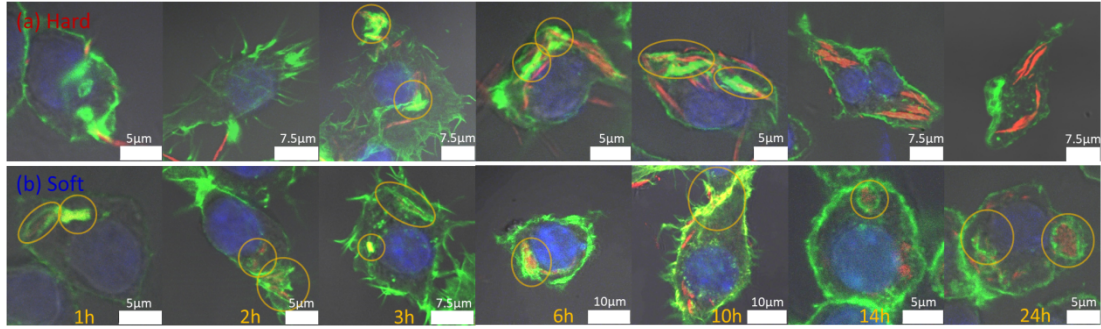


Figure S3. Time dependent actin revolution and fibers deformation. Confocal images of (a) hard and (b) soft fibers fed cells. (Blue: nucleus, green: actin, red: fibers; yellow circles indicates the actin coated on the fibers containing vesicles).

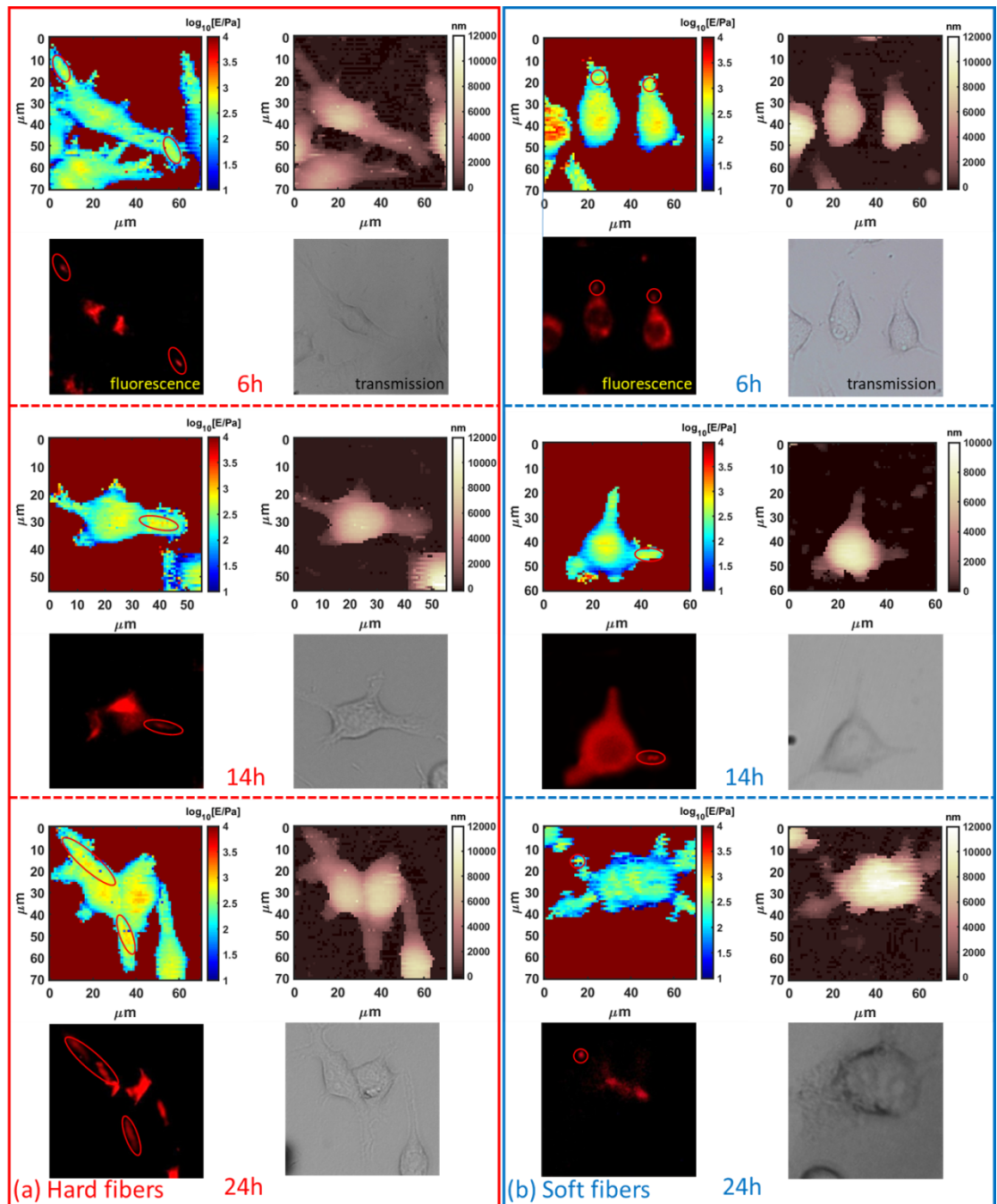


Figure S4. Time dependent AFM-optical fluorescence colocalization observation of PLGA-PEG fibers fed cells. (a) hard fibers fed cells and (b) soft fibers fed cells at 6 hours. (red color: fibers' fluorescence, all the optical images share the same scale bar as AFM images, red circles indicate the coincidence of fibers' location both form AFM force mapping and fluorescence images).

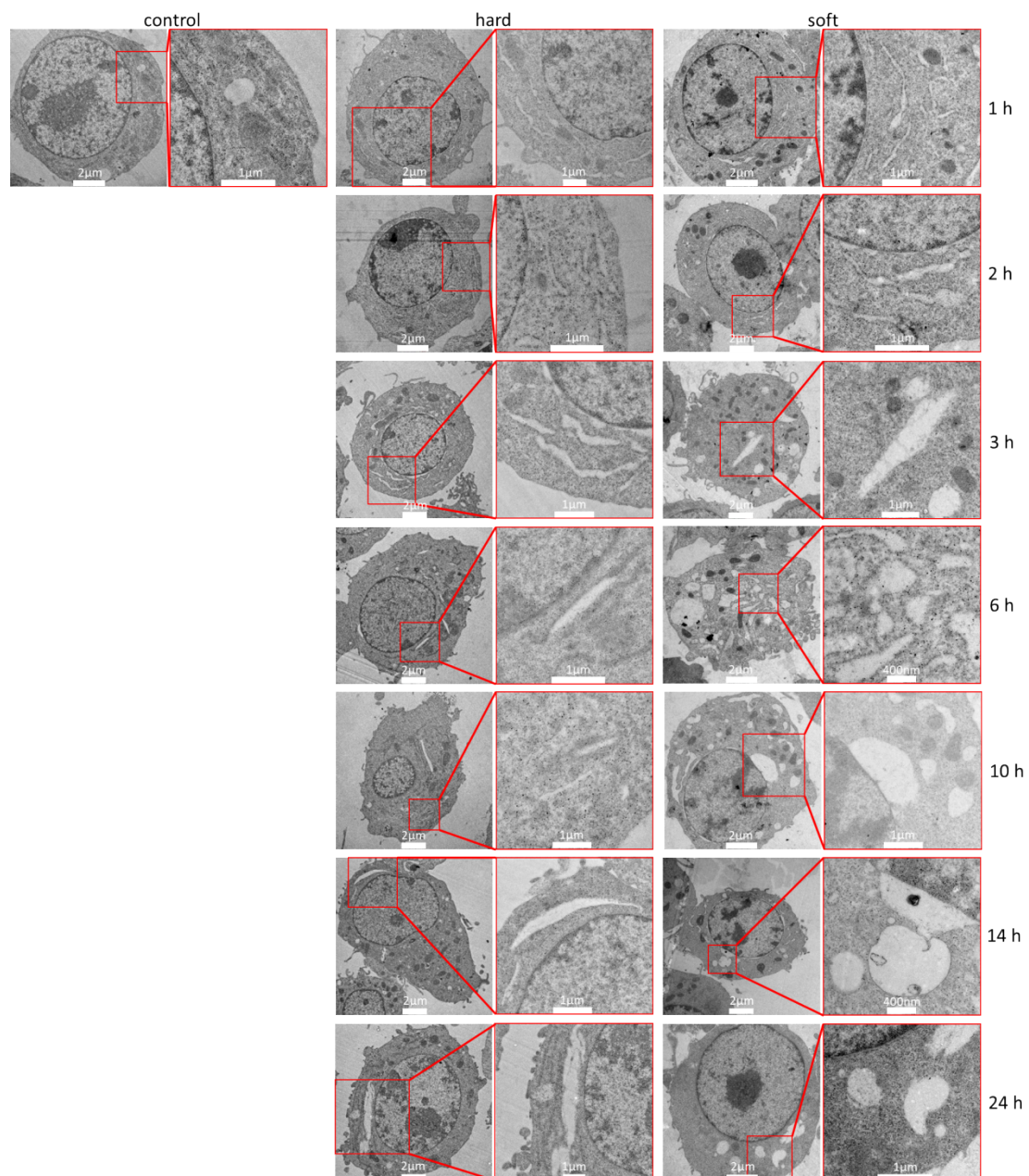


Figure S5. Time dependent TEM images showing the intracellular structure affected by PLGA-PEG fibers. (a) control, (b) hard fibers and (c) soft fibers fed cells.

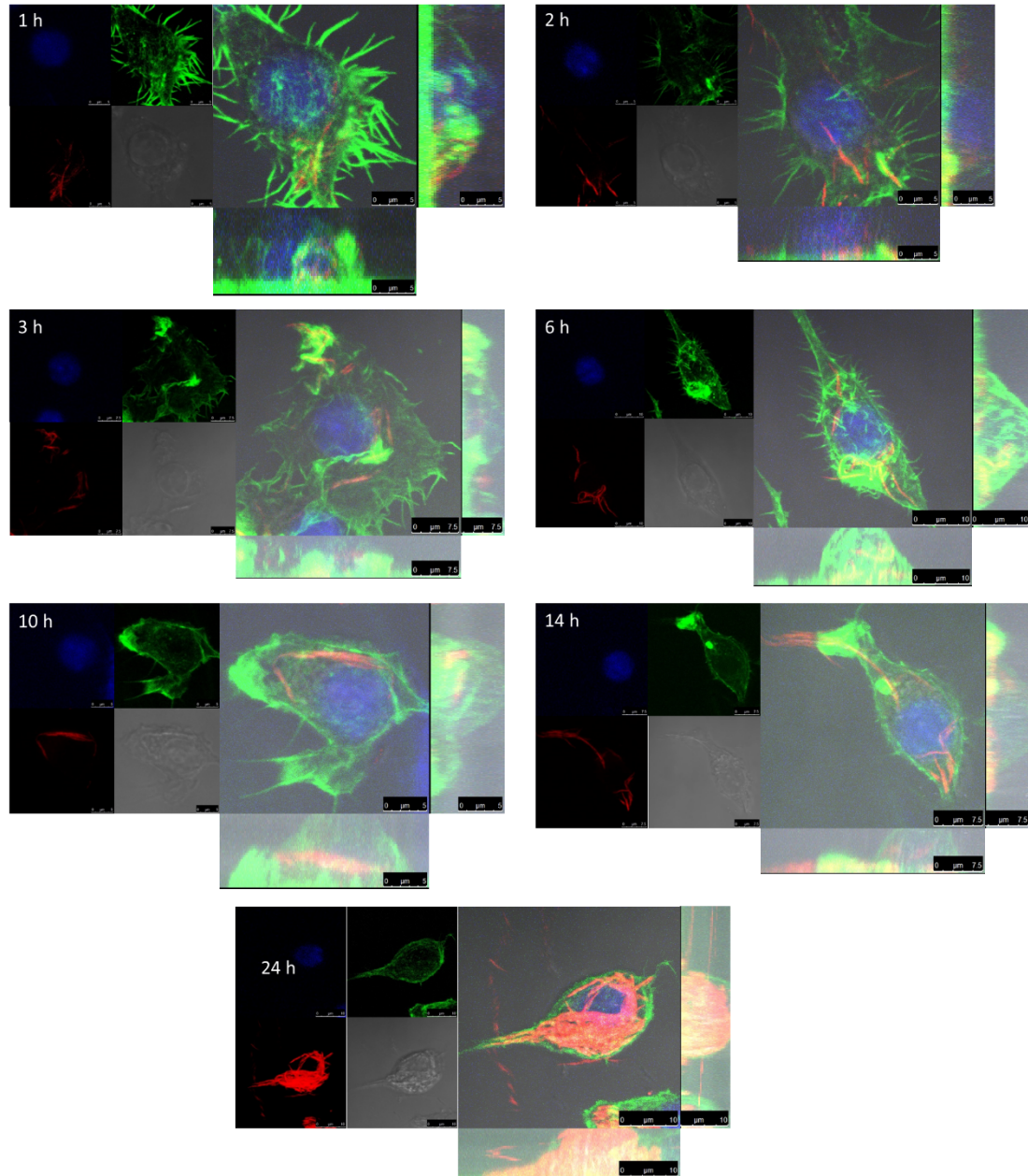


Figure S6. 3D confocal projected images of the time dependent actin distribution of the hard fibers fed cells. (Blue: nucleus, green: actin, red: fibers).

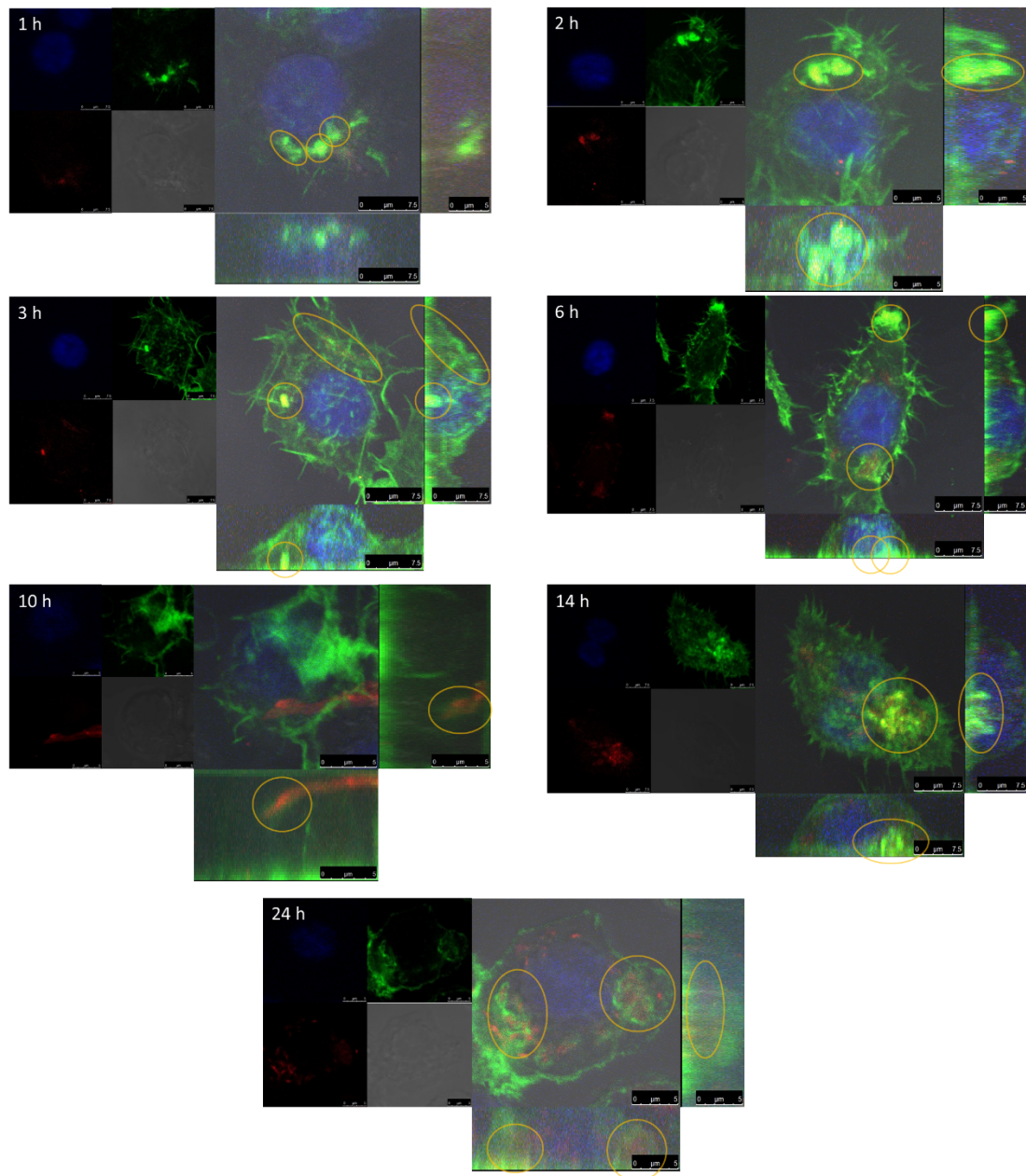


Figure S7. 3D confocal projected images of the time dependent actin distribution of the soft fibers fed cells. (Blue: nucleus, green: actin, red: fibers).