

Z-direction

Supplemental figure S4: Different spatial localization of telomeres marks absence of artificial flattening. The resolution in z-direction is sufficient to discriminate telomere spots close by, or way from, the nuclear lamina. Shown are 5 z-sections (slices 8, 10, 12, 14, 16) of a nucleus with telomere FISH staining (grey) in the left-panel, and a merge of average DAPI staining (grey) and telomere FISH staining (green) in the right-panel. DAPI is averaged over all consecutive z-sections 8-16 to present a common background for the telomere spots. The distance between consecutive z-sections is 0.504  $\mu$ m, the distance between first and last z-sections in the figure is 8x0.50=4.03  $\mu$ m.