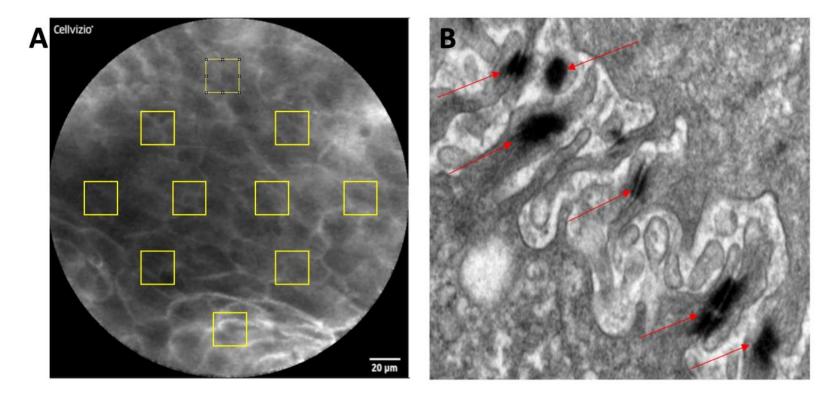
## **Supplemental Figure 1.**



(A). Measurement of fluorescein leak intensity. For each still image captured from the confocal video, a total of 10 boxes (20 $\mu$ m x20 $\mu$ m) were used to sequentially and systematically sample the fluorescent intensity of the image. The fluorescent intensity of each box was obtained by ImageJ's "Analyze"  $\rightarrow$  "Measure" function. The mean intensity of the 10 boxes was used to represent the fluorescein leak intensity of the image. (B). Desmosomes are electron dense structures that resemble railroad tracks (red arrows) on TEM.