



Article

# Long-Term Changes in Axon Calibers after Injury: Observations on the Mouse Corticospinal Tract

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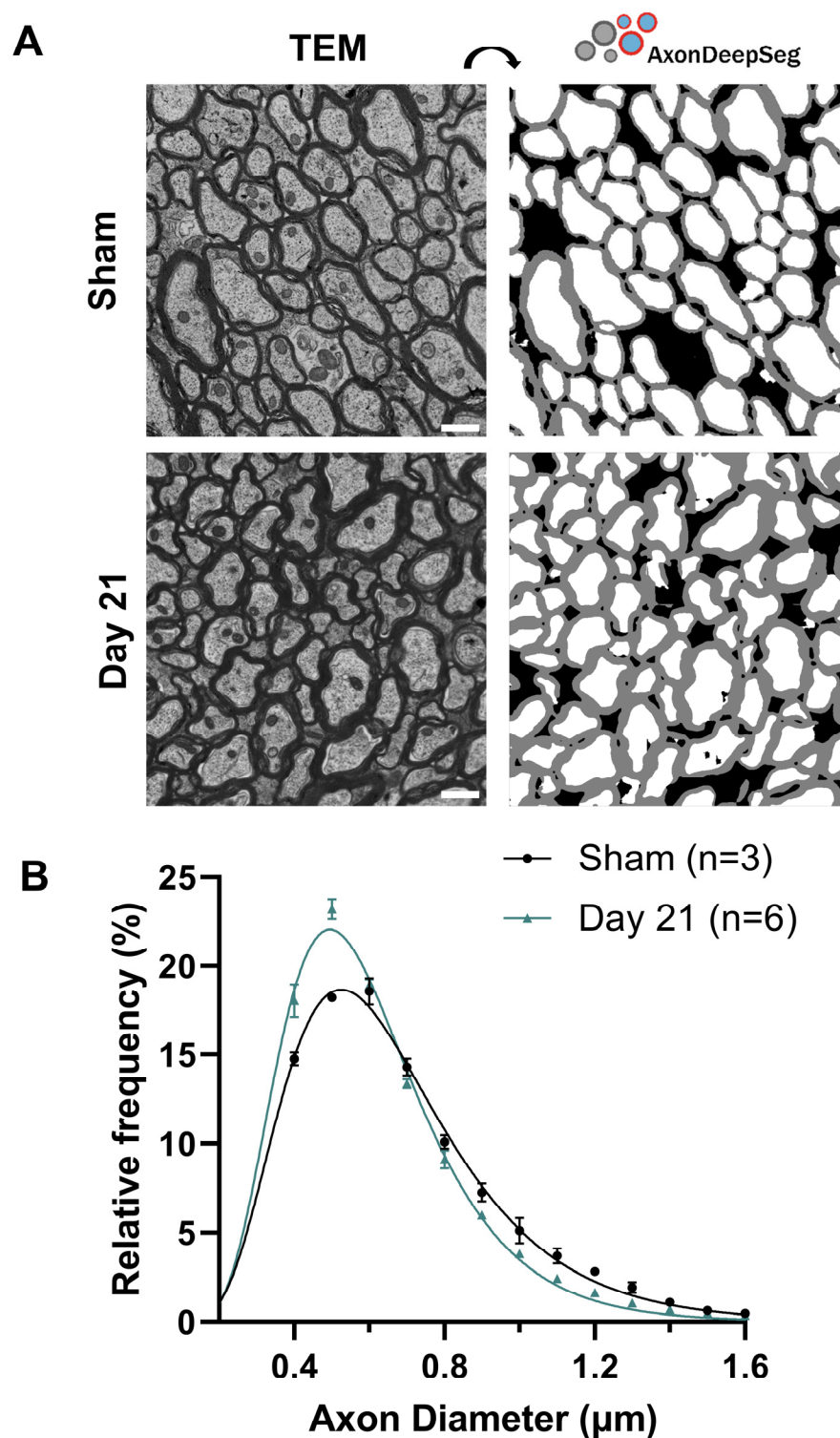
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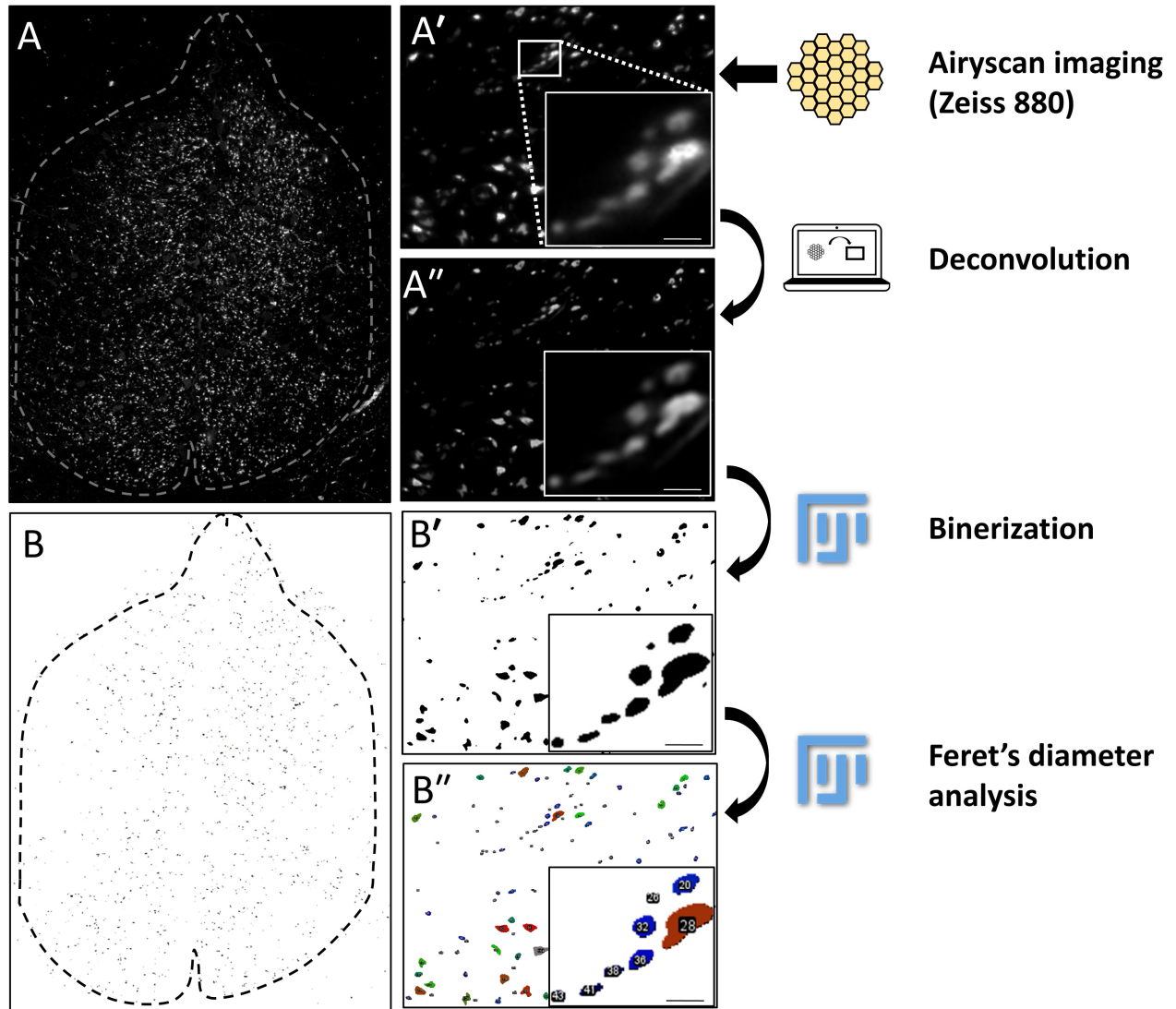
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**Supplementary Figure S1.** Transmission electron micrographs (TEM) of corticospinal axons after sham and impact acceleration traumatic brain injury; and automated image processing for analysis of axon calibers by AxonDeepSeg. Scale bar, 600 nm. **B.** Axon diameter distributions 21 days after injury or sham-injury based on analysis of electron micrographs. Data for sham and injury groups are fitted with lognormal curves that are significantly different from each other with geometric means of 0.62 and 0.57, ( $t_7 = 9.99$ ,  $p < 0.001$ ), and geometric SDs of 1.50 and 1.44 ( $t_7 = 4.11$ ,  $p = 0.005$ ) respectively. Error bars represent standard error of the mean.



**Supplementary Figure S2.** Image processing for estimation of axon calibers. Tile images including the whole corticospinal tract (region indicated by dashed-line in A and B) were acquired with a Zeiss 880 Airyscan microscope (A-A'), deconvoluted (A''), and then processed in FIJI for creation of binary masks (B-B'), and particle analysis for Feret's diameter (B''; with color indicating relative diameter). Scale bar, 1  $\mu$ m.