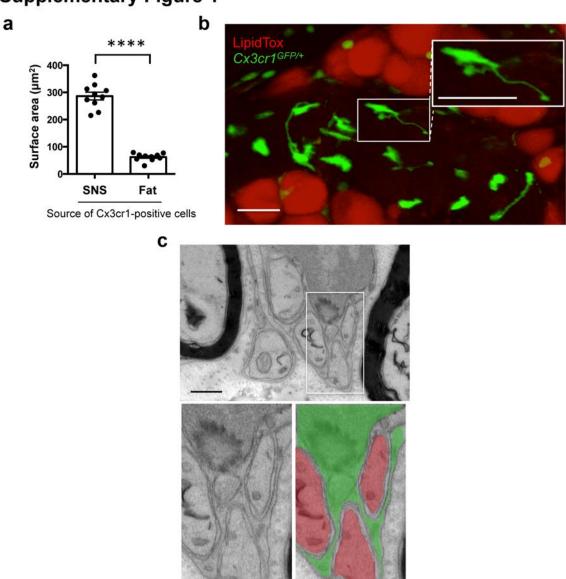
## **Supplementary Figure 1**



Supplementary Figure 1. Sympathetic neuron-associated Cx3cr1<sup>GFP/+</sup> cells differ in morphology from Cx3cr1<sup>GFP/+</sup> cells in the parenchyma of adipose tissue and wrap around non-myelinated neurons in adipose tissue.

(a) Surface area of Cx3cr1<sup>GFP/+</sup> cells associated with the nerve fibers (SNS) and fat was quantified from 3 independent experiments. 3-4 measurements were taken per one multi-photon image. n=10 per group, \*\*\*\*P<0.0001. (b) Intra-vital multi-photon visualization of a neuro-adipose connection in the inguinal fat pad of a live Cx3cr1<sup>GFP/+</sup> mouse; LipidTOX (red) labels adipocytes. Images are representative of 3 similar experiments. Boxed region represents higher magnification of the same micrograph. Scale bars, 50 µm. (c) Upper panel: electron microscopy image of a sympathetic fiber dissected from subcutaneous adipose tissue with lower panels being higher magnification of the same micrograph. Lower right panel: electron micrograph with false color-coding highlighting cells wrapping around the neurons (green) and sympathetic neurons (red). Scale bars, 500 nm. Data in panel a were analyzed by two-tailed Student's t-test.