## **Description of Additional Supplementary Files**

File Name: Supplementary Movie 1 Description: Segmentation and 3D reconstruction of FIB-SEM datasets

**File Name:** Supplementary Movie 2 **Description:** FIB-SEM z-stack showing a complete inclusion of presynaptic bouton material inside microglia

**File Name:** Supplementary Movie 3 **Description:** FIB-SEM z-stack showing a partial inclusion of axonal material inside microglia

**File Name:** Supplementary Movie 4 **Description:** Time-lapse light sheet imaging of Cx3cr1::CreER; RC::LSL-tdTomato microglia

**File Name:** Supplementary Movie 5 **Description:** Time-lapse light sheet imaging of presynaptic material intake by microglia

**File Name:** Supplementary Movie 6 **Description:** Time-lapse light sheet imaging of presynaptic material intake by microglia in CR3 KO

**File Name:** Supplementary Movie 7 **Description:** Time-lapse light sheet imaging of filopodia induction by microglia

**File Name:** Supplementary Movie 8 **Description:** Time-lapse light sheet imaging of spine head filopodia induction by microglia