Table S1. List of genotypes used in this work.

Figure	Cells Imaged / Label	Fly Genotype	Notes
Fig1B	Astrocytes / myr::tdTomato	*pBPhsFLP2::PEST (attP3); 10X-UAS-myr::tdTOM (attP40) / +; UAS-FSF-myr::smGdP-HA/V5/FLAG (VK5) / R25H07-GAL4 (attP2)*	HA/V5/FLAG not used in analysis
Fig1C	Ensheathing glia / myr::tdTomato	*pBPhsFLP2::PEST (attP3); 10X-UAS-myr::tdTOM (attP40) / +; UAS-FSF-myr::smGdP-HA/V5/FLAG (VK5) / R56F03-GAL4 (attP2)*	HA/V5/FLAG not used in analysis
Fig1D	Cortex glia / myr::tdTomato	*pBPhsFLP2::PEST (attP3); 10X-UAS-myr::tdTOM (attP40) / +; UAS-FSF-myr::smGdP-HA/V5/FLAG (VK5) / R54H02-GAL4 (attP2)*	HA/V5/FLAG not used in analysis

Fig1G,J	Astrocytes / GCaMP, Neurons / RCaMP	*20XUAS-IVS-Syn21-OpGCaMP6s-p10 (su(Hw)attP8)/w;* *R57C10-lexA (attP40), 13XLexAop2-IVS-NES-jRCaMP1b (VK00005) / alrm-Gal4.D.3;* *20XUAS-IVS-Syn21-OpGCaMP6s-p10 (su(Hw)attP1) / alrm-Gal4.D.2*	
Fig1H,K	Ensheathing glia / GCaMP, Neurons / RCaMP	*20XUAS-IVS-Syn21-OpGCaMP6s-p10 (su(Hw)attP8)/w;* *R57C10-lexA (attP40), 13XLexAop2-IVS-NES-jRCaMP1b (VK00005) / +;* *20XUAS-IVS-Syn21-OpGCaMP6s-p10 (su(Hw)attP1) / R56F03-GAL4 (attP2)*	
Fig1I,L	Cortex glia / GCaMP, Neurons / RCaMP	*20XUAS-IVS-Syn21-OpGCaMP6s-p10 (su(Hw)attP8)/w;* *R57C10-lexA (attP40), 13XLexAop2-IVS-NES-jRCaMP1b (VK00005) / +;* *20XUAS-IVS-Syn21-OpGCaMP6s-p10 (su(Hw)attP1) / R54H02-GAL4 (attP2)*	
Fig2B	Cortex glia / hid, Neurons /RCaMP	*w;* *R57C10-LexA (attP40), 13X-LexAop2-IVS-NES-jRCaMP1b-p10 (su(Hw)attP5) / UAS-Stinger, UAS-hidZ;* *tubP-GAL80ts(2) / R54H02-GAL4*	

		(attP2)	
Fig2C	Ensheathing glia / hid, Neurons /RCaMP	*w;* *R57C10-LexA (attP40), 13X-LexAop2-IVS-NES-jRCaMP1b-p10 (su(Hw)attP5) / UAS-Stinger, UAS-hidZ;* *tubP-GAL80ts(2) / R56F03-GAL4 (attP2)*	
Fig2D	Astrocytes / hid, Neurons /RCaMP	*w;* *R57C10-LexA (attP40), 13X-LexAop2-IVS-NES-jRCaMP1b-p10 (su(Hw)attP5) / UAS-Stinger, UAS-hidZ;* *tubP-GAL80ts(2) / alrm-GAL4*	
Fig2E,F	Astrocytes / hid, Neurons /RCaMP	*w;* *R57C10-LexA (attP40), 13X-LexAop2-IVS-NES-jRCaMP1b-p10 (su(Hw)attP5) / UAS-Stinger, UAS-hidZ;* *tubP-GAL80ts(2) / R25H07-GAL4 (attP2)*	
Fig3B,E,F,G	Neurons / GCaMP	*yw, UAS-Kir2.1-2A-myr::tdTOM-3xHA (attP3) / w;* *tubP-GAL80ts(10) / +;* *R57C10-lexAp65 (VK20), lexAop2-opGCaMP6s (su(Hw)attP1), UAS-his::RFP / empty-GAL4 (attP2)*	
Fig3B,E,F,G	Neurons /	*yw, UAS-Kir2.1-2A-myr::tdTOM-3xHA*	

	Kir2.1, Neurons / GCaMP	*(attP3) / w; tubP-GAL80ts(10) / +; R57C10-lexAp65 (VK20), lexAop2-opGCaMP6s (su(Hw)attP1), UAS-his::RFP / R57C10-GAL4 (attP2)*	
Fig3B,E,F,G	Trpγ Neurons / Kir2.1, Neurons / GCaMP	*yw, UAS-Kir2.1-2A-myr::tdTOM-3xHA (attP3) / w; tubP-GAL80ts(10) / TI-Trpγ-GAL4; R57C10-lexAp65 (VK20), lexAop2-opGCaMP6s (su(Hw)attP1), UAS-his::RFP / +*	
Fig3B	Neurons / GCaMP	*w, UAS-TeTxLC (C1) / w; tubP-GAL80ts(10) / +; R57C10-lexAp65 (VK20), lexAop2-opGCaMP6s (su(Hw)attP1), UAS-his::RFP / empty-GAL4 (attp2)*	
Fig3B	Neurons / TNT, Neurons / GCaMP	*w, UAS-TeTxLC (C1) / w; tubP-GAL80ts(10) / +; R57C10-lexAp65 (VK20), lexAop2-opGCaMP6s (su(Hw)attP1), UAS-his::RFP / R57C10-GAL4 (attP2)*	
Fig3C,D	Astrocytes / GCaMP	*w, UAS-TeTxLC (C1) / w; tubP-GAL80ts(10) / R25H07-lexAp65 (attP40), lexAop2-opGCaMP6s (su(Hw)attP5); lexAop2-opGCaMP6s (su(Hw)attP1) /*	

		empty-GAL4 (attP2)	
Fig3C,D	Neurons / Kir2.1, Astrocytes / GCaMP	*w, UAS-Kir2.1-2A-myr::tdTOM-3xHA (attP3) / w; tubP-GAL80ts(10) / R25H07-lexAp65 (attP40), lexAop2-opGCaMP6s (su(Hw)attP5); lexAop2-opGCaMP6s (su(Hw)attP1) / R57C10-GAL4 (attP2)*	
Fig3C,D	Neurons / TNT, Astrocytes / GCaMP	*w, UAS-TeTxLC (C1) / w; tubP-GAL80ts(10) / R25H07-lexAp65 (attP40), lexAop2-opGCaMP6s (su(Hw)attP5); lexAop2-opGCaMP6s (su(Hw)attP1) / R57C10-GAL4 (attP2)*	
Fig4B,C	Astrocytes / GCaMP	*w; R25H07-lexAp65 (attP40), lexAop2-opGCaMP6s (su(Hw)attP5); R25H07-GAL4 (attP2) / +*	
Fig4B,C,D	Astrocytes / TrpA1, Astrocytes / GCaMP	*w; R25H07-lexAp65 (attP40), lexAop2-opGCaMP6s (su(Hw)attP5); R25H07-GAL4 (attP2) / UAS-TrpA1 (attP2)*	
Fig4D	Astrocytes / GCaMP	*w; R25H07-lexAp65 (attP40), lexAop2-*	

		opGCaMP6s (su(Hw)attP5); *empty-GAL4 (attP2) / UAS-TrpA1* *(attP2)*	
Fig4B,C	Neurons / GCaMP	*w;* *R57C10-lexAp65 (attP40), lexAop2-* *opGCaMP6s (su(Hw)attP5);* *R25H07-GAL4 (attP2) / +*	
Fig4B,C	Astrocytes / TrpA1, Neurons / GCaMP	*w;* *R57C10-lexAp65 (attP40), lexAop2-* *opGCaMP6s (su(Hw)attP5);* *UAS-TrpA1 (attP2) / R25H07-GAL4* *(attP2)*	
Fig4E	Neurons / Control	*w;* *R57C10-lexAp65 (attP40), lexAop2-* *opGCaMP6s (su(Hw)attP5);* *wtrw^{ex} / +*	
Fig4E	Neurons / *wtrw*	*w;* *R57C10-lexAp65 (attP40), lexAop2-* *opGCaMP6s (su(Hw)attP5);* *wtrw^{ex} / wtrw^{ex}*	