

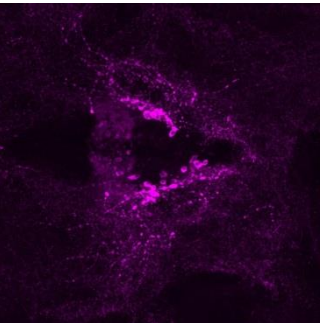
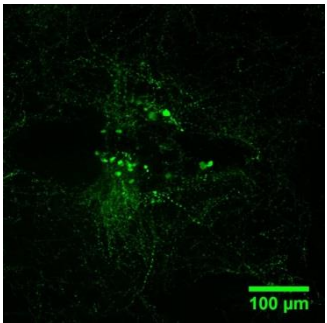
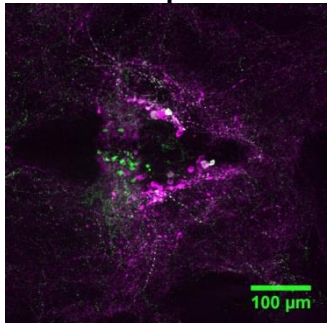
Transgenic line	Gene expressed	Use
ThGal4(VP16);UAS:EGFP ^{CAAX}	Membrane-GFP	Reporter gene
ThGal4(VP16);UAS:wtChr2EYFP	Channelrhodopsin2	Optogenetic activation
ThGal4(VP16);UAS:NpHR3.0EYFP	Halorhodopsin	Optogenetic inhibition
ChATGal4(VP16);UAS:EGFP ^{CAAX}	Membrane-GFP	Reporter Gene
Th-itTA;TetO7:EGFP	GFP	Reporter gene
Th-itTA;TetO7:wtChr2EYFP	Channelrhodopsin2	Optogenetic activation
Th-itTA;TetO7:hChr2(H134R)EYFP	Channelrhodopsin2	Optogenetic activation
Th-itTA;TetO7:NpHR3.0EYFP	Halorhodopsin	Optogenetic inhibition
Th-itTA;TetO7:hM3Dq-EGFP	Activating DREADD	Pharmacogenetic activation
Th-itTA;TetO7:hM4Di-IRES-EGFP	Inhibiting DREADD	Pharmacogenetic inhibition
Th-itTA;TetO7:GCaMP5	GCaMP5	Optical reporter of neuronal activity
Th-itTA;TetO7:GCaMP6s	GCaMP6 slow	Optical reporter of neuronal activity
ChAT-itTA;TetO7:wtChr2EYFP	Channelrhodopsin2	Optogenetic activation
ChAT-itTA;TetO7;ReaChR-mCitrine	Red-activated Channelrhodopsin	Optogenetic activation
ChAT-itTA;TetO7:NpHR3.0EYFP	Halorhodopsin	Optogenetic inhibition
ChAT-itTA;TetO7:GCaMP5	GCaMP5	Optical reporter of neuronal activity

Table 1

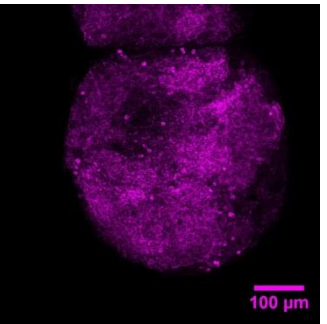
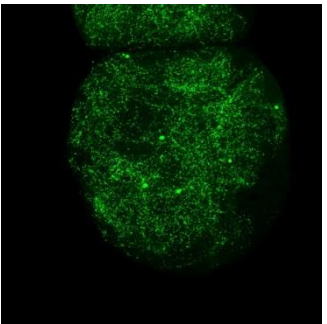
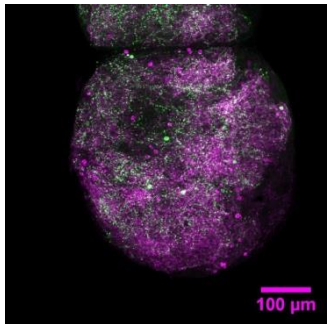
Composite

GFP

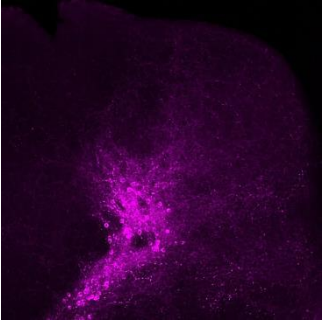
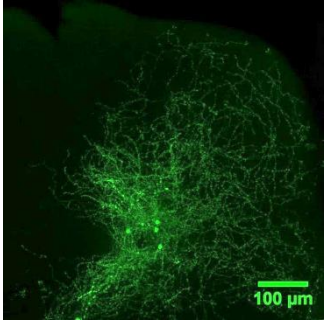
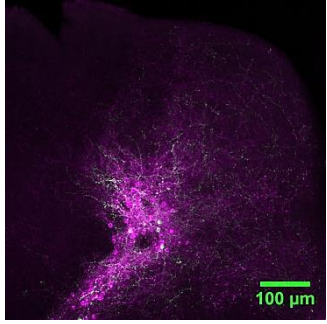
Th



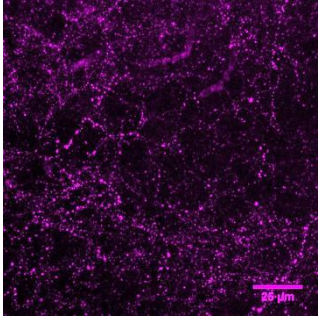
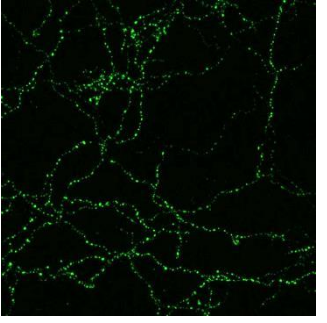
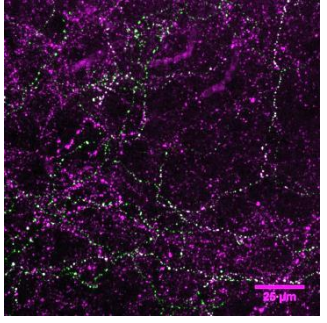
Posterior
Tuberculum



Olfactory Bulb



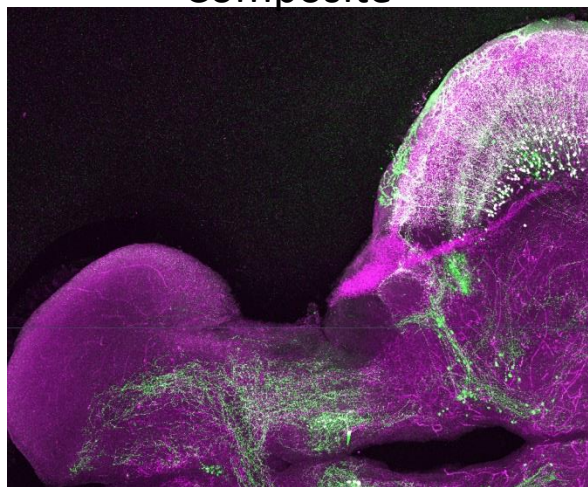
Telencephalon



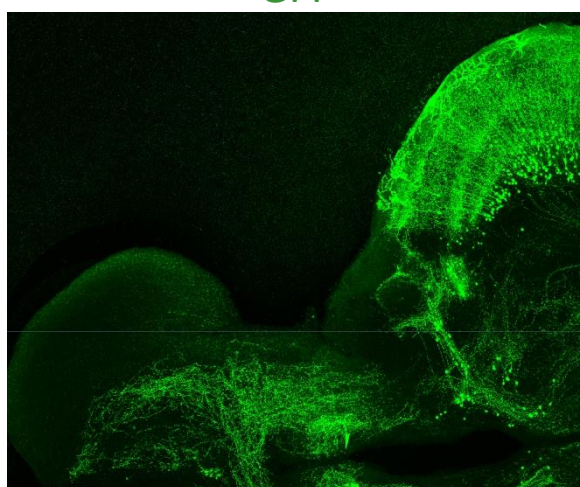
Dp area

Figure 1

Composite



GFP



ChAT

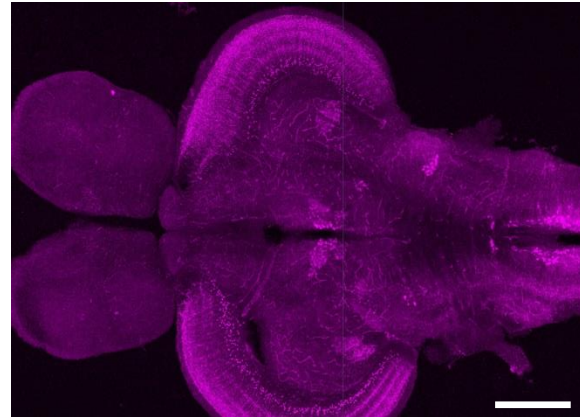
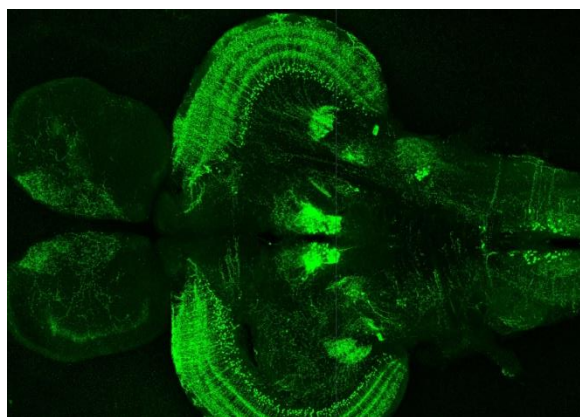
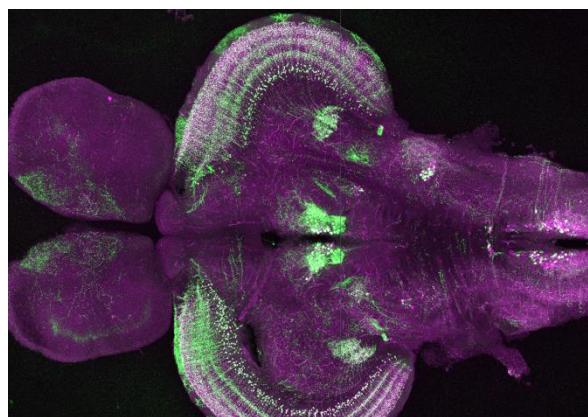
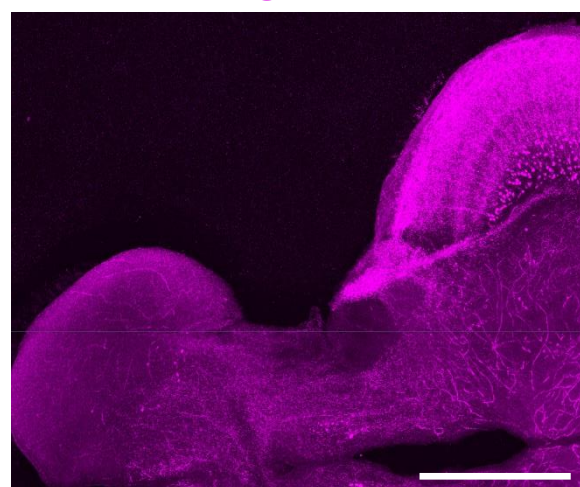


Figure 2

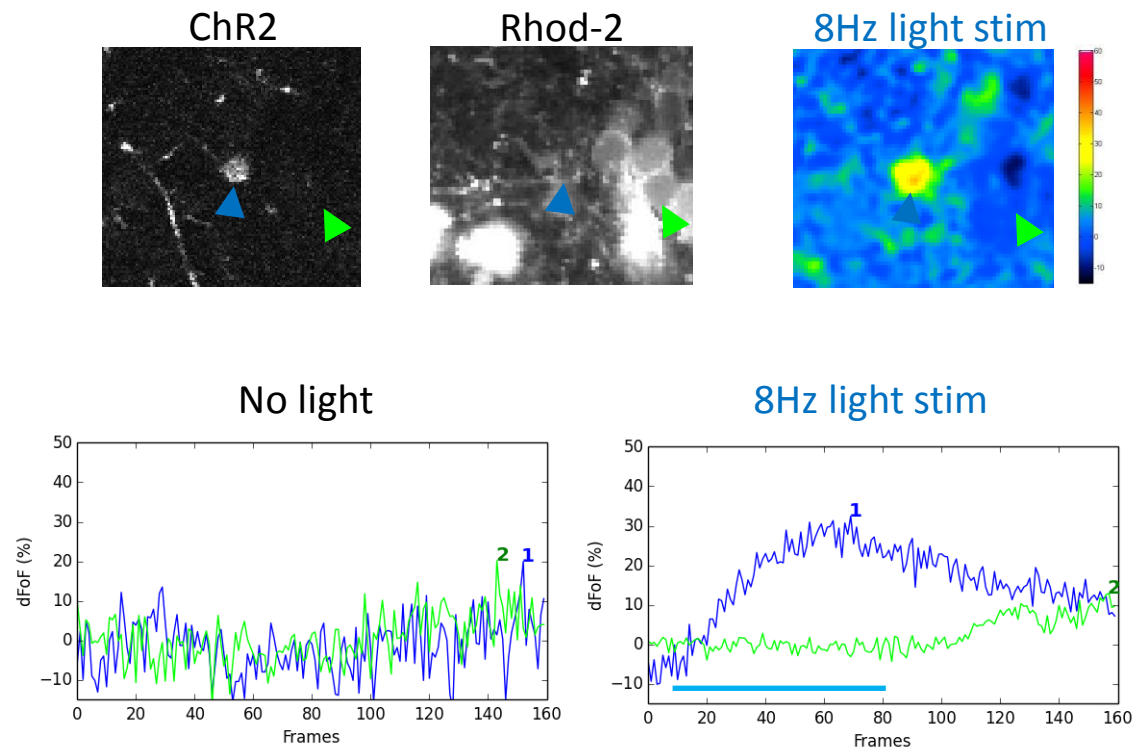


Figure 3

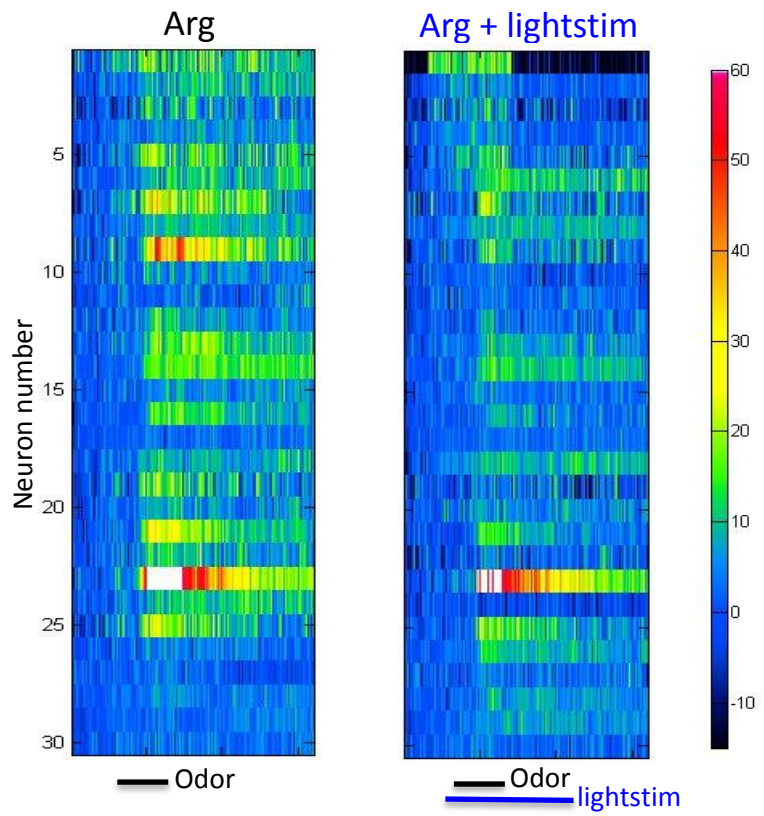


Figure 4