



**Figure S4 E–J** ODR-3 and GPA-13 trafficking defects in mutant *C. elegans* olfactory neurons. **E–J**, structural integrity of AWA, AWB and AWC Cilia in *unc-119 C. elegans* and restoration of ODR-3 and GPA-13 Localization. GFP was specifically expressed in AWA neurons (E,F), AWB neurons (G,H), and AWC neurons (I,J) of wild-type (left column) and *unc-119* mutant (right column) *C. elegans* worms. Reporter constructs were *odr-10::gfp* for AWA, *str-1::GFP* for AWB, and *str-2::GFP* for AWC. The structural integrity of these neurons is not compromised in the mutant (F,H,J) when compared to WT (E,G,I). Please note that transgene *kyls140* in the *unc-119* mutant background only expressed GFP in one of the two AWC neurons (**Fig. S4I,J**), while some of the transgenic worms expressed GFP in both AWC neurons (unpublished data). Similar phenomena have been reported for other mutants (Troemel et al., *Cell* **99**, 387-398 (1999)).