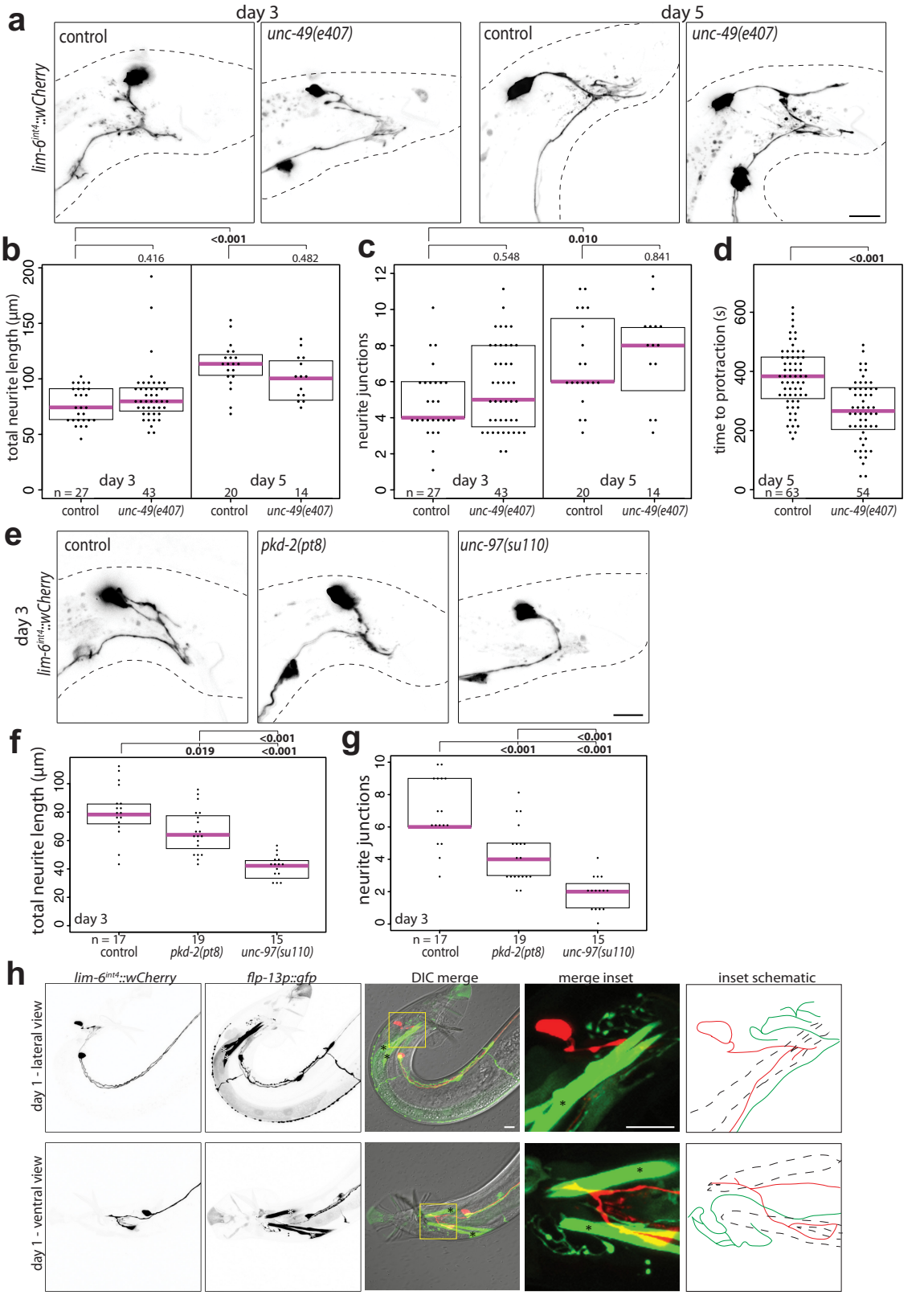

Extended Data Figure 4 | DVB neurite outgrowth in *unc-49*, *pkd-2* and *unc-97* mutant males. *flp-13p::gfp* labels CP6 and spicule retractor muscles. **a**–**c**, Confocal images (**a**) and quantification of total neurite outgrowth (**b**) and number of neurite junctions (**c**) in control and *unc-49(e407)* males at days 3 and 5. **d**, Time to spicule protraction on aldicarb at day 5 for control and *unc-49(e407)* males. **e**–**g**, Confocal images (**e**) and quantification of total neurite outgrowth (**f**) and number of neurite junctions (**g**) in control, *pkd-2(pt8)*, and *unc-97(su110)* males at day 3. **h**, Confocal images of male worms with *lim-6*^{int4}*::wCherry*, *flp-10p::gfp*, and differential interference contrast at day 1 in ventral and lateral views. Inset showing DVB and CP6 axons, with schematic of axons demonstrating lack of contact (red is DVB axon, green is CP6 axon, blue dashed lines are spicule retractor muscles). Asterisks in *flp-13::gfp* panel mark spicule retractor muscles. Dot represents one worm; magenta bar, median; boxes, quartiles; one-way ANOVA and post-hoc Tukey HSD, *P* values shown above plots, bold shows significance ($P < 0.05$), scale bars, 10 µm.