

Extended Data Figure 2 | DVB neurite outgrowth in adult male *C. elegans* is stochastic and other neurons in the male tail do not show progressive neurite outgrowth in adulthood. a, b, DVB neurites at day 5 visualized with $lim-6^{int4}::wCherry$ (a) or $lim-6^{int4}::gfp$ (b) (n>10 for each). DVB posterior neurites were traced through confocal stacks using Simple Neurite Tracer⁴ plugin. c, DVA neuron visualized with ser-2(prom-2)::gfp (n=5) (red dashed line indicates axon of relevant neuron). d, DVC neuron

visualized with <code>inx-18p::gfp</code> (n=5). **e**, CP6 neuron visualized with <code>flp-13::gfp</code> (cell soma not shown) (n=5). **f**, Ray neurons visualized with <code>dat-1::gfp</code> (ventral view) (n=5). **g**, **h**, PVT neuron visualized with <code>srz-102p::gfp</code> (n=5) (**g**) and <code>srg-4p::gfp</code> (n=5) (**h**) at day 1 and day 5. Axons of indicated neurons highlighted by red dashed lines. Scale bars, $10\,\mu\mathrm{m}$.