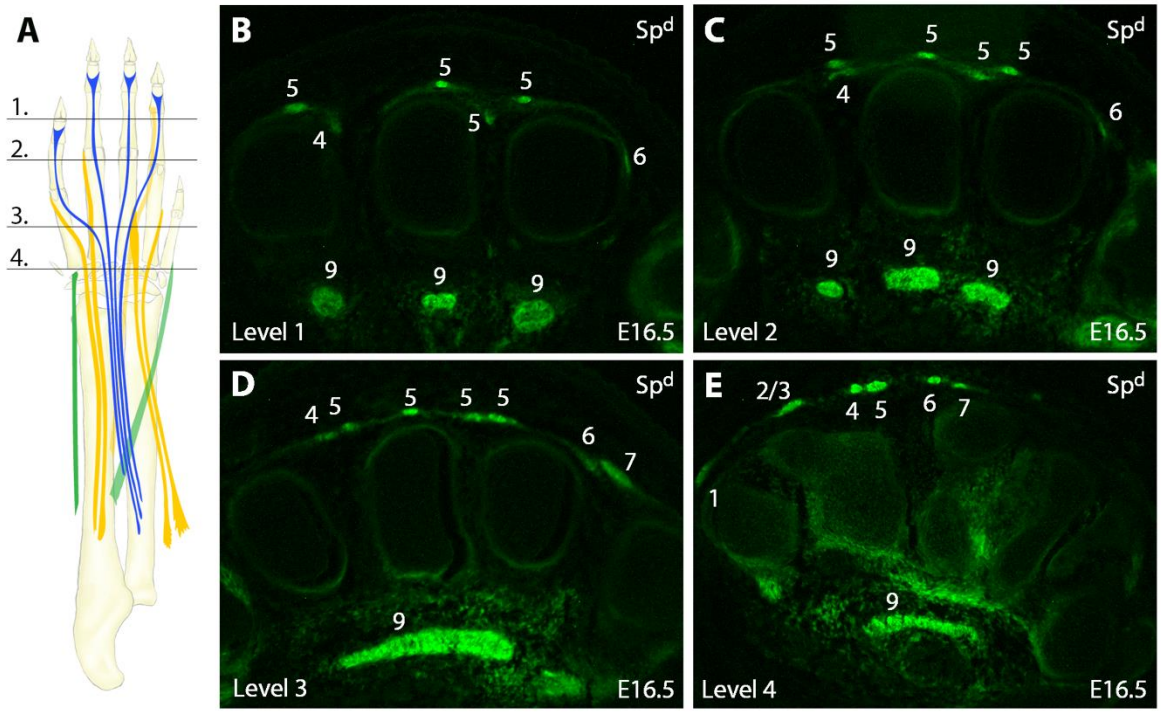
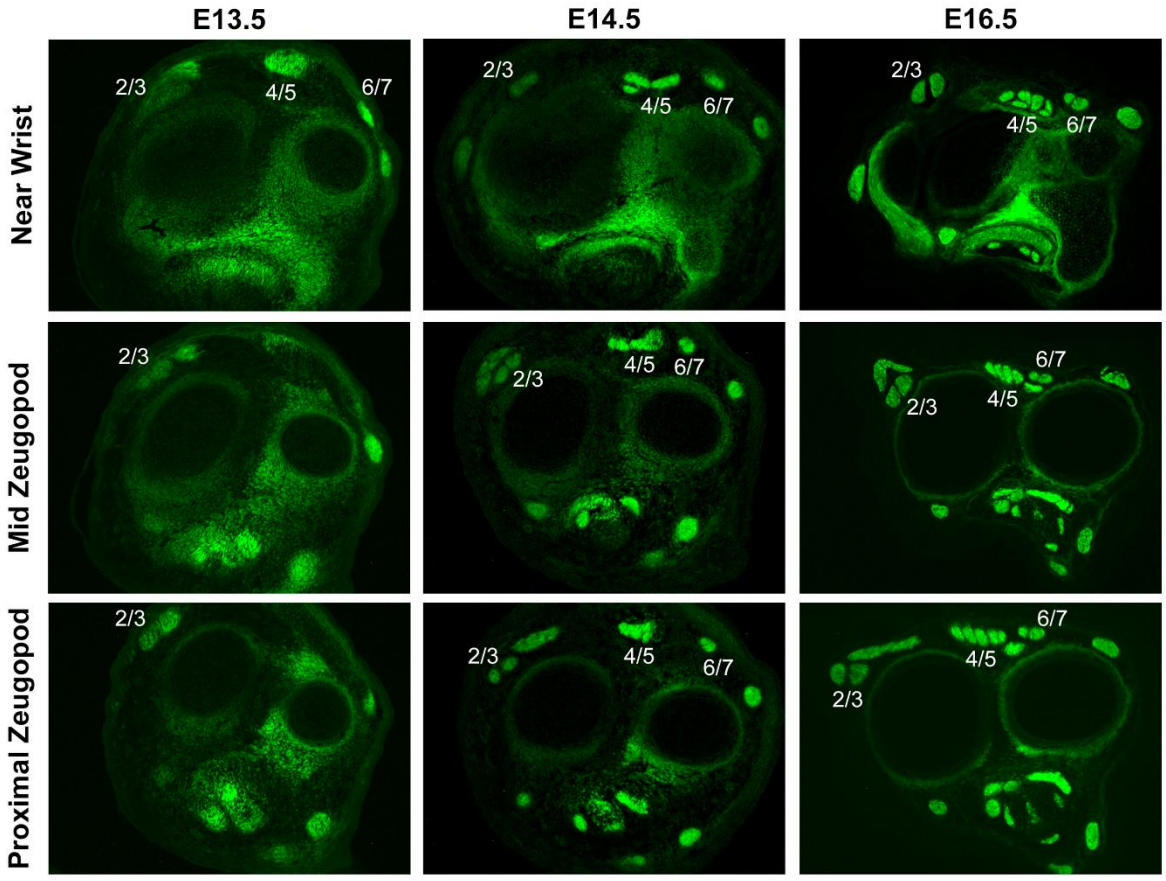
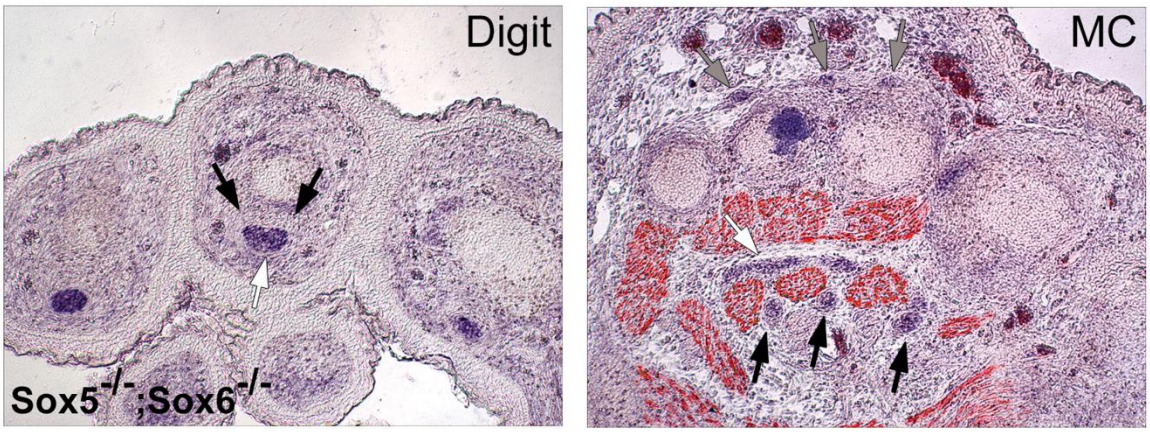


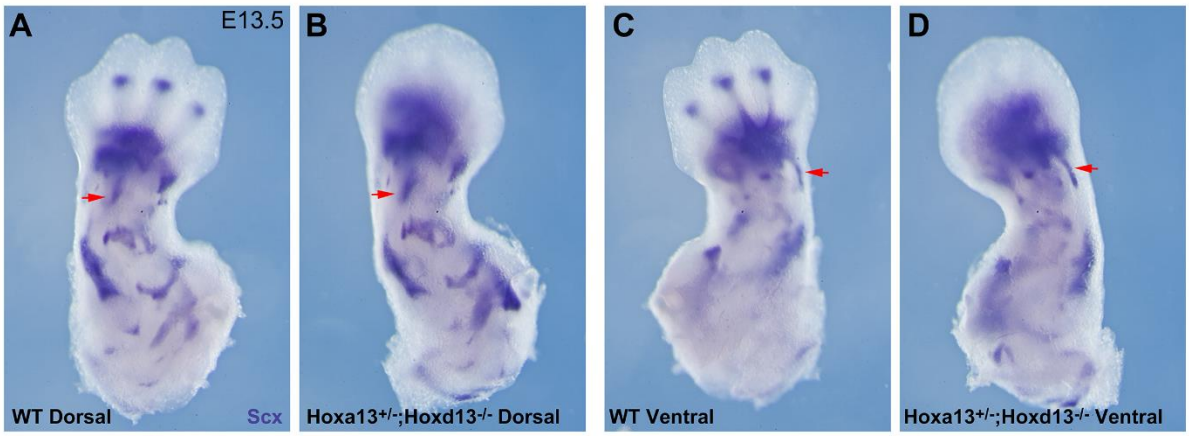
Supplementary Figure 1: Trajectory of autopod tendons in the *Sp*^{d} 'muscle-less' mutant. (**A**-**E**) The trajectory of autopod tendons were evaluated in *Sp*^{d} mutants, using sequential transverse sections taken from the distal digits to the wrist. Based on the location of skeletal insertions, and patterning along their trajectories, individual tendons were readily identified. The autopod components of several long tendons were visible, though less robust in size.



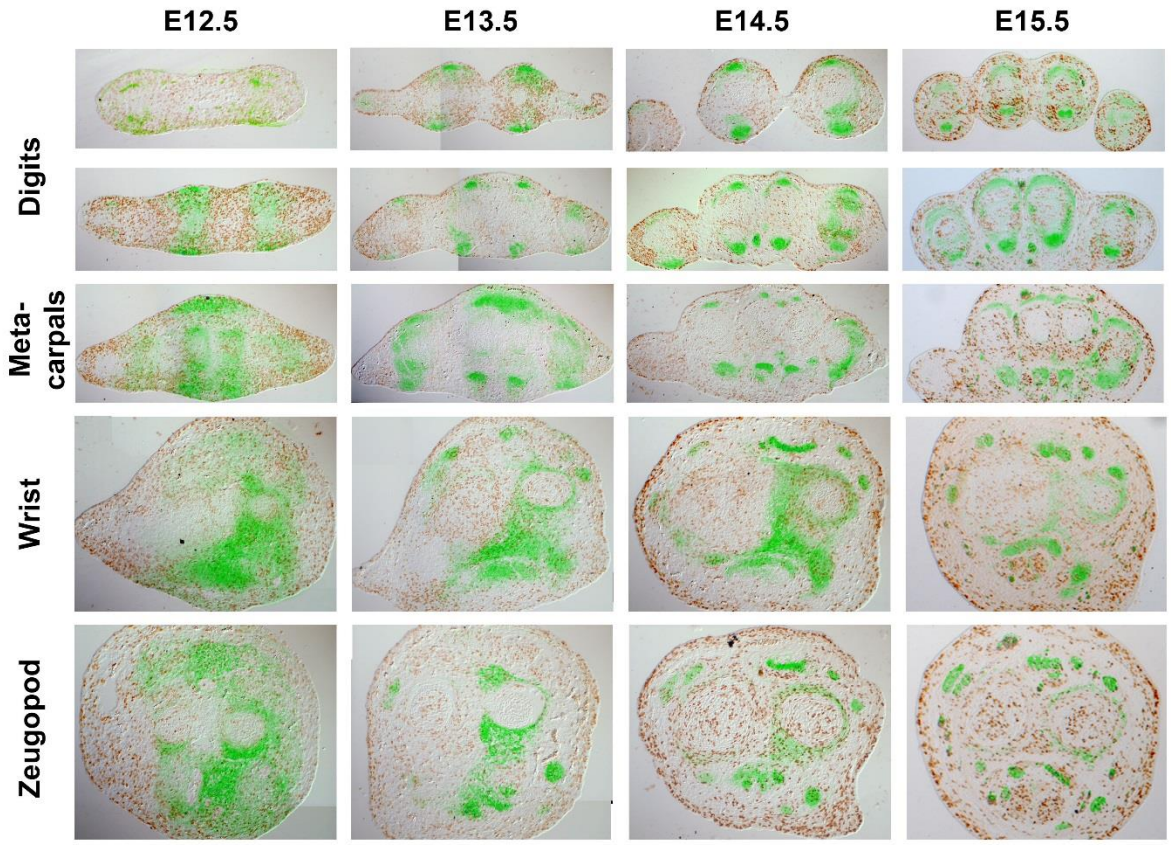
Supplementary Figure 2: Tendon individuation from an initial fused element proceeds in a proximal to distal progression from E13.5 onwards. Transverse sections of *ScxGFP* limbs shows that the EL/B tendons (2/3) begin to separate at E13.5. At E14.5, the EL/B tendons are fully separated at zeugopod levels while remaining fused at the wrist. The EDC (5) are formed from a large fused element that also individuates into distinct components beginning at E13.5. The EQ tendons (6/7) are fused at E14.5, but are separated by E16.5. Separation of all fused tendons is complete by E16.5.



Supplementary Figure 3: Tendon development is largely normal in Sox5$^{-/-}$;Sox6$^{-/-}$ double mutants, with the exception of FDS digit tendon formation. (**A**, **B**) In situ hybridization for *Col1a1* counterstained with MHC for muscle revealed the presence of several autopod tendons at E17.5, including the FDP, the EDC and the FDS metacarpal tendons. FDS tendons were missing at the digits. FDP, EDC and FDS tendons are highlighted by white, gray, and black arrows, respectively.



Supplementary Figure 4: Analysis of Hoxa13$^{+/-}$;Hoxd13$^{-/-}$ mutant limbs provide additional evidence for developmental modularity of limb tendons. (**A-D**) Whole mount in situ hybridization for *Scx* expression showed that in *Hoxa13$^{+/-}$;Hoxd13$^{-/-}$* mutant limbs, the loss of digit specification and the arrest in autopod development does not impair formation of zeugopod tendons (red arrows).



Supplementary Figure 5: Tendon proliferation in the autopod and zeugopod. Brdu was detected using DAB staining and the images were overlaid with *ScxGFP* signal from an immediate alternate section to highlight cell proliferation in tendons from digit through zeugopod levels (E12.5 through E15.5).