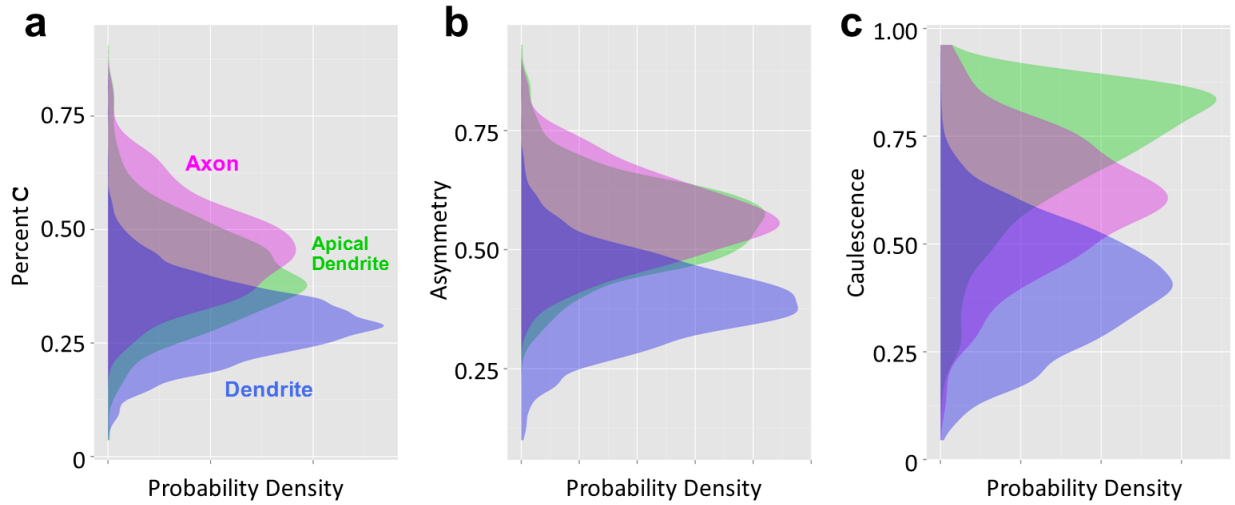
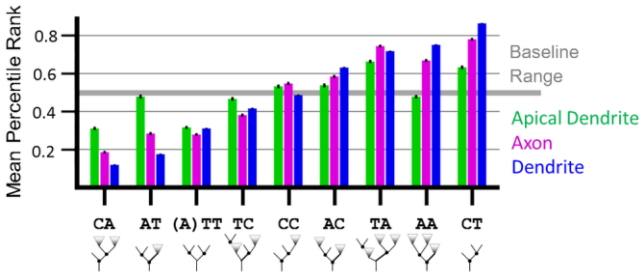
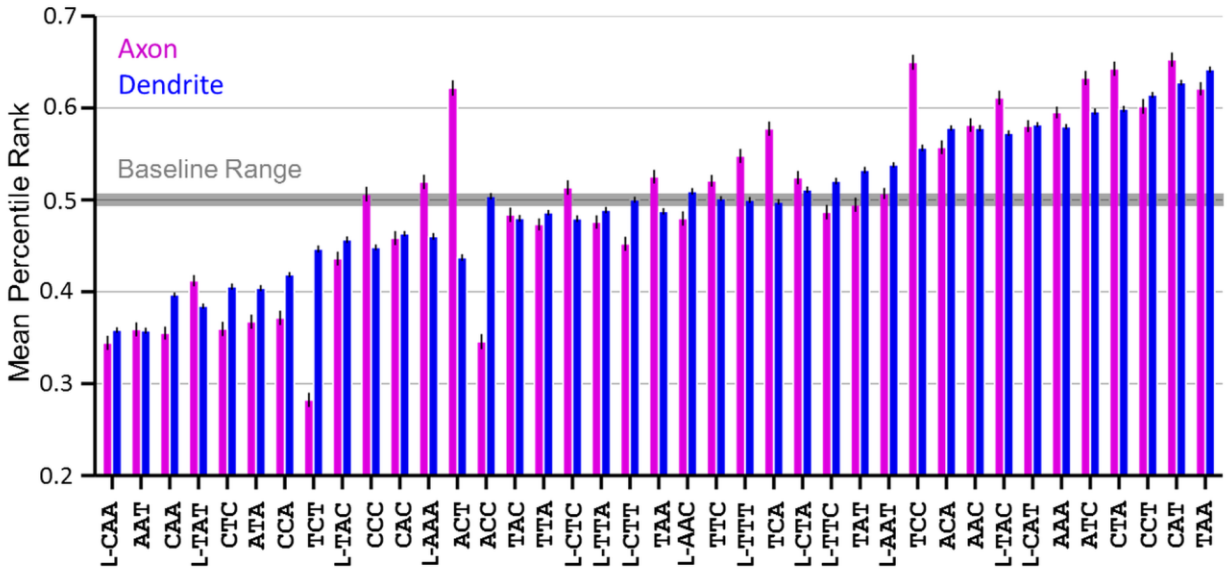
Supplementary Figures



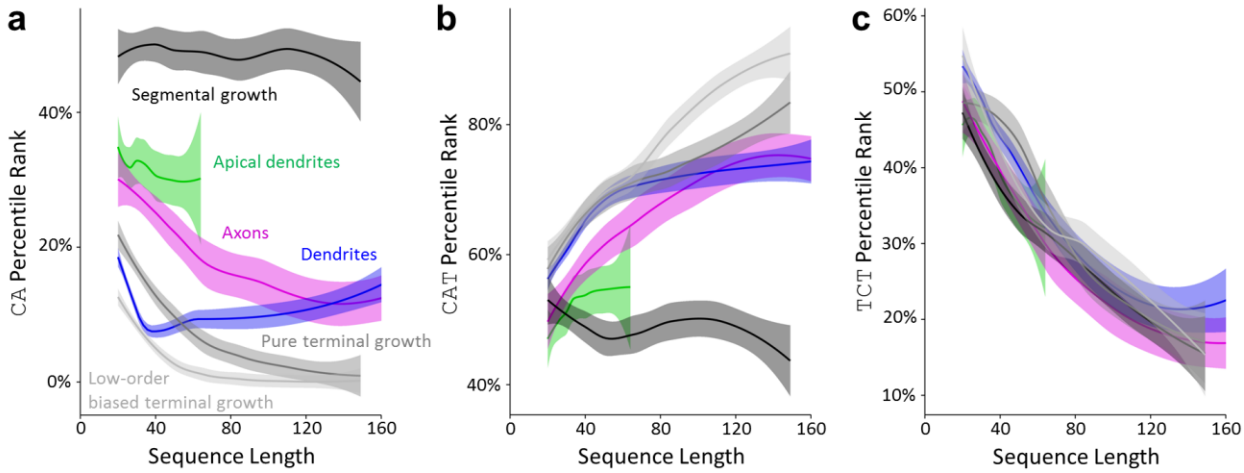
Supplementary Figure 1: Percent C, Asymmetry, and Caulescence. Distributions of %C (**a**), average partition asymmetry (**b**), and caulescence (**c**) for pyramidal axons (magenta), dendrites (blue), and apical dendrites (green). The relationship between axons and dendrites is consistent between measures, but the apical distribution is unique in each.



Supplementary Figure 2: Dimer motifs and anti-motifs by arbor type. All mean dimer percentile ranks (with SEM error bars) are shown for each arbor type. Apical dendrites are closer to the baseline (50%) than axons and dendrites except for the case of (A)TT where all arbor types are approximately the same.



Supplementary Figure 3: Axon and dendrite trimer motifs and anti-motifs. Axons and dendrites exhibit highly similar trimer patterns, with a few notable exceptions. Approximately one-third of trimers are motifs and another one-third anti-motifs.



Supplementary Figure 4: Dimers and trimers by sequence length. Percentile ranks of arbor types and growth models (segmental, terminal, and low-order biased terminal), smoothed across sequence length, with 95% confidence intervals, for *k*-mers (**a**) CA, (**b**) CAT, and (**c**) TCT. In the CA and CAT cases, the different percentile rank trends and different average lengths of axons and dendrites cause the averages across sequence lengths to appear more similar. TCT, on the other hand, shows substantially greater similarity of the arbor types and growth models by sequence length, but greater differences when averaged across sequence lengths.