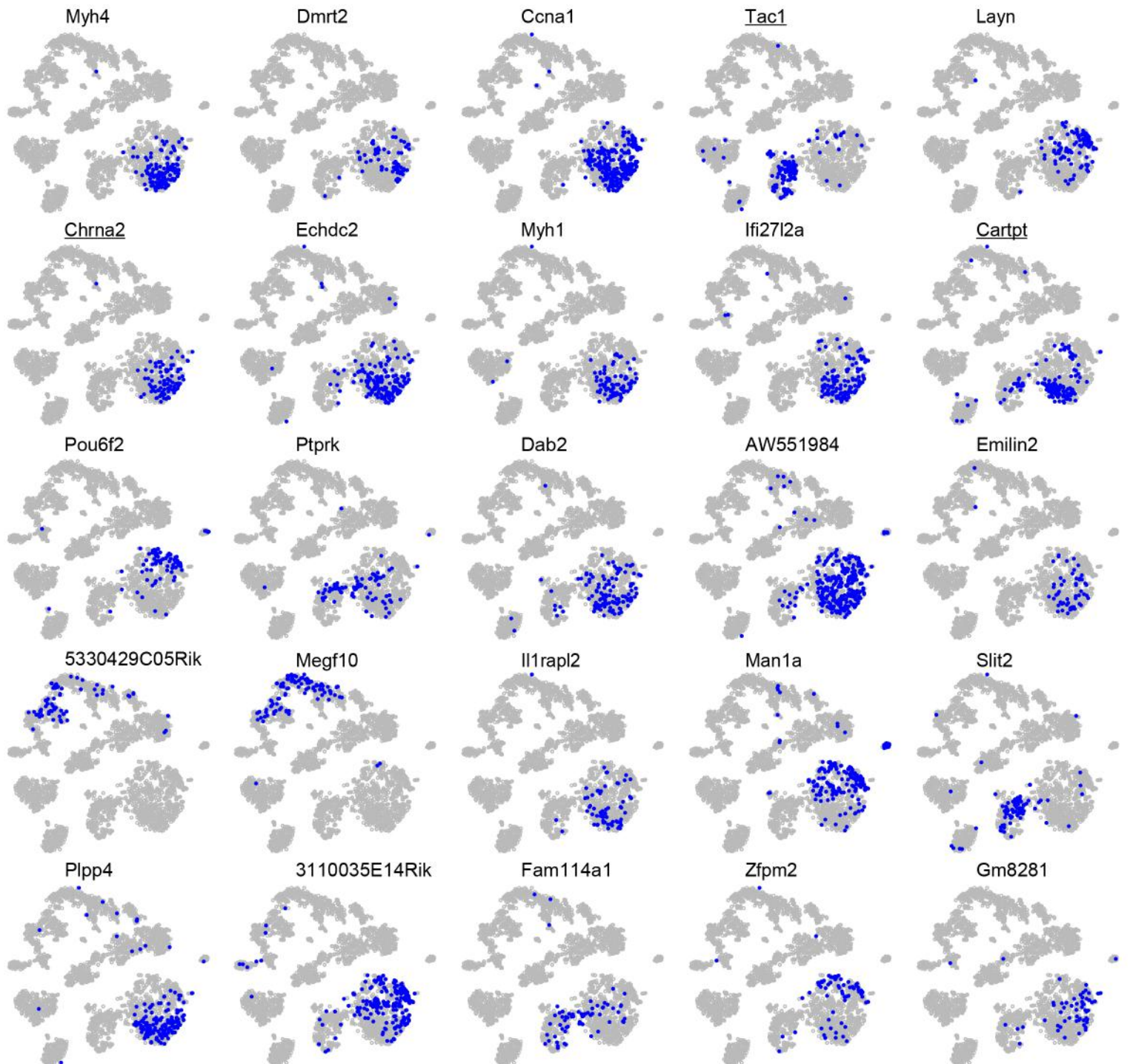
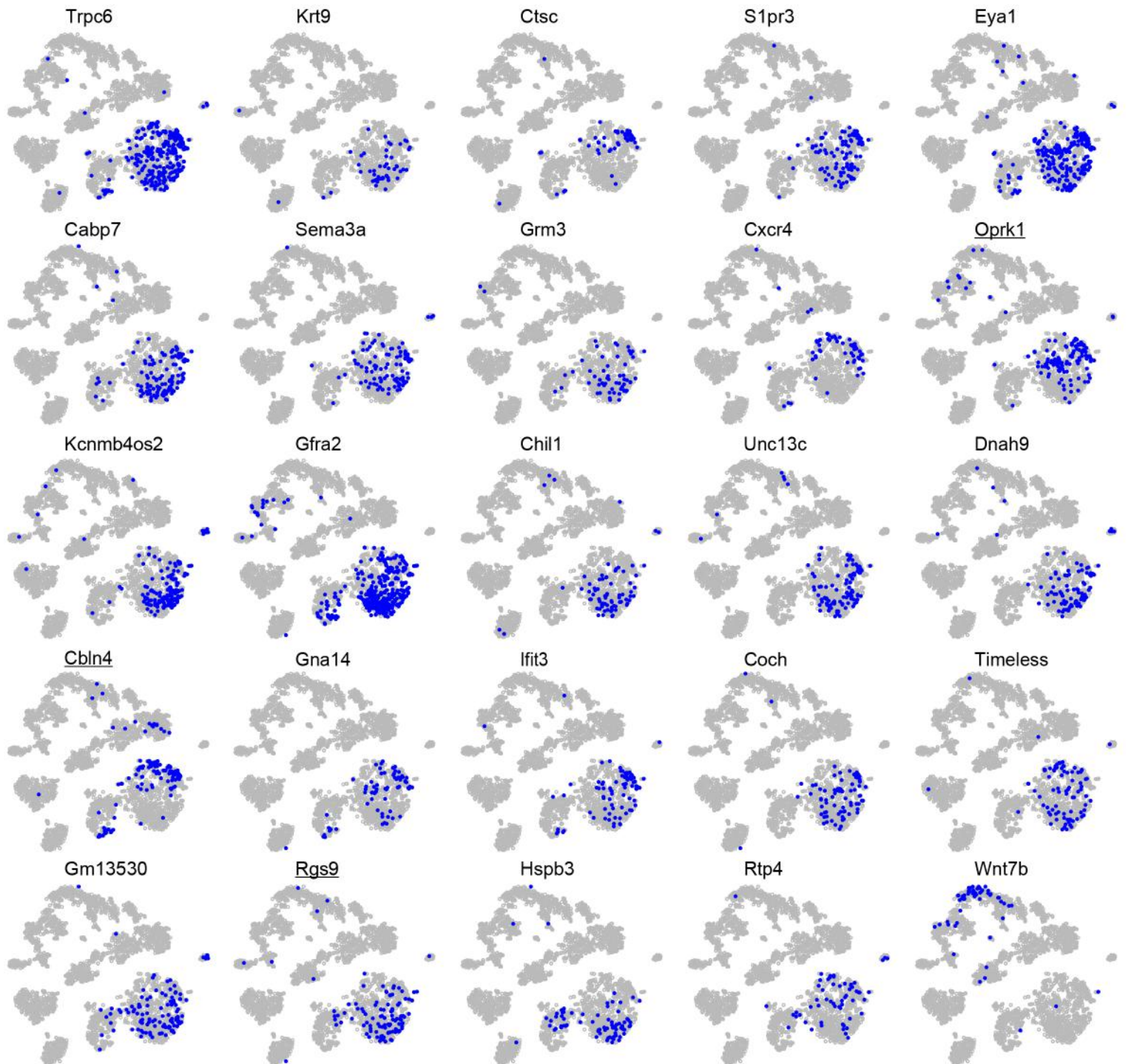
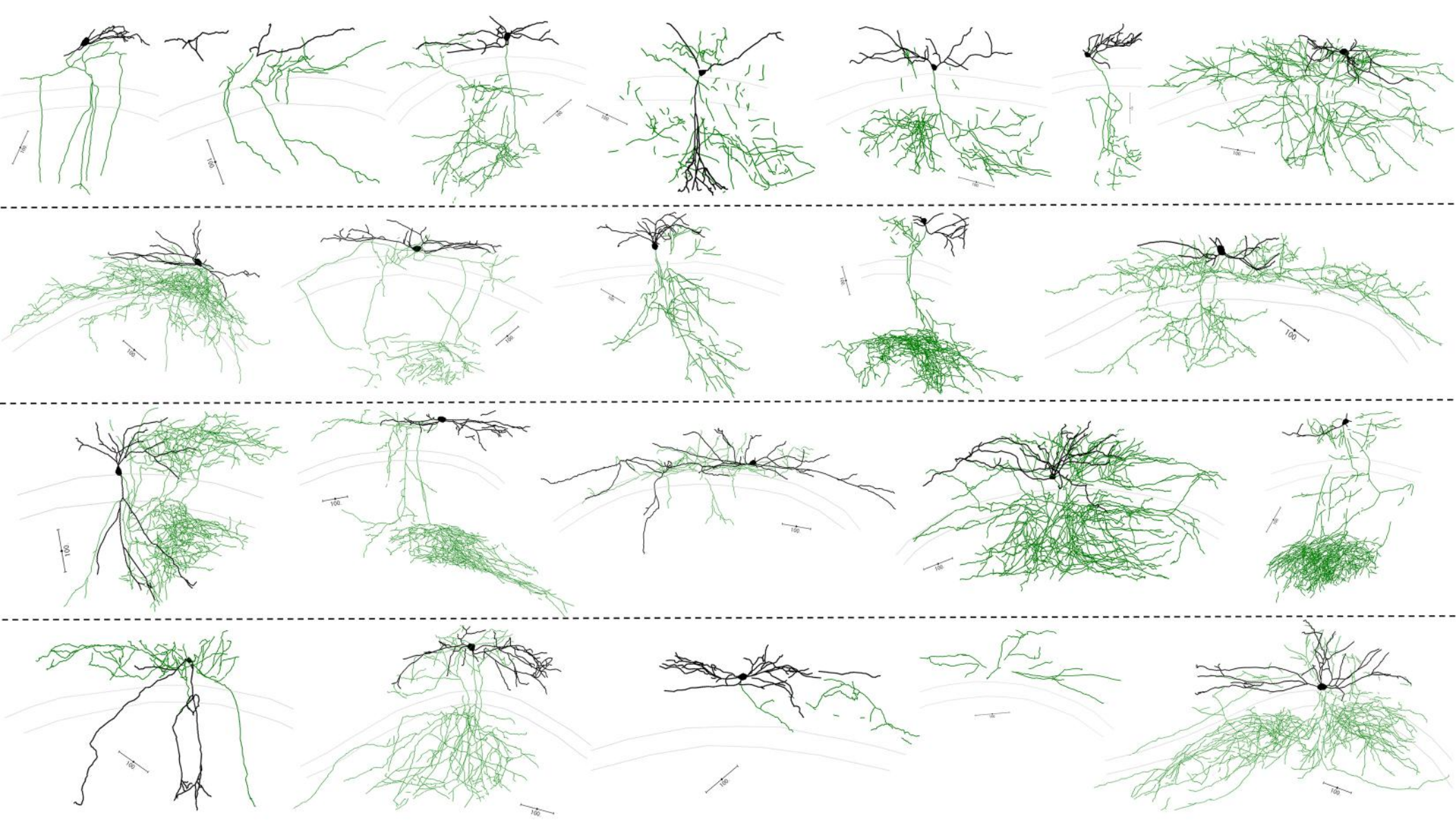


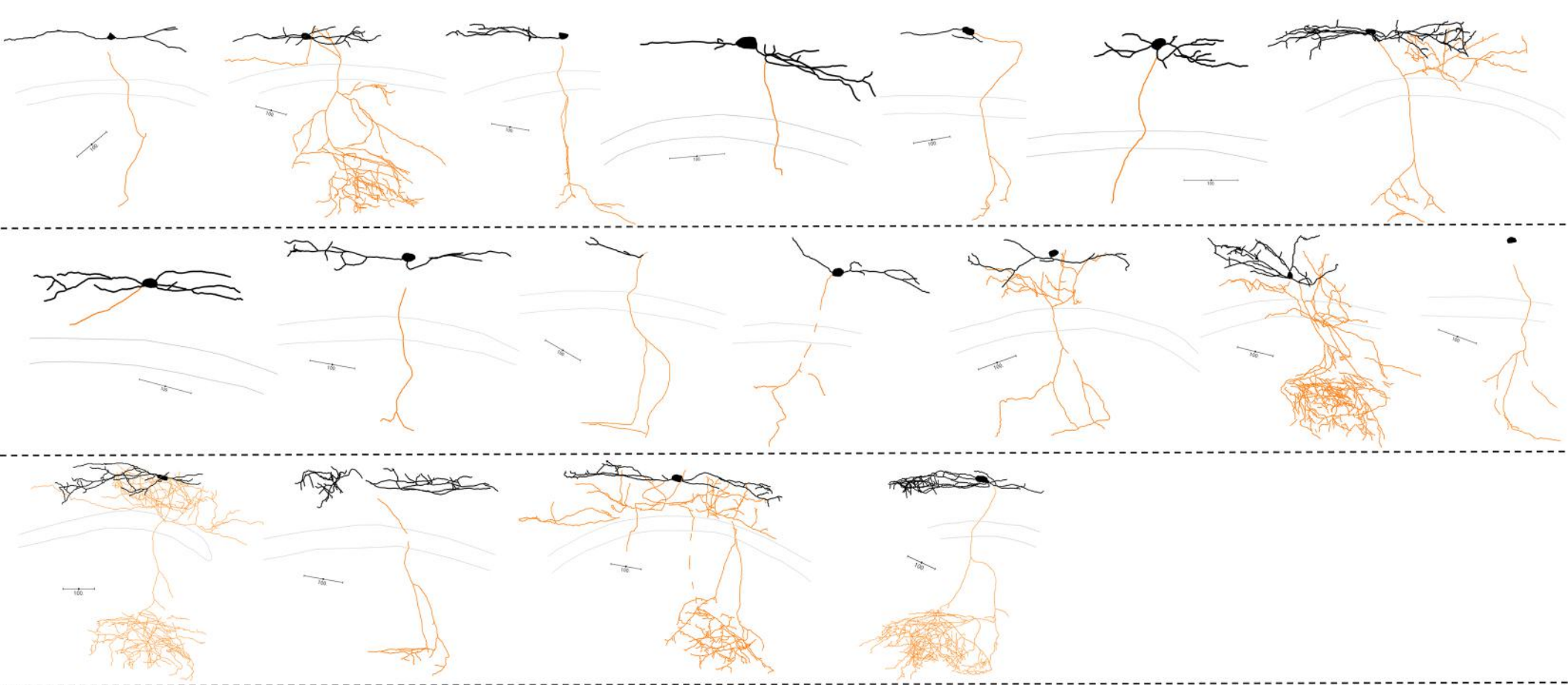
Supplementary Figure 1



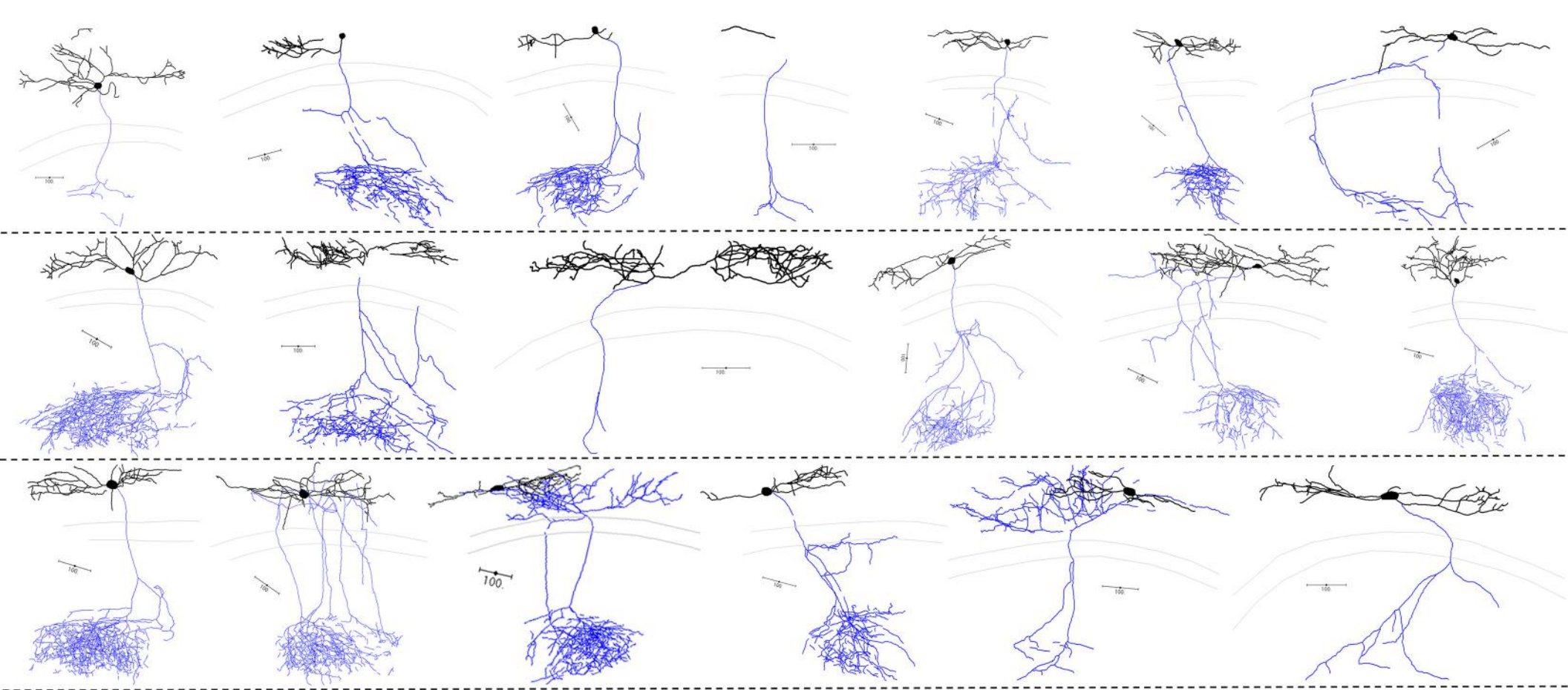




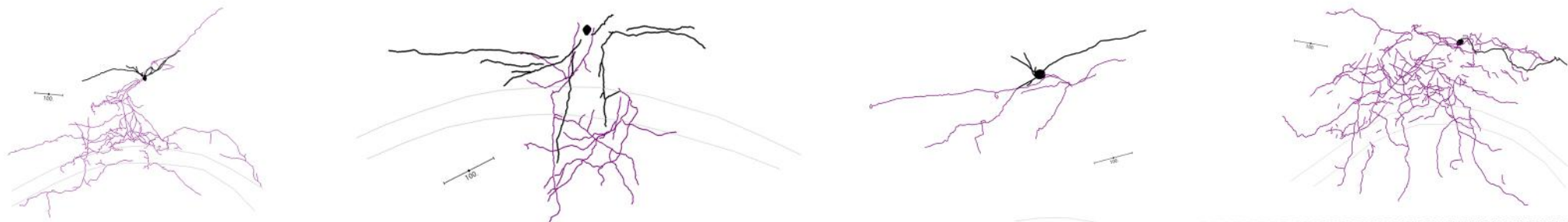
Supplementary Figure 4



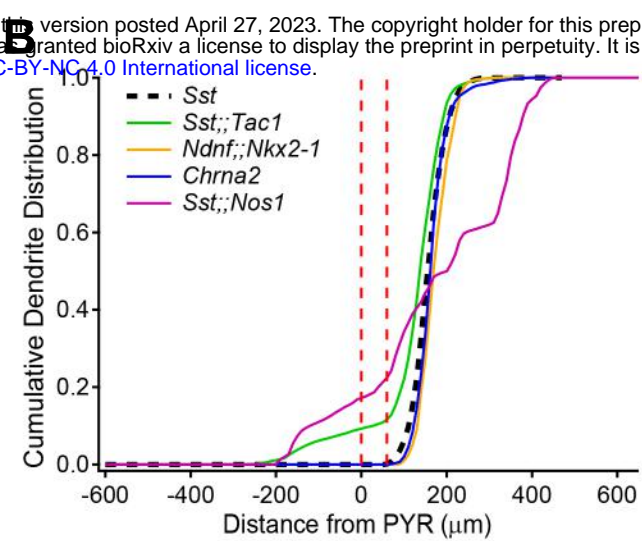
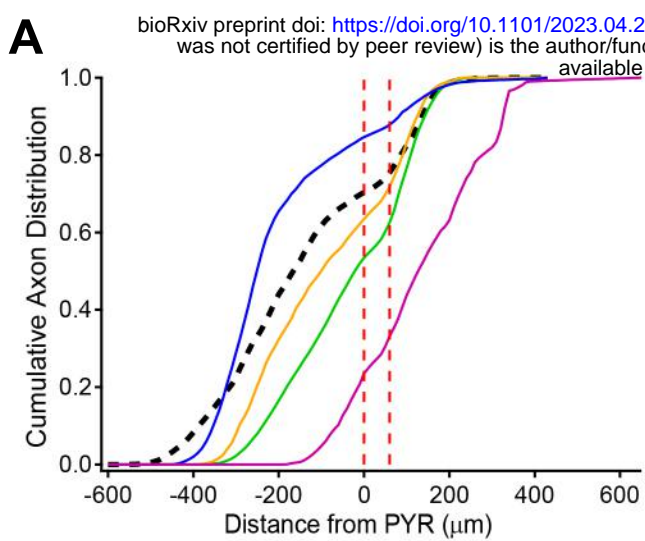
Supplementary Figure 5

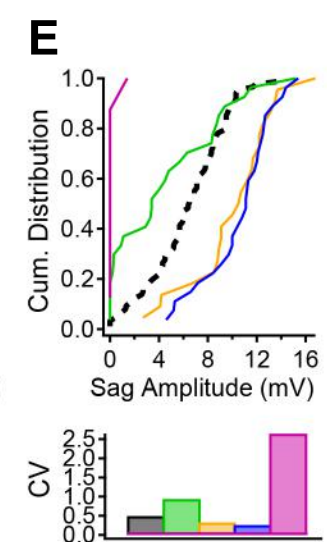
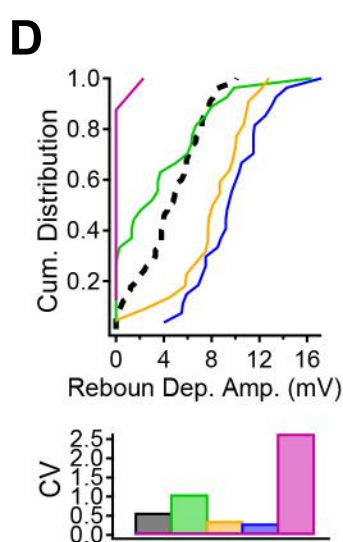
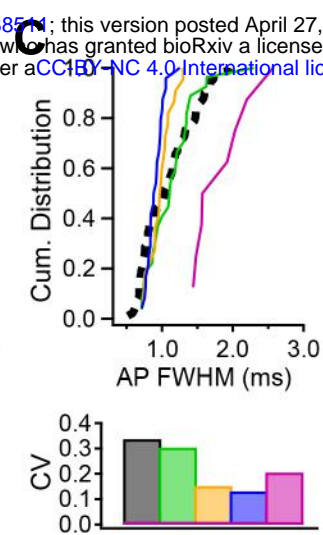
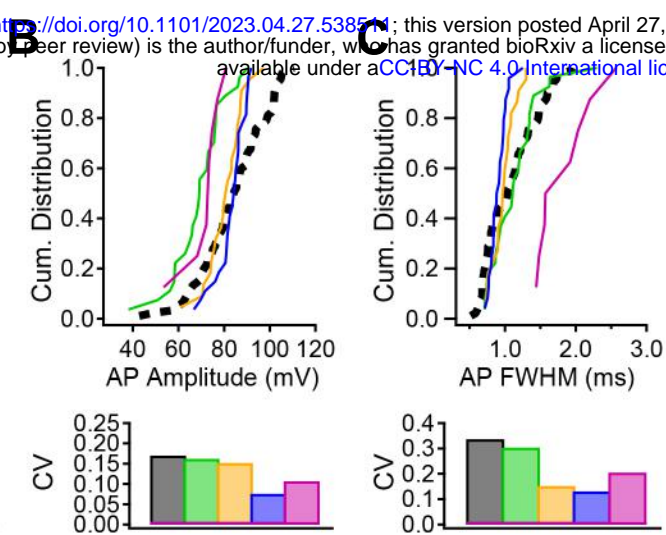
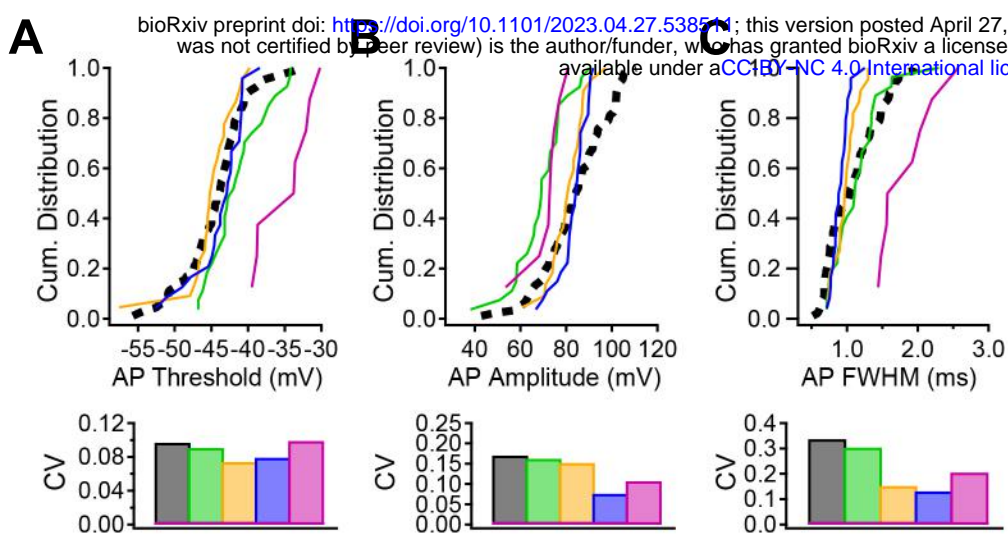


Supplementary Figure 6



Supplementary Figure 7





Supplementary Table 1. p-values for statistical comparisons of anatomical parameters

p-values		Sst	Sst;;Tac1	Ndnf;;Nkx2-1	Chrna2
axons	Sst				
	Sst;;Tac1	0.3417			
	Ndnf;;Nkx2	0.3417	0.3417		
	Chrna2	0.0036	0.005	0.0064	
	Sst;;Nos1	0.000048	0.000147	0.00001	0.00001
dendrites	Sst				
	Sst;;Tac1	0.0032			
	Ndnf;;Nkx2	1	0.00068		
	Chrna2	1	0.0018	1	
	Sst;;Nos1	0.0305	0.2416	0.0112	0.015

Supplementary Table 2. p-values for statistical comparisons of electrophysiological parameters

p-values		Sst	Sst;;Tac1	Ndnf;;Nkx2-1	Chrna2
ahp_max	Sst				
	Sst;;Tac1	1			
	Ndnf;;Nkx2	0.2709	1		
	Chrna2	0.4568	0.5976	0.051	
	Sst;;Nos1	1	1	0.567	1
ap_amp	Sst				
	Sst;;Tac1	0.00005			
	Ndnf;;Nkx2	0.21	0.014		
	Chrna2	0.18	0.00003	0.614	
	Sst;;Nos1	0.093	0.614	0.21	0.009
ap_thresh	Sst				
	Sst;;Tac1	0.2855			
	Ndnf;;Nkx2	0.8342	0.0486		
	Chrna2	0.8342	0.4924	0.4924	
	Sst;;Nos1	0.0001	0.0308	0.000144	0.000264
ap_fwhm	Sst				
	Sst;;Tac1	0.5658			
	Ndnf;;Nkx2	0.3138	0.1336		
	Chrna2	0.0075	0.0054	0.5658	
	Sst;;Nos1	0.0021	0.0008	0.000144	0.00012
sag	Sst				
	Sst;;Tac1	0.037			
	Ndnf;;Nkx2	0.000252	0.0016		
	Chrna2	0.00001	0.000252	0.9484	
	Sst;;Nos1	0.000088	0.0168	0.000112	0.000081
ap_maxdecay	Sst				
	Sst;;Tac1	0.0072			
	Ndnf;;Nkx2	0.0344	0.0135		
	Chrna2	0.0028	0.000405	0.0344	
	Sst;;Nos1	0.0042	0.0055	0.000405	0.00009
ap_maxrise	Sst				
	Sst;;Tac1	0.003			
	Ndnf;;Nkx2	0.4408	0.0016		
	Chrna2	0.0884	0.00003	0.0884	
	Sst;;Nos1	0.006	0.349	0.0021	0.000189
rebound dep	Sst				
	Sst;;Tac1	0.1044			
	Ndnf;;Nkx2	0.000096	0.0052		
	Chrna2	0.00001	0.000096	0.3972	
	Sst;;Nos1	0.00052	0.0558	0.000276	0.000081

Supplementary Table 3: Contribution of individual parameters to the principal components

	PC1_feat	PC2_feat	PC3_feat	PC4_feat	PC5_feat	PC6_feat	PC7_feat	PC8_feat
ap_thresh	0.38	0.39	0.35	0.44	0.38	0.35	0.35	0.05
ap_amp	0.09	0.17	0.38	0.14	0.44	0.33	0.32	0.63
ap_fwhm	0.54	0.13	0.02	0.03	0.09	0.48	0.48	0.47
ap_maxrise	0.12	0.68	0.56	0.22	0.02	0.24	0.04	0.32
ap_maxdecay	0.66	0.01	0.11	0.53	0.08	0.01	0.24	0.45
sag	0.17	0.08	0.26	0.08	0.06	0.68	0.64	0.14
rebound dep	0.18	0.57	0.55	0.42	0.28	0.14	0.27	0.02
ahp_max	0.22	0.12	0.20	0.52	0.75	0.07	0.04	0.23