Comparing train and test correlation scores over training iterations Fold 1 / 2 mfa identity cellTree with maptpx monocle with DDRTree 1.50 -0.7 0.76 1.25 -0.6 0.72 0.5 -1.00 -0.68 0.4 0.75 -0.64 0.3 0.50 | 0.50 0.7 0.75 1.00 1.25 0.5 0.72 0.75 0.78 1.50 0.4 0.2 0.3 0.6 monocle with ICA SCORPIUS phenopath random 0.03 -0.70 0.02 0.01 0.68 0.00 0.66 --0.01 test.correlation iteration_i 100 0.700 0.04 0.60 0.65 0.75 0.650 0.675 0.725 0.02 0.03 0.70 0.80 0.625 0.00 0.01 -0.01 75 TSCAN shuffle SLICER slingshot 0.02 -0.775 -0.03 0.75 -0.01 0.02 0.750 0.70 0.01 0.00 -0.725 0.65 0.00 -0.010.700 0.60 -0.01 -0.02 0.675 --0.02 | - -0.01 0.01 0.02 0.03 0.70 0.80 0.75 0.60 0.65 0.70 0.00 -0.02 -0.01 0.00 0.01 0.75 0.80 Waterfall Wishbone 0.72 0.68 8.0 0.2 0.72 0.76 0.4 0.6 0.64 0.68 train.correlation

Comparing train and test correlation scores over training iterations Fold 2 / 2 mfa identity cellTree with maptpx monocle with DDRTree 1.50 -0.80 -0.6 1.25 -0.75 1.00 0.4 0.70 0.75 0.2 0.65 0.50 + 0.50 0.75 0.7 0.725 0.750 1.25 0.5 1.00 0.675 0.700 1.50 0.6 0.650 0.3 0.4 0.2 phenopath monocle with ICA SCORPIUS random 0.75 0.8 -0.03 0.70 -0.02 0.7 0.01 0.65 0.6 0.00 test.correlation iteration_i 100 0.66 0.70 0.00 0.68 0.02 -0.01 0.01 0.03 75 50 SLICER shuffle TSCAN slingshot 25 0 0.02 -0.76 0.75 -0.02 -0.01 0.72 0.01 0.00 0.70 -0.68 0.00 -0.01 0.64 0.65 0.00 0.00 0.72 0.02 0.04 0.01 0.02 0.78 0.68 0.70 0.69 0.75 -0.02 -0.01 0.03 0.72 0.74 0.76 Waterfall Wishbone 0.8 0.76 -0.72 -0.4 0.68 -0.2 0.64 0.72 0.68 0.76 train.correlation