## Dyneval parameter optimisation on !TOYS! (100 initial, 100 iterations of 4 new parameters). point = train score, bar = test score. ВА bifurcating consecutive\_bifurcating identity identity identity SCORPIUS -**SCORPIUS** SCORPIUS monocle with ICA monocle with ICA monocle with ICA slingshot slingshot · slingshot StemID StemID StemID monocle with DDRTree monocle with DDRTree monocle with DDRTree embeddr embeddr embeddr cellTree with Gibbs cellTree with Gibbs cellTree with Gibbs cellTree with maptpx cellTree with maptpx cellTree with maptpx TSCAN-**TSCAN TSCAN** SLICE SLICE SLICE Waterfall Waterfall Waterfall DPT DPT DPT mfa mfa mfa SLICER SLICER **SLICER** phenopath phenopath phenopath ouija ouija ouija shuffle shuffle shuffle random random random -0.75 1.00 0.75 0.75 0.00 0.50 0.50 1.00 0.25 1.00 0.25 0.25 0.50 0.00 0.00 linear converging cycle identity identity identity **SCORPIUS SCORPIUS SCORPIUS** monocle with ICA monocle with ICA monocle with ICA slingshot · slingshot slingshot StemID -StemID StemID monocle with DDRTree monocle with DDRTree monocle with DDRTree ti\_type embeddr embeddr embeddr • BA cellTree with Gibbs cellTree with Gibbs cellTree with Gibbs bifurcating cellTree with maptpx cellTree with maptpx cellTree with maptpx consecutive\_bifurcating **TSCAN TSCAN TSCAN** converging SLICE SLICE SLICE cycle Waterfall Waterfall Waterfall linear DPT DPT DPT trifurcating mfa mfa mfa SLICER SLICER SLICER phenopath · phenopath phenopath ouija · ouija ouija shuffle shuffle shuffle random random random -1.00 0.50 0.75 1.00 0.00 0.50 0.75 1.00 0.00 0.50 0.75 0.00 0.25 0.25 0.25 trifurcating identity -SCORPIUS monocle with ICA slingshot · StemID monocle with DDRTree embeddr · cellTree with Gibbs cellTree with maptpx -TSCAN-SLICE Waterfall DPT mfa SLICER phenopath ouija shuffle random

auc\_R\_nx

1.00

0.75

0.50

0.25

0.00