

Entropy (might do this later)

<https://rdrr.io/github/aet21/SCENT/f/inst/doc/SCENT.Rmd>

PPI:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2048726/bin/plntphys_pp.107.103465v2_index.html

SCENIC:

http://htmlpreview.github.io/?https://github.com/aertslab/SCENIC/blob/master/inst/doc/SCENIC_Setup.html

How to Calculate Correlation Between Continuous & Categorical Variables

I.e. correlation between counts/number of features and ploidy/...

Point biserial correlation: <https://www.statology.org/correlation-between-continuous-categorical-variables/>

Subclustering

Might be beneficial for clusters with high uncertainty and to avoid cluster names with lots of different cell types

Unsupervised: <https://satijalab.org/seurat/reference/findsubcluster>

Supervised: e.g. based on specific markers (as they did for distinguishing QC and columella in Denyer paper, fig. 4)

GO-enrichment of clusters

<https://cran.r-project.org/web/packages/gprofiler2/vignettes/gprofiler2.html>

<https://bioconductor.org/packages/release/bioc/html/goseq.html>

Cell-type specific networks:

<https://github.com/VIB-PSB/MINI-EX>

Single-cell data simulation (could also skip this and start on small cluster)

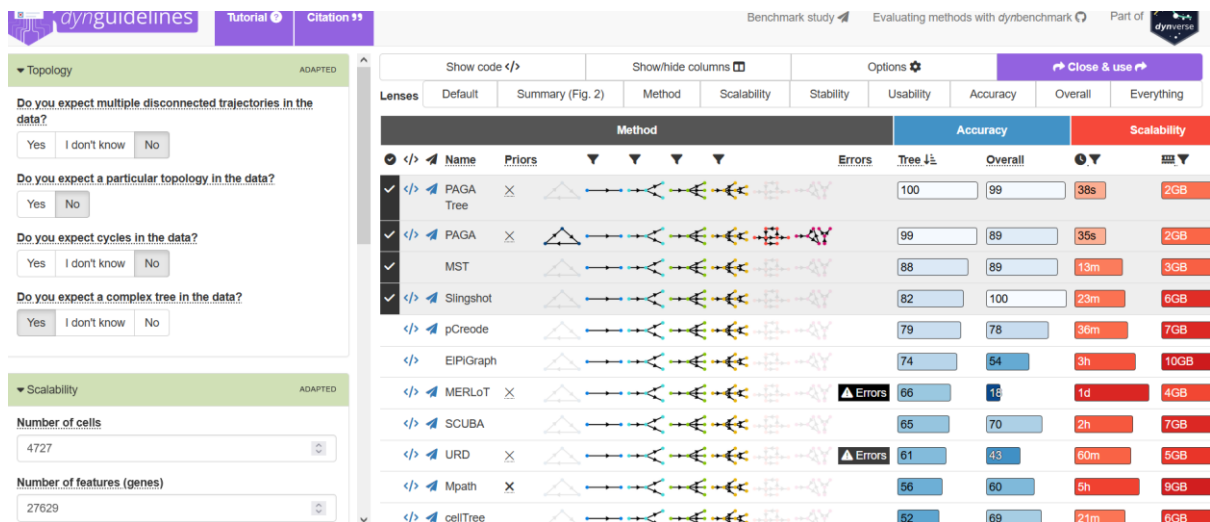
<https://github.com/dynverse/dyngen>

https://dyngen.dynverse.org/articles/getting_started.html

https://dyngen.dynverse.org/articles/showcase_backbones.html

Trajectory inference

<https://github.com/dynverse/dynguidelines>



<http://bioconductor.org/books/3.13/OSCA.advanced/trajectory-analysis.html>

<https://bioconductor.org/packages/devel/bioc/vignettes/slingshot/inst/doc/vignette.html>

Differential expression along pseudotime

<https://bioconductor.org/packages/release/bioc/vignettes/tradeSeq/inst/doc/tradeSeq.html>

<https://kstreet13.github.io/bioc2020trajectories/articles/workshopTrajectories.html>

<https://statomics.github.io/tradeSeq/articles/tradeSeq.html>

<https://nbisweden.github.io/workshop-archive/workshop-scRNAseq/2020-01-27/labs/compiled/slingshot/slingshot.html>

Probabilistic methods

A descriptive marker gene approach to single-cell pseudotime inference (Campbell et al., 2019):

<https://github.com/kieranrcampbell/ouija>

Order Under Uncertainty: Robust Differential Expression Analysis Using Probabilistic Models for Pseudotime Inference (Campbell et al., 2016): <https://github.com/kieranrcampbell/pseudogp>