

	splatter	powsimR	PROSSTT	SymSim	dyngen
Available modality outputs					
- mRNA expression	✓	✓	✓	✓	✓
- Pre-mRNA expression					✓
- Protein expression					✓
- Promotor activity				✓	✓
- Reaction activity					✓
Available ground-truth outputs					
- True counts	✓			✓	✓
- Cluster labels	✓	✓		✓	✓
- Trajectory	✓		✓ ¹	✓	✓
- Batch labels	✓				✓ ¹
- Differential expression				✓	✓ ²
- Knocked down regulators					✓
- Regulatory network				✓	✓
- Cell-specific regulatory network					✓
Emulate experimental effects					
- Single-cell RNA sequencing	✓	✓	✓	✓	✓
- Batch effects	✓				✓ ¹
- Knockdown experiment					✓
- Time-series					✓
- Snapshot					✓
Evaluation applications					
- Clustering	✓	✓		✓	
- Trajectory inference	✓		✓	✓	✓
- Network inference				✓	✓
- Cell-specific network inference					✓
- Differential expression	✓				✓ ²
- Batch effect correction	✓				✓
- RNA Velocity					✓
- Trajectory alignment					✓