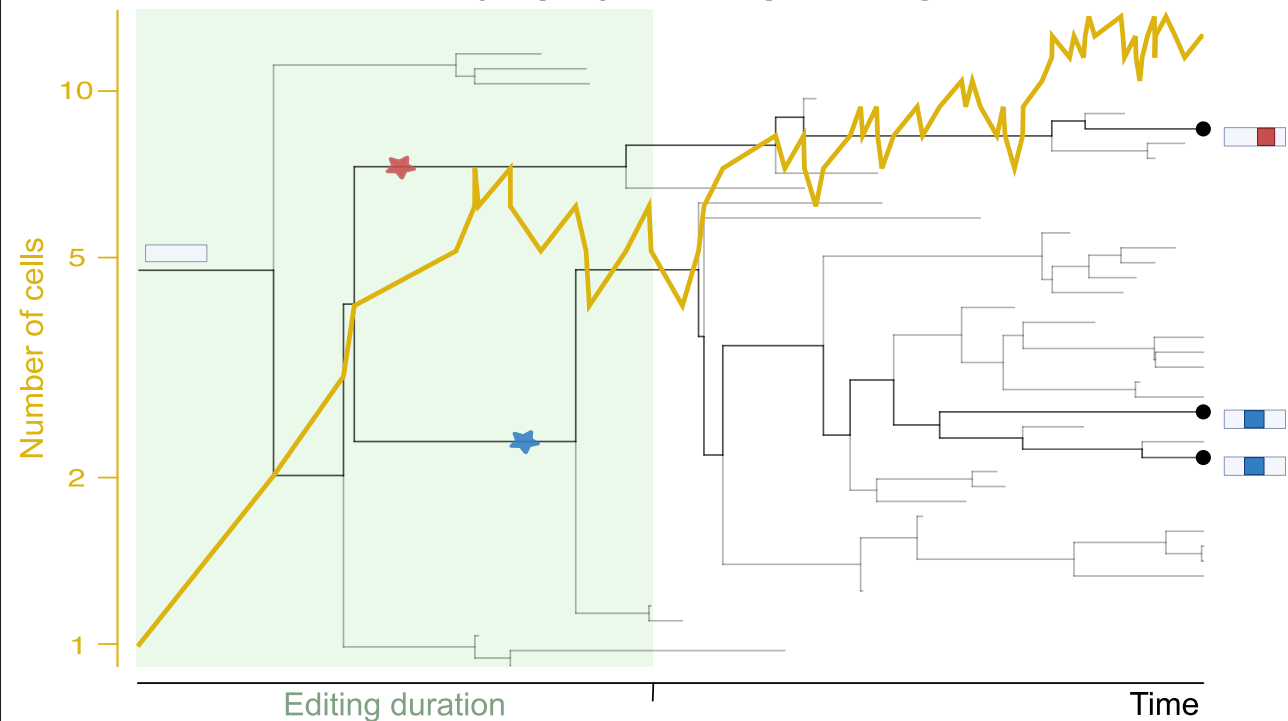
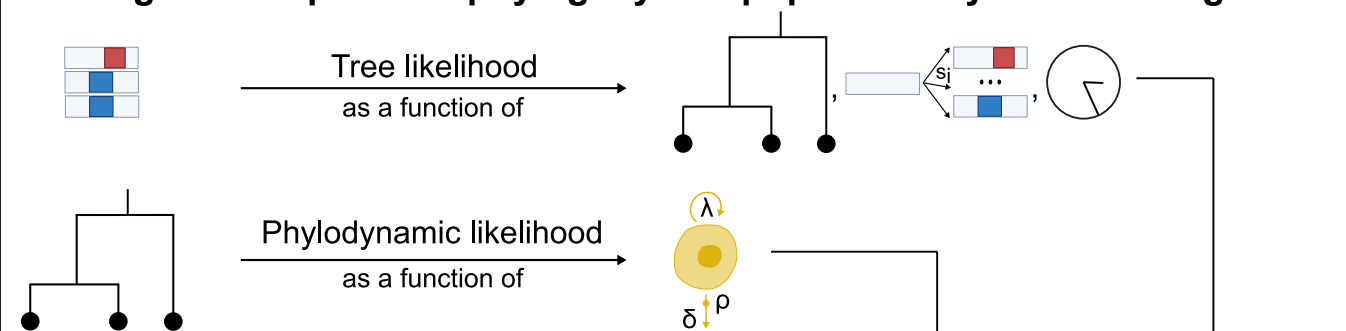


Full cell population and phylogeny in lineage tracing experiment



Inferring the sampled cell phylogeny and population dynamics using



Bayesian Phylogenetic inference

$$P(\text{Phylogeny}, \text{Editing model}, \text{Molecular clock model}, \text{Population dynamic model} | \text{Barcodes}) = \frac{P(\text{Population dynamic model}) P(\text{Editing model}) P(\text{Molecular clock model}) P(\text{Phylogeny} | \text{Population dynamic model}) P(\text{Barcodes} | \text{Phylogeny}, \text{Editing model}, \text{Molecular clock model})}{P(\text{Barcodes})}$$

