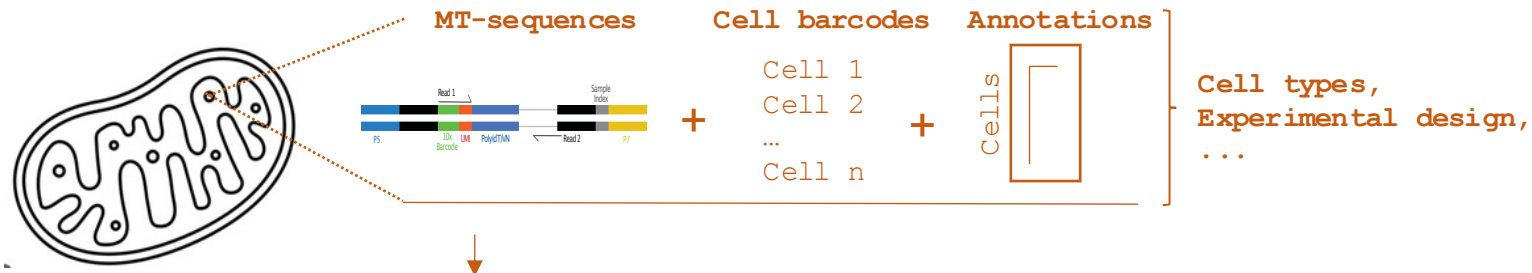


# MT-sequence data, cell barcodes, and cell metadata

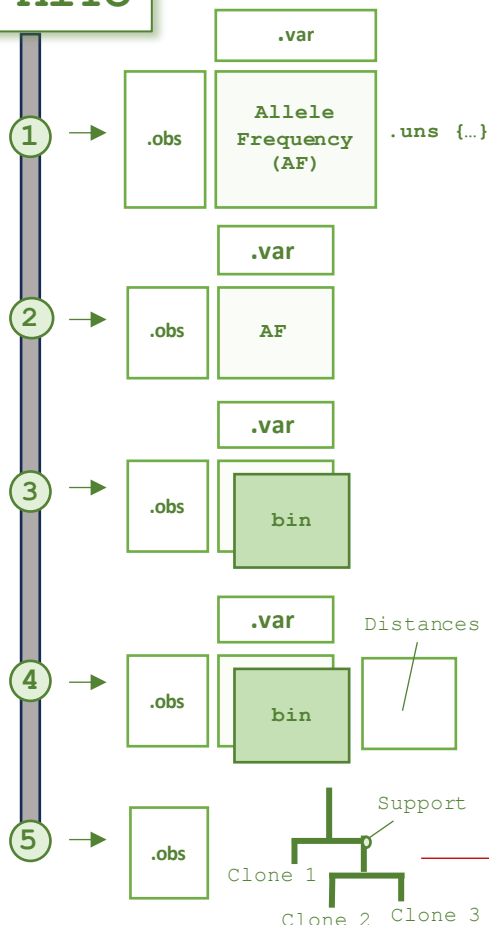


## nf-MiTo

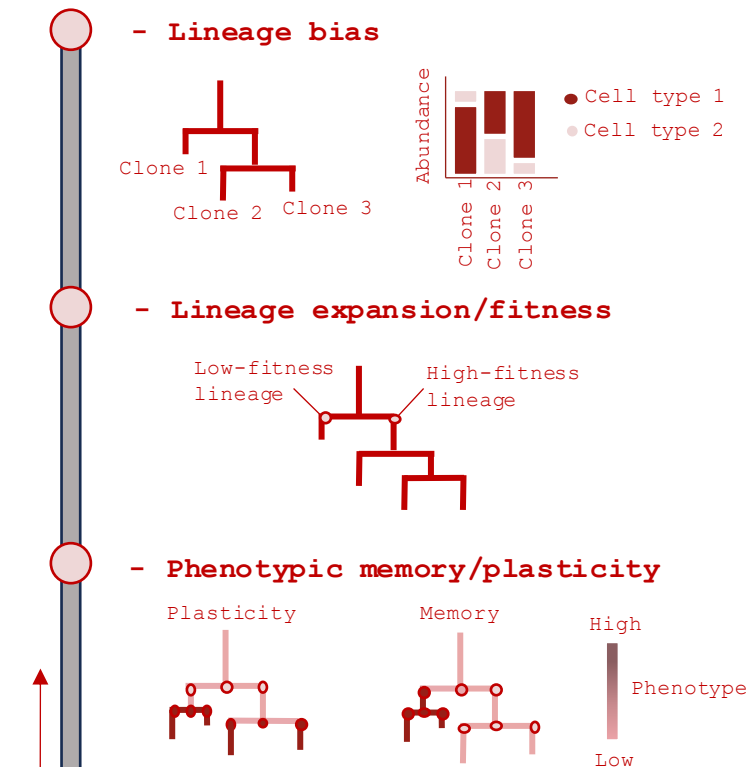
nextflow run main.nf

- Pre-processing**  
Allele Frequency Matrix (AFM) generation
- AFM filtering**  
Cell and MT-SNVs quality control and filtering
- Cell genotyping**  
Binary assignment of cell MT-genotypes
- Cell-cell distances**  
Pairwise dissimilarity in MT-SNVs space
- Lineage inference**  
Single-cell phylogeny and clonal inference

53 parameters  
19 metrics



Annotated cell phylogeny



Single-cell multi-omics: downstream analysis and visualization

import mito as mt

Other -omic layers

e.g., Gene expression

