Molecular Haplotyping

cost/labor: high → low
global → haplotypes → local

Chromosome sorting
(FACS, microfluidics, ...)

StrandSeq

synthetic long reads
(TruSeq, 10xGenomics, ...)
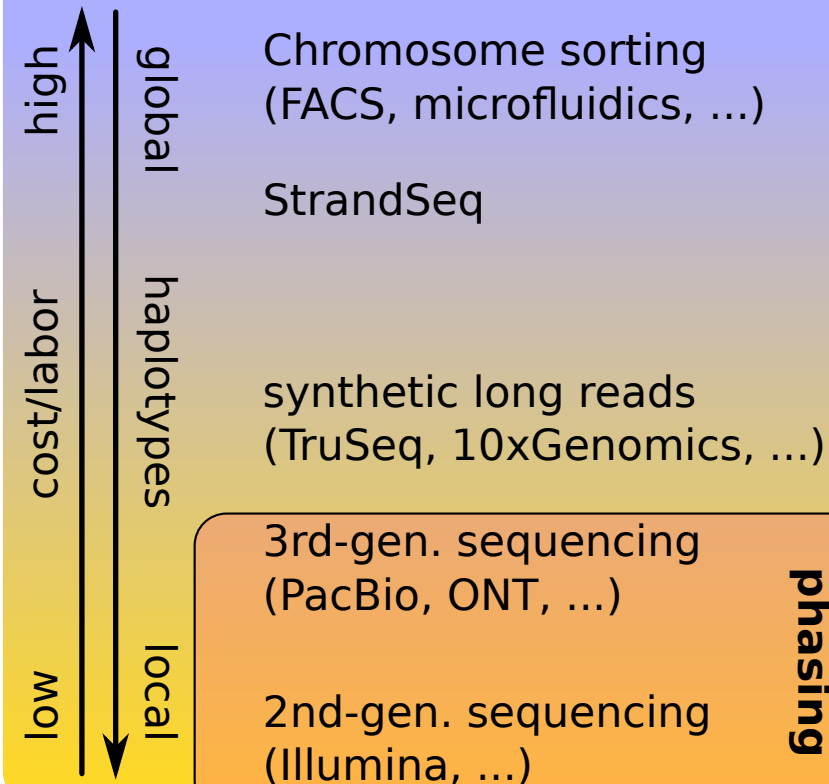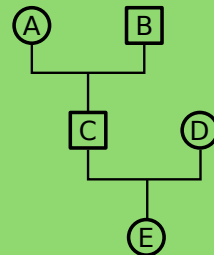
3rd-gen. sequencing
(PacBio, ONT, ...)

2nd-gen. sequencing
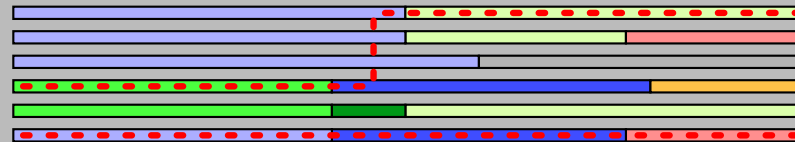(Illumina, ...)

Read-based phasing

Genetic Haplotyping

A: 0/1 1/1 0/1 0/0
B: 0/1 0/0 0/1 0/1
C: 1/1 0/1 0/1 0/0
D: 0/1 1/1 1/1 0/1
E: 0/1 0/1 0/1 0/0

Use genotypes across a pedigree

Statistical Phasing

Use genotypes/haplotypes from a reference population