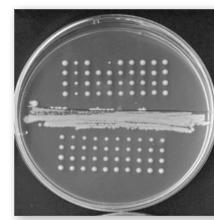
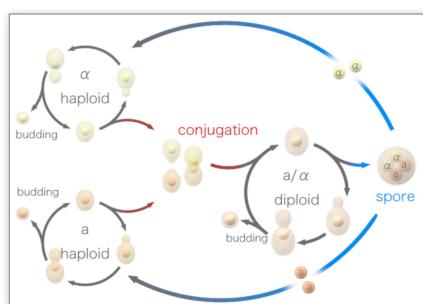
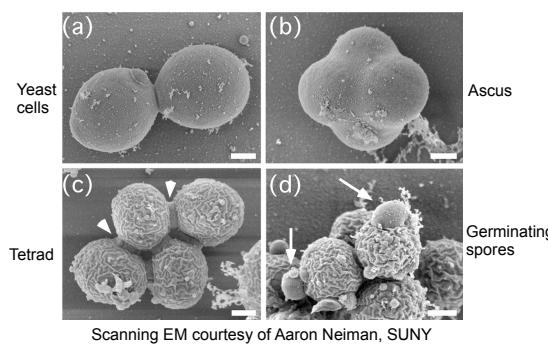


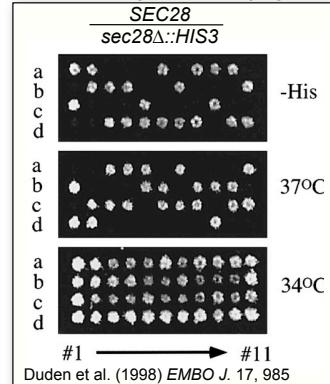
Tetrad dissection



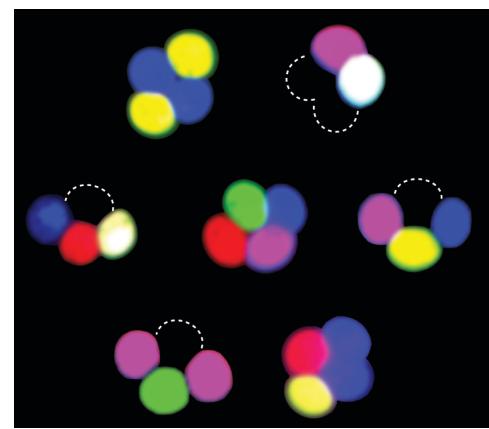
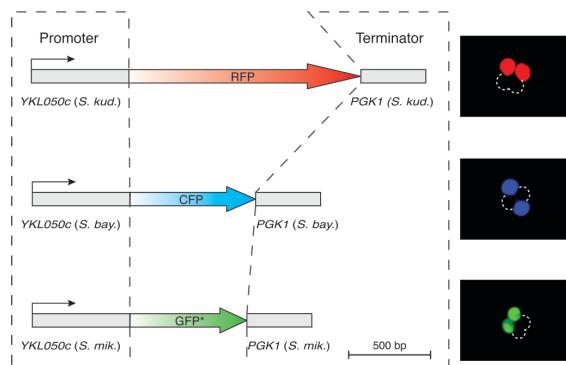
Cotton et al. (2009)
Methods Mol Biol 557, 3



Replica-plating to score segregation



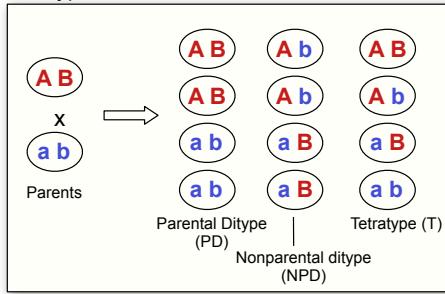
Tetrad analysis without tetrad dissection: Spore-autonomous fluorescent protein expression



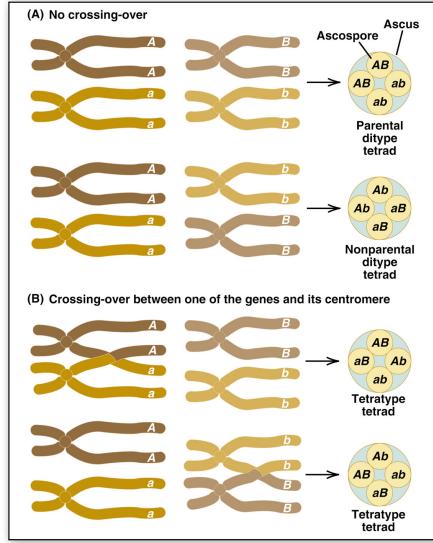
Thacker, Lam, Knop & Keeney
2011 *Genetics*

Mendelian segregation patterns

Types of asci:



Segregation of unlinked genes:

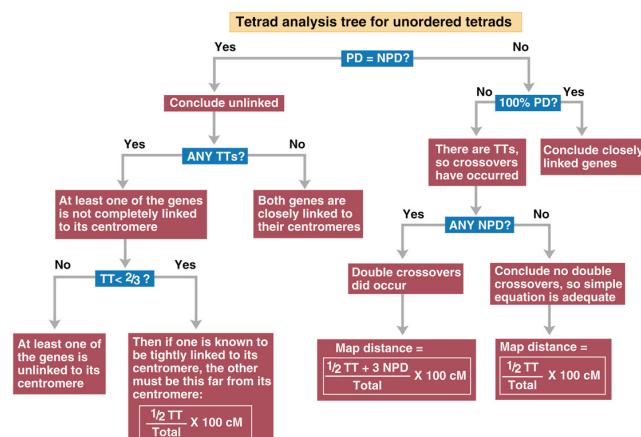
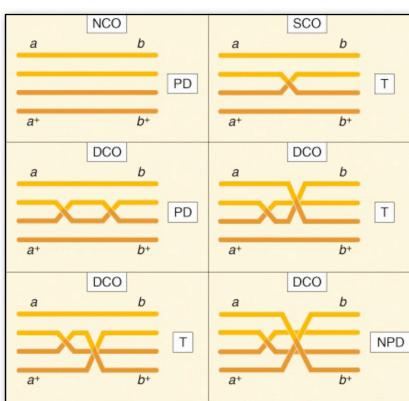


Types of asci produced with two genes in different chromosomes.

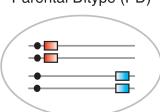
A) Without crossing over, random arrangement of chromosome pairs at metaphase I yields two different combinations of chromatids, one yielding PD tetrads and the other NPD tetrads.

B) When crossing over takes place between one gene and its centromere, the two chromosome arrangements yield TT tetrads. If both genes are closely linked to their centromeres (so that crossing over is rare), then few TT tetrads are produced.

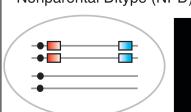
Mendelian segregation patterns: linkage analysis



Parental Ditype (PD)



Nonparental Ditype (NPD)



Tetratype (T)

