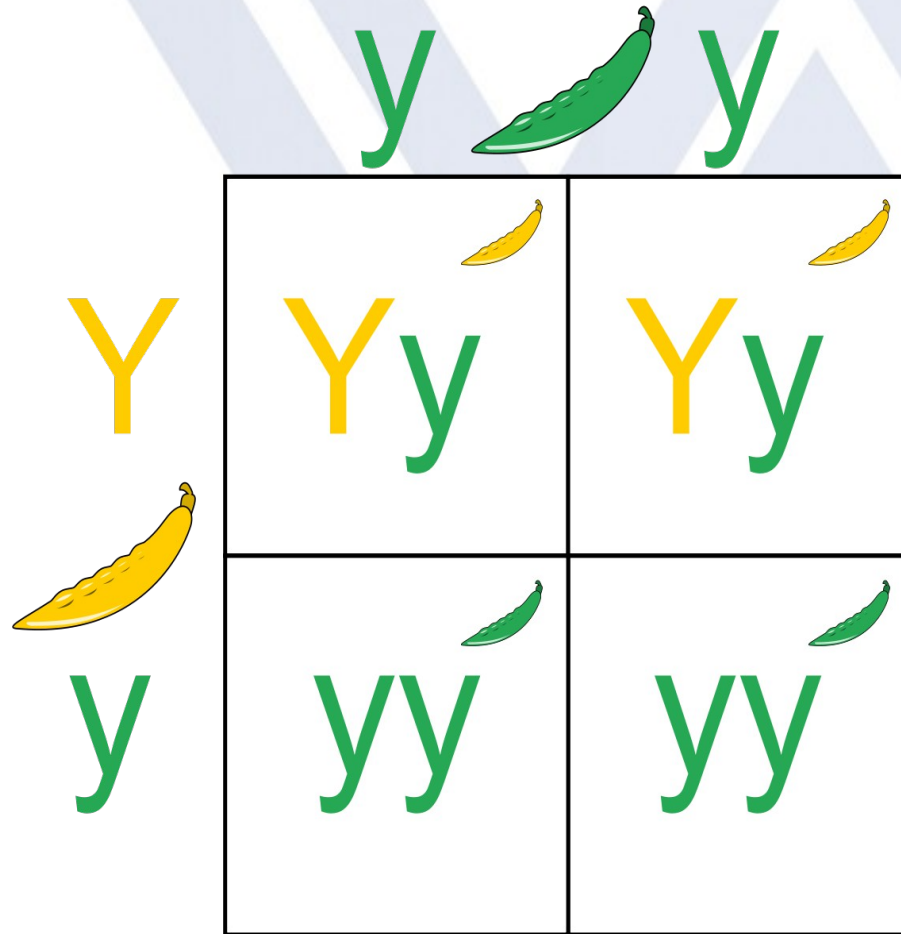


Performing Sorting/Inquires of very large text files to discover molecular mechanisms of non-mendelian inheritance
















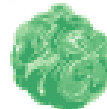
Michael Carlise
Graduate Student, Ph.D.
Department of Biology









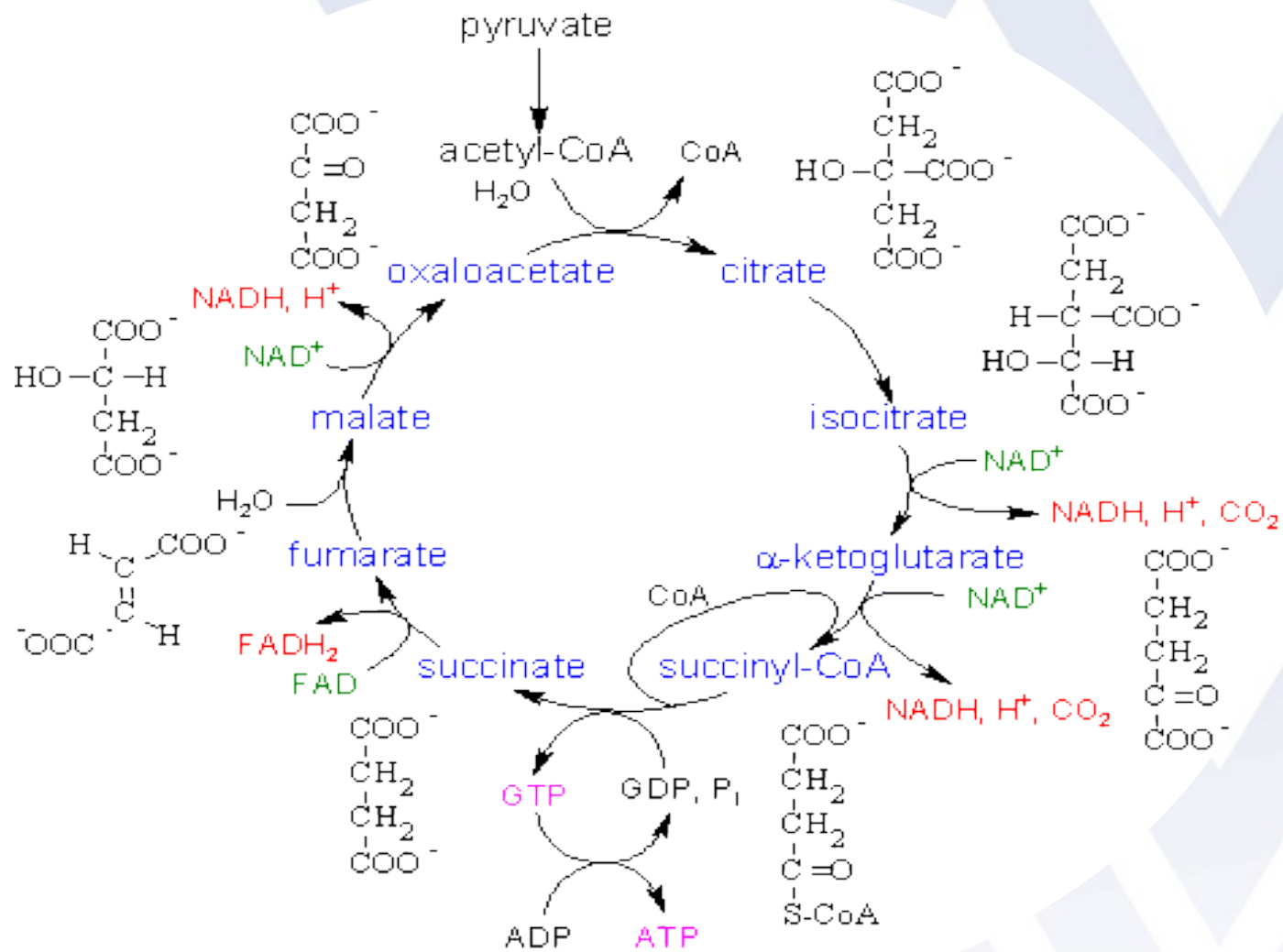
Punnett Square of Dihybrid Cross

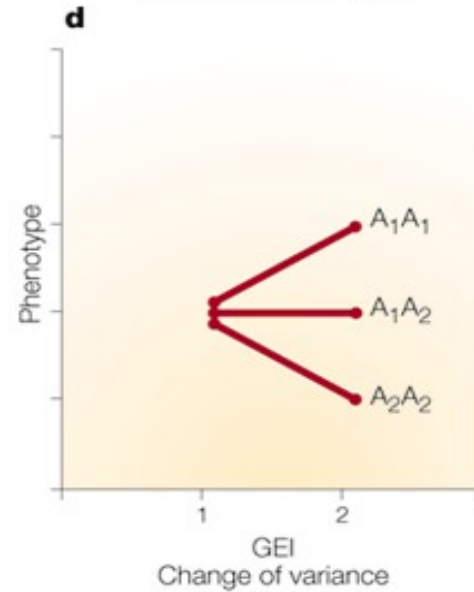
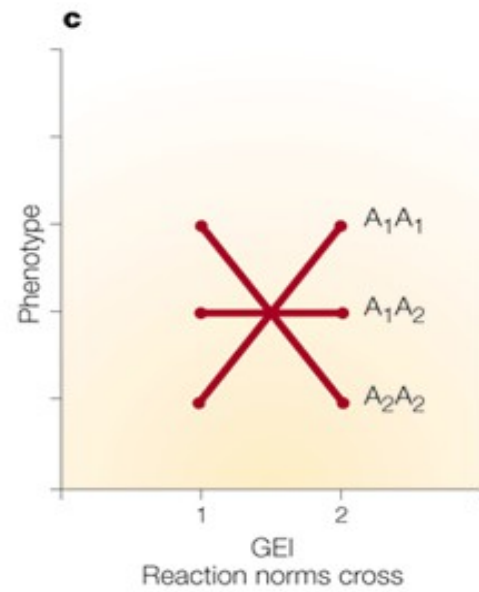
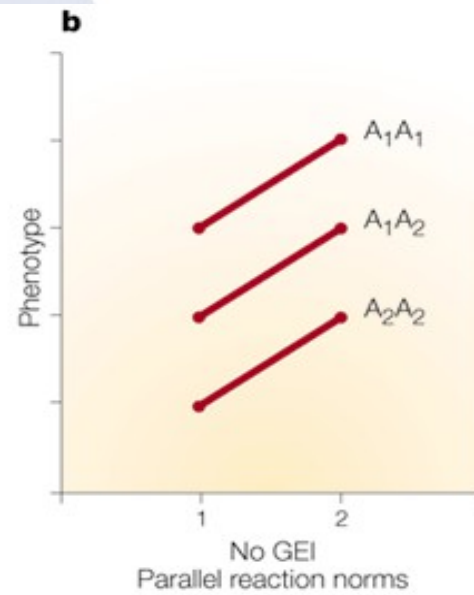
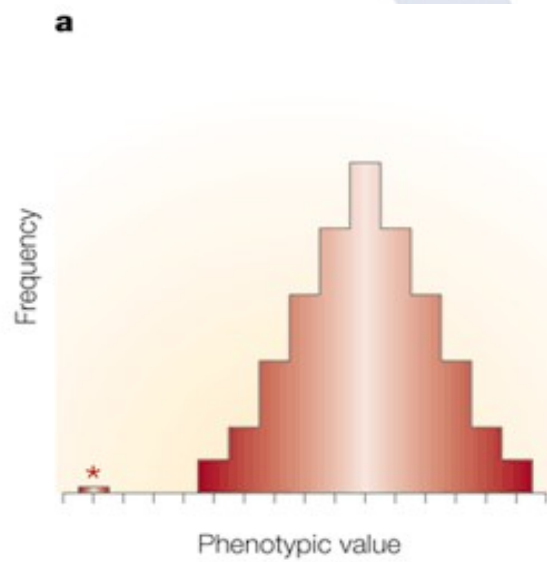
Gametes from $RrYy$ parent

		RY	Ry	rY	ry
Gametes from $RrYy$ parent	RY	$RRYY$ 	$RRYy$ 	$RrYY$ 	$RrYy$ 
	Ry	$RRYy$ 	$RRyy$ 	$RrYy$ 	$Rryy$ 
	rY	$RrYY$ 	$RrYy$ 	$rrYY$ 	$rrYy$ 
	ry	$RrYy$ 	$Rryy$ 	$rrYy$ 	$rryy$ 

F_1 cross: $RrYy \times RrYy$

-  round yellow
-  round green
-  wrinkled yellow
-  wrinkled green

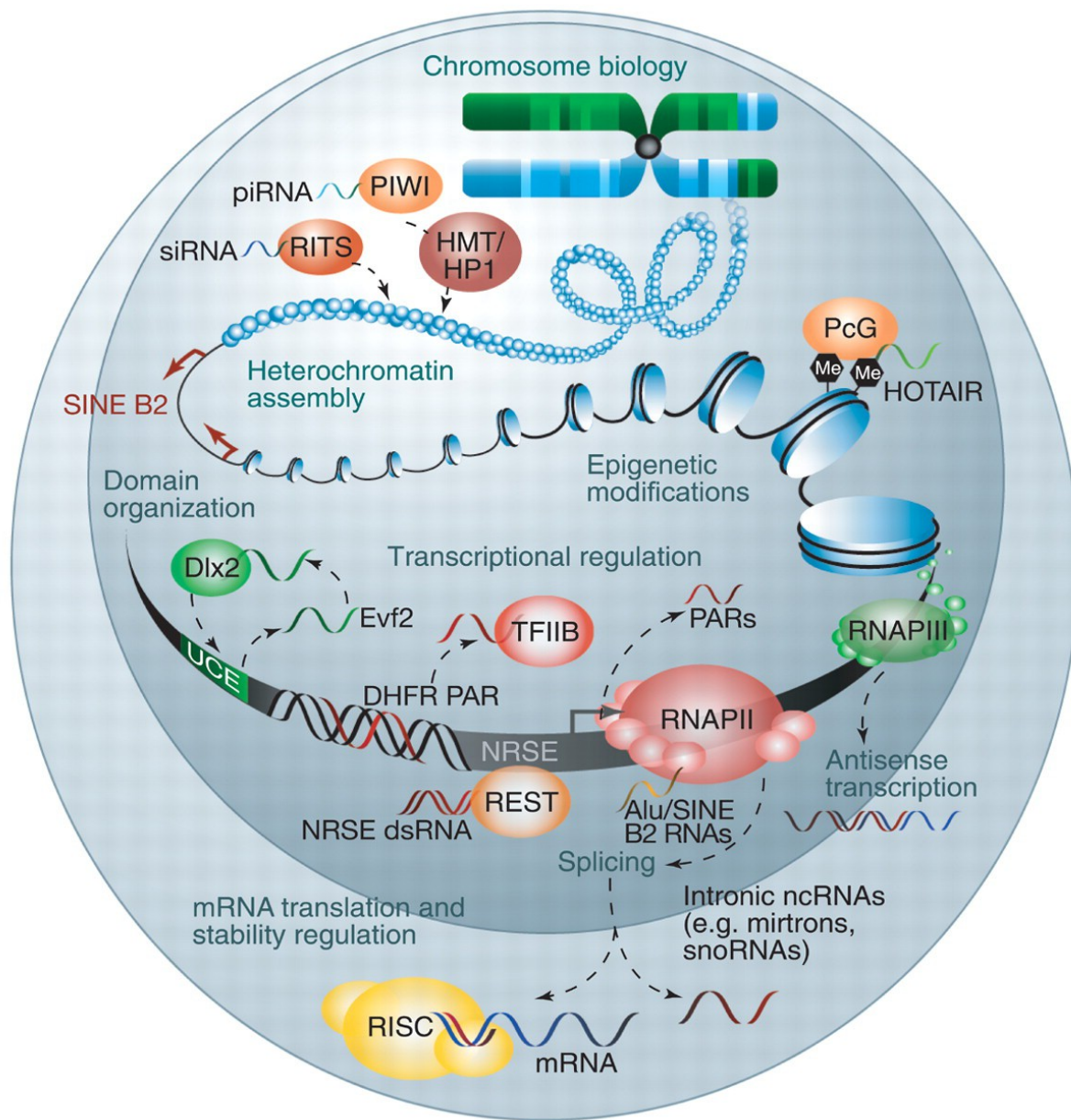




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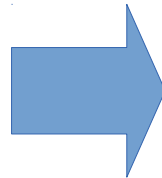
Mackay T.F.C. 2001. *Nature Reviews Genetics* (2) 11-20



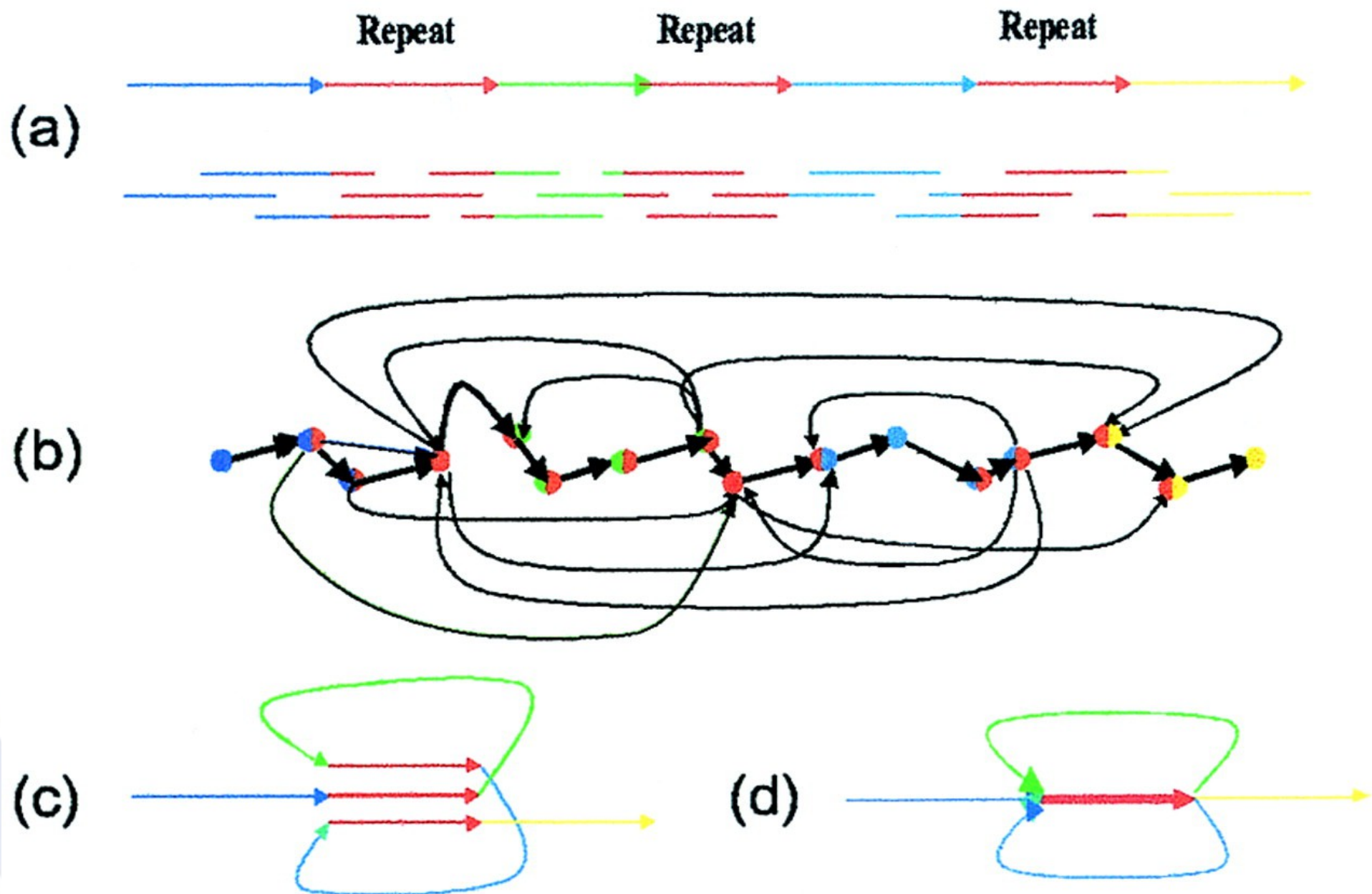


Amaral et al., 2008. *Science* (319) 1787-1789





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Pevzner et al., 2001. *PNAS* (98) 9748-9753



