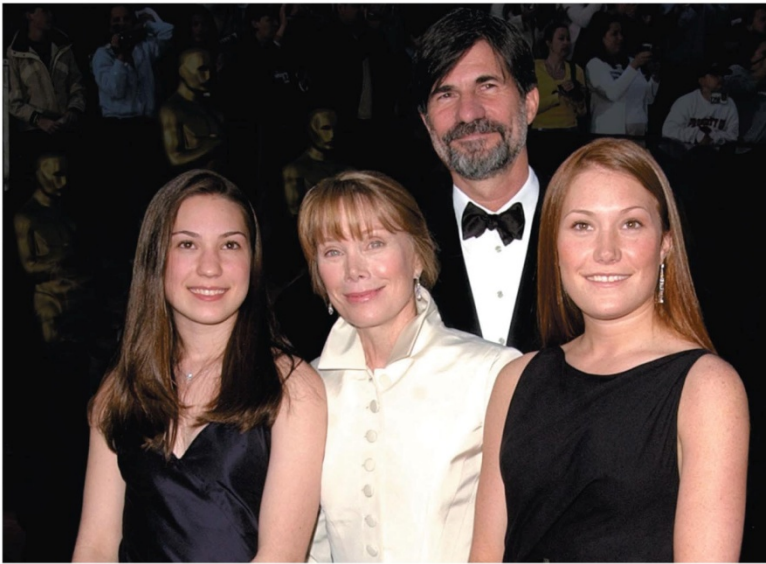


**MIT BLOSSOMS INITIATIVE**

**“Genetic Basis of Inheritance and  
Variation”**

Dr. Amjad Mahasneh  
JUST



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Photo # 1



Photo # 2



Photo # 3



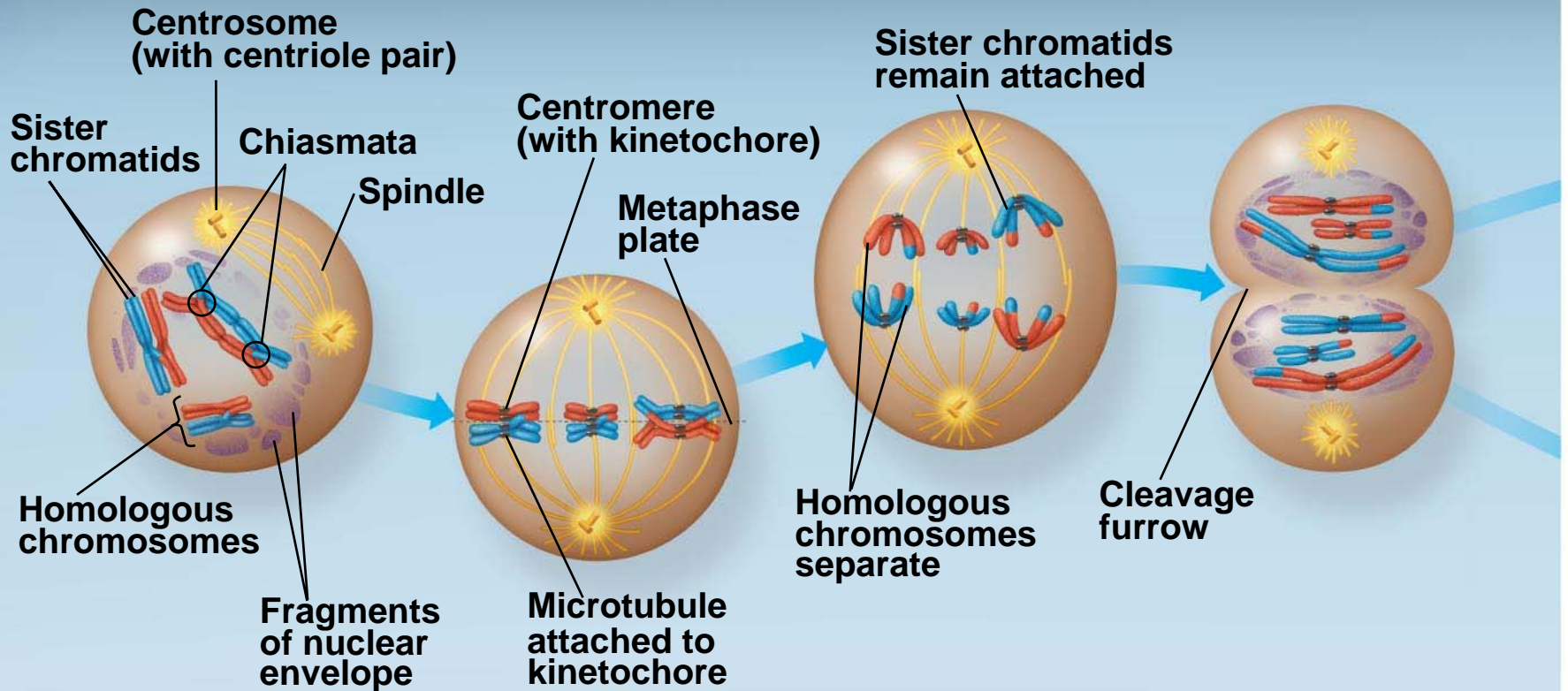
Photo # 4

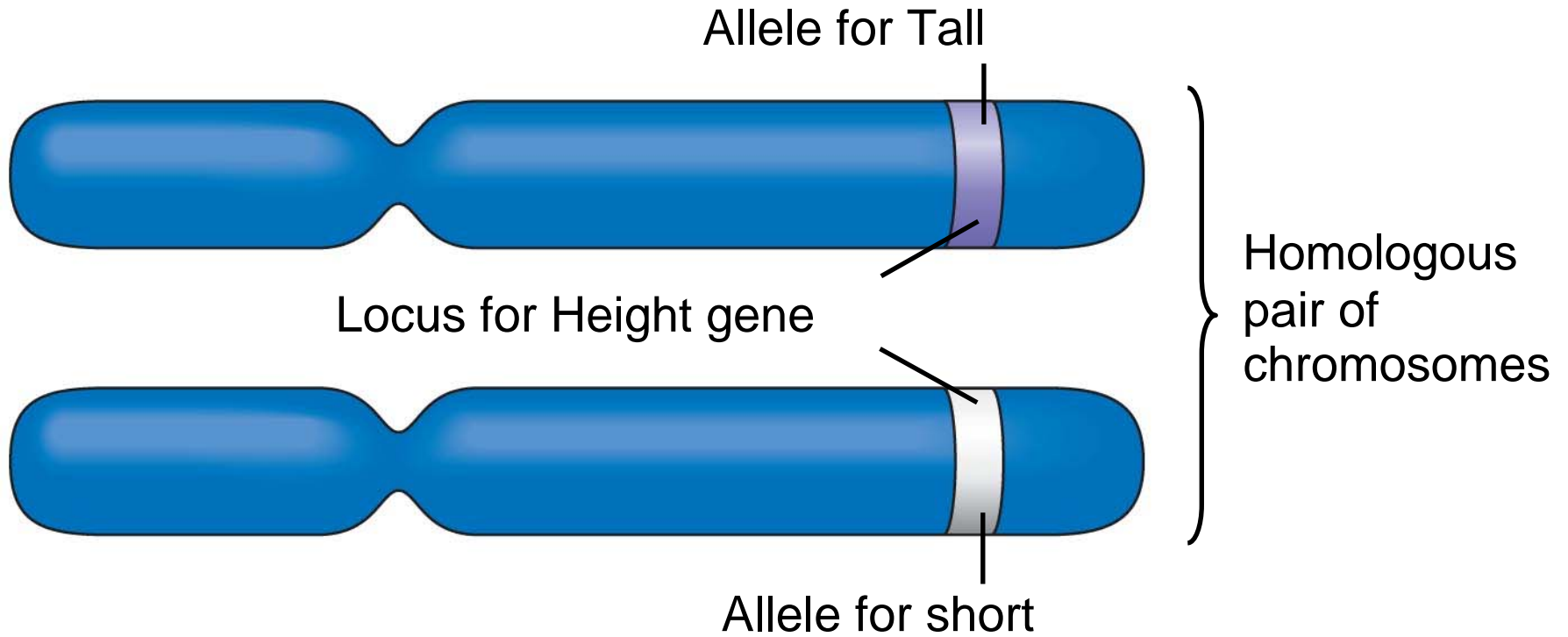
**Prophase I**

**Metaphase I**

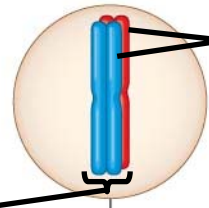
**Anaphase I**

**Telophase I and Cytokinesis**



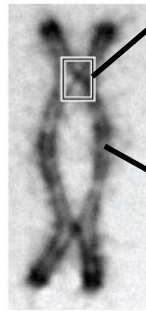


**Prophase I  
of meiosis**



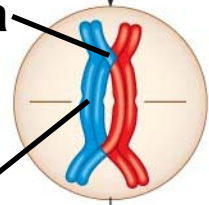
**Nonsister  
chromatids  
held together  
during synapsis**

**Pair of  
homologs**

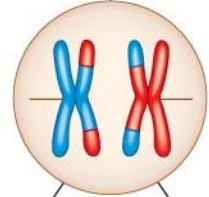


**Chiasma**

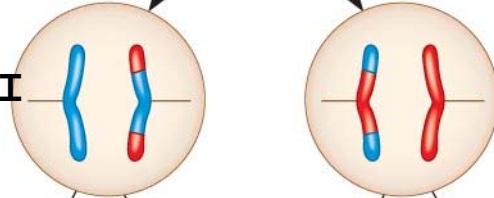
**Centromere**



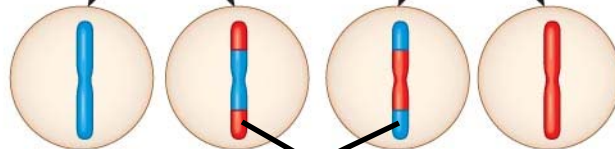
**Anaphase I**



**Anaphase II**



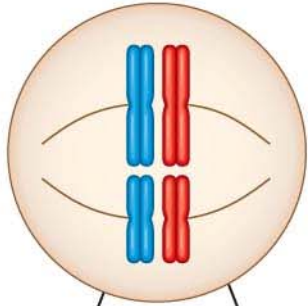
**Daughter  
cells**



**Recombinant chromosomes**

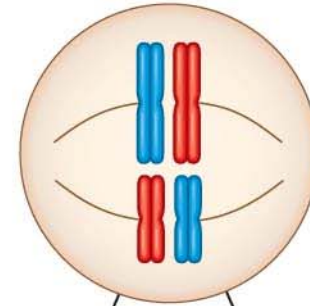


**Possibility 1**

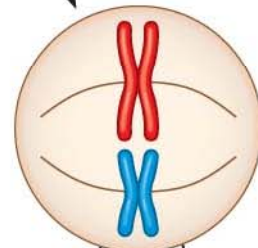
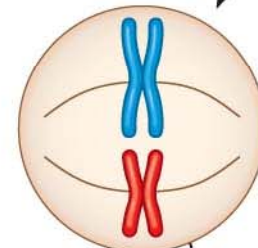
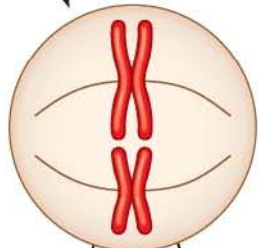
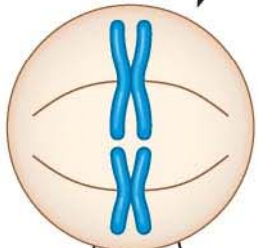


Two equally probable  
arrangements of  
chromosomes at  
metaphase I

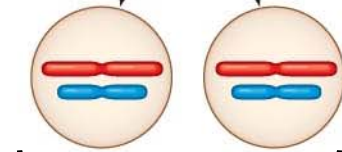
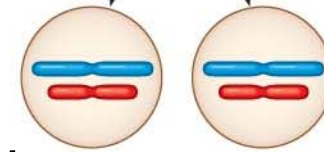
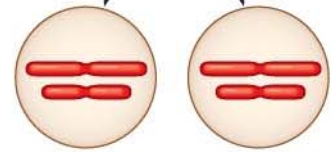
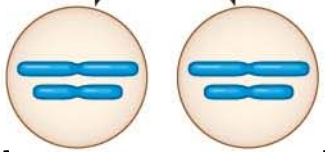
**Possibility 2**



**Metaphase II**



**Daughter  
cells**



**Combination 1    Combination 2**

**Combination 3    Combination 4**