

WEDNESDAY, MARCH 24

MUTATIONS

CHANGE IN GENETIC CODE

MUTAGEN: SUBSTANCE THAT CAUSES

A MUTATION

3 TYPES:

- 1) DNA
- 2) CHROMOSOME
- 3) NON-DISSUNCTION

I) DNA MUTATIONS:

A) POINT MUTATION:

- CHANGE IN A SINGLE BASE PAIR
- 3 KINDS

	NO MUTATION	① SILENT	② NONSENSE	③ MISSENSE
DNA	TTC	TTC	ATC	TTC
MRNA	AAG	AAA	UAG	AGG
PROTEIN	LYS	LYS	STOP	Arg

B) FRAMESHIFT MUTATION:

- SINGLE BASE PAIR ADDED OR DELETED
- ALL OTHER BASE PAIRS SHIFT

	NORMAL	ADDED	DELETED
DNA	CAT TCA	CTA TTC	CTT CA
MRNA	GUA AGU	GAU AAG	GAA
PROTEIN	Val Ser	ASP LYS	GLU