

Cancer 3

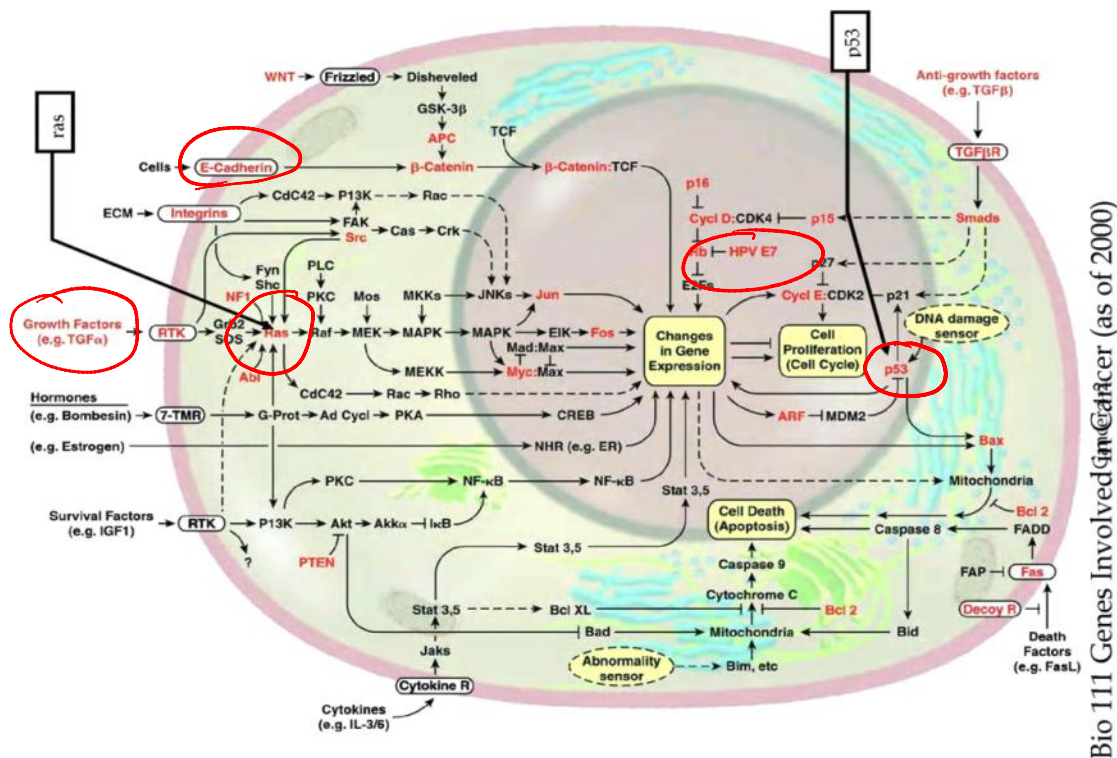
- iClicker 33A
 - Inherited cancer risk
 - Chemotherapy
 - iClicker 33B
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- Register your iClicker!
 - Grades are locked Dec. 15th
- Final Exam - Comprehensive**
- Dec 16th (Wed)
 - 11:30-2:30
 - Last name A-E in McCormick Cafe
 - Last name F-Z here in Lipke

Inherit Cancer Risk

- some people are born with one p53 allele that has been already mutated

Li-Fraumeni cancer syndrome

- they tend to get cancer early in life
- they have a much higher risk of cancer than people w/ 2 functional p53 alleles



Chemotherapy - drugs to treat cancer

- ① cyclophosphamide - attaches to DNA in a similar manner as (BP) and causes DNA damage

DNA damage in cells cause the cells to commit suicide "apoptosis"
 ∴ tumor stops growing

- ② etoposide - binds to enzymes needed for DNA replication and prevents them from working
 → no DNA replication
 → no cell division → tumor stops growing

chemotherapy stops cell division

rapidly dividing cells

follicle cells that produce hair

stomach-lining cells

side effects

loss of hair

nausea

blood-producing cells

anemia and
immune dysfunction

cancer strategy → give as strong a dose as possible
to kill tumor and almost kill the patient