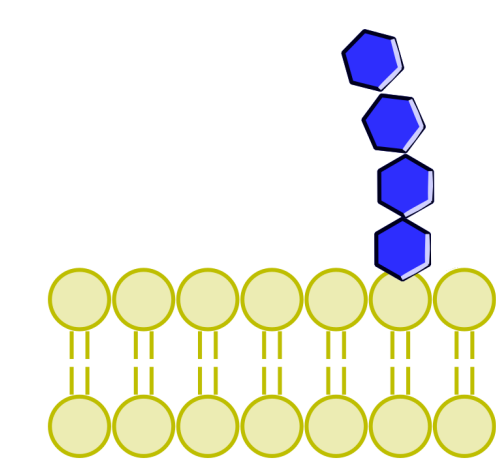


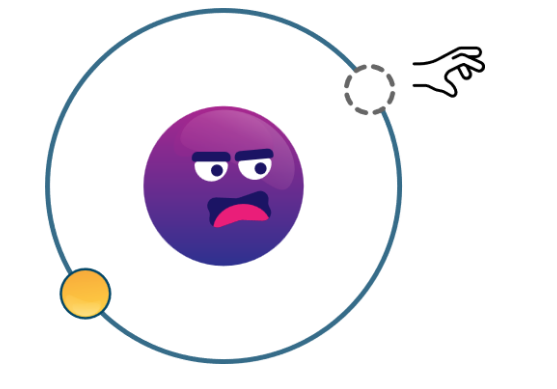
Cancer Cell Metabolism



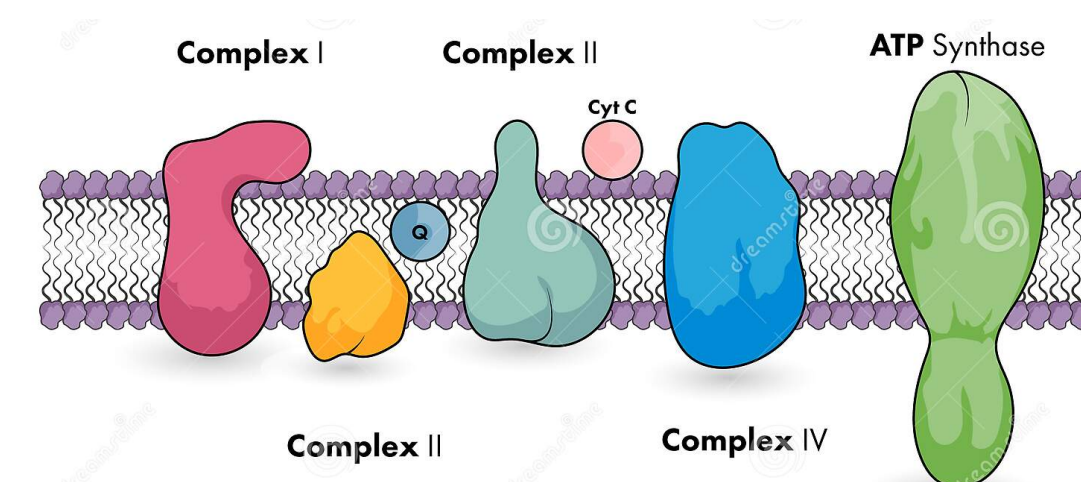
Lipid Synthesis



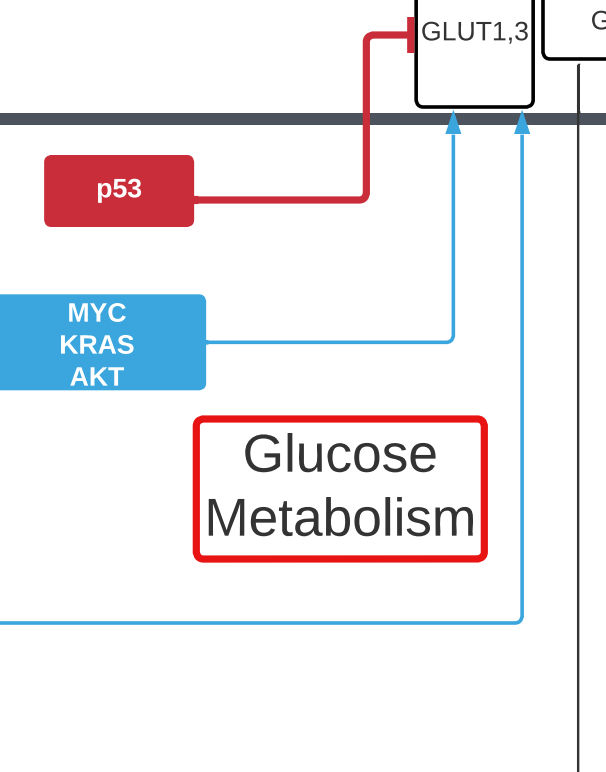
ROS Regulation



ATP Synthesis ETC

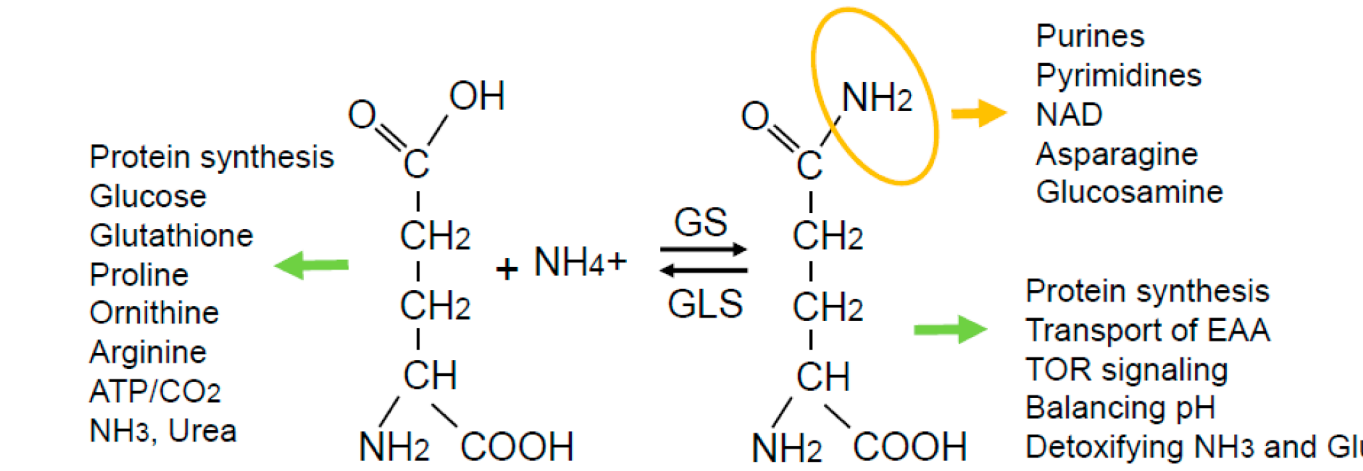


Glucose Metabolism



Glutamine Metabolism

Glutamine Metabolism



One Carbon Metabolism

Fatty Acid Synthesis

Fatty Acid Synthesis

Fatty Acid Synthesis

Fatty Acid Synthesis

Fatty Acid Synthesis

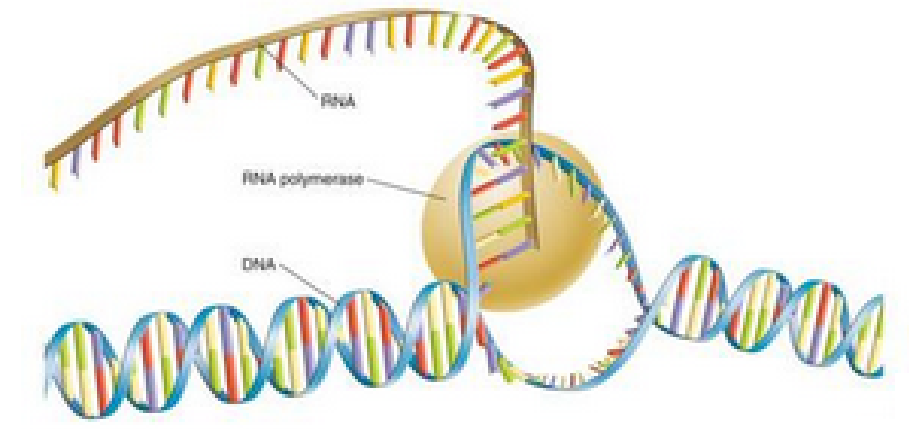
Fatty Acid Synthesis

Fatty Acid Synthesis

Fatty Acid Synthesis

Fatty Acid Synthesis

DNA / RNA Synthesis



Adenosine signaling has emerged as a key metabolic pathway that regulates tumor immunity

The transformation of healthy active cells to cancerous cells involves a multitude of oncogenic, tumor suppressor and tumor promoter gene mutations that orchestrate a milieu of metabolomic changes. To accommodate run away cell division changes occur in a number of pathways including:

- Glucose metabolism
- de novo Lipogenesis
- Cholesterogenesis
- Fatty acid oxidation
- Lipolysis
- Extracellular lipid uptake
- Rebalancing of saturated and unsaturated fatty acids
- Control over ROS
- Pentose phosphate pathway regulation
- Adenosine release
- Amino acid metabolism and synthesis