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BSCI 103
PRESSON

I. Slide Show

- A. Looked at different organelles in the cell that were stained
- B. The point of the slide show: cells are highly structured within

II. More about Proteins: How Membrane Proteins Work

- A. Cell membrane is embedded by proteins that allow the cell to interact and communicate with the outside environment.
- B. The proteins extend across the membrane and stick out on either side.
- C. Proteins, due to the way they will fold together (tertiary structure), have polar and non-polar areas. The polar areas will rest on the outside of the membrane while the non-polar areas will remain inside the cellular membrane
- D. The membrane is always busy; there are many proteins sending and receiving messages
- E. When a protein interacts with an external signal it is called a "receptor"
- F. The receptor will react to signal and change cellular behavior
- G. Signals are usually small proteins with charges
- H. How does a signal bind to the receptor? It depends on how its charge and shape match with the protein's "binding site"
- I. Each type of protein has a different signal with which it likes to communicate with



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III. Facillitated Diffusion

- A. A signal molecule binds to a protein receptor in the cellular membrane
- B. This causes the protein to change shape which opens a pore in the membrane
- C. The open pore in the membrane allows ions to flow in or out of the cell
- D. This changes the chemical make-up of the cell and thus changes cellular behavior