**Extra Credit: Up to 10 points in the test category for second semester Name and Date:**

Below is the announcement of the discovery of a predicted channel that is responsible for transfering the impact of sound waves on the sensory hairs in ears to an electrical signal in the brain.

**Directions:** Read the announcement below and look at the diagram. Consider the role of channel proteins in membranes and do some background reading.

1. What is the relationship of structure to function of these channels?
2. How do they help transfer physical signals to electrical signals in the brain?
3. Write the scientific question being answered here. Caution: this is not as easy as it sounds.
4. Was there an IV and DV? What are they?
5. What would be a legitimate next step in this research?

**Due: January 11 by email.**

