Touro College of Osteopathic Medicine



Middletown

REACH Program

Meeting 4

Concept Mapping

Learning in medical school (and medical practice) requires the development of an understanding of patterns and relationships in order to be useful. Each step in learning involves combining what you already know with what you need to know. Understanding concept mapping and its contribution to learning in medical education can be seen by comparing it with standard outlining.

Concept mapping can be done for several reasons:

* to generate ideas (brain storming, etc.);
* to design a complex structure (long texts, hypermedia, large web sites, etc.);
* to communicate complex ideas;
* to aid learning by explicitly integrating new and old knowledge;
* to assess understanding or diagnose misunderstanding

In todays session we will be creating a concept map to help us better understand the underlying immunology behind Hypersensitivty Reactions.

Steps to Creating a Concept Map (Taken from: Medical Education 2010: 44: 440–448)

* Creating a concept map is an active process that includes the following steps:
* Firstly, the learner identifies the most general concepts and places them at the top of the map.
* Secondly, the learner identifies more specific concepts that relate to the general concepts in some way.
* Thirdly, the learner ties together the general and specific concepts with linking words that make sense to him or her.
* Finally, the learner actively looks for cross-linkages that tie concepts from one side of the map to concepts on the other. Concept maps can be created by hand with paper and pencil, or they can be created using one of many computer-based software programs, for example CMAP Tools (see http://cmap.ihmc.us/conceptmap.html).

**Use these steps to create a concept map that promotes your understanding of the fundamental mechanisms (and stated examples) of a biochemistry topic.**