MHC Questions

The open-ended questions below are provided for the tutorial on **MHC classes I and II** available from <u>MolviZ.Org</u>. There is also an online quiz with multiple choice questions that will give you immediate feedback on your answers: <u>Proteopedia.Org/w/User:Eric Martz/MHC Quiz</u> Suggestions to <u>molviz@yahoo.com</u>

1. What does "MHC" stand for? What finding gave it this name?

2. Which cell types express MHC class I? Why?

3. Which cell types express MHC class II? Why?

4. Sketch the structures of MHC classes I and II, showing their main features schematically.

5. Which cells express CD8 and how is it involved with MHC?

6. Where do the antigens and peptides come from?

7. Why are the peptides that fit in one class shorter than those that fit in the other class?

8. How does MHC manage to accommodate the huge range of peptides that could be from any possible pathogen?

9. What do all peptides that fit in a particular MHC class I molecule have in common?

10. What does, and what does not distinguish self from foreign peptides?

11. What do some viruses and cancers do to MHC class I? Why? How does the immune system deal with this?