

**Appendix 1:** Baseline survey filled out by students during week 4.

Please rate how the following tools are helping to facilitate your learning of molecular structure & function this semester	Are of No Help	Help a Little	Help Some	Help a Good Deal	Help a Great Deal
	1	2	3	4	5
a. textbook readings for lecture	1	2	3	4	5
b. Dr. Day's note packet	1	2	3	4	5
c. lecture problem sets	1	2	3	4	5
d. computer images of biomolecules shown by Dr. Day in Biocore 303 lecture	1	2	3	4	5
e. physical models of biomolecules held by Dr. Day in Biocore 303 lecture	1	2	3	4	5
f. answering pre-lab questions	1	2	3	4	5
g. conversations with TAs and instructors	1	2	3	4	5
h. conversations with your fellow students	1	2	3	4	5
i. writing the Subcellular Fractionation paper	1	2	3	4	5
j. the 1-hour Protein Explorer online tutorial you did for this week	1	2	3	4	5
k. Other tools? Please explain:	1	2	3	4	5

1. Have you taken college level biochemistry? Yes\_\_\_ No\_\_\_ If so, what course(s) and when?
2. Aside from the images Dr. Day has shown you in Biocore 303 lecture, have you seen computer images of molecules in other courses? Yes\_\_\_ No\_\_\_ If yes, please explain which courses you've seen them in and why they were shown to you there.
3. Please answer the following question as best as you can, using concise and clear language.

*It is possible for a mutation in a single amino acid sidechain (also known as a residue or R-group) to make a protein non-functional. **How** this might be possible? (You can use the back of this form to finish your answer if needed.)*

4. Rate your confidence in your answer to question #3:

<b>1</b>	<b>2</b>	<b>3</b>	
<b>4</b>			
<b>My answer is purely my answer is right. a guess.</b>	<b>This is a logical guess, so I may be partly right.</b>	<b>My answer is probably right for the most part.</b>	<b>I know</b>