**CHEM523 Extra Credit Assignment**

**Due 28 March, 2014**

For 5 points of Extra Credit, compile a single Powerpoint slide that describes the reaction mechanism, active site and catalytic residues of 1 of your assigned proteins.

Your slide must include:

1. Text describing the name of the protein and the organism that makes it
2. Text that describes the substrate and products
3. Text the accurately describes the reaction mechanism, including all relevant amino acids.
4. At least 2 images that you have made. One image needs to be an image of the active site of your protein. The second image has to be from MarvinDraw of ChemDraw or some other chemical drawing program that shows the substrate and product being formed with reaction arrows.

This assignment is All or Nothing. If you phone it in, you will not receive any points, no matter how hard you worked on it. If you do not attempt to understand and address the intent of the assignment, you will not receive any points. If you do not follow all of the instructions on this sheet to the letter, you will not receive any credit. I expect you to use your knowledge of organic chemistry, biochemistry and your skills with computer software to develop a slide that could be used in a textbook. Or your final presentation and review paper. Hint, hint, hint.

Submit your slide in the course Dropbox folder with the following naming convention: lastname\_firstname\_MechanismExtracredit.ppt

An example of a perfectly executed assignment from last year is below. Yes, this really was made by a Winthrop undergraduate student. You can do better though!



**CHEM523 Extra Credit Assignment: Mechanism Grading Rubric**

**Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

In order to receive full credit, you must have met all of the requirements given to you.

☐ 1) Text describing the name of the protein and the organism that makes it

☐ 2) Text that describes the substrate and products

☐ 3) Text the accurately describes the reaction mechanism, including all relevant amino acids.

☐ 4) At least 2 images that you have made. One image needs to be an image of the active site of your protein. The second image has to be from MarvinDraw of ChemDraw or some other chemical drawing program that shows the substrate and product being formed with reaction arrows.