

## Chem 30B - Exploring organic and biological molecules

(10 points - fun and easy - this is a regular assignment, not extra credit)

1. Choose a drug or biological molecule that you have heard of before but are unfamiliar with. (If it's a drug, it can be either pharmaceutical or recreational, legal or illegal.)
2. Look up information about this molecule online. I recommend starting with either PubChem <https://pubchem.ncbi.nlm.nih.gov/search/search.cgi> or Wikipedia.
3. Draw the structure of the molecule by hand, large enough to fill up most of a page. (Draw either the line structure or the condensed structural formula, your choice. You will be showing this drawing to the students in your group.)
4. Circle and identify any organic functional groups. Identify any other recognizable units (such as sugar units, amino acids, lipid components, etc.)
5. Print the first page of the website(s) you end up using.
6. Print the description of the biological effect of this molecule from the website. Then, write an explanation of what this molecule does *in your own words*, in one or two paragraphs. Pretend you're trying to explain it to someone who doesn't know much chemistry - maybe your mom or dad or another family member (or one of your classmates.) Relate this explanation to things you have learned in this class.

You're likely to find an overwhelming amount of information. Focus on the most important, relevant, interesting, or understandable parts. I don't want this to take you very long. In PubChem, focus on the following sections: "Structures" and "Pharmacology and biochemistry." In Wikipedia, focus on the structure and "Pharmacology" or "Biochemistry."

Work on making your explanation as clear and understandable as possible. A shorter, clearer explanation is preferable to a long, confusing one.

In class, you will get into small groups (with your friends!) and take turns showing them your molecule, pointing out the functional groups and other recognizable components, and explaining what you learned about what this molecule does. Afterward, you will turn in your structure drawing, written explanation, and printed pages from the website(s) you used.

Due date: