

Norwich Homework 11\_10\_2005 Due on Dec 01 2005

1. Go to <http://www.yeastgenome.org/> and find 3 candidate genes of known f(x) and one of undefined f(x) that you predict to be altered by DMSO treatment. Make a hypothesis as to whether or not you anticipate this gene to go Up or Down in the DMSO treated yeast and why.
2. What GO biological processes and molecular mechanisms are associated with your candidate genes?
3. Where, subcellularly does the protein reside in the cell?
4. What other proteins are known or inferred to interact with yours? How was this interaction determined? Is this a genetic or physical interaction?
5. Find the expression of at least one of your known genes in another public ally deposited microarray data set?
  - a) Name of data set and how you found it?
  - b) What is the largest Fold change observed for this gene in the public study?
6. Now that you are microarray technology experts can you give me two reasons the observed transcript level difference may not be confirmed through a second technology like RTQPCR?