

P847: Readings on Gene Regulation (To be discussed in class Oct 9)

Read the two papers (both experimental).

1) Setty Y, Mayo AE, Surette MG and Alon U. "Detailed map of a cis-regulatory input function" . PNAS **100**, 7702 (2003).

2) Ozbudak EM, Thattai M, Lim HN, Shraiman BI, Van Oudenaarden A. "Multistability in the lactose utilization network of Escherichia coli" , Nature **427**, 737 (2004).

Definitely not the first papers on the lac operon, but these papers set out to measure its logic function and then show that such a function could lead to switch behavior. You may find the supplementary material from (2) to be useful for Assignment #2.

Come prepared to discuss each figure. Are the results sound? what are the conclusions? what questions remain unanswered?