

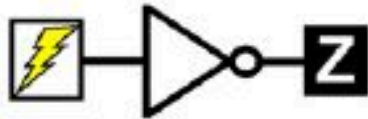
- Announcements
- Lab Quiz
- Pre-lab Lecture
 - ❖ Transfer functions
 - ❖ Sequencing
 - ❖ Today in Lab: M2D6

Announcements

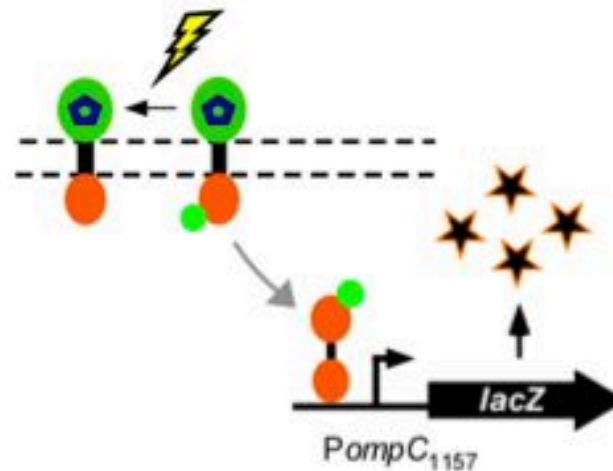
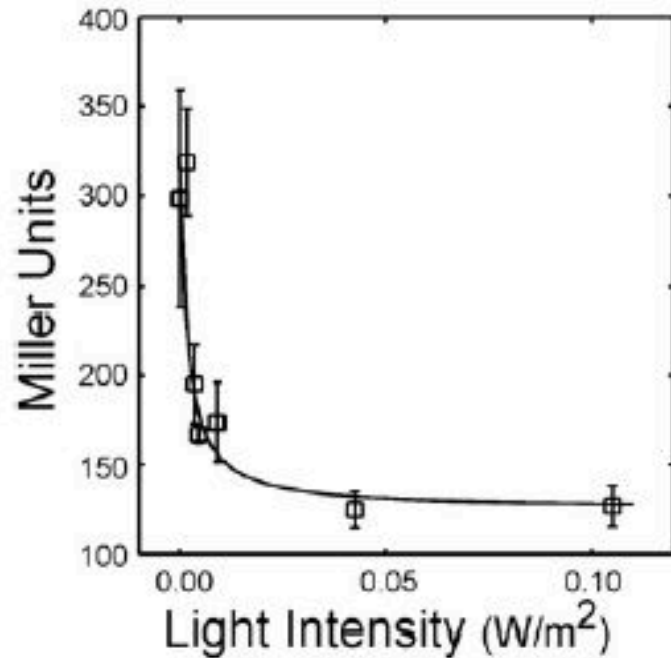
- OH Monday 4-5 pm useful?
- General comments about HW (see also written comments please).
 - methods key words are complete and concise
 - understand full edge detector vs. transfer functions that isolate part of the system
- Long FNT
 - journal articles as models for what goes in paper

Transfer function example

A



$$f_{\text{light}} = \frac{K}{K+L}(\beta_{\text{max}} - \beta_{\text{min}}) + \beta_{\text{min}}$$



JJ Tabor, et al. *Cell* **137**:1272

Sequencing reactions

Dideoxy method: no 3' OH → can't elongate
 Run 4 rxns: (d)dT, dA, dG, dC and 3 others

different fluorophores
ddA', G'', C''', T''''

Reactions <i>ddT</i>	<i>ddA</i>
→ TAAATT	→ TAAATT
AT*	A*
ATT*	ATTA*
ATT*	ATTAA*
ATT*	ATTAAA*

Gel	
ddT	ddA
	— 7bp
	—
—	—
—	— 1bp

* = radioactive or fluorescent label

Colony counts

Group Colour	(-) control	+ control plasmid	bkb + ligase	bkb + insert + ligase
Hypothetical Data	0	100	3	30
Red	0	3000	1	75
Orange	0	384	0	0
Yellow	5	260	0	6
Green	0	153	0	2
Purple	0	2800	1	71
Red	0	400	0	0
Orange	0	1300	5	125
Yellow	0	400	0	5
Green	0	298	43	215
Blue	0	2	63	264
Pink	0	347	0	2
Purple	0	437	16	32

What is the role of the (+) control on D4 vs. D5?

IPTG-sensitive system in solid culture



Today in Lab (M2D6)

- EHS Biosafety lecture
 - Prepare for mammalian tissue culture in Mod 3
- Sequencing analysis → pick a clone
- Prepare liquid culture truth table assay
 - new (duplicate) and original (single or duplicate) system
- Prepare solid culture truth table assay
- Post colony counts again today