

- Announcements
- Pre-lab Lecture
 - ❖ Module 2 Overview
 - ❖ Working with Bacteria
 - ❖ Today in Lab: M2D1

Announcements

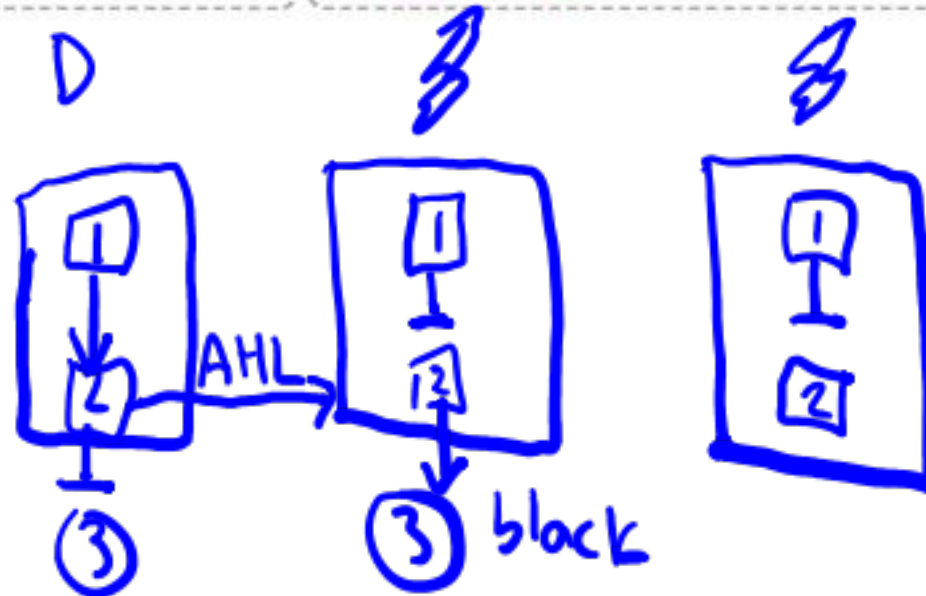
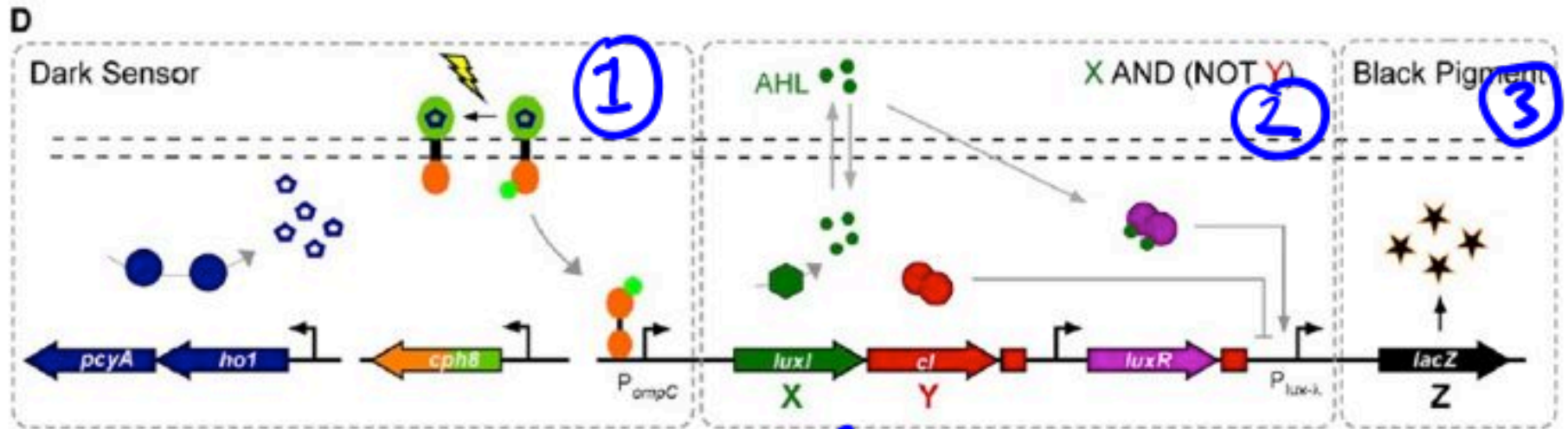
- Still accepting journal club reflections
- Module 1 reflection due *next* time, not today
- Sign-up for WAC meetings next time

- Introducing... Adrian, your TA for Module 2

Module 2 goal: improve edge detector

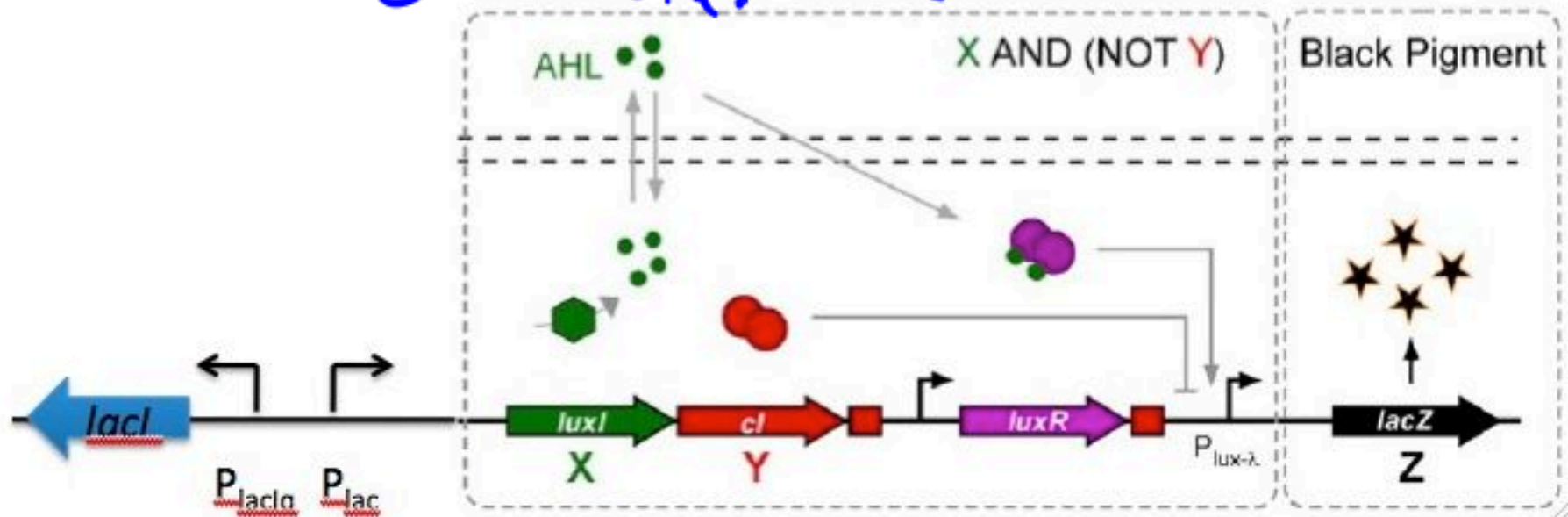


First: understand original system



Next: develop model system

- Why useful?
- ① light \rightarrow diffuse small molecule \rightarrow more exact easier to test (multiple conditions @ once)
 - ② more subtle; isolate one problem @ a time



Last: Theoretically, close loop

- ✓ • Gather data on broken and modified model (IPTG-based) system
- ✓ • Gather data on broken original (light) system
- (✓) • Use transfer functions to make predictions about how to fix original edge detector

(Implement modification in original system)

Working with bacteria

- Sterile technique
 - use sterile equipment and reagents
 - avoid contaminating either one
- Appropriate disposal
 - aspirate liquid cultures into flasks w/bleach
 - toss solid cultures in biohazard bin
- Useful organism
 - they grow quickly!

Today in Lab: M2D1

- Mostly: get to understand the system(s)
 - consider output for various inputs
- Briefly: set up sample edge detection plate
 - note half-hour incubation step
- Slightly less briefly: set up liquid cultures
 - four possible input combinations
 - next time measure β -gal activity of each

pEDL3
AB8

pED-IPTG
AB2Z