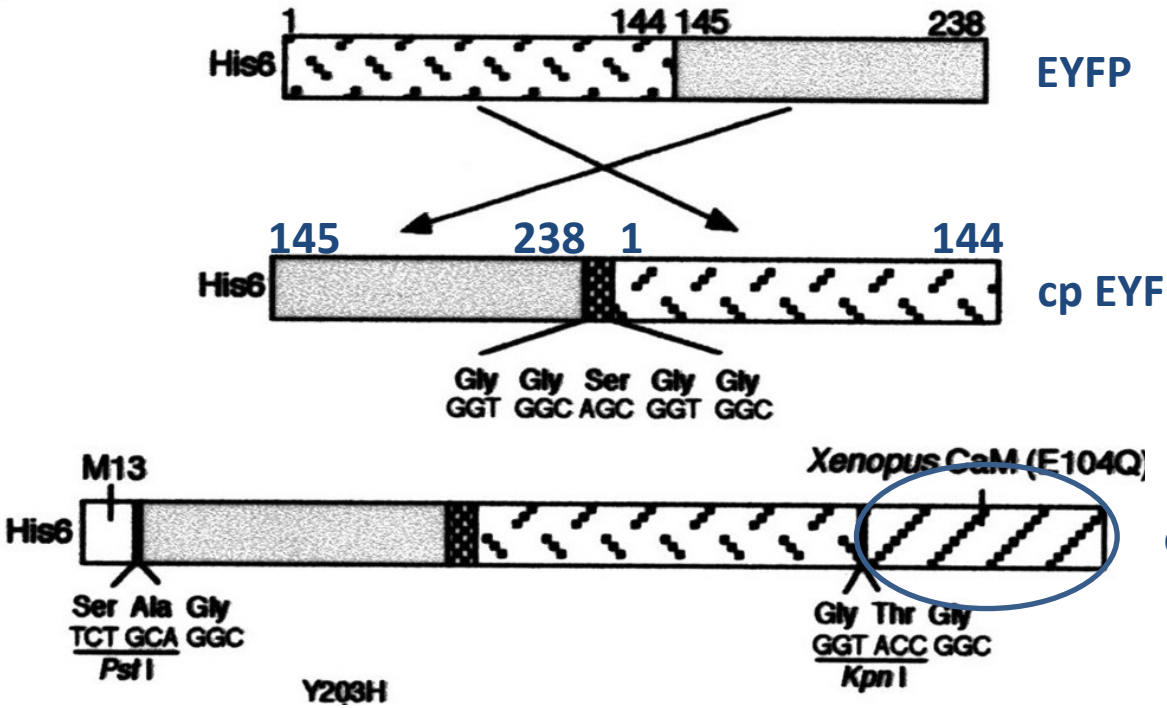
- Announcements
- Pre-lab Lecture
  - ❖ Module 2: Design Overview
  - ❖ Primer design for mutagenesis
  - ❖ Intro to Restriction Enzymes
  - ❖ Today in Lab: M2D1

Announcements

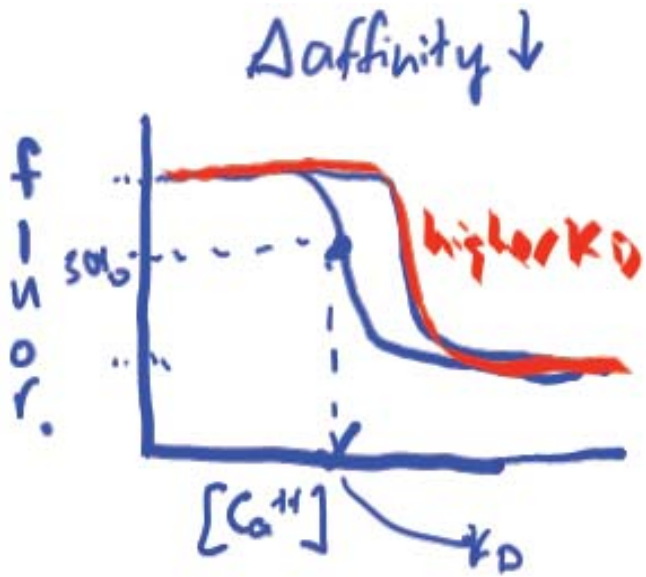
- iGEM competition
- Introducing… Xiaosai, your TA for Module 2

Inverse Pericam



calmodulin CaM
→binds M13 if Ca^{2+} bound
→4 Ca^{2+} binding sites

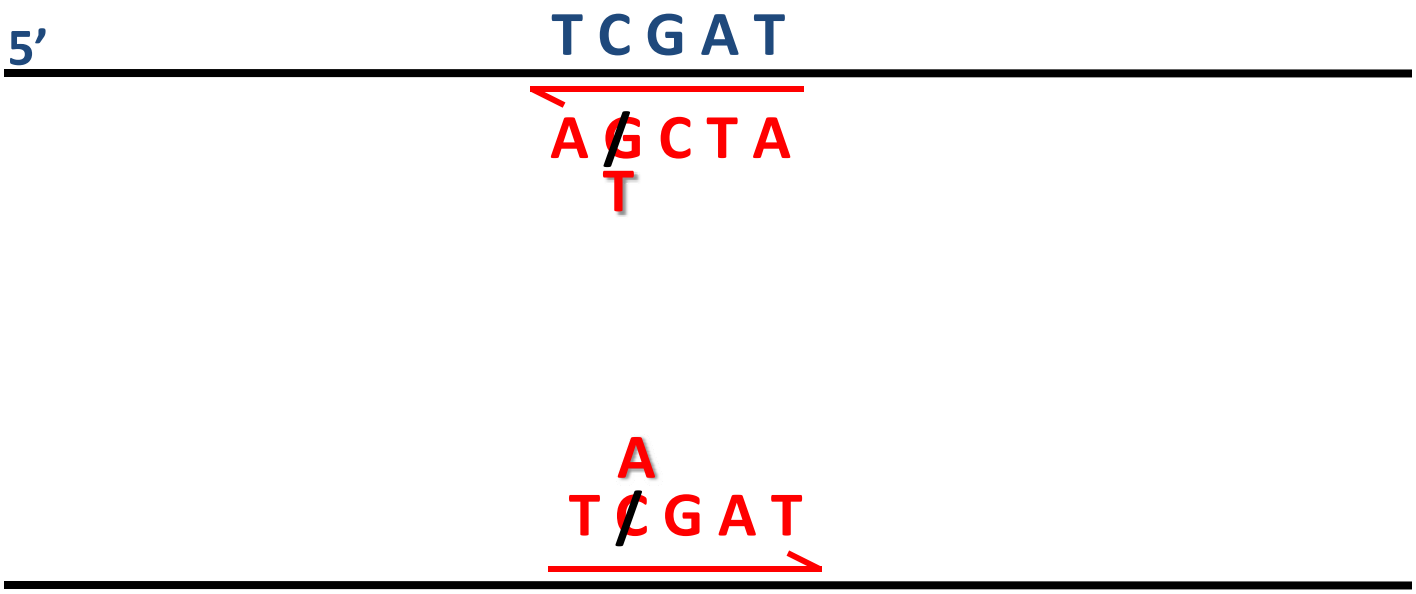
Goal: Affect Binding Properties



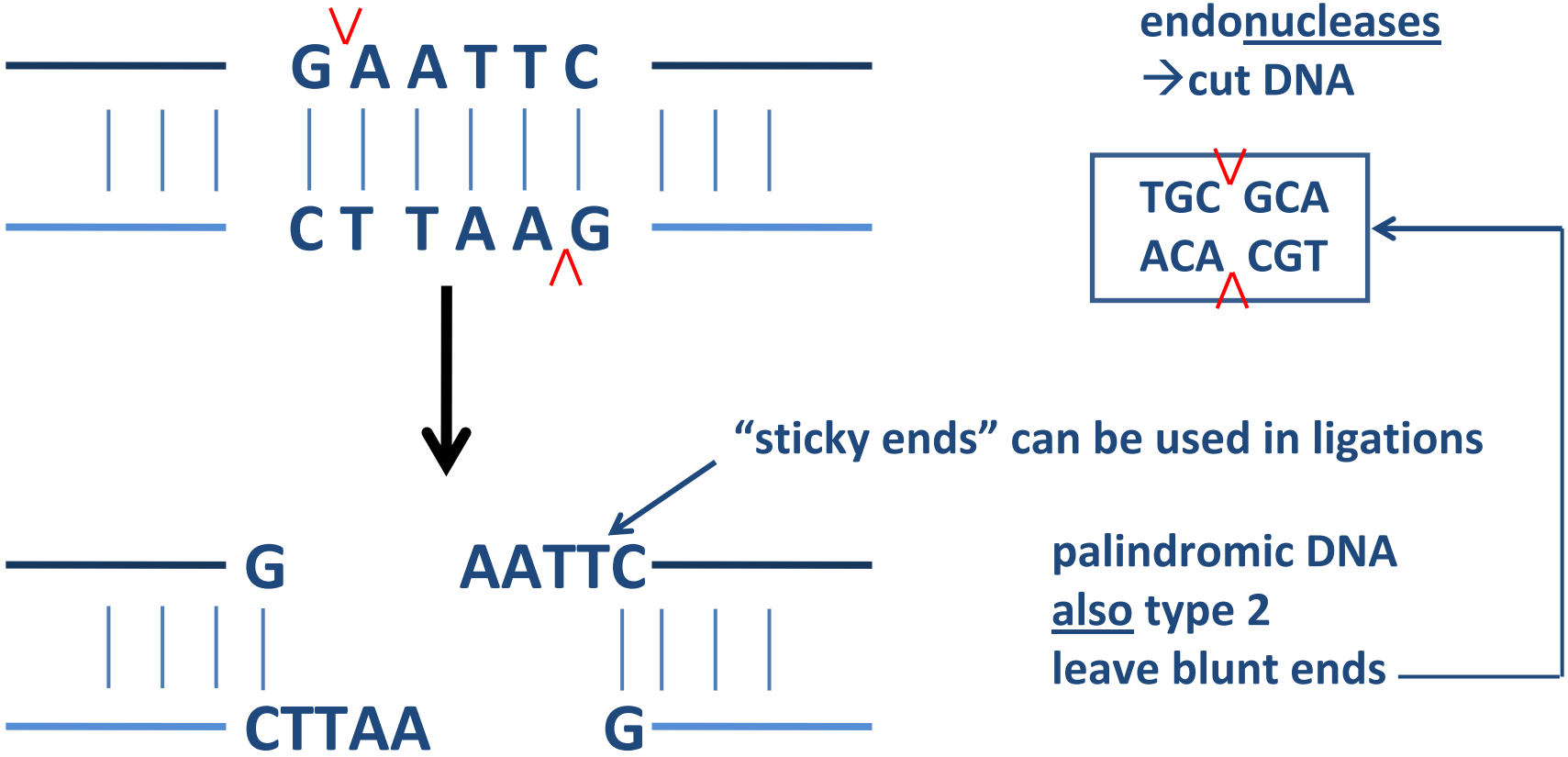
vary $[Ca^{2+}]$, keep [CaM] constant

$$\text{fluor} \propto \frac{1}{\text{binding}}$$

Designing Mutagenic Primers

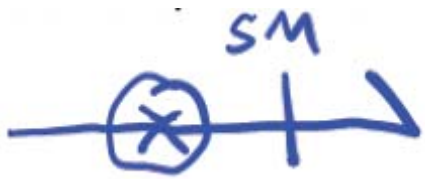


Intro to Restriction Enzymes



Today in Lab

- Study inverse pericam at multiple levels
- Design primers
  - Amino acid change
  - Silent change make new, unique restriction site



silent mutation

- For next time: begin reading two papers
  - Focus on Nagai; other one is for some history/context
  - Time in class on D2 to finish

20.109 Laboratory Fundamentals in Biological Engineering
Spring 2010