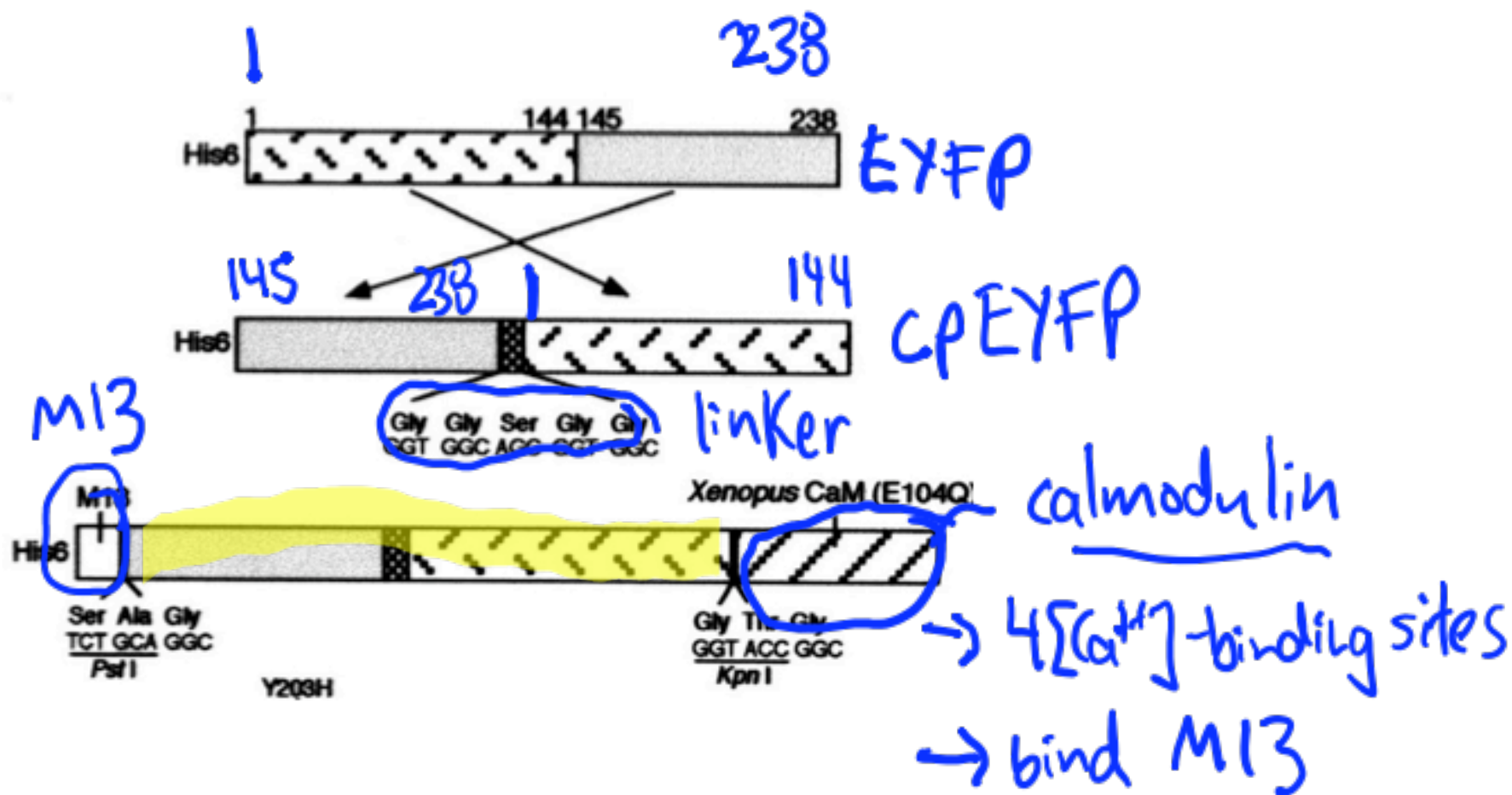


- Announcements
- Lab Practical (~30 min)
- Pre-lab Lecture
  - ❖ Day 1 Overview
  - ❖ Intro to Amplifying DNA
  - ❖ Intro to Restriction Enzymes
  - ❖ Today in Lab

# Announcements

- BE seminar series:
  - Thursdays at 4:05 pm in 32-141
  - Full schedule linked from BE website
- Maintaining our lab space
- Introducing... Naiyan, your TA for Module 1

# Inverse Pericam



# Goal: Affect Binding Properties



$\Delta$  cooperativity



fluor  $\propto$   
1/binding

$[Ca^{2+}]$  bulk soln.  
vary  $[Ca^{2+}]$ , keeping  $[CaM]$  same

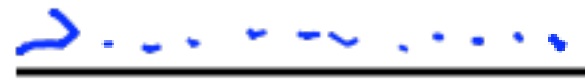
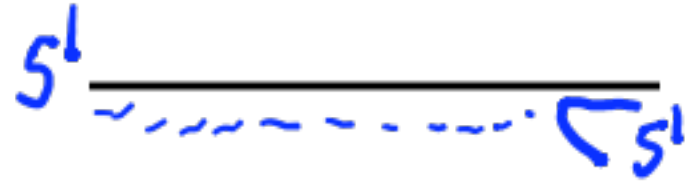
# DNA Amplification Process



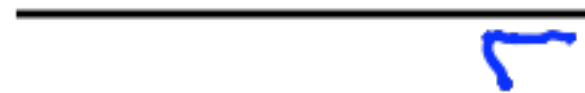
↓ melt  
ds → ss



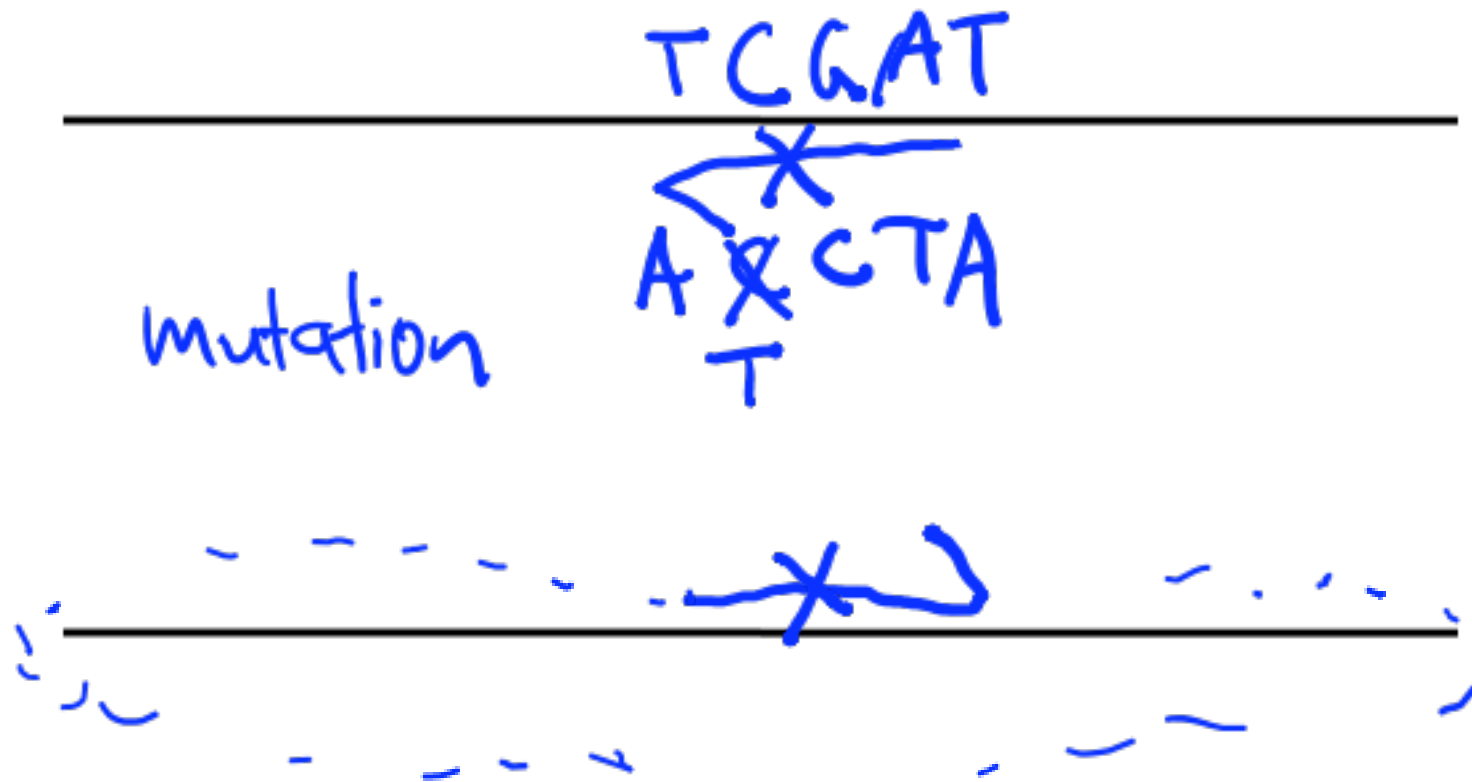
anneal  
→  
primers



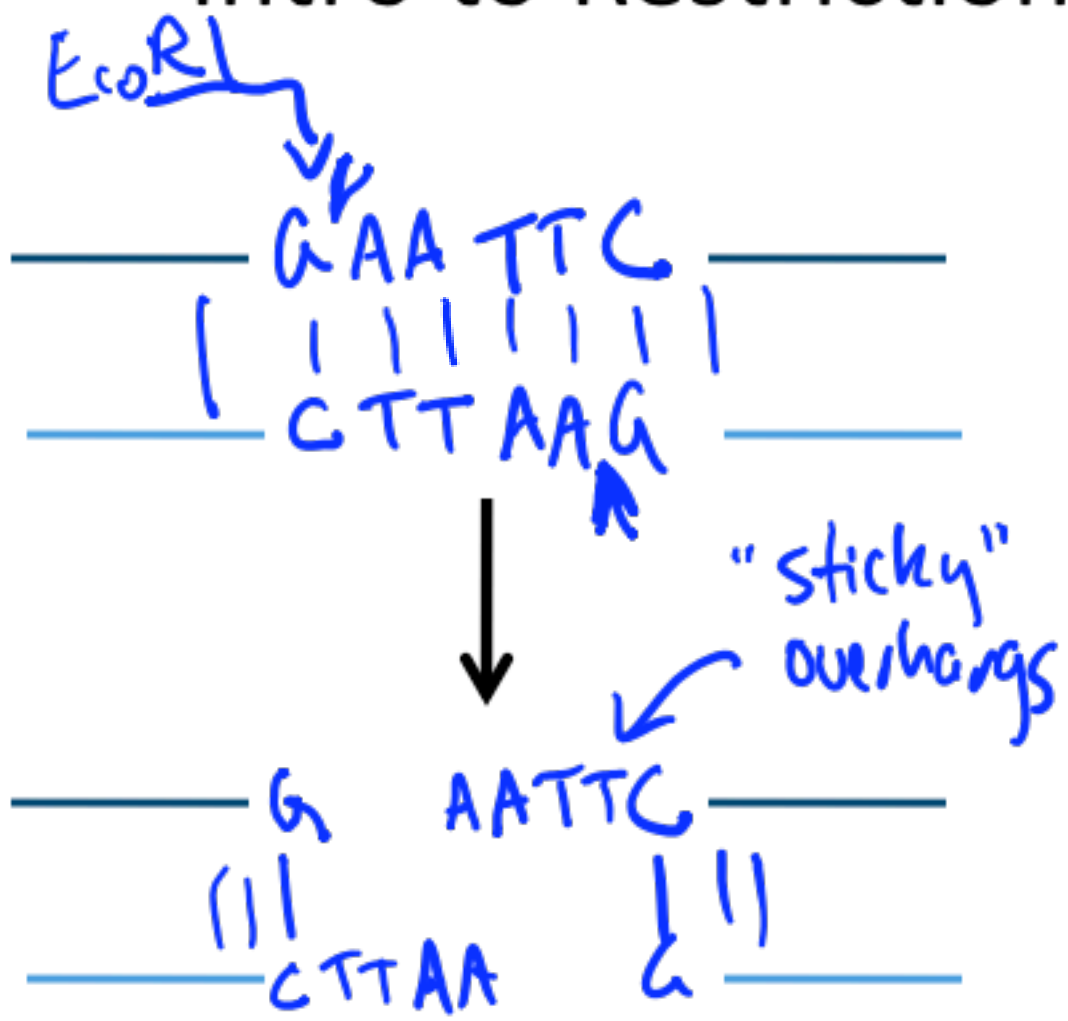
extend ↑



# Designing Primers



# Intro to Restriction Enzymes

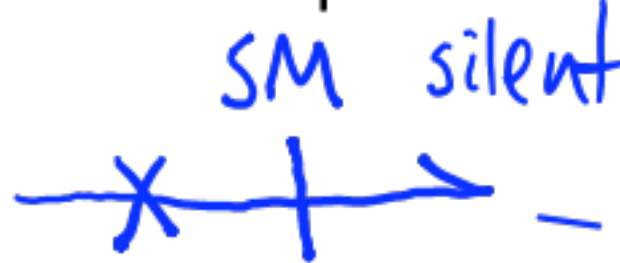


endonucleases  
cut DNA

palindromic DNA  
Type 2: blunt ends  
TACGCA  
ACGCGAT

# Today in Lab

- Study inverse pericam at multiple levels
- Design primers
  - Amino acid change <sup>x</sup>
  - Silent change



↳ add new restriction site

2<sup>nd</sup> primer: 5101L

- For next time: get familiar with scope of module, OpenWetWare, read two papers
  - Read figures, skim text, then do a close read