

DNA Engineering: M1D2 Lab Talk

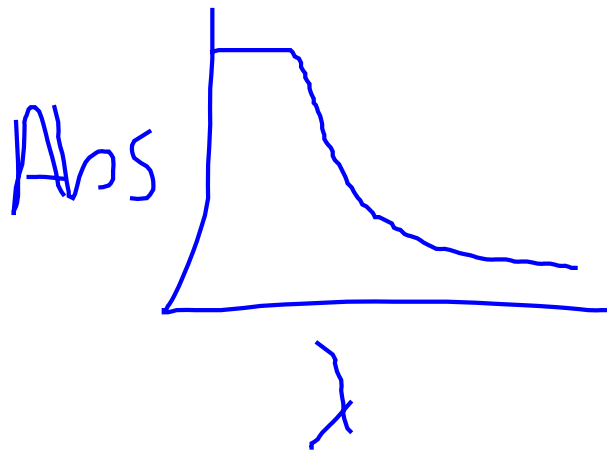
20.109 (F12)

09.13.12

Quick review of lab practical glitches...

50X

? throw gloves



$$1 + 1 = 2$$

$$V_1 C_1 = V_2 C_2$$

“Last time in 20.109...”



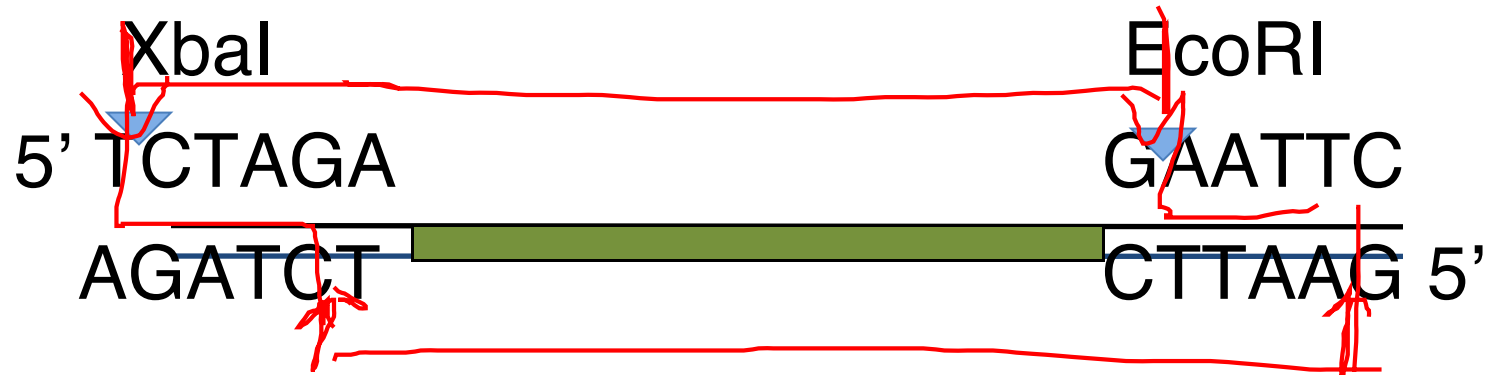
codon
33 ←

Stop

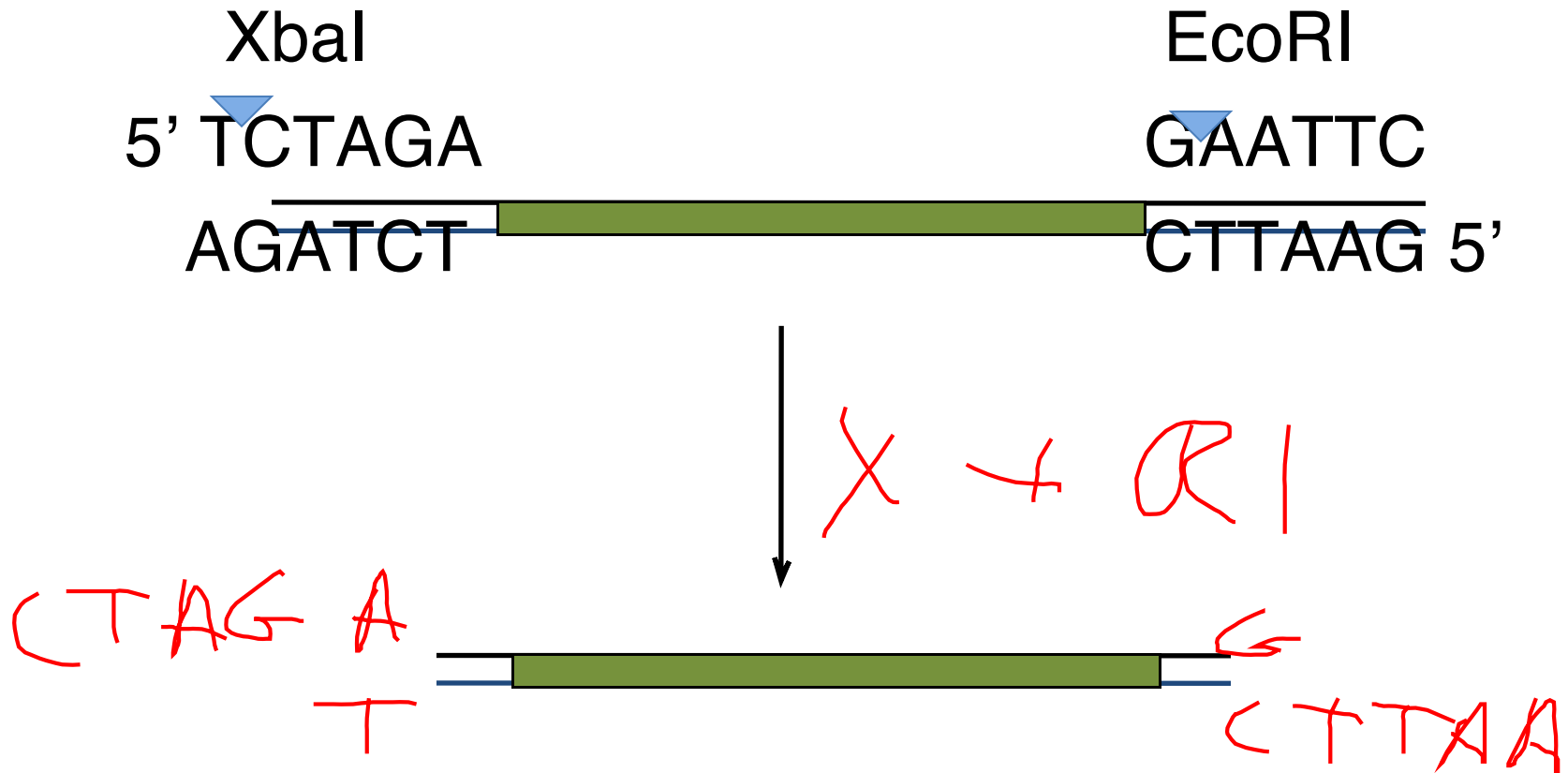
pCX-EGFP
GDR1, Amp^R
→ EGFP, MCS

$R_1 =$ Xba
 $R_2 =$ Bam
 $R_3 =$ RV
 $R_4 =$ RI

Digesting your PCR product



Digesting your PCR product



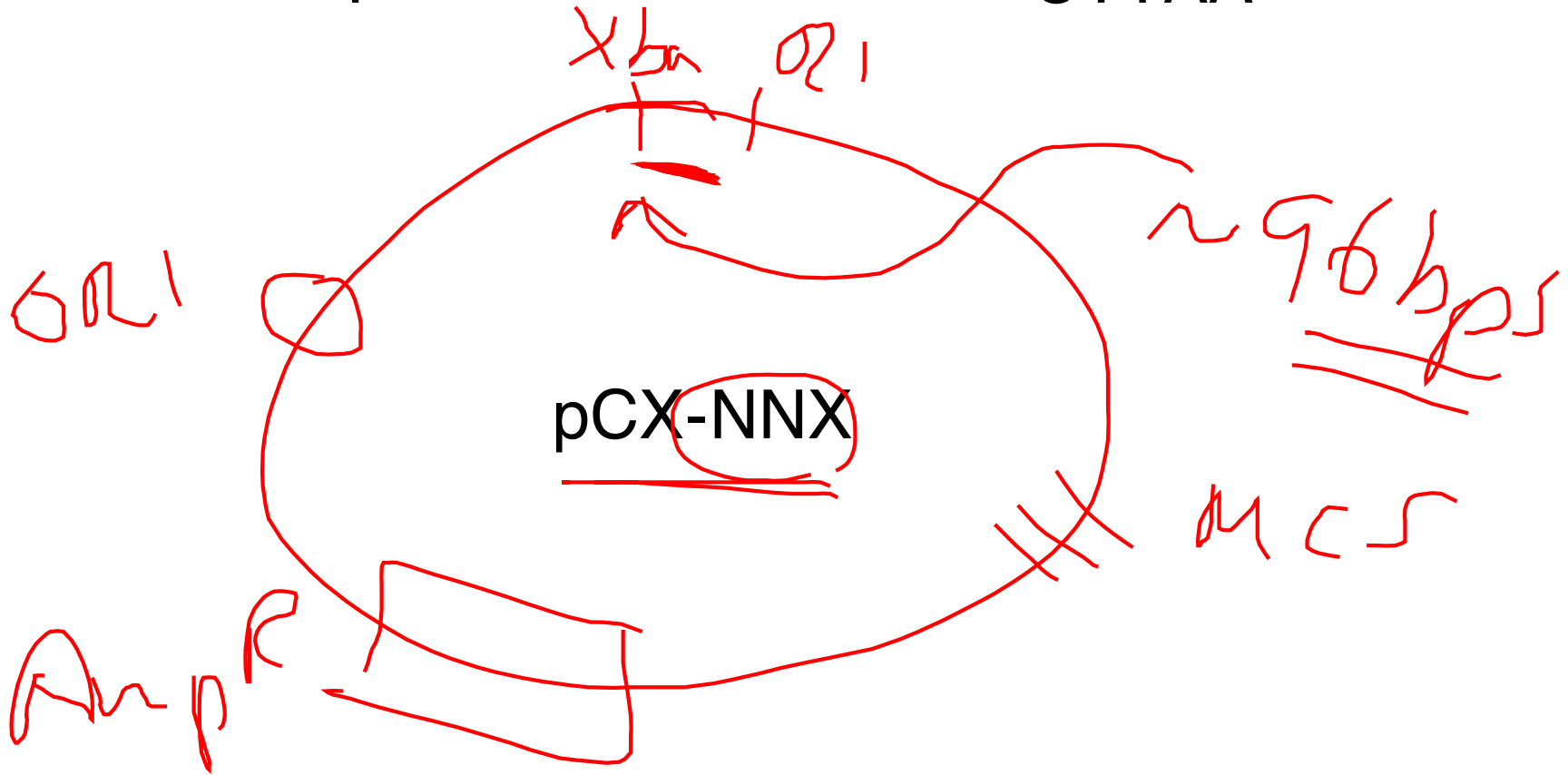
(Sub)Cloning PCR product into new plasmid

XbaI

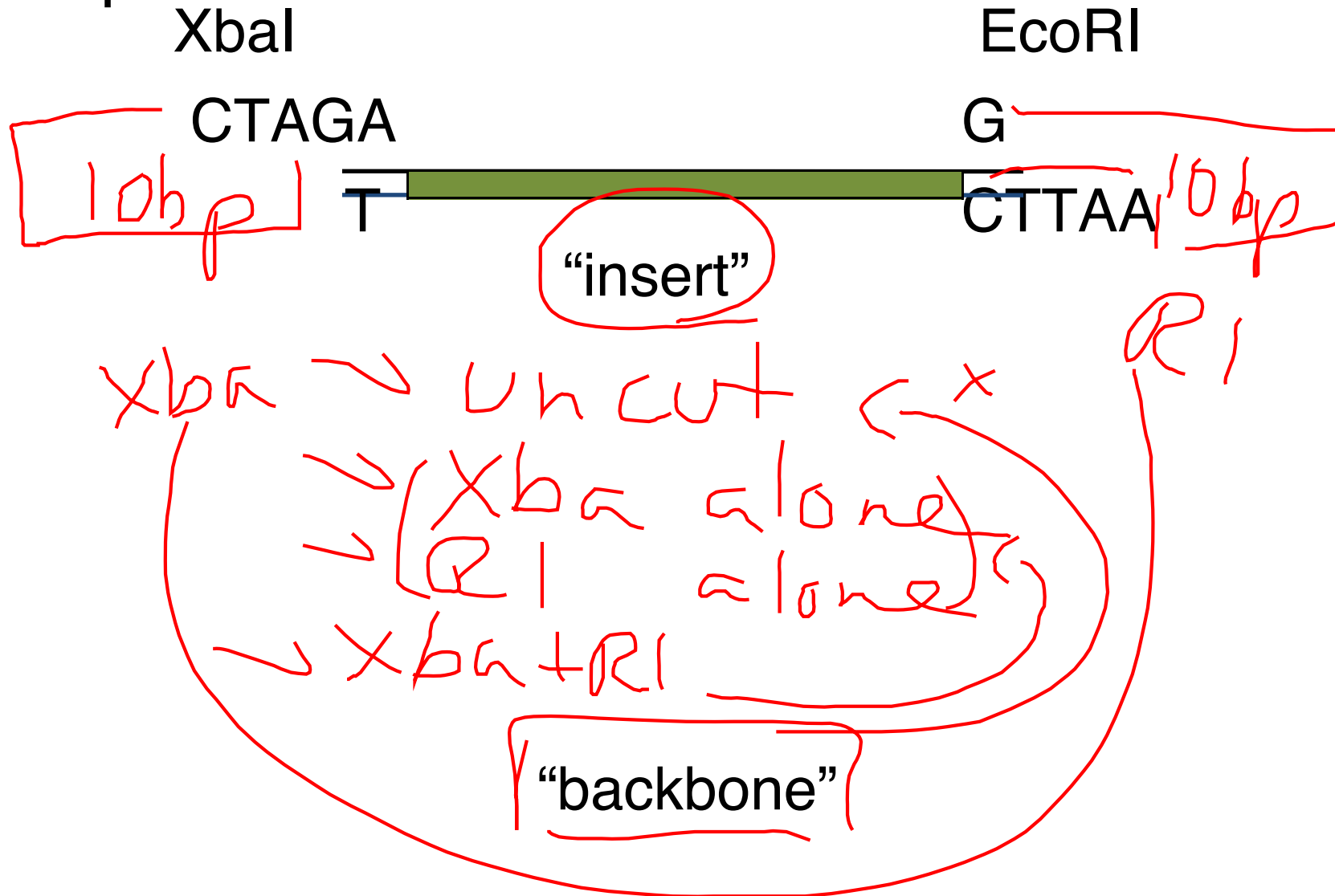
EcoRI

CTAGA

G



(Sub)Cloning PCR product into new plasmid



But first, clean up your PCR product

Why?

1. Remove the dNTPs + Tag
2. Δ Buffer

But first, clean up your PCR product

How?



→ resin

1. Bind DNA to resin on column (= silica)

↘ salt ↘ pH

2. Wash in presence of EtOH

keeps DNA on membrane

3. Elute DNA in small volume

↘ salt → pH

Your reactions

	Component	Details
3	DNA	PCR prod/pCX- XXXX
4	Enzyme	XbaI, EcoRI
2 =	10XNEB	1x final
1 =	H ₂ O	to final 25 μ
	Temperature	32 $^{\circ}$

Be careful with stock solutions and order of addition!!

In lab today and next week

R

Clean DNA, digest
Selection of Assessments

T

Agarose gel isolate DNA

WAC

Wtshkr

R

No Lab

