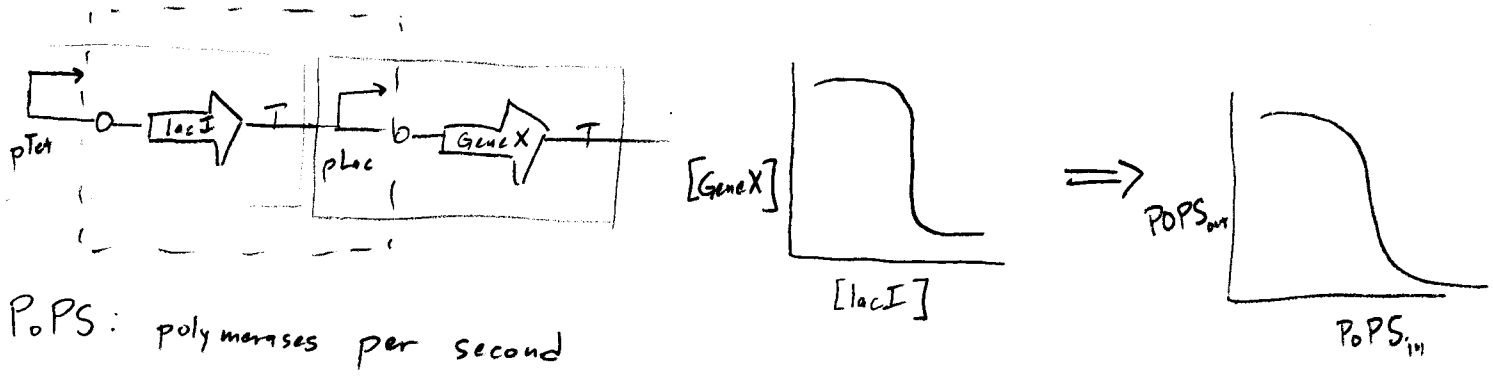


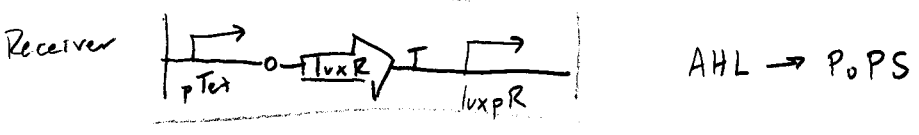
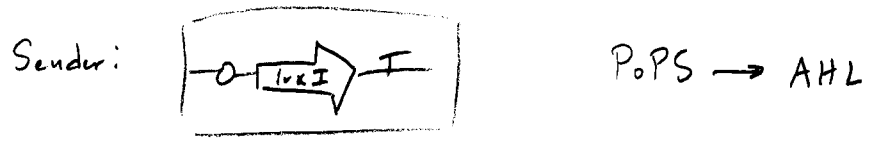
3 standard repressors

Repressor	Promoter	"Knob"
lacI	p _{lac}	IPTG
cI	p _R	ts
tetR	p _{Tet}	aTc



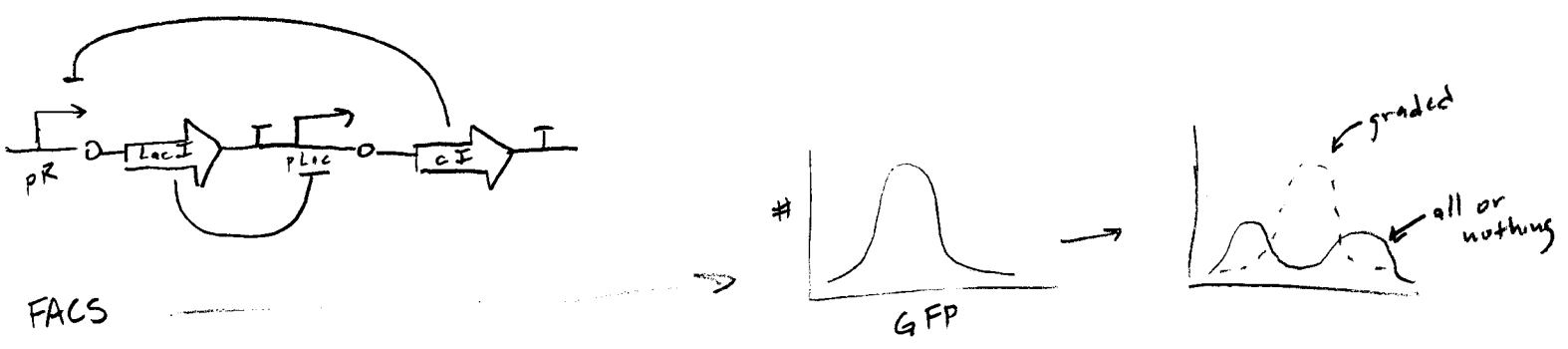
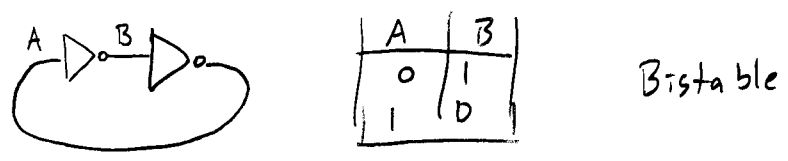
PoPS: polymerases per second

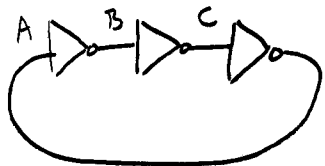
Signaling



Crosstalk with tetR

Systems

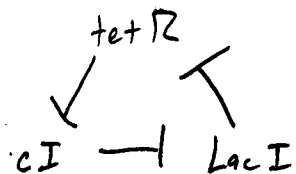




No stable fixed point:

A high \Rightarrow B low \Rightarrow C rising \Rightarrow A falling \Rightarrow ...

Dynamics: limited by synthesis/degradation
 "lifetime" - degradation tag



Noisy - lose coherence (period longer than cell cycle)

Time lapse microscopy - track same cell over time.