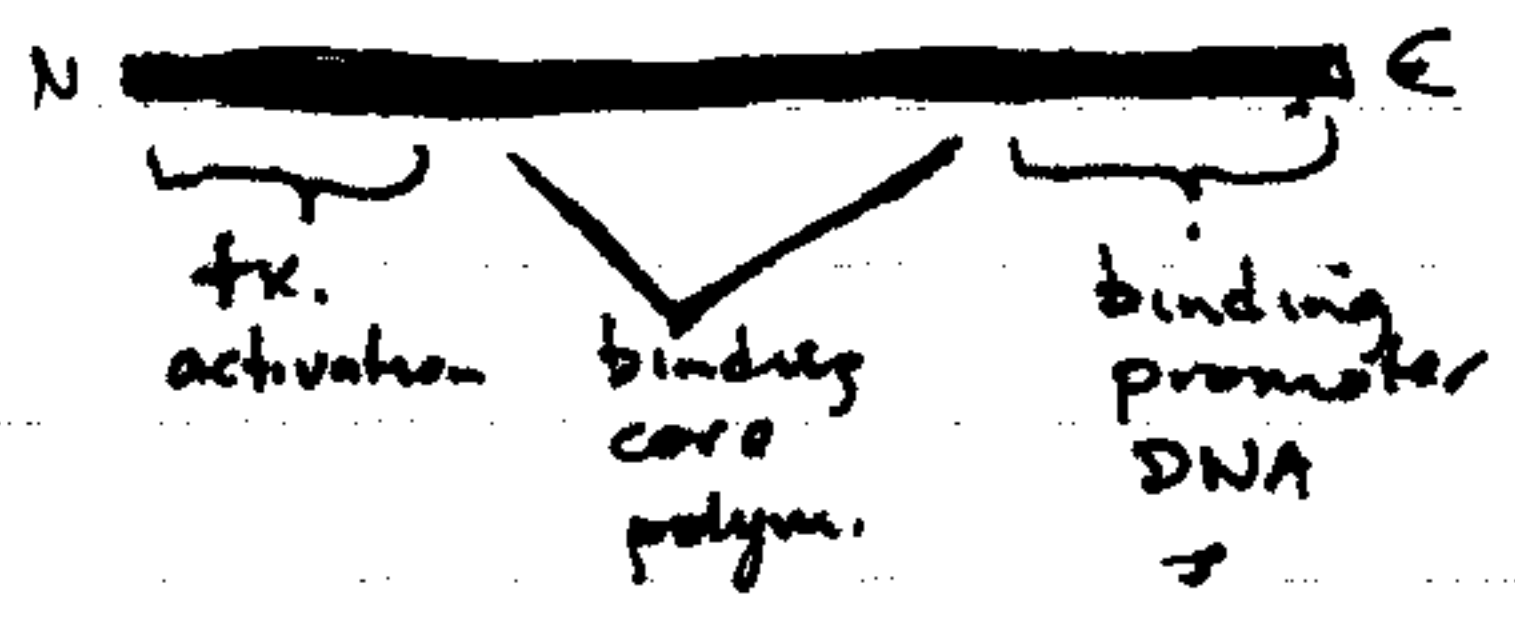


Bob Fischer



$\sigma^{54} = RpoN / NtrA / GlnF$

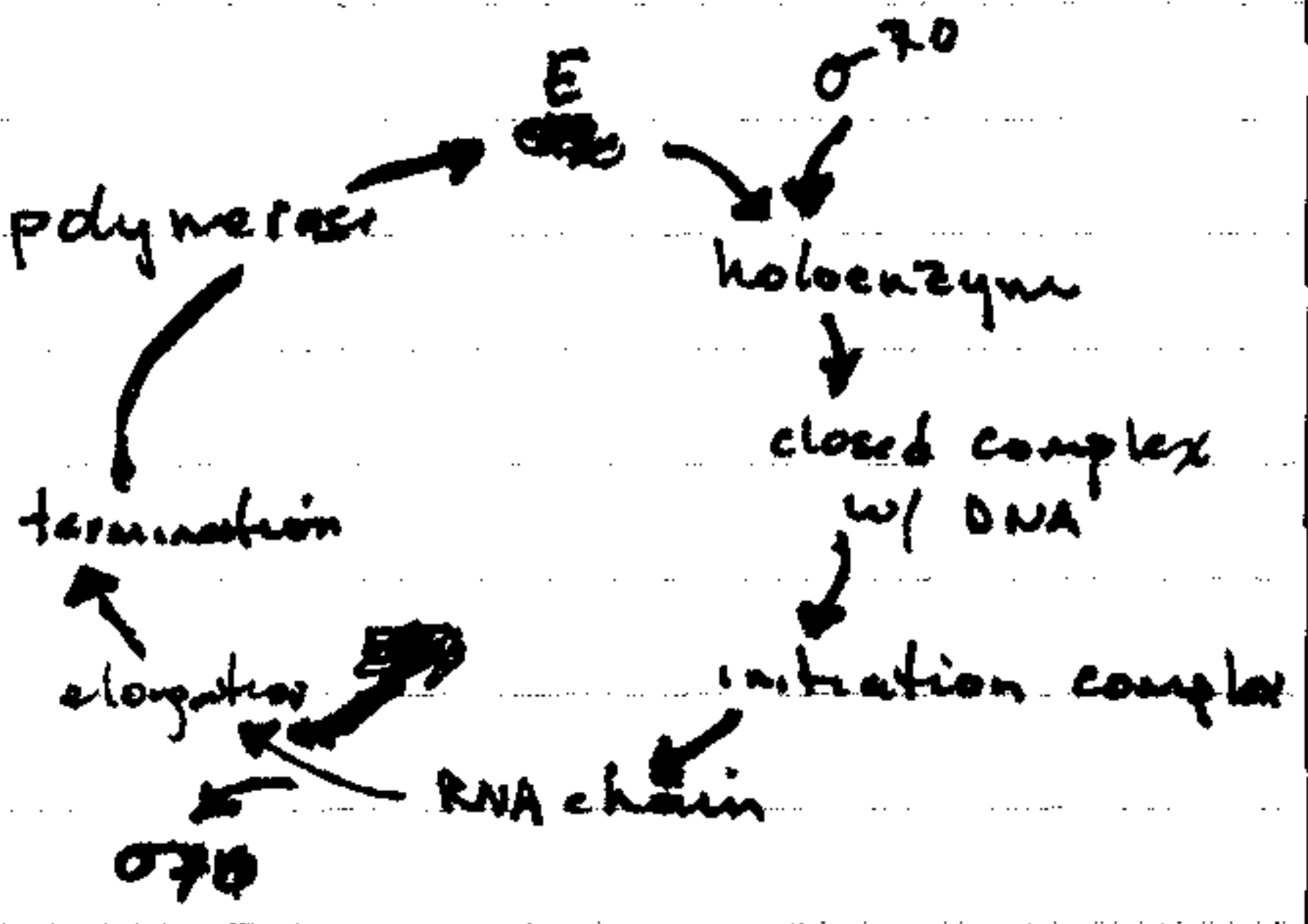


σ factors

- each have specific activities
- two classes

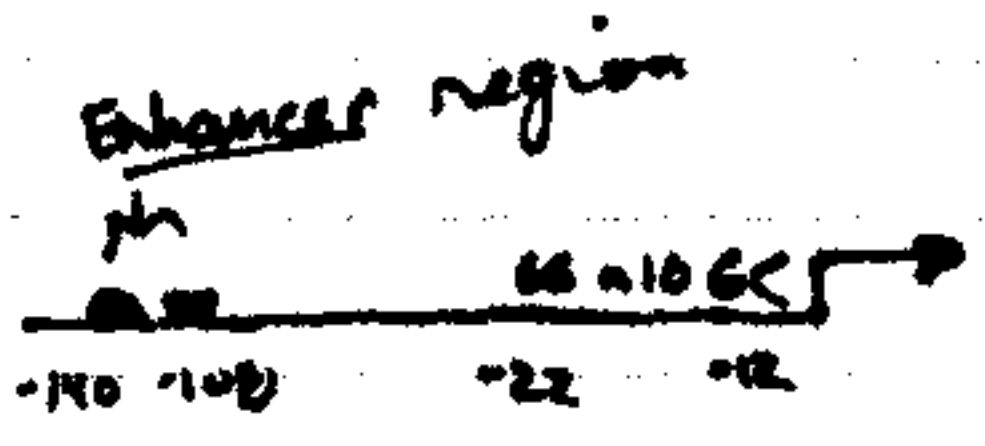
σ^{70} family

- assoc. w/ core polymerase



σ^{54} - only 1 in this family in E. coli

- mediates regulation of variety of systems
- all σ^{54} -like systems work by ^{interacting w/} enhancer-binding proteins



Primer extension

- DNAse I - attack minor groove
- KMnO₄ - attack ssDNA

- break
- modify & then break
- block extension