

# Seth Derst - RNA polymerase of E. coli

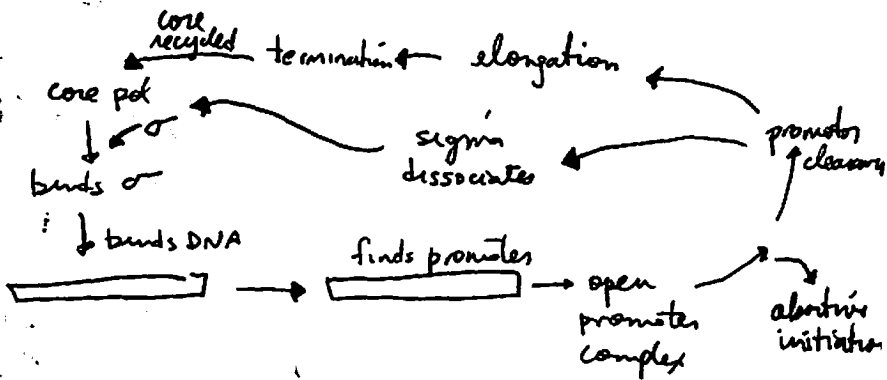
2.4.99

## T7 vs. E. coli vs. Yeast RNA polymerase

single subunit	~5-6 subunits	~10-15 subunits
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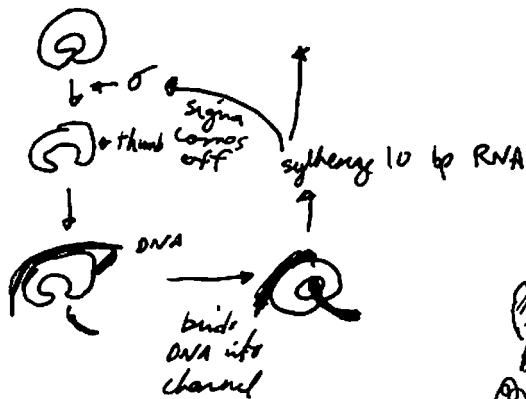


- Many X-ray structures of single subunit RNAPs
- As well as of similar proteins (e.g. Klenow)
- Many subunits are homologous



2D X tabs

E. coli: holoenzyme vs. Yeast core vs. E. coli core

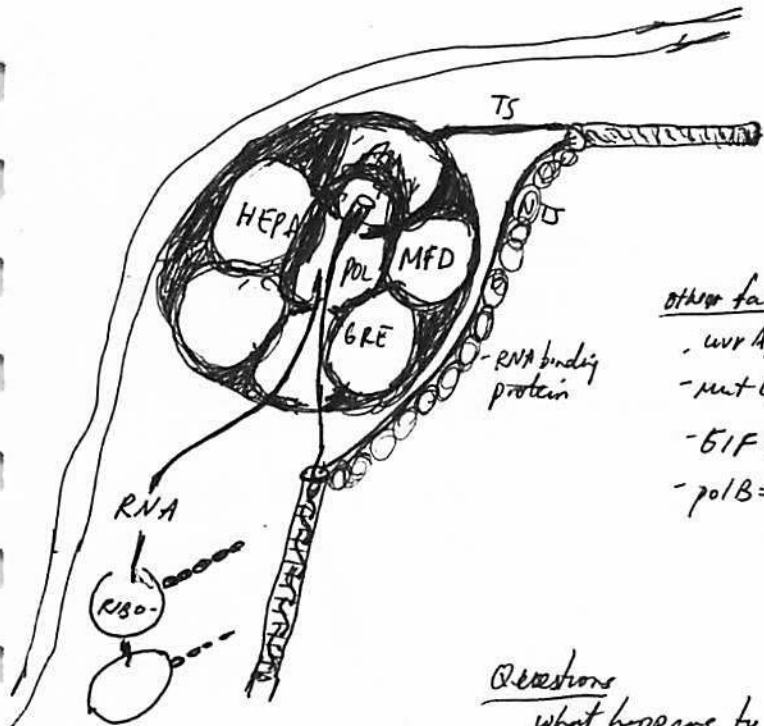


open complex



### Sigma Factor

- a sigma ~~factor~~ factor is required for promoter binding



### Other factors

- uvr A, B, C
- mut L, S
- 5' F 4A
- pol B = repair pol

### Questions

- $\sigma$  factor?
- does anything bind NTS?

- what happens to RNA pol
- what happens to NTS
- how re-syn. TS w/o moving
- how attach to membranes
- is DNA packaged
- does translation matter

