

## Chapter 13 Transcription

### Vocabulary:

Ribosomal RNA (rRNA)	messenger RNA (mRNA)	transfer RNA (tRNA)
Template strand	nontemplate strand	transcription unit
Promoter	RNA coding region	terminator
rNTP	RNA Polymerase	core enzyme
sigma factor	holoenzyme	RNA Polymerase I
RNA Pol. II	RNA Pol III	consensus sequence
Rho dependent terminator	rho independent terminator	rho factor
General transcription factor	basal transcription apparatus	core promoter
Enhancer	silencer	

### Reading Assignment: Entire Chapter

- I. Key Questions:
  - a. What do we need for transcription (Ingredients)?
  - b. How does it start?
  - c. How does it proceed?
  - d. How does it stop?
  
- II. Ingredients:
  - a. rNTPs, basic structure of RNA, RNA vs. DNA
  - b. DNA template
  - c. Transcriptional Apparatus (Enzymes and associated proteins)
  
- III. Bacterial Initiation
  - a. Consensus Sequences
  - b. Promoters
  - c. Promoter recognition (sigma factor)
  
- IV. Bacterial Elongation
  
- V. Bacterial Termination
  - a. Rho independent termination
  - b. Rho dependent termination
  
- VI. Eukaryotic Initiation
  - a. Promoters and Enhancers
  - b. RNA Pol I, II, III
  - c. Basal transcription Apparatus
  
- VII. Eukaryotic Termination
- VIII. Summary: Bacterial vs. Eukaryotic Transcription