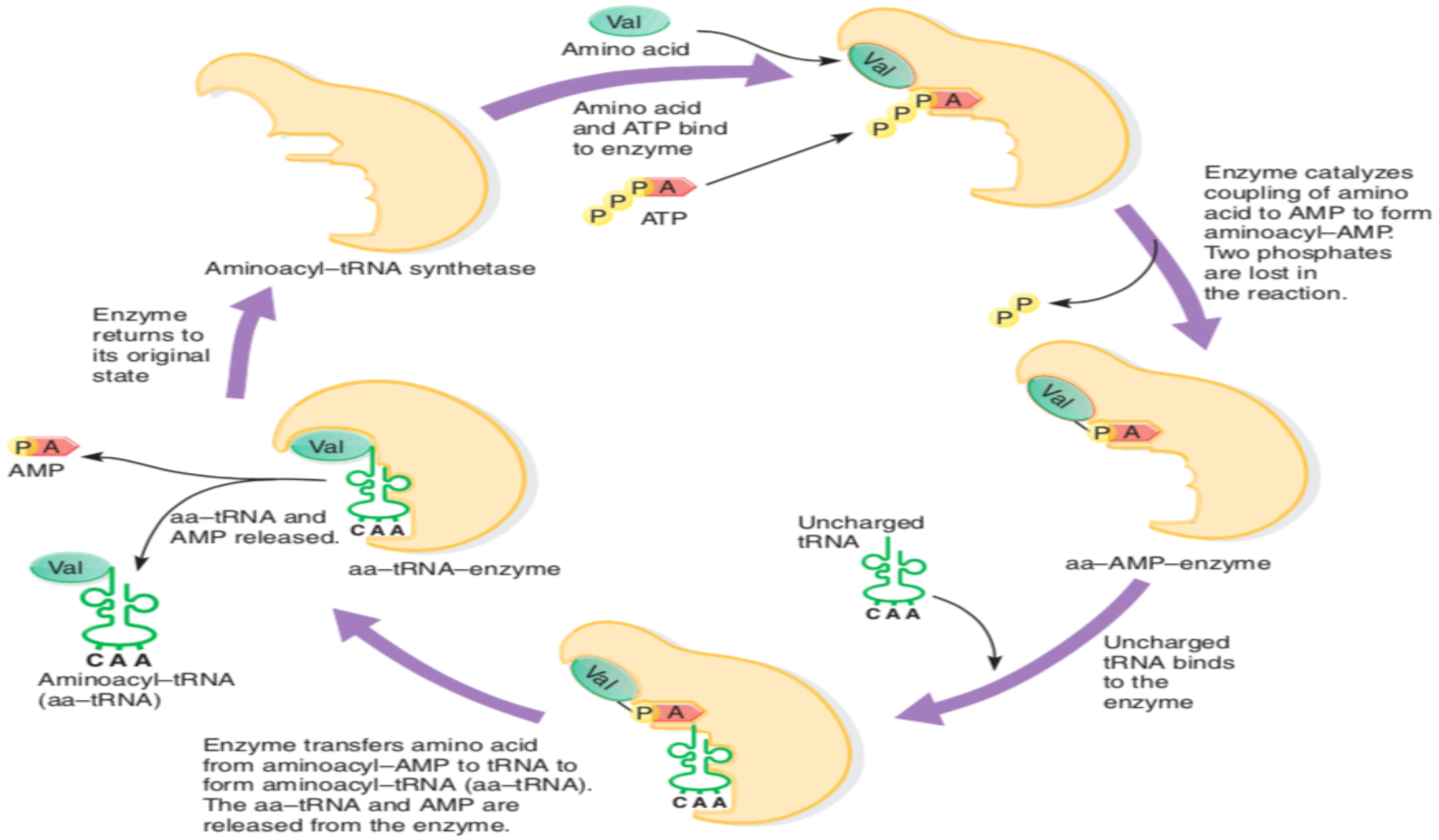


Describe Three Stage of Protein Synthesis

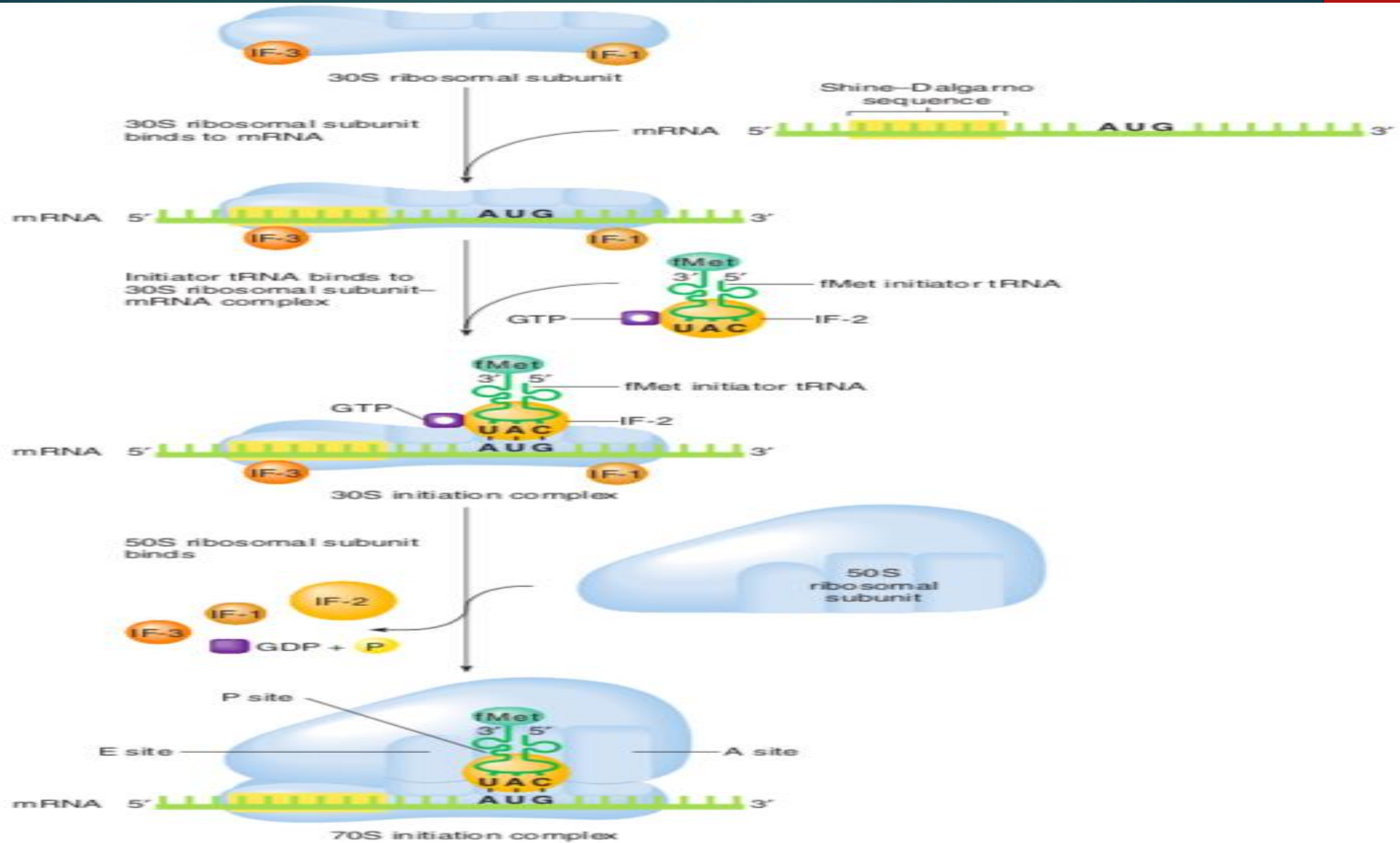
BY: ABDELMALEK ELHASHANI

NO: 1609

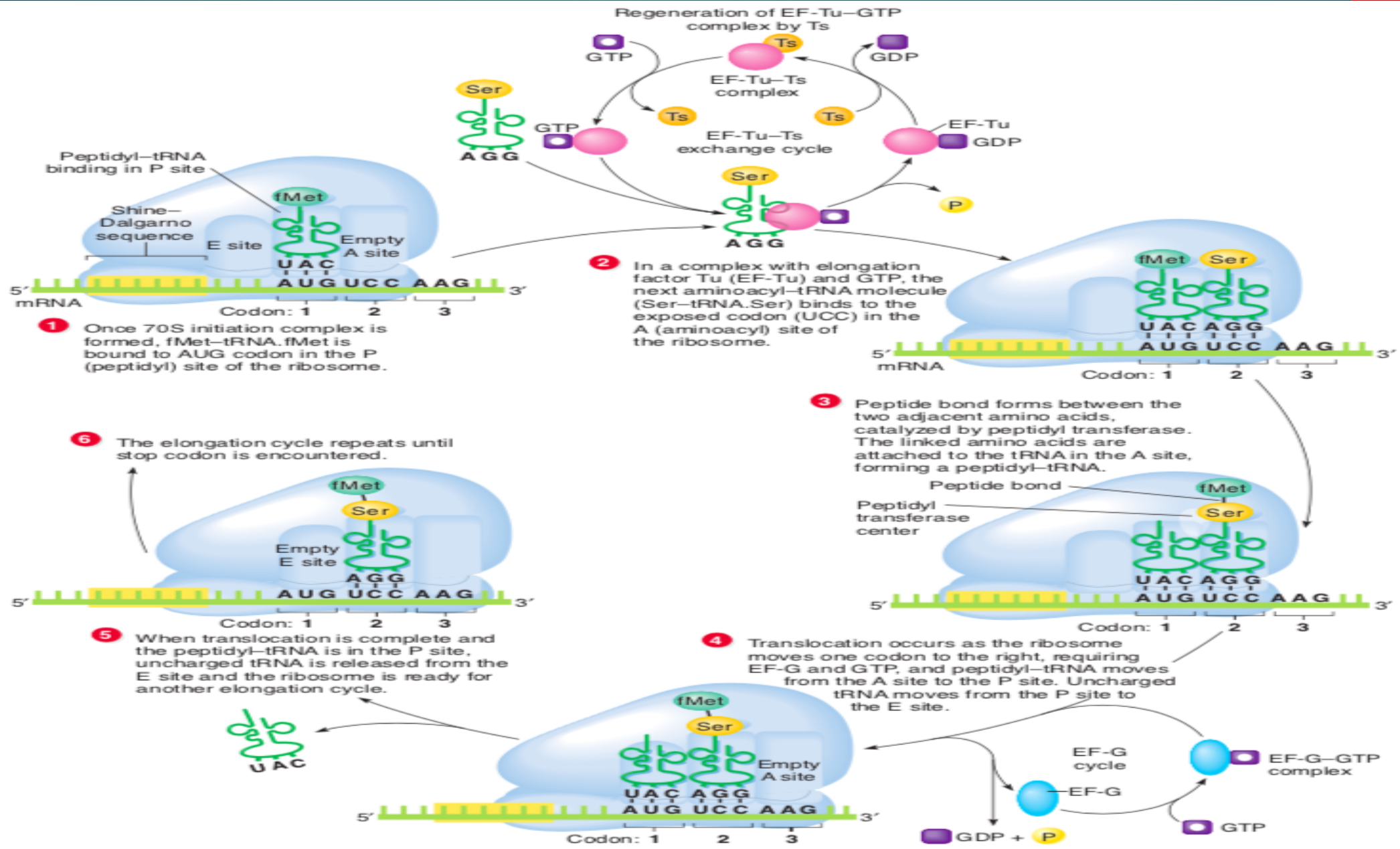
2nd Year



Initiation of protein synthesis in bacteria.

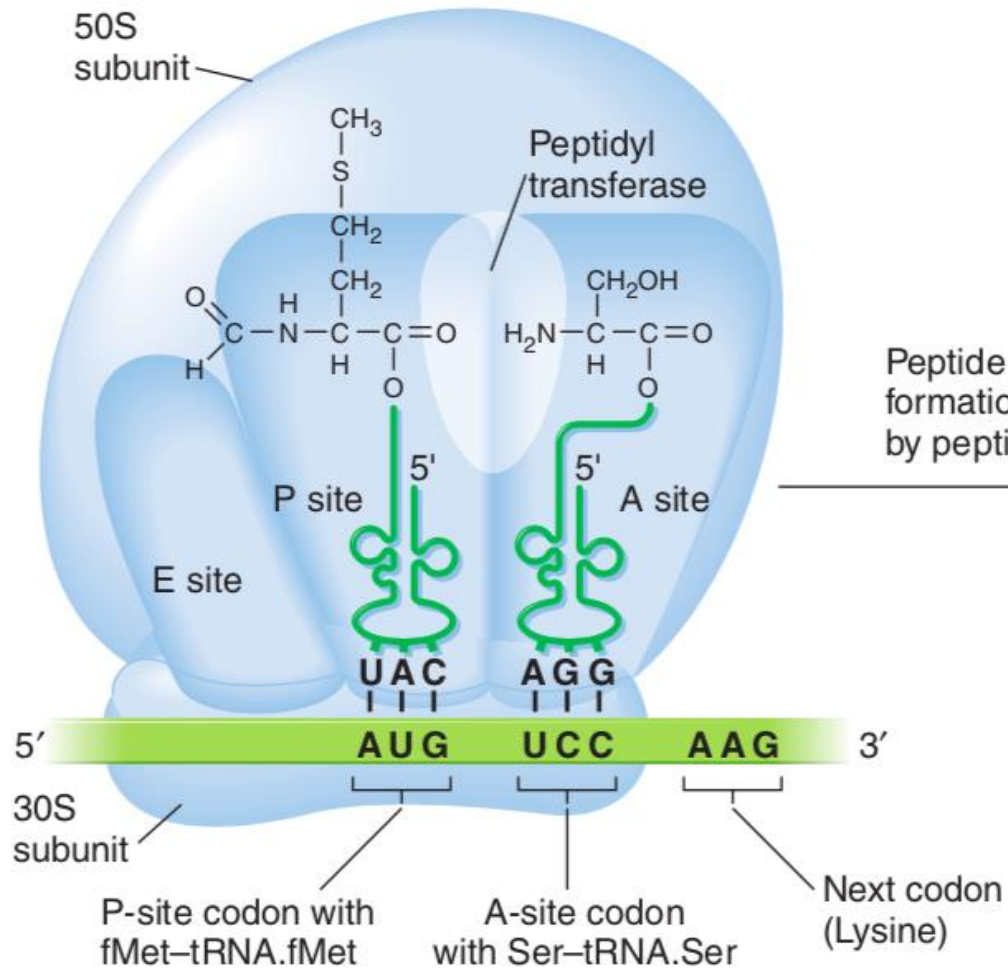


Elongation stage of translation in bacteria

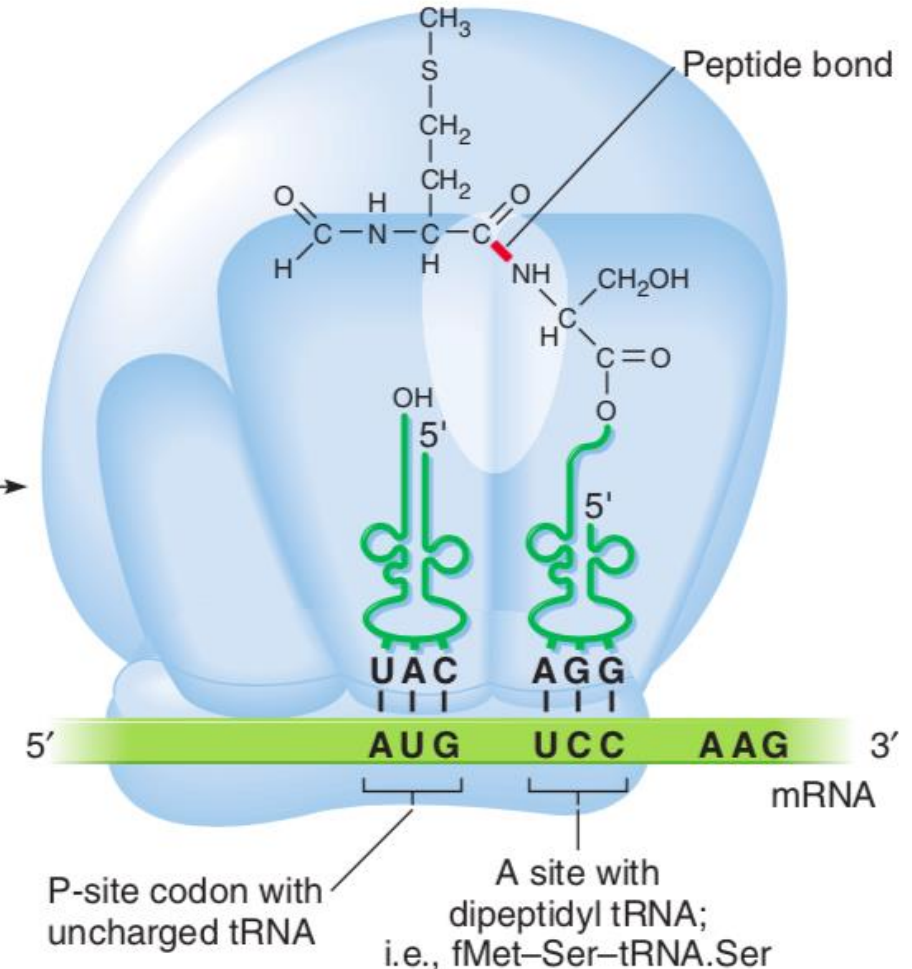


The formation of a peptide bond between the first two amino acids (fMet and Ser) of a polypeptide chain is catalyzed on the ribosome by peptidyl transferase.

a) Adjacent aminoacyl-tRNAs bound to the mRNA at the ribosome



b) Following peptide bond formation, an uncharged tRNA is in the P site, and a tRNA with two amino acids attached is in the A site



Termination of Translation

5 ribosomes reading same RNA sequentially

Growing polypeptide chains

Complete polypeptide

(Initiator codon)

AUG

5'

UAG

3' mRNA

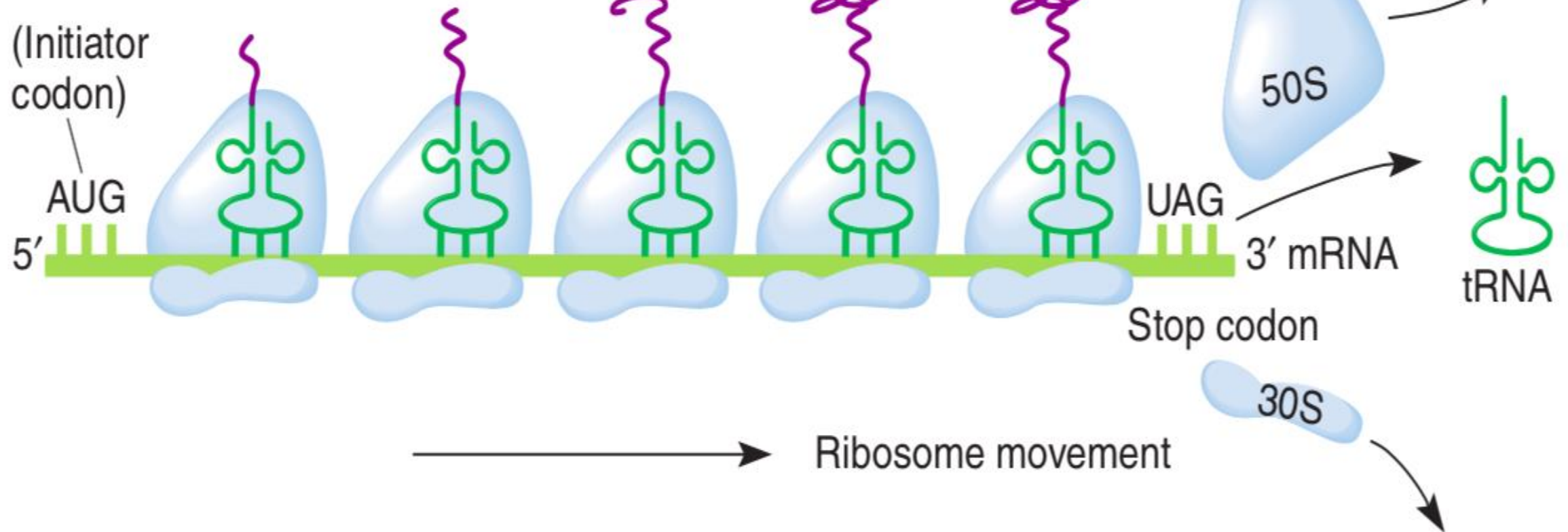
Stop codon

30S

50S

tRNA

Ribosome movement



THANK YOU