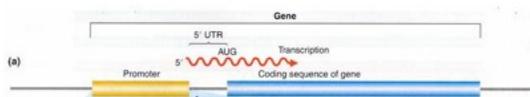
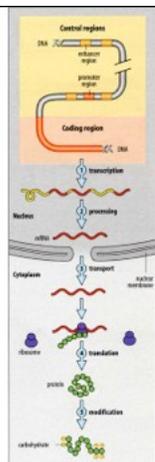


Developmental Biology

Signaling & Gene Regulation

Modern developmental biology is the study of **differential patterns of gene expression** and their effects on cells, tissues, organs, and organisms.

The gene



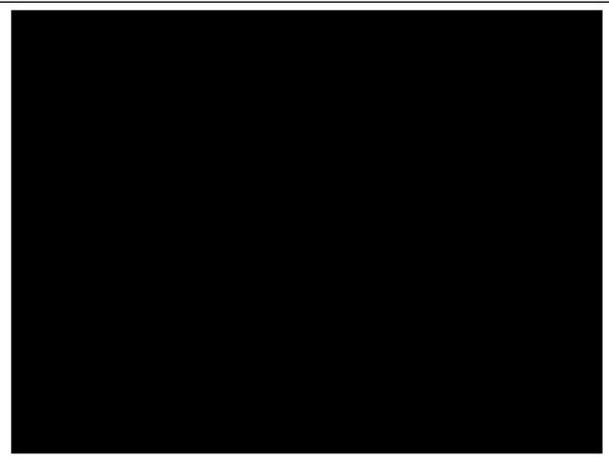
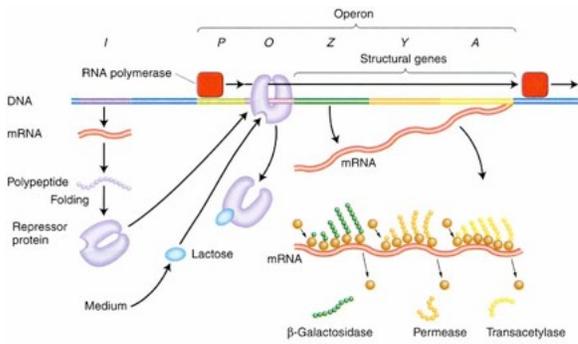
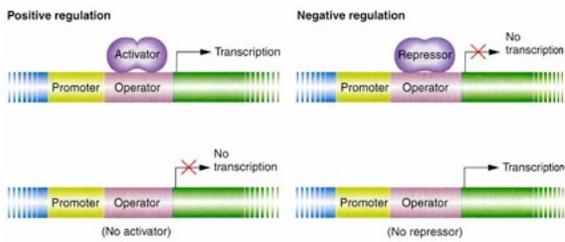
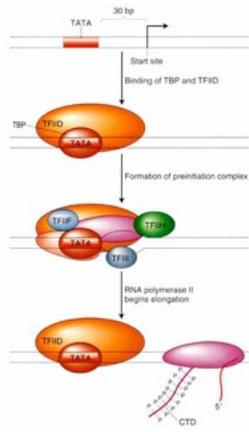
(b) Strong *E. coli* promoters

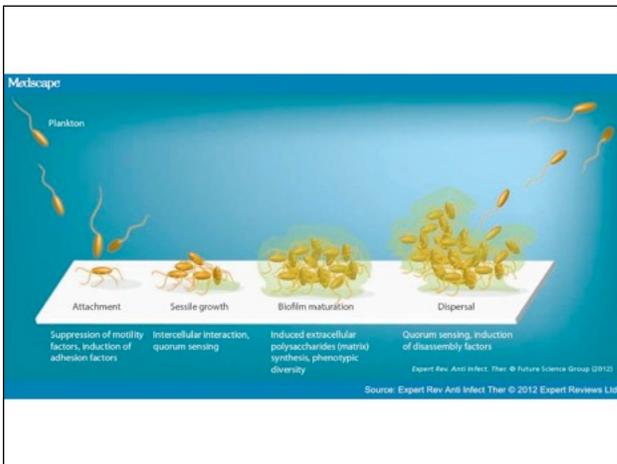
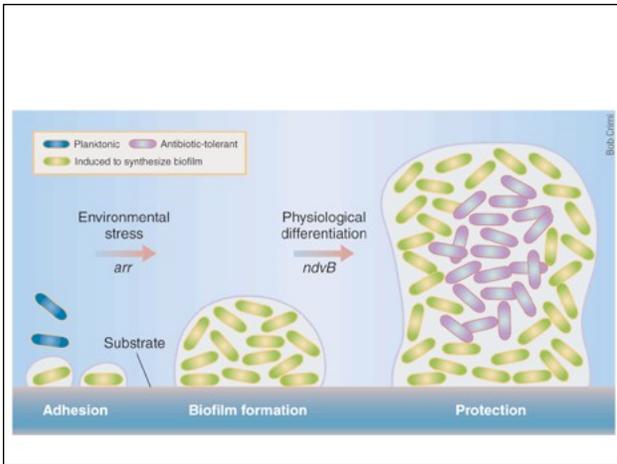
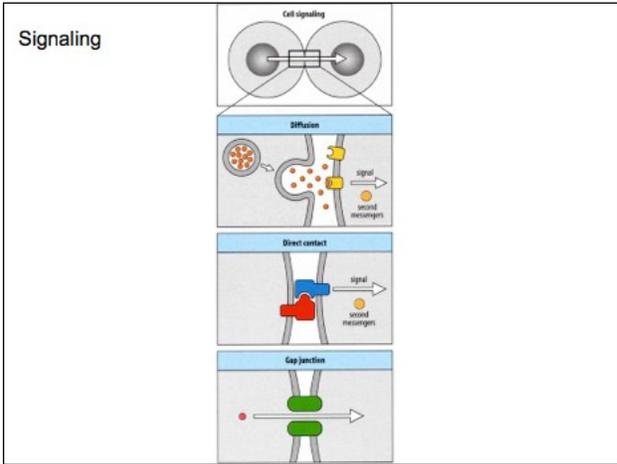
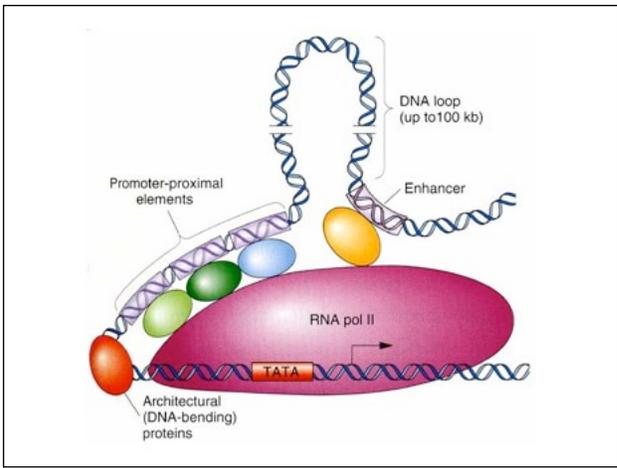
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    tyr mRNA  TCTCAACGTAACACTTACAGCGGGG••CGTCATTGATATGATGC•GCCCCCTTCCCGATAAGGG
    rim D1    GATCAAAAAAATACTTGTGCAAAAAA••TTGGATCCCTATAATGGGCTCCBTGGAGACGACAAACG
    rim X1    ATGCATTTTCCGGCTTGTCTCCTGA••GCCGACTCCCTATAATGGGCTCCBTGCACACGGCGGAT
    rim (DKE) CCTGAAATTCAGGGTTGACTCTGAAA••GAGGAAAGCGTAAATAC•GCCACCTCCGACAGTGAAG
    rim E1    CTGCATTTTTCTATGGGGCTTCGG••GAGAACTCCCTATAATGGGCTCCBTGGACACGGGGAT
    rim A1    TTTTAAATTCCTCTGTCAGGCGGG••AATACTCCCTATAATGGGCCACCACTGACACGGAACAA
    rim A2    GCAAAAAATAAGCTTGACTCTGTAG••CGGGAAGGGTATATGC•ACACCCCGCGCCCTGAGAA
  
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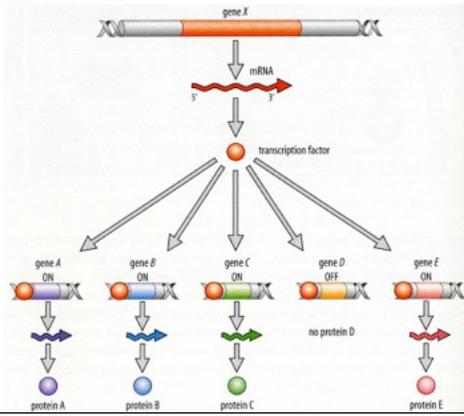
Consensus sequences for most *E. coli* promoters

TTGACAT	15-17 bp	TATAAT
-35		-10

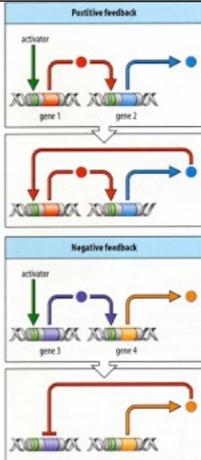




Transcription factors



Feedback



Choanoflagellate
(*Monosiga brevicollis*)

