

BACTERIA

GENERAL CONCEPTS

SHAPE & ARRANGEMENT

BACILLI

COCCI

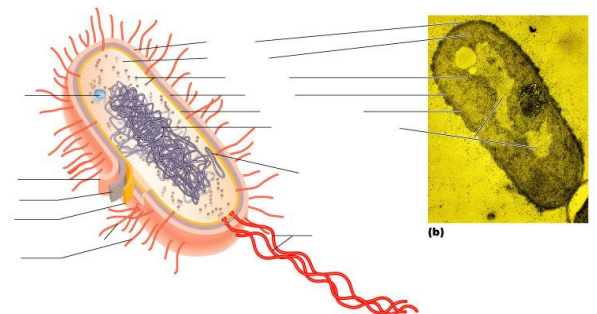
SPIRALS

PLEOMORPHIC

STRUCTURE

GLYCOCALYX

THE CAPSULE



FLAGELLA
STRUCTURE

FUNCTION

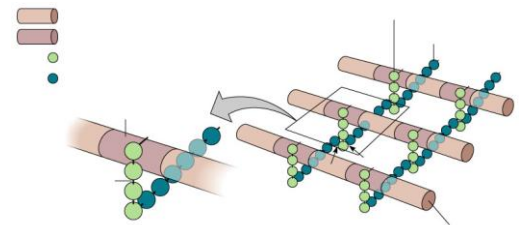
PILI / PILUS
STRUCTURE

FUNCTION

FIMBRAE
STRUCTURE

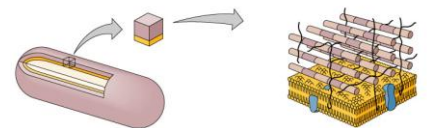
FUNCTION

CELL WALL
BASIC STRUCTURE – PEPTIDOGLYCAN



(a)
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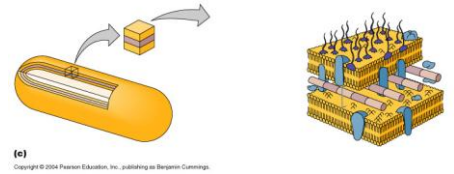
GRAM POSITIVE CELL WALL STRUCTURE



(b)
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GRAM-NEGATIVE CELL WALL STRUCTURE

CELL MEMBRANE STRUCTURE



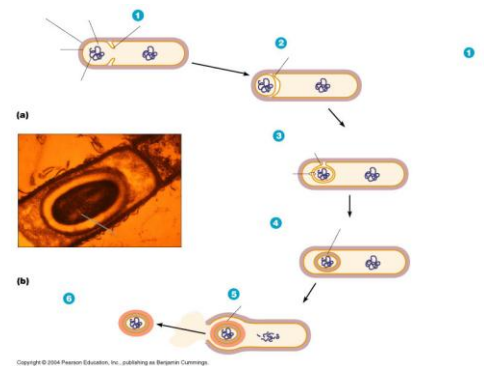
FUNCTION

CYTOPLASM

CHROMOSOME & NUCEOID

PLASMID

RIBOSOMES



ENDOSPORES

IN ADDITION TO THE OUTLINE AND PICTURES HERE, LOOK FOR AUDIO PODCASTS OVERVIEWING BACTERIA ("BACTERIA"), TALKING ABOUT BENEFICIAL BACTERIA ("PROBIOTICS"), AND ANCIENT BACTERIA ("STROMATOLITES") ON MY WEB SITE AT

<http://webhome.broward.edu/~sobenauf/mcb2013/podcasts/podcasts%20audio.html>

BACTERIAL GROUPS

CLASSIFICATION CRITERIA

DOMAIN BACTERIA / EUBACTERIA

GRAM-POSITIVE COCCI
STAPHYLOCOCCUS

STREPTOCOCCUS

GRAM-POSITIVE RODS
SPORE-FORMING
BACILLUS

CLOSTRIDIUM

NON SPORE-FORMING
LACTOBACILLUS

MYCOBACTERIUM

GRAM-NEGATIVE RODS
PSEUDOMONADS

ENTEROBACTERIALES

MYCOPLASMAS

CYANOBACTERIA
CHARACTERISTICS

ENVIRONMENTAL IMPORTANCE

ACTINOMYCETES
CHARACTERISTICS

IMPORTANCE

DOMAIN ARCHAEA

WANT TO SEE SOME VIDEO OF THE INCREDIBLE ABILITY OF BACTERIA TO LIVE IN HOSTILE ENVIRONMENTS?
LOOK FOR A SHORT VIDEO PODCAST ("HOT WATER ECOSYSTEMS") ON MY WEB SITE AT
<http://podcast.broward.edu/~sobenauf/0014a%20Hot%20Water%20Ecosystem.m4v>
