Pathogenic (pyogenic) cocci

**Genera:**
- *Staphylococcus*
- *Streptococcus* (streptococci)
- *Neisseria*

Pathogenic cocci:
*Staphylococcus* spp.
- *S. epidermidis*
  - skin
- *S. aureus*
  - skin
  - nasal membranes
  - GI, GU tracts

Some diseases caused by *Staph*
- *S. aureus*
  - toxin-mediated (food poisoning, TSS)
  - cutaneous
  - other
- *S. epidermidis*
  - opportunistic infections
Pathogenic cocci: streptococci

- *S. pyogenes*
- *S. pneumoniae*
- *Enterococcus faecalis*
Blood agar

Lancefield system of classification
- further classification of (β-hemolytic) Strep
- based on carbohydrates in their cell walls
- Groups A-R studied
- Groups A-G normally infect people

Pathogenic cocci: Neisseria
Pathogenic cocci: *Neisseria*

Phenyl Ethanol Agar (PEA)
Mannitol salt agar

Catalase Test

Oxidase Test
Bile Esulin Test

- to ID Group D

esculin (a bile salt) 

esculetin + dextrose 

combines with iron salts in agar 

black/brown color

Coagulase Test

S. aureus

S. epidermidis