

# Gram Negative Bacteria

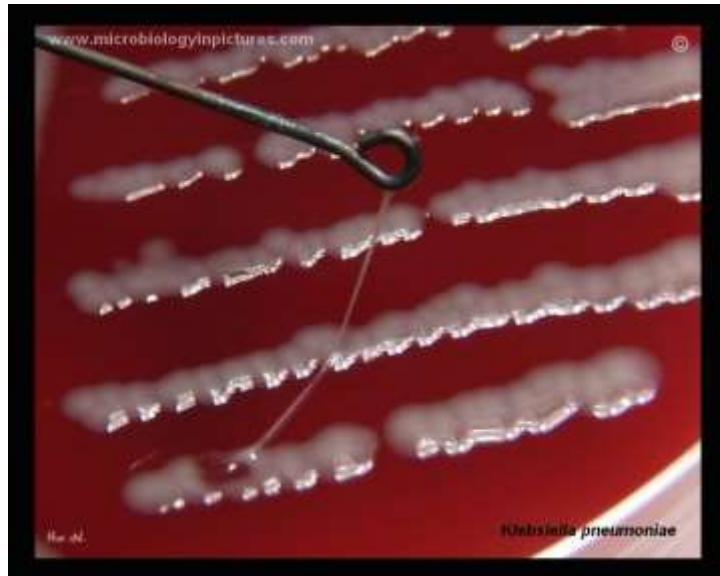


# 1. Escherichia coli (E.coli)



## 2. Klebsiella

- Large ***mucoid*** poly saccharide capsule .



### 3. Enterobacter



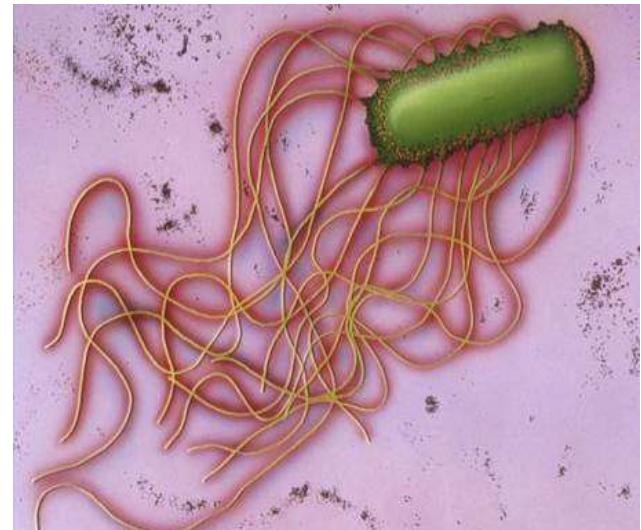
# 4. Citrobacter



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# Proteus

- Gram negative rods, non lactose fermenter
- Swarming motility ( flagellated )
- Prevent swarming by culturing it on CLED or MacConkey media

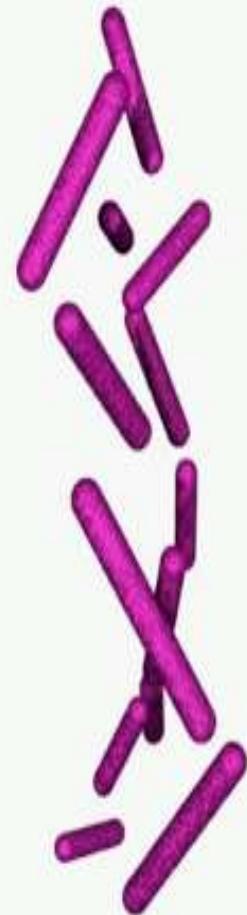


# *Pseudomonas aeruginosa*

Identified by :

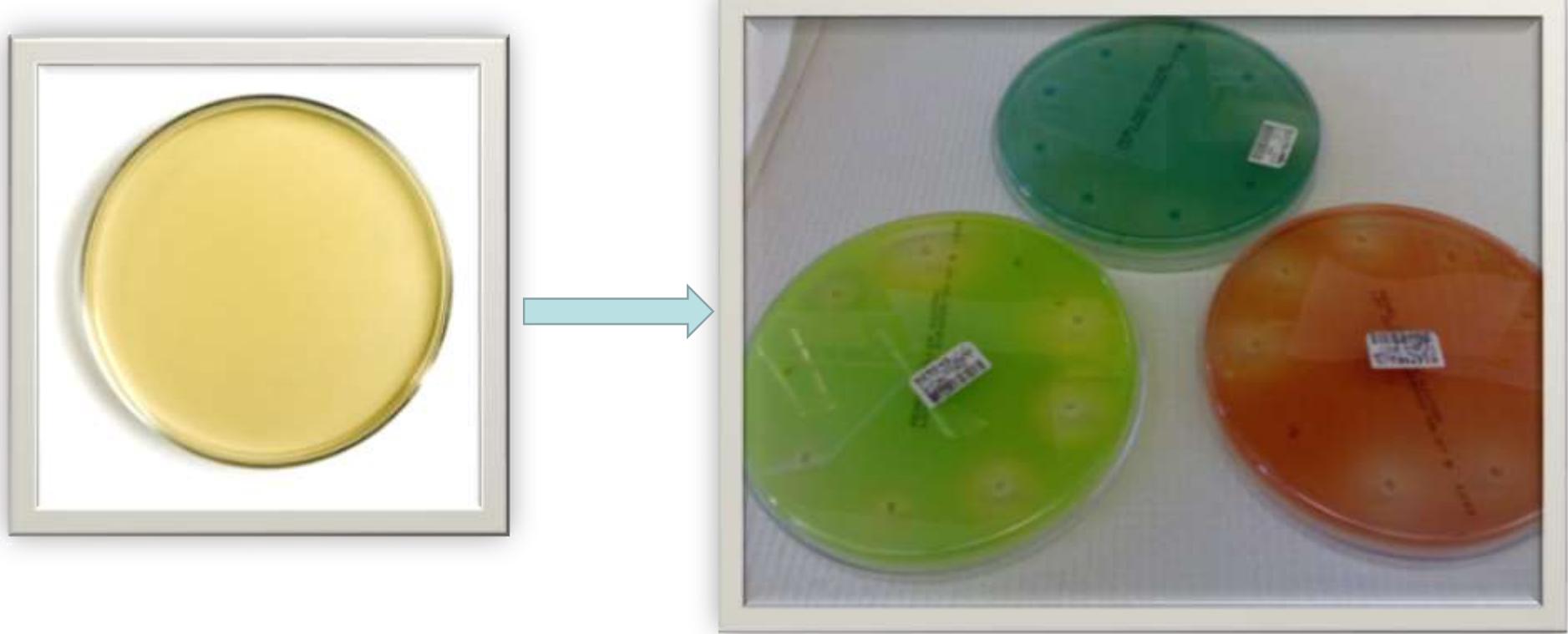
- **Gram negative rod.**
- **odor** : grape-like smell.
- Oxidase positive.
- Produce different pigments colors:

- **Pyocyanine (blue-green)**
- **Pyoverdin (fluorescent yellow –greenish pigment).**
- **Pyorubrin (red).**
- **Pyomelanin (brown).**



*Pseudomonas aeruginosa*

# *Pseudomonas aeruginosa* on mueller hintion agar





**Thank you  
Any Question ??**