

# From Gene to Protein



**Mohamed N. Seleem**



# What is new ?

- Number
- Cell phones
- Practice
- Lectures vs lab



# Aims

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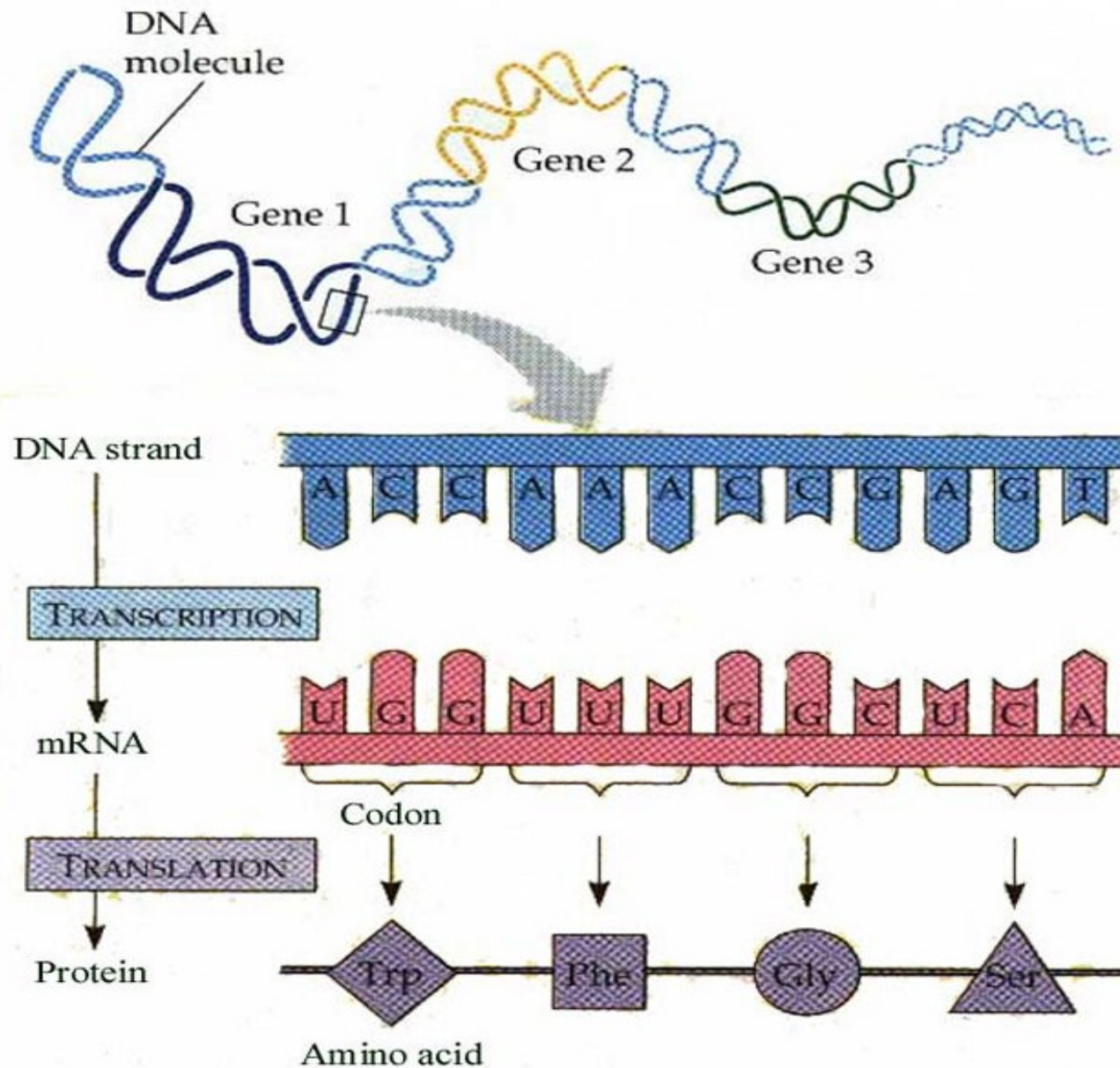
From Gene to protein  
(Gene Cloning and Expression)

105 new definition in molecular biology

# Rules worth applying to all molecular experiments

- Think through from beginning till the end of the experiment
- Know the experiment's level of forgiveness
- Get your sample as pure as possible
- If you had to choose, be gentle rather than rough
- Think carefully about how much stuff you actually need
- Do it right so you don't have to do it again

# Gene Expression

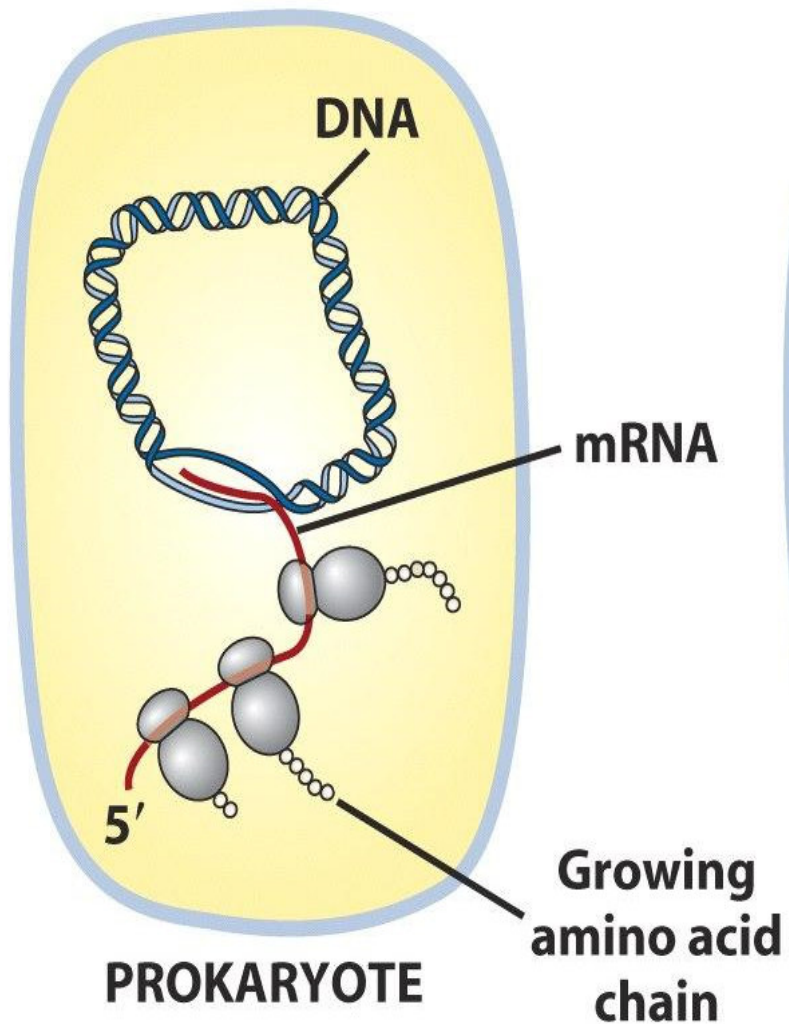


Structure

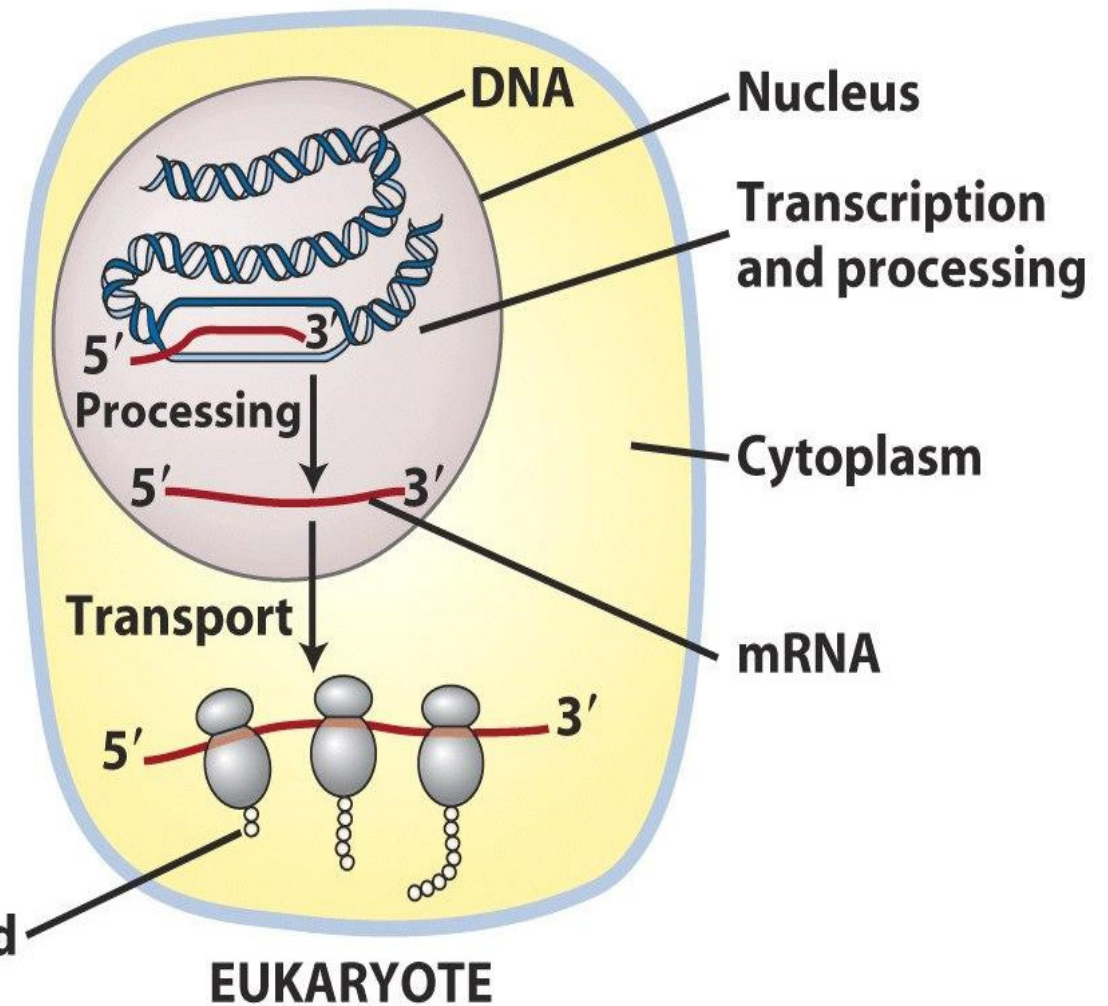
Function

# Basic knowledge

(a)

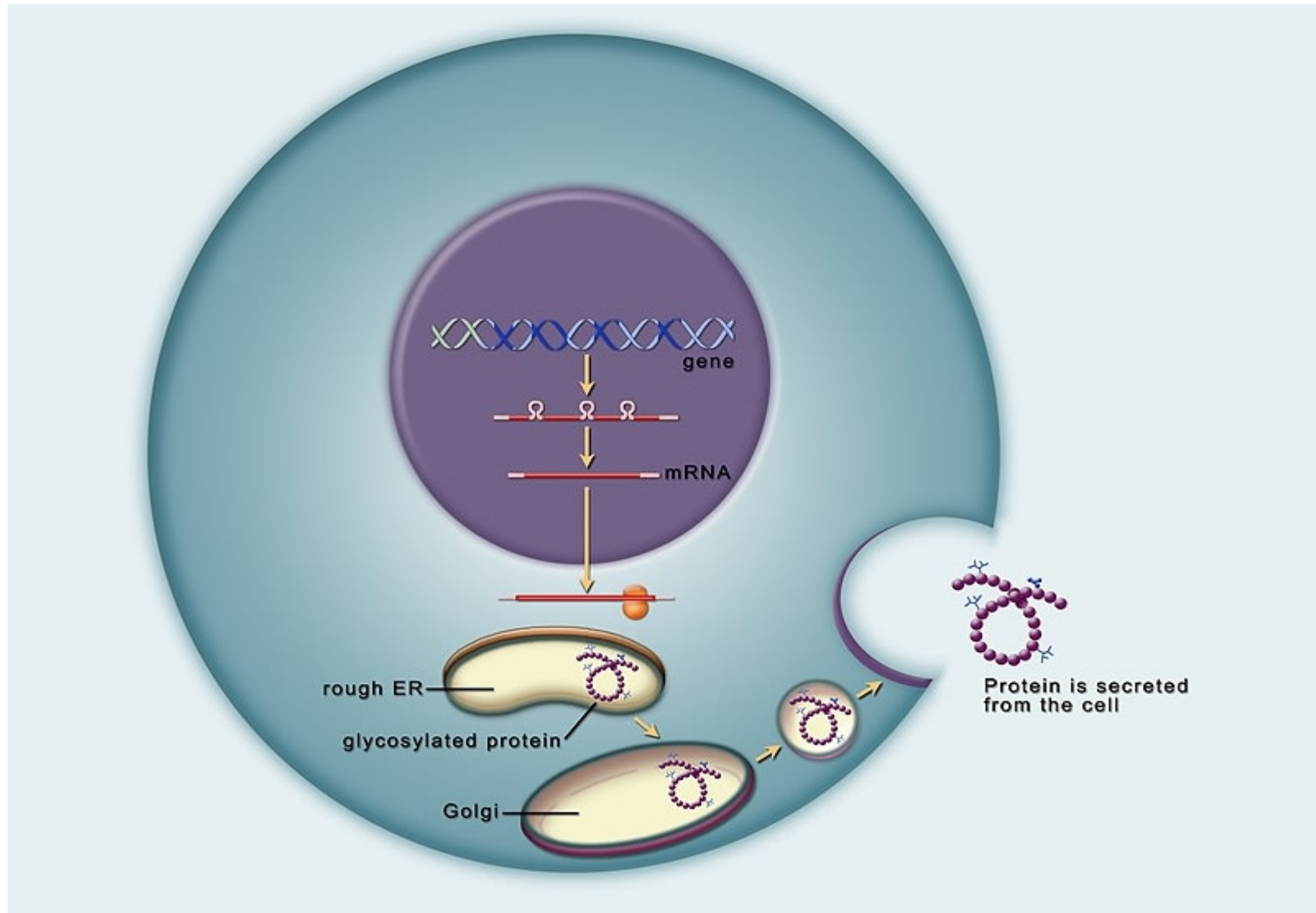


(b)

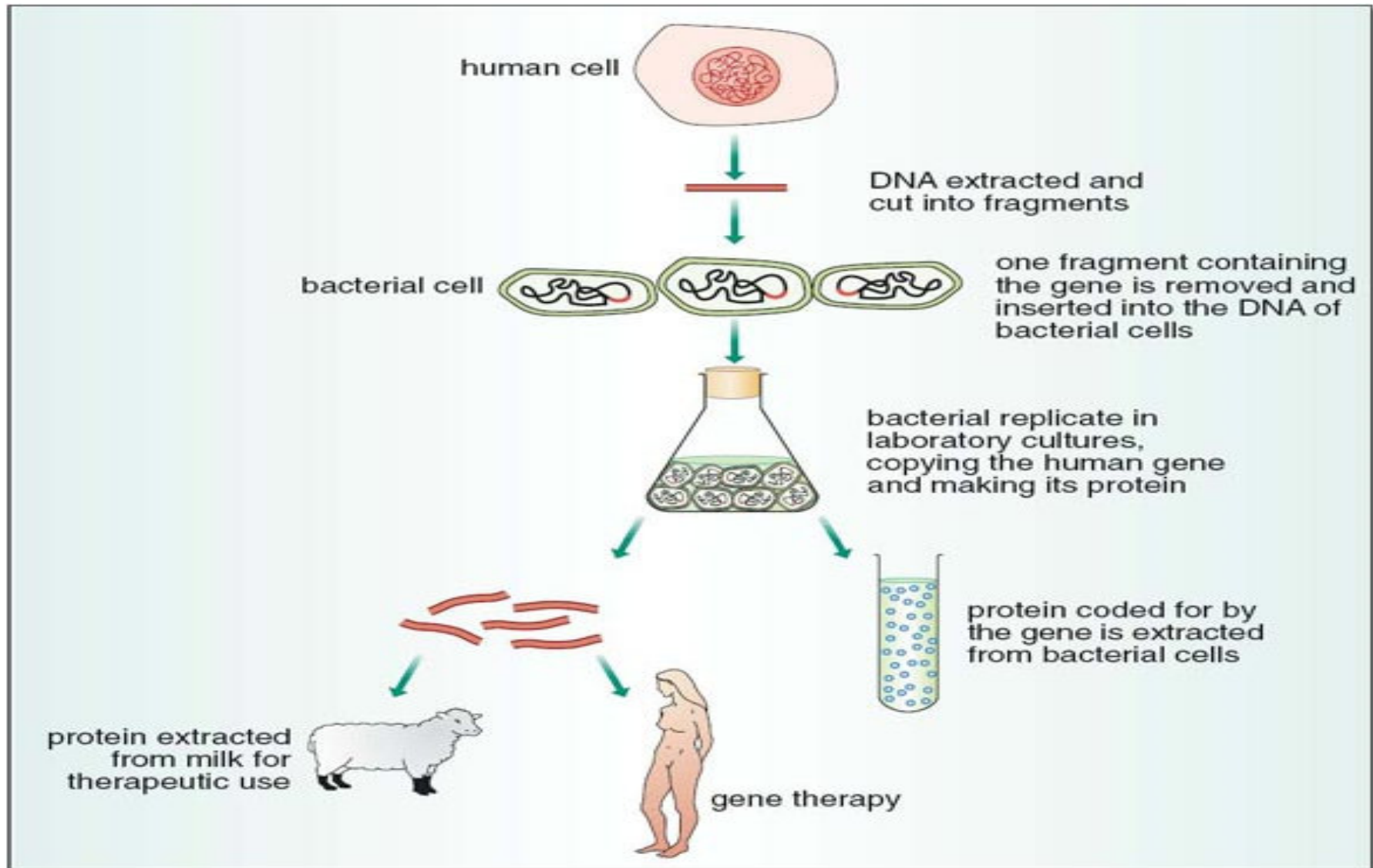




# Eukaryotic gene expression



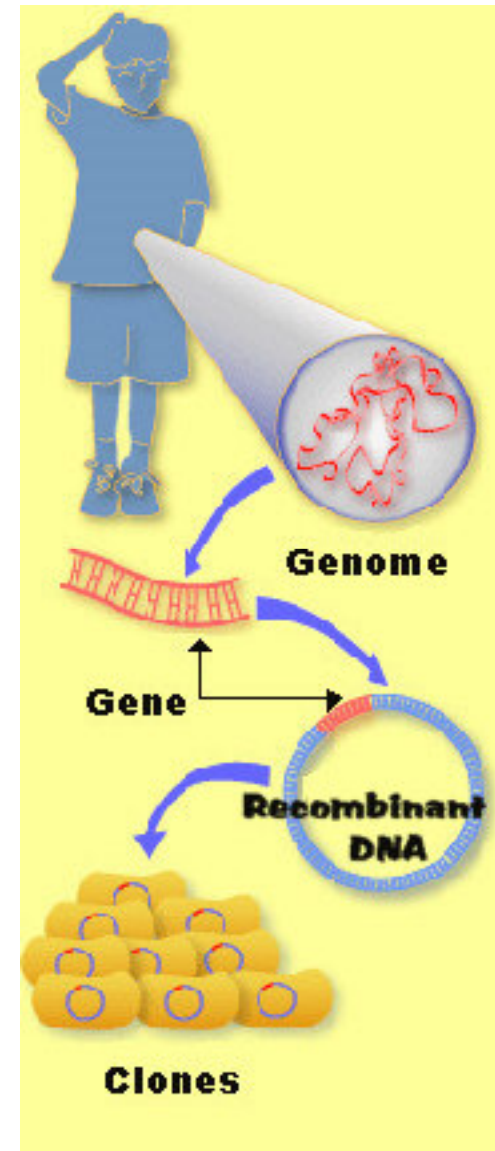
# Cloning and expressing gene of interest





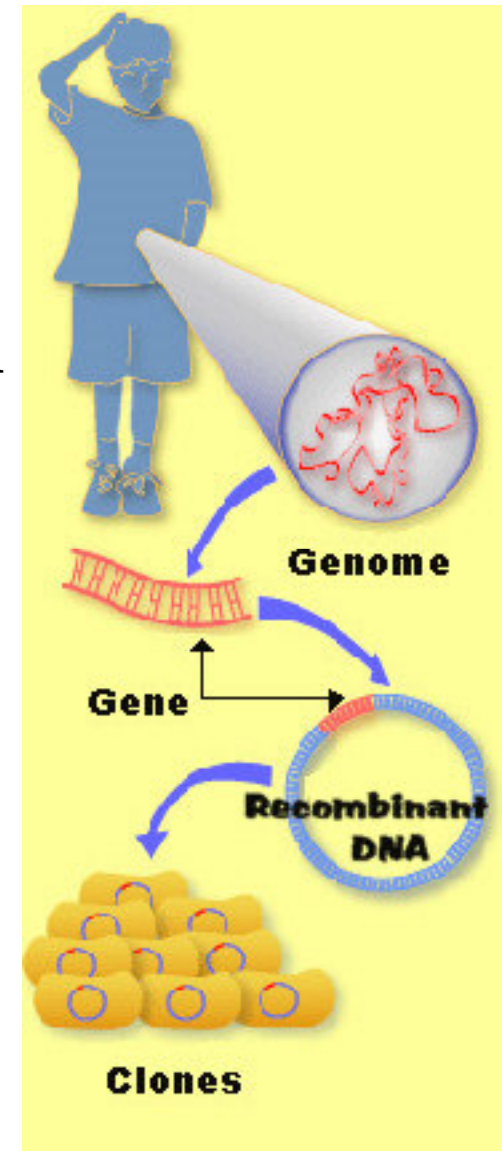
# Why Bacterial host?

- Easy
- Fast
- Efficient
- Cheap
- Controllable



# Why Not?

- Posttranslational modification
- Folding
- Signal sequence
- Toxic proteins
- Large proteins



# Questions!!!

