



# Welcome to our presentation

## Great Mates

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# Finding Gene in DNA

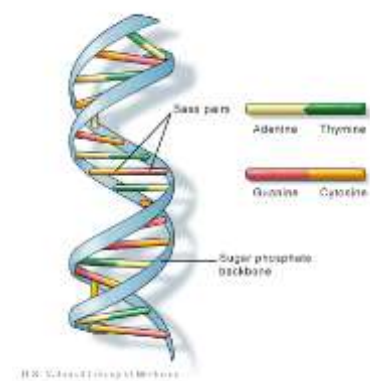
Subject: Introduction to Bio-informatics

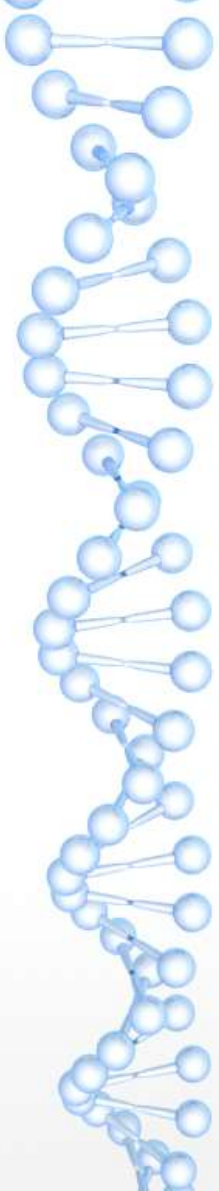


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# What is DNA

- 1) DNA stands for Deoxyribonucleic Acid
- 2) It is the very large molecule made up of similar units called nucleotides. Each nucleotides has three parts i-e  
a Ribose super, phosphate group and nitrogenous bases.
- 3) The nitrogenous bases carry the genetics informations. The nitrogenous bases are the Adinine, Tymine, Cytosine and guanine





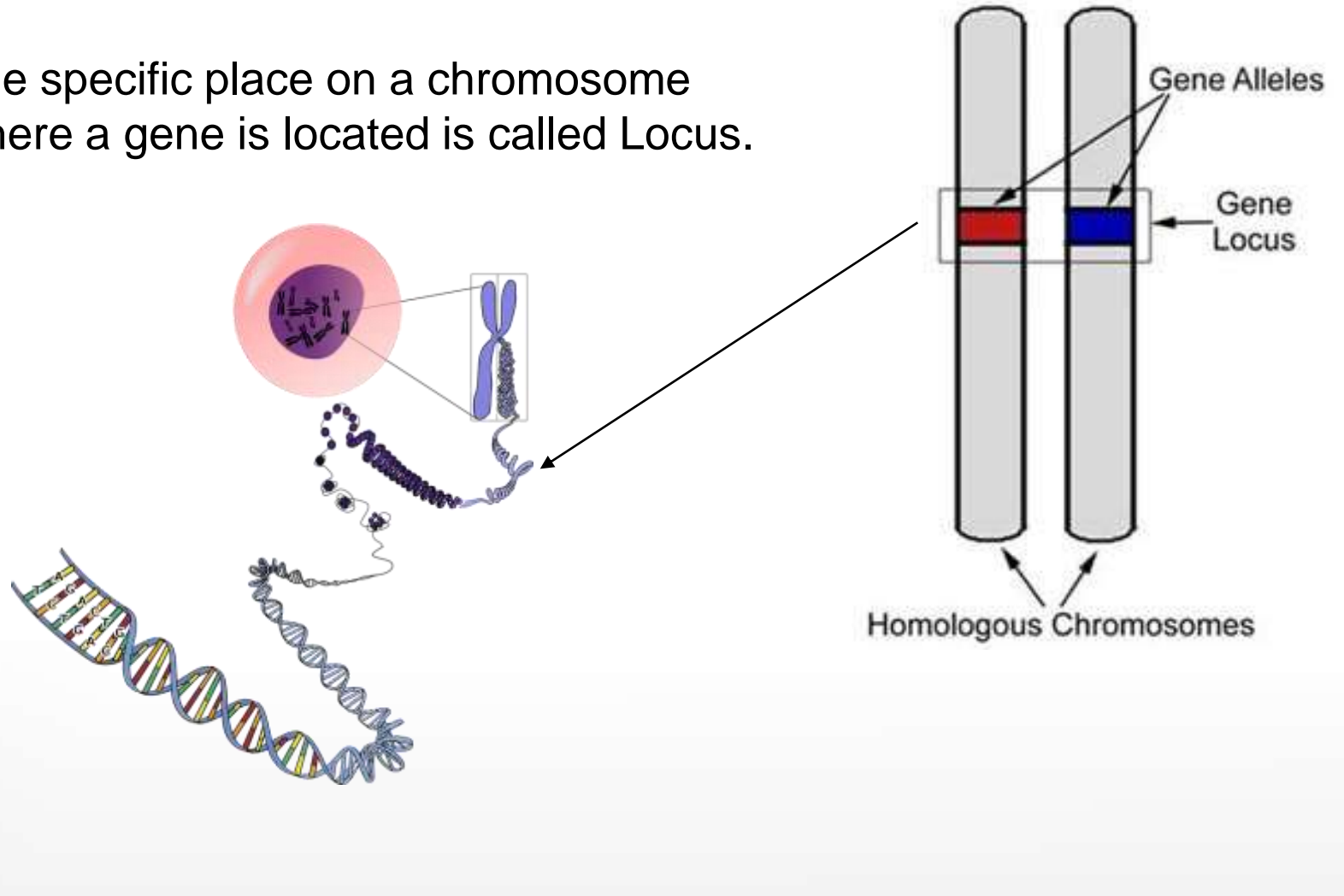
# What is Gene

- ☐ Gene is the sequence of DNA that code for a functional Protein is called gene.

OR

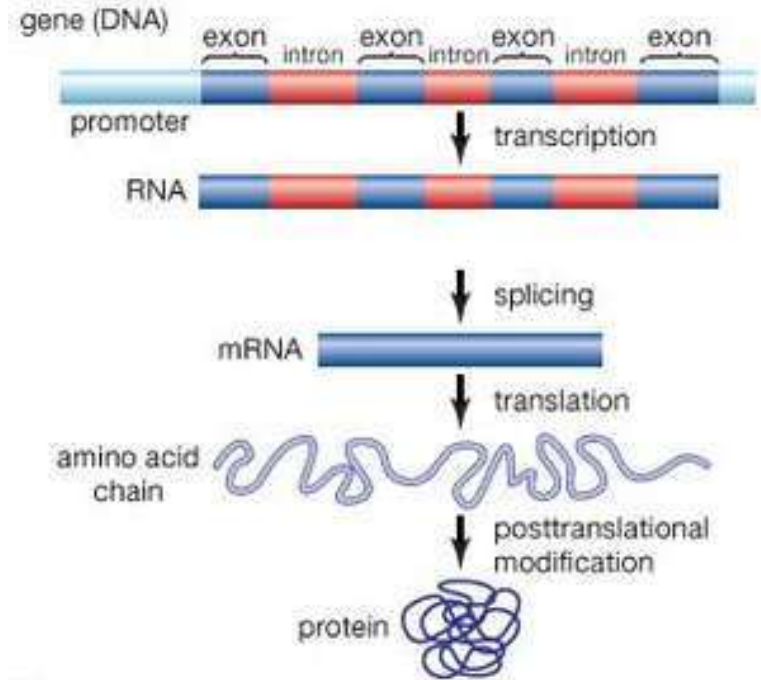
- ☐ A gene is the basic physical and functional unit of heredity. Genes, which are made up of DNA, act as instructions to make molecules called proteins.

The specific place on a chromosome where a gene is located is called Locus.

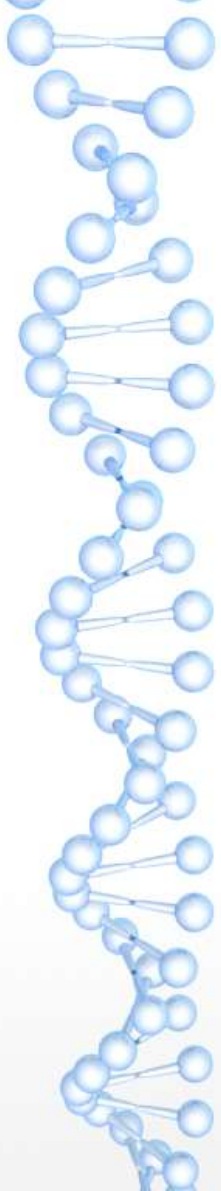


# Structure Of Gene

- ☐ 5' prime UTR
- ☐ Promoters
- ☐ Enhancers
- ☐ Exons
- ☐ Introns
- ☐ 3 Prime UTR



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- Promoters:

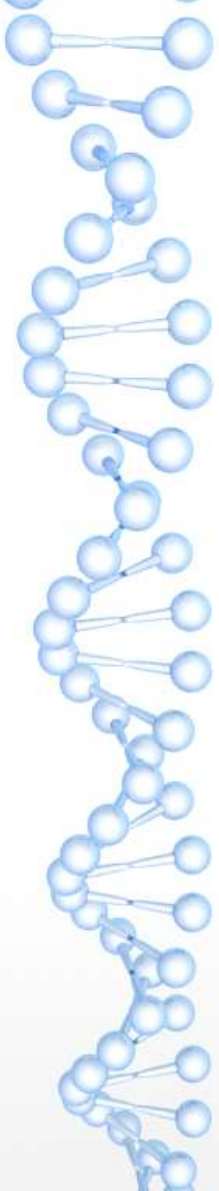
Promoter is a region of DNA that initiates transcription of a particular gene. Promoters are located near the transcription start sites of genes (towards the 5' region of the sense strand).

- Enhancer

A DNA sequence element to which transcriptional factors bind. Binding of transcriptional factors increases gene transcription

- Exon – the protein coding sequence

- Intron – the non coding sequence



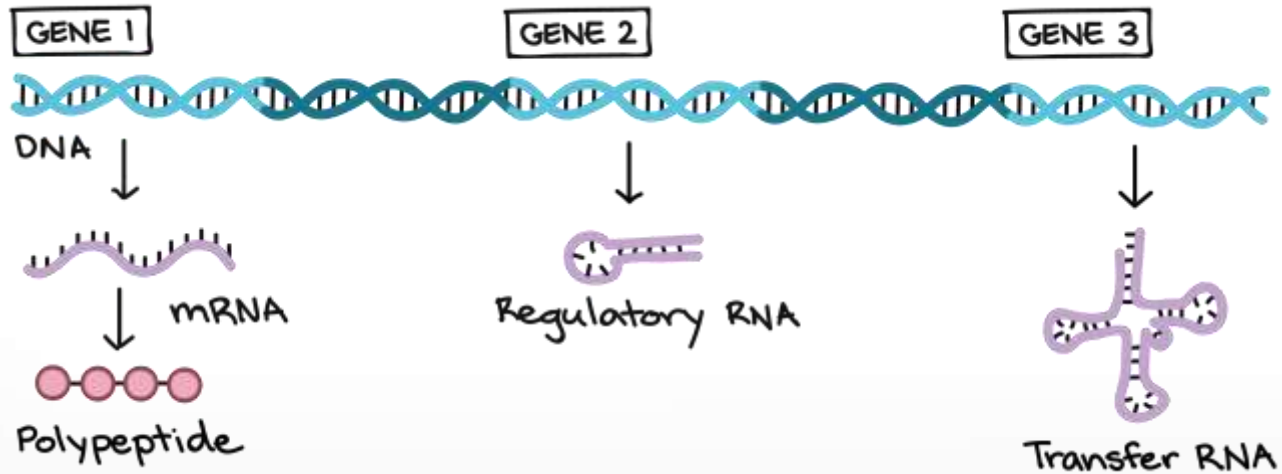
## **Why we find the Gene in DNA.....**

- ☐ We find gene in the DNA for many purposes but in most commonly we used to find the gene for the Researches and in diseases condition.
- ☐ In the diseases condition we find the mutation to on the gene know the cause of the disease and to find the treatment for that disease



## How to Find GENE in DNA and with What Protocols...

- To find the gene in the DNA we can use the some specific type of data bases to help us in the finding of gene its mutation ,publication SNPs ,variants types etc.





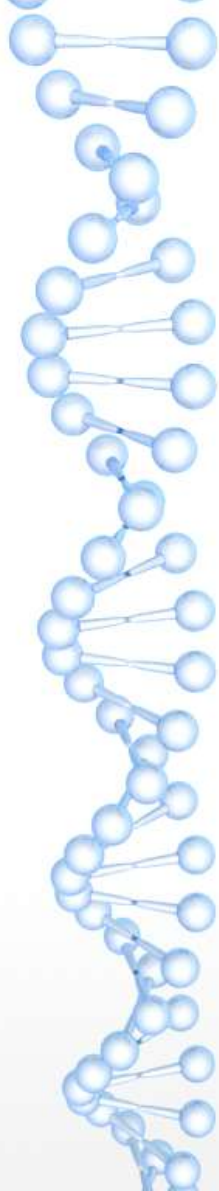
## How to find gene in NCBI.....

- ☐ To know the use of NCBI data base we should to follow the following points.
- ☐ If we are finding the gene in NCBI we will open the ncbi in the google.
- ☐ After that we will get the main page of the NCBI we will select the gene in the TAB.
- ☐ After the selection of the gene we will put the any gene name in the searching scroll bar and search for that gene.



## How to find gene in NCBI.....

- ☐ The another page will be open on the selected page will there will be the same gene will be present but in the different organism
- ☐ We will select the homo sapiens gene. so the next page will be open on the selected page there will be the complete data analysis will be present about that gene which we have search to find....
- ☐ Then it defend on us that what we want to know about the gene we can know them by using the different the tabs and different options.



*Thank  
You*

