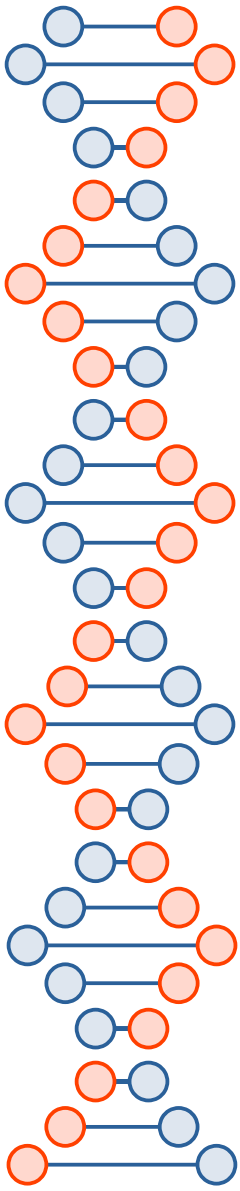
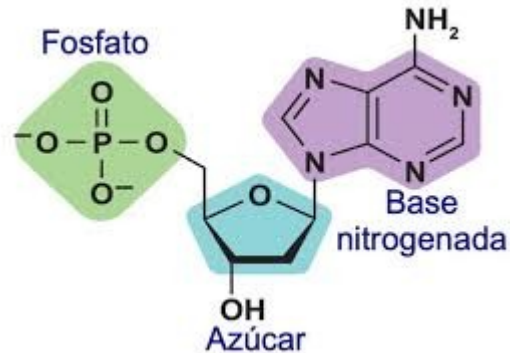


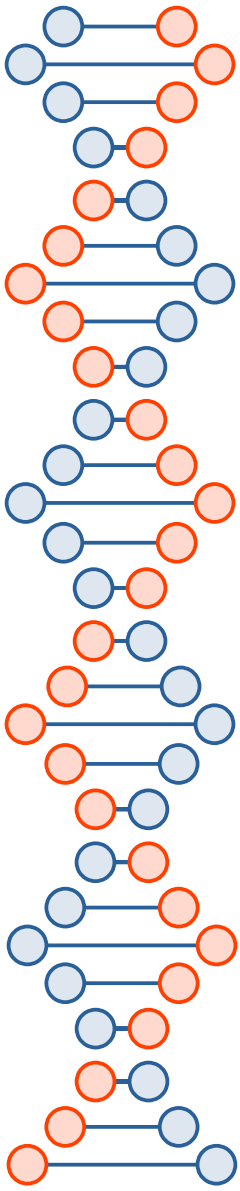
Biología molecular



Ácidos nucleicos

- Monómero: nucleótido





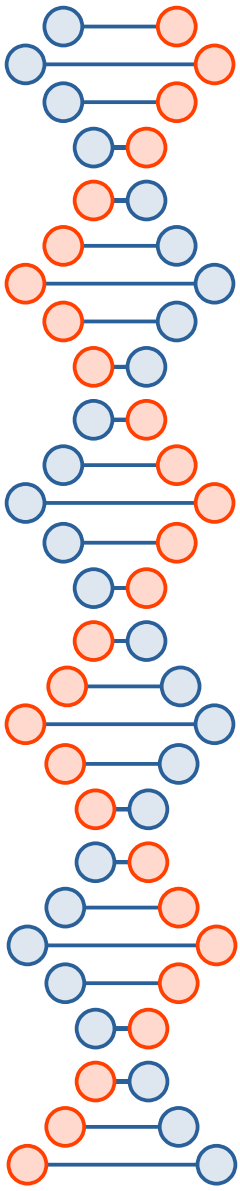
Comparación

- ADN:

- Dúas fías
- Desoxirribosa
- Timina
- Núcleo
- Garda a herdanza

- ARN:

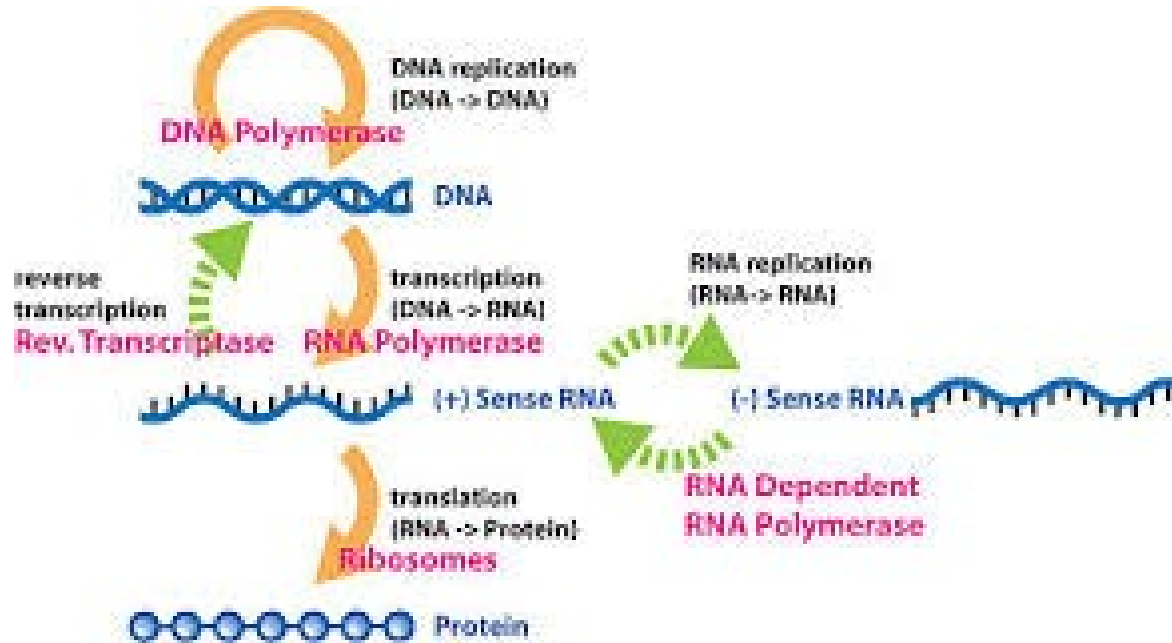
- Unha fía
- Ribosa
- Uracilo
- Núcleo e citoplasma
- Síntese de proteínas



Tipos de ARN

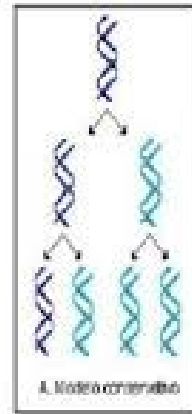
- ARN ribosómico.- Forma parte dos ribosomas xunto con proteínas.
- ARN transferente.- Vincula un triplete cun aminoácido. Código xenético.
- ARN mensaxeiro.- Copia o xene do ADN e lévao ao citoplasma para que os ribosomas fagan o seu traballo

Dogma da biologia

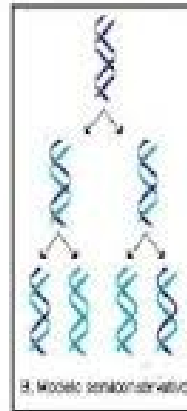


Duplicación, replicación do ADN

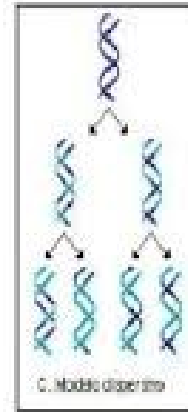
- Como?



**Modelo
conservativo**

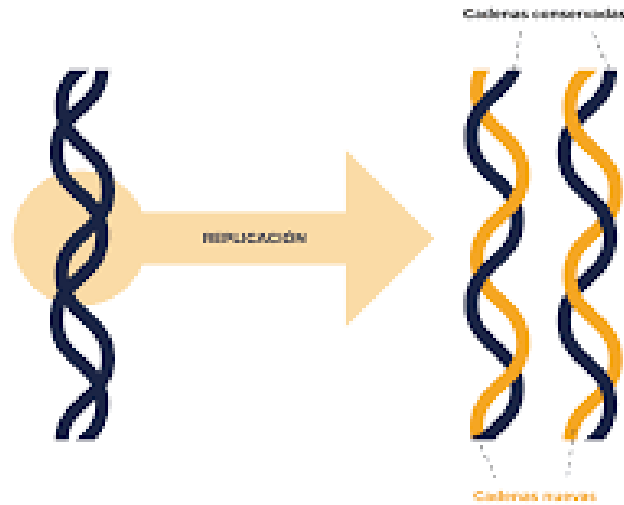


**Modelo
semiconservativo**

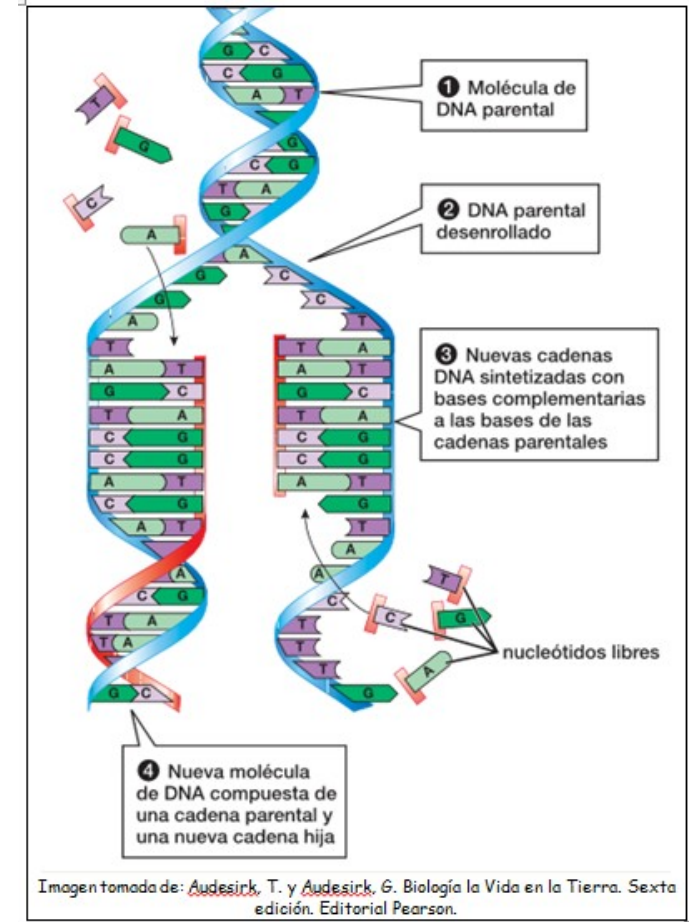
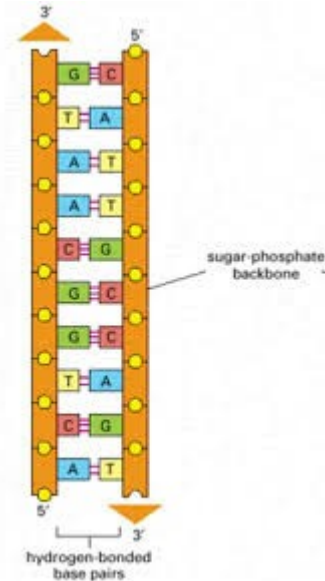


**Modelo
dispersivo**

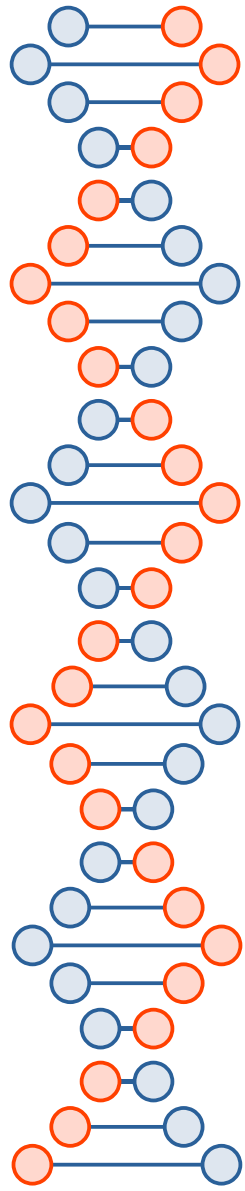
Duplicación semiconservativa



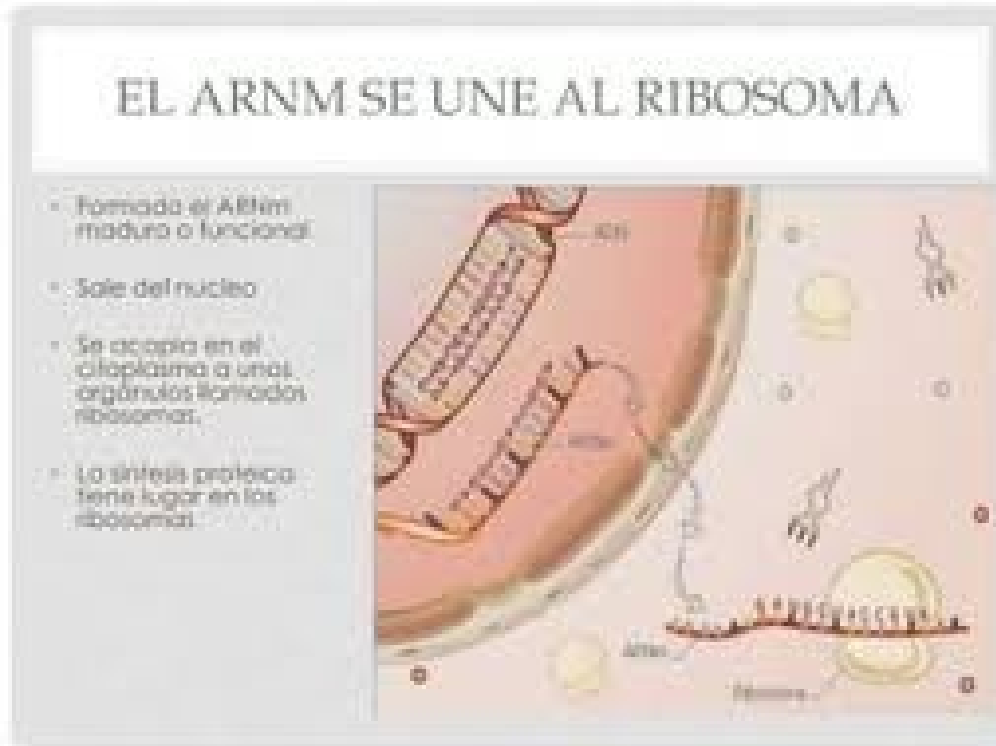
Por complementariedad de bases:



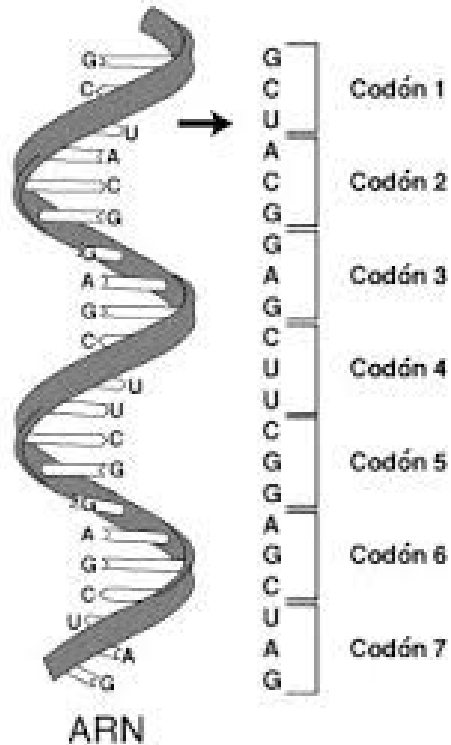
Complementariedad entre las bases de ADN y ARN:



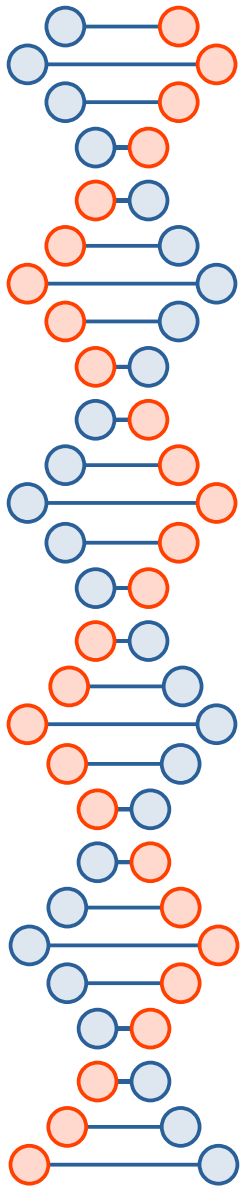
Paso do ARNm ata o citoplasma a través da envoltura nuclear



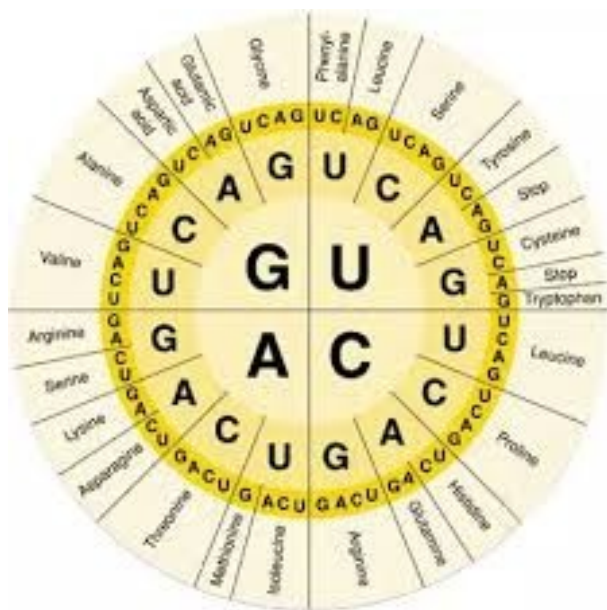
O ARNm lese en tripletes:



Ácido ribonucleico

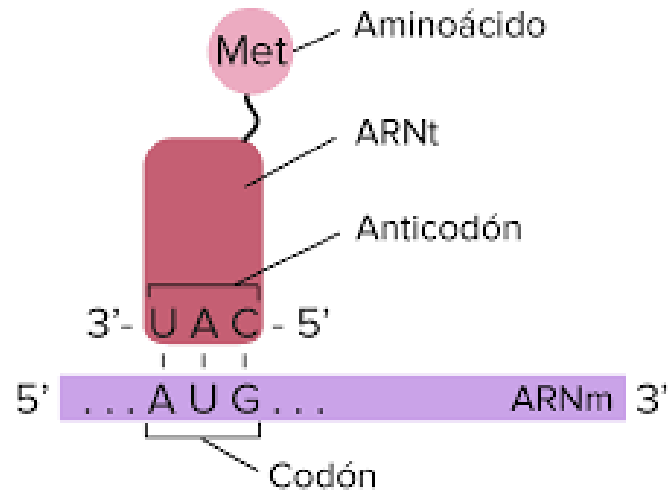


Código xenético

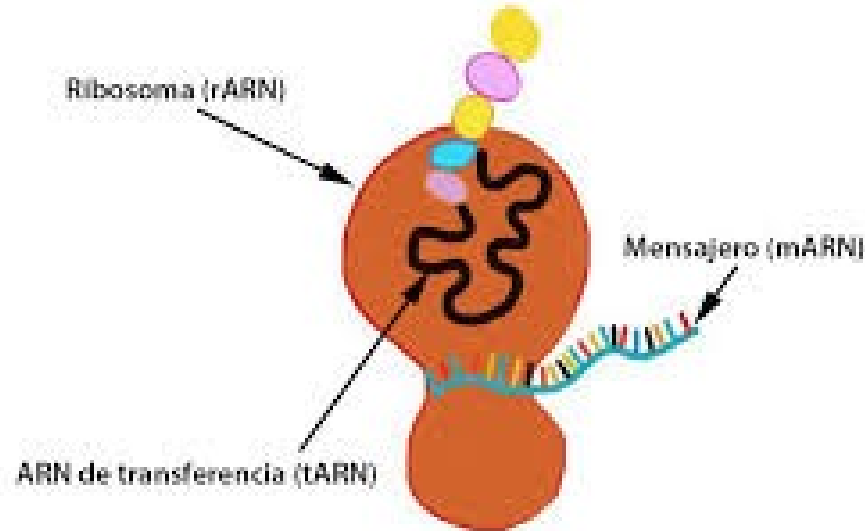


		Segunda letra				
		U	C	A	G	
Primera letra	U	UUU } Phe UUC } UUA } Leu UUG }	UCU } UCC } Ser UCA } UCG }	UAU } Tyr UAC } UAA } Alto UAG } Alto	UGU } Cys UGC } UGA } Alto UGG } Trp	U C A G
	C	CUU } CUC } Leu CUA } CUG }	CCU } CCC } Pro CCA } CCG }	CAU } His CAC } CAA } Gln CAG }	CGU } CGC } Arg CGA } CGG }	U C A G
	A	AUU } AUC } Ile AUA } AUG } Met	ACU } ACC } Thr ACA } ACG }	AAU } Asn AAC } AAA } Lys AAG }	AGU } Ser AGC } AGA } Arg AGG }	U C A G
	G	GUU } GUC } Val GUA } GUG }	GCU } GCC } Ala GCA } GCG }	GAU } Asp GAC } GAA } Glu GAG }	GGU } GGC } Gly GGA } GGG }	U C A G
						Tercera letra

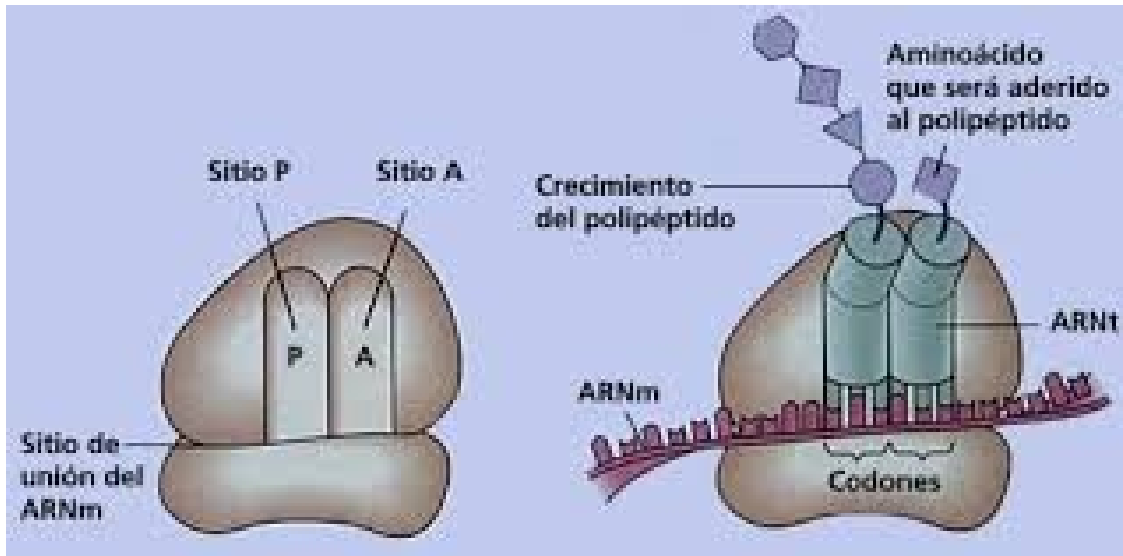
Codón e anticodón

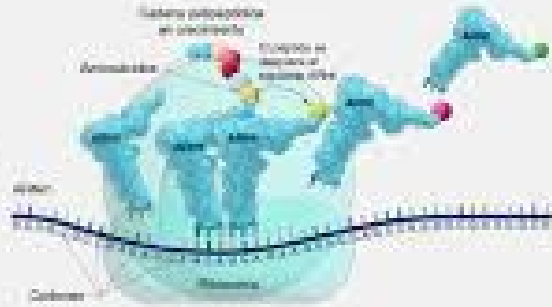


Unión do ARNm ao ribosoma:

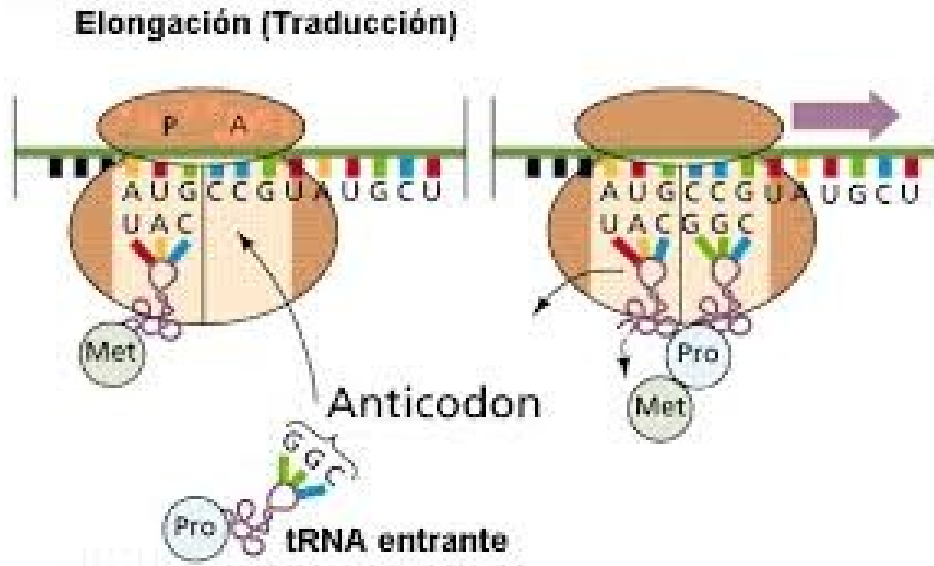


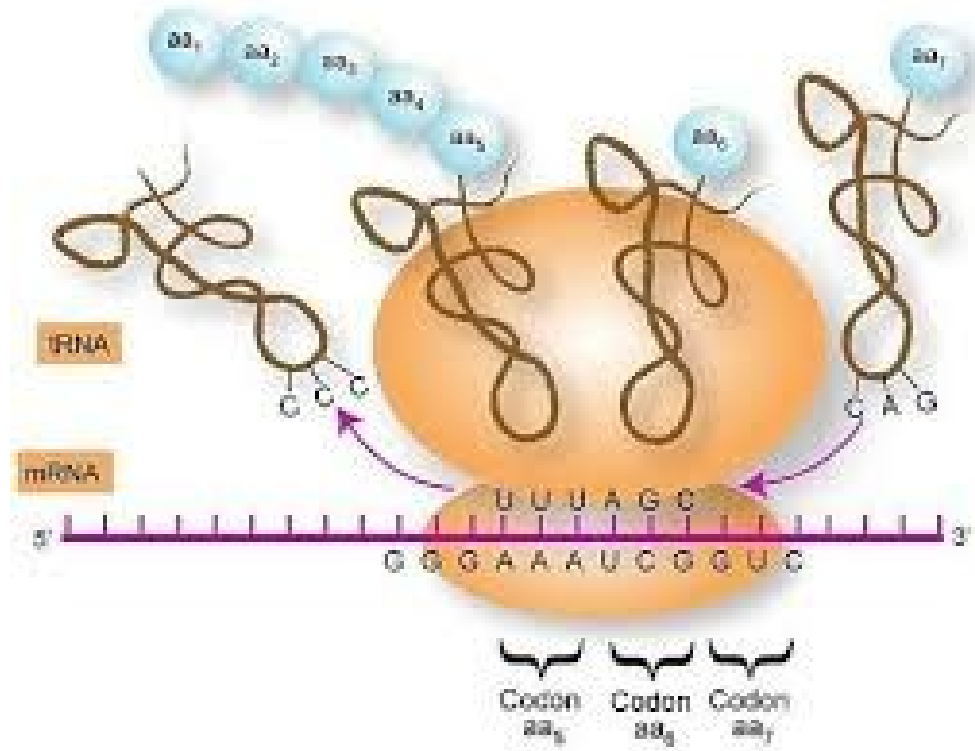
Lugares do ribosoma



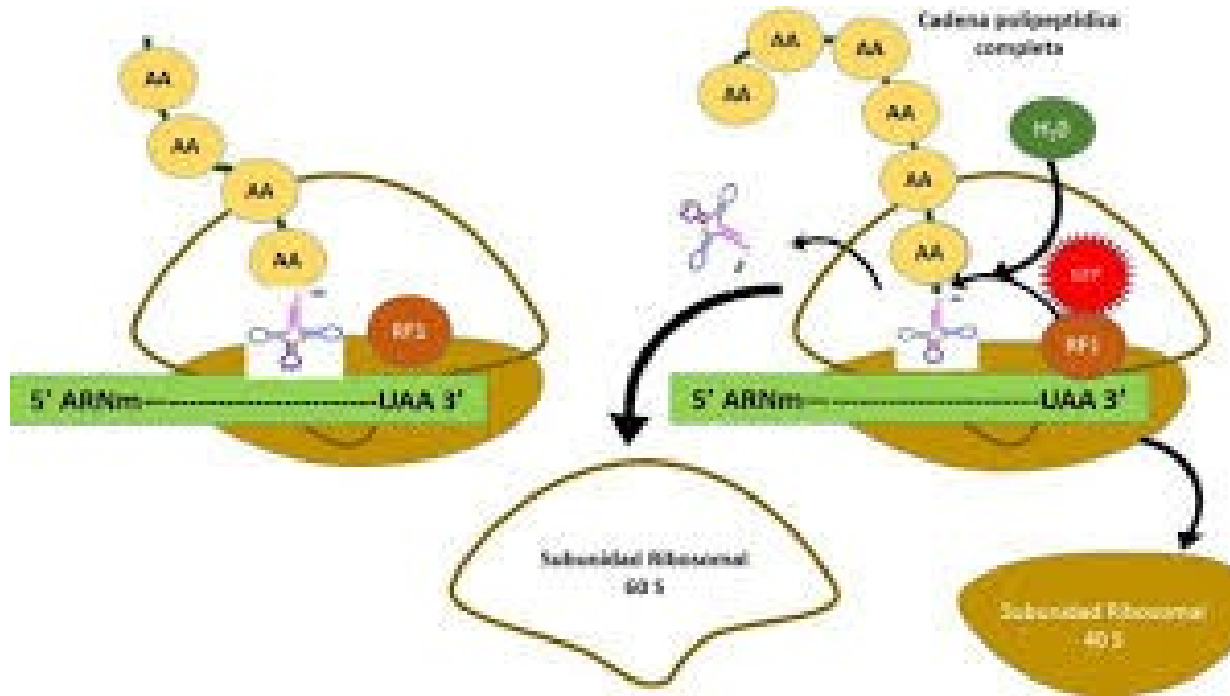


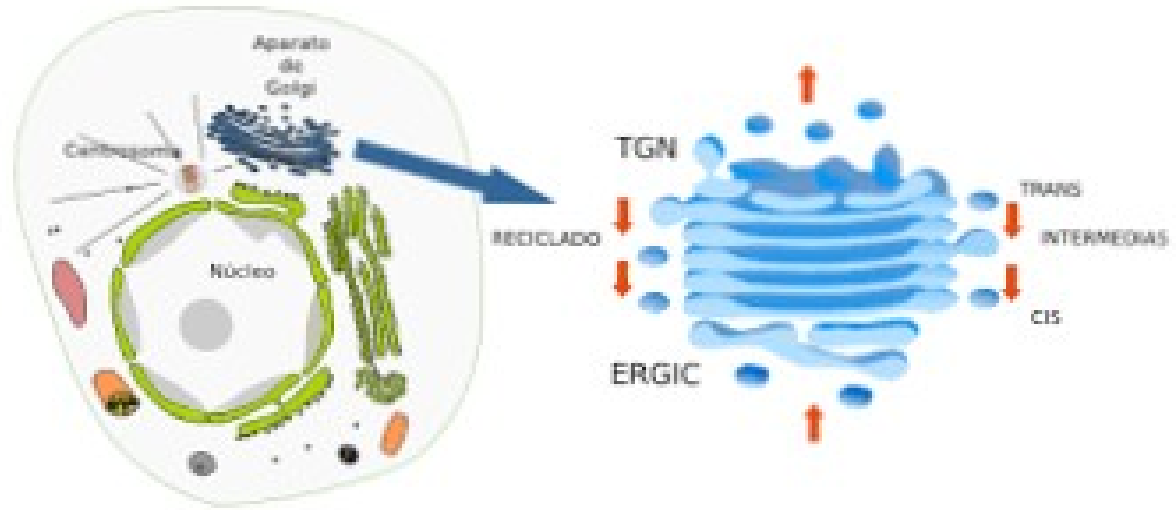
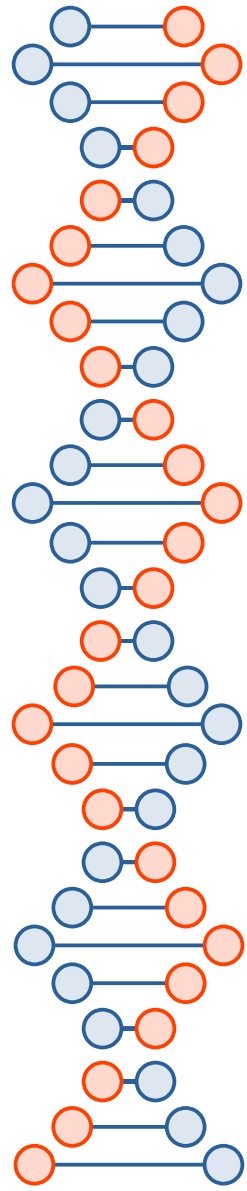
Elongación dunha proteína: tradución





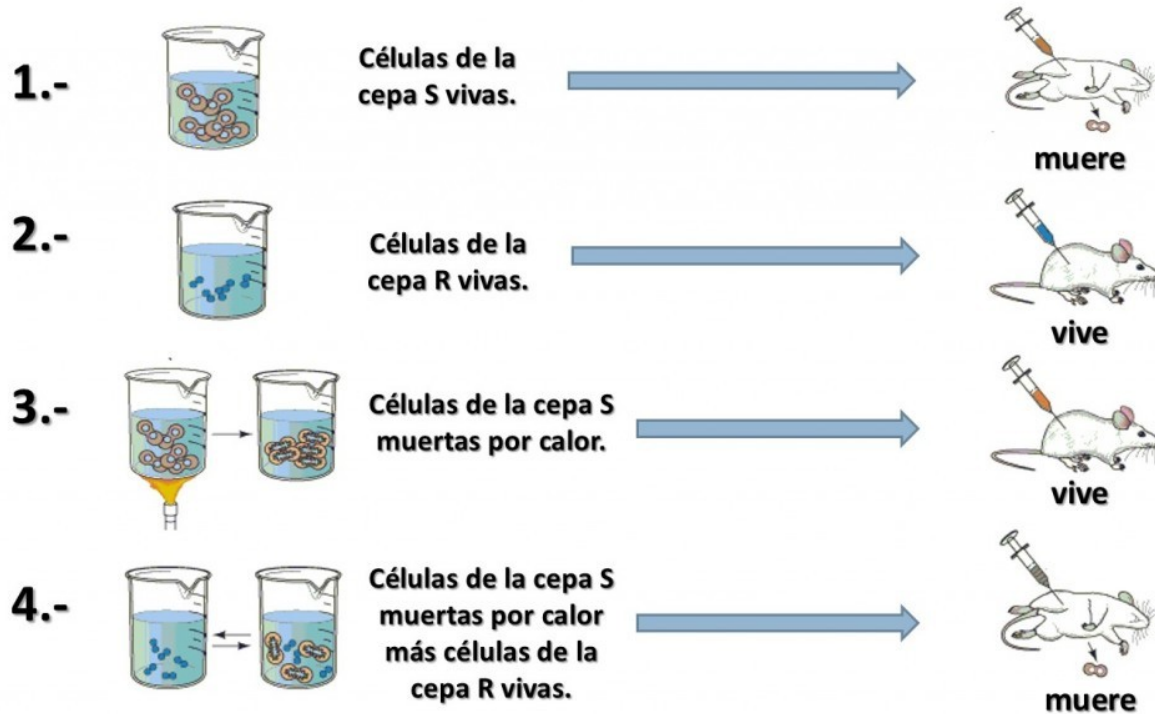
Terminación dunha proteína



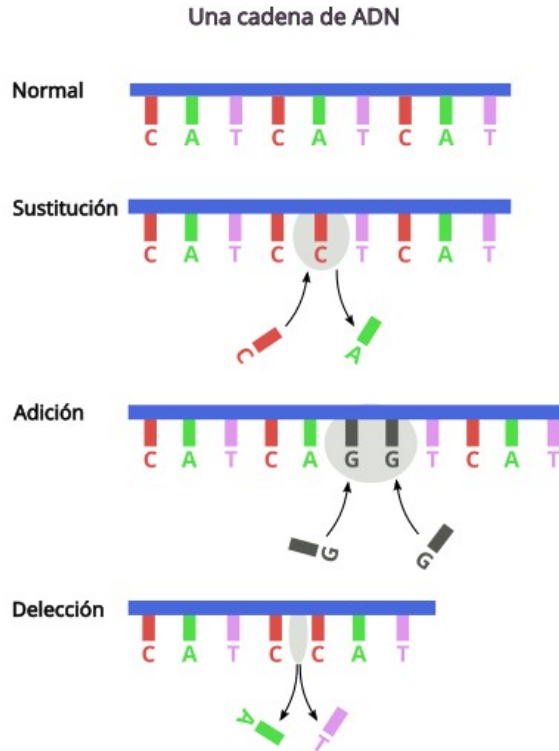


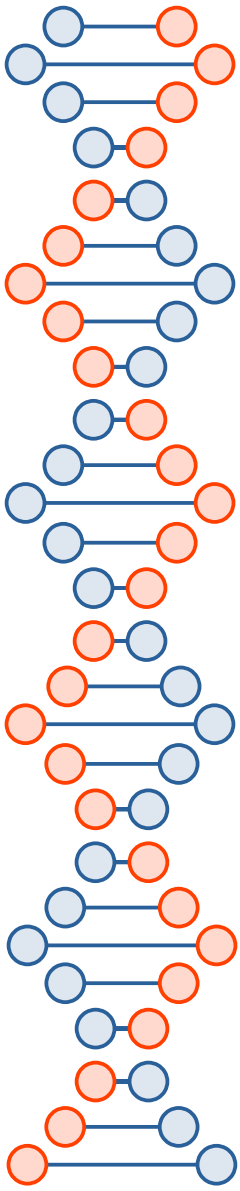
ADN VS PROTEÍNAS

- Experimento de Griffit e explicación de Avery

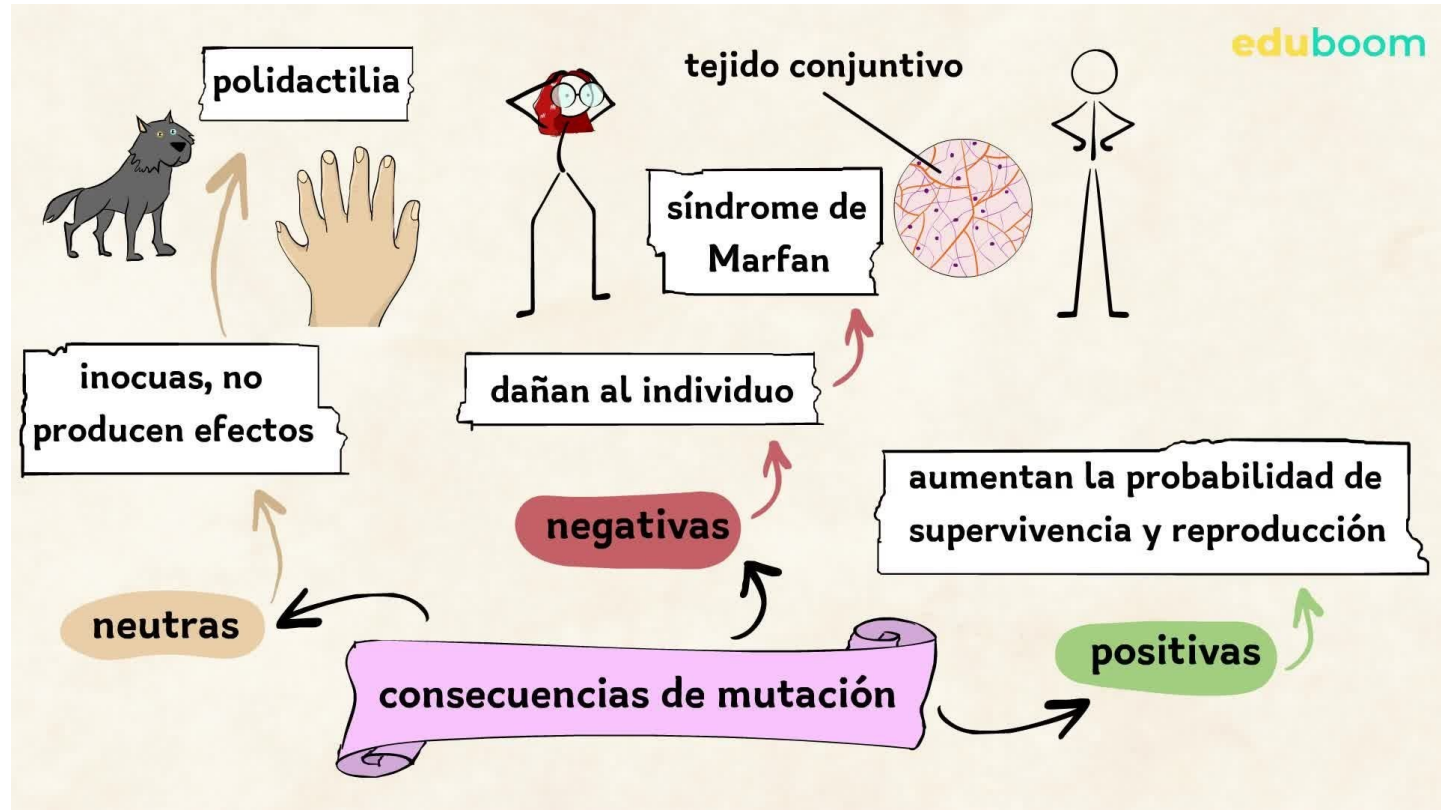


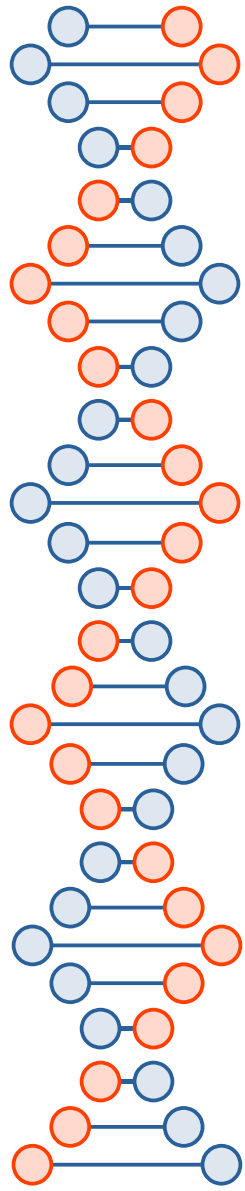
Definición: mutación



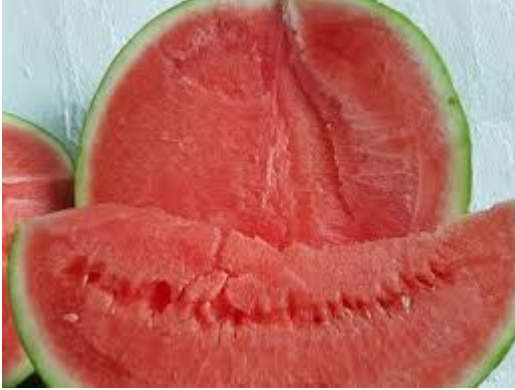


Mutaciones



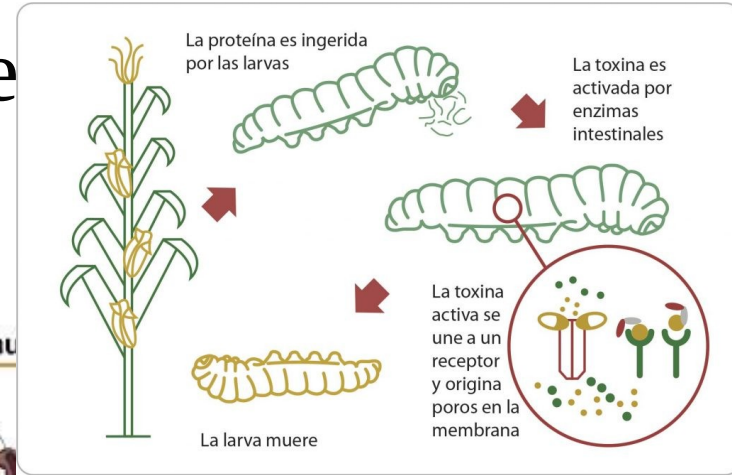
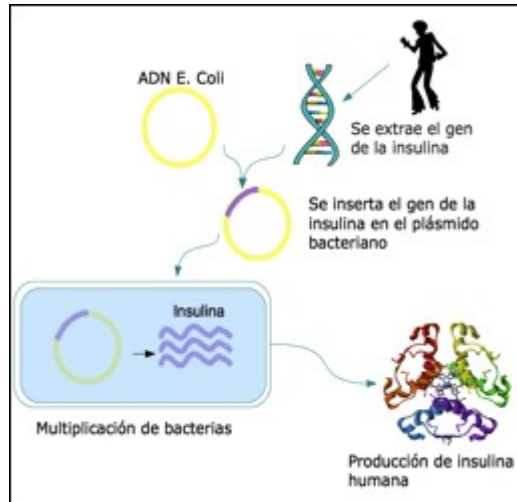


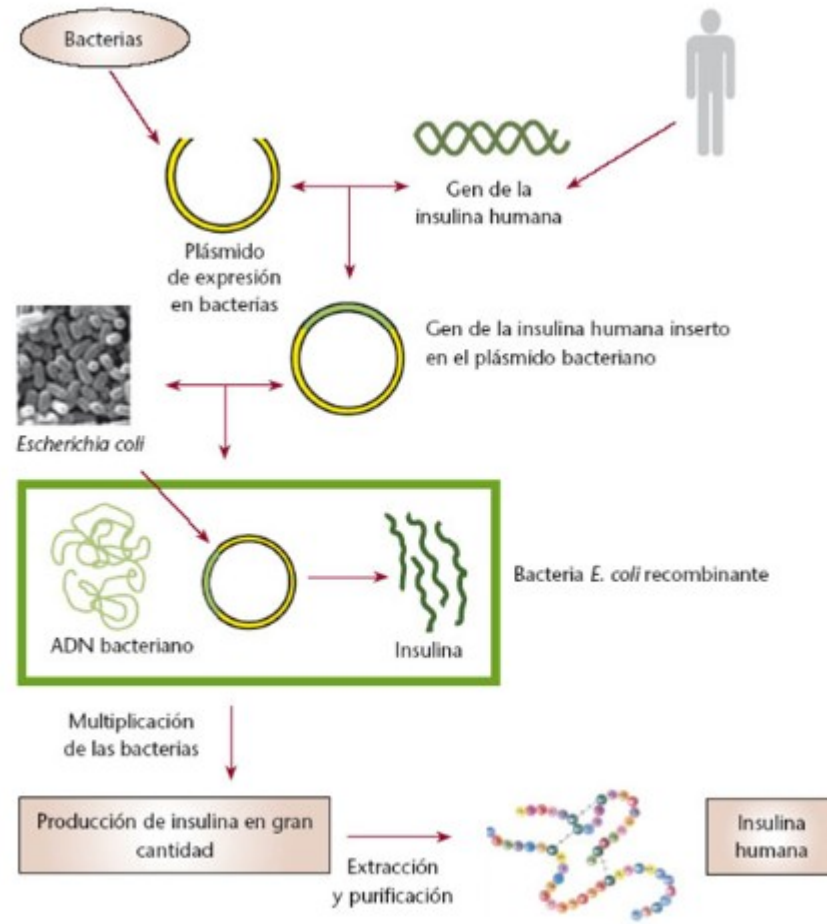
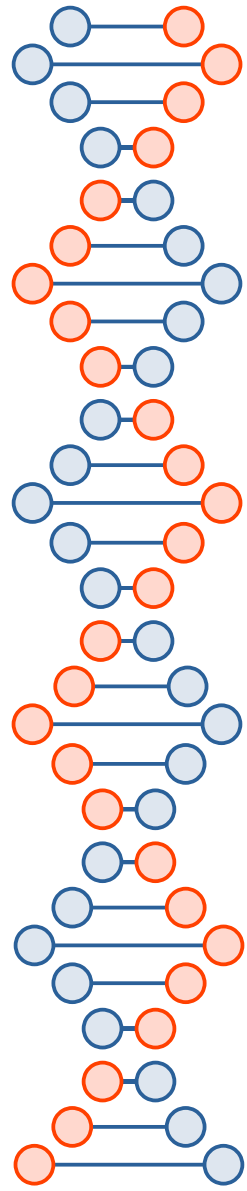
Biotecnoloxía ou enxeñe

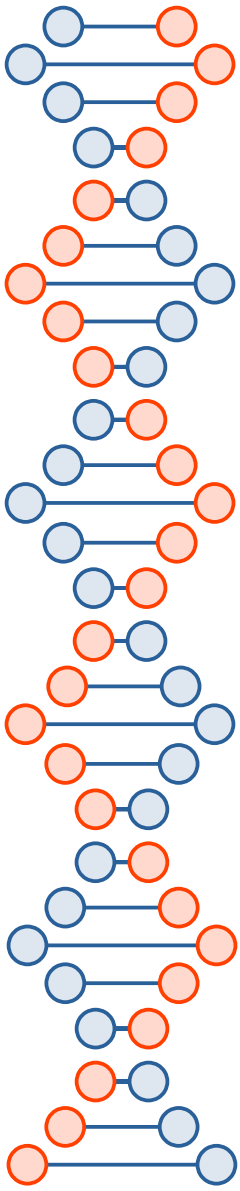


Trasplante de riñón de cerdo a hu

El proceso paso a paso

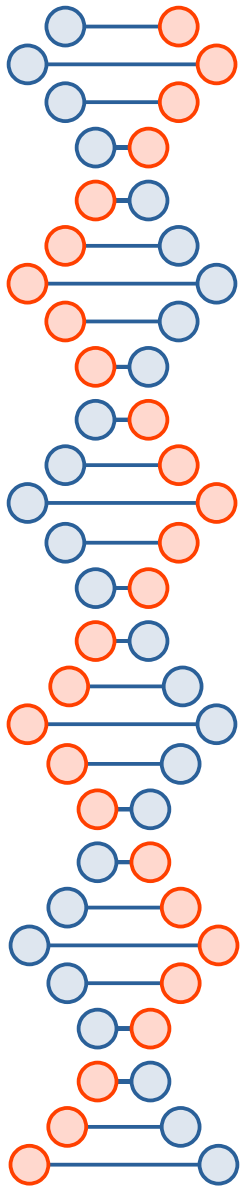




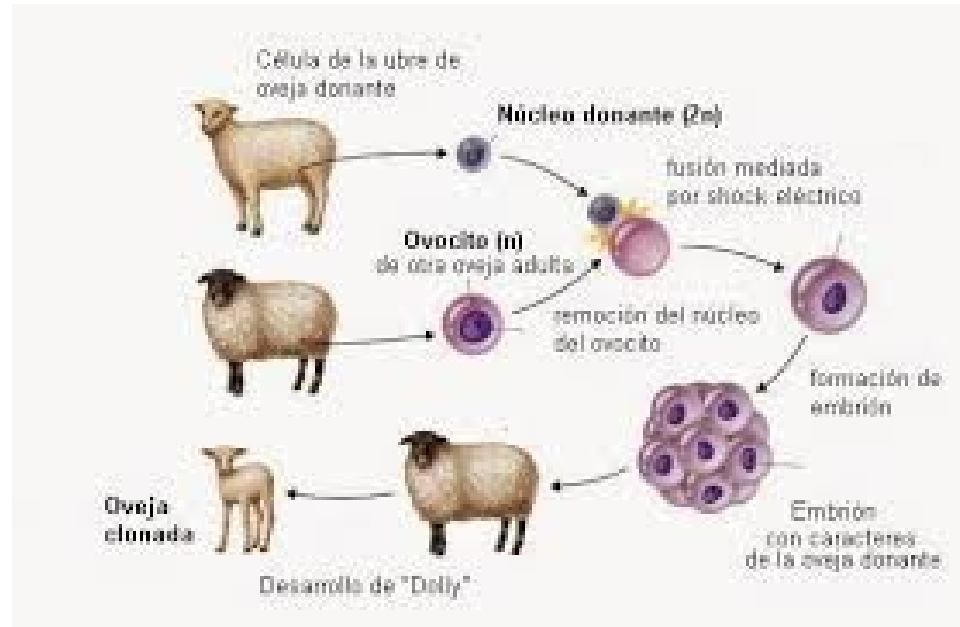


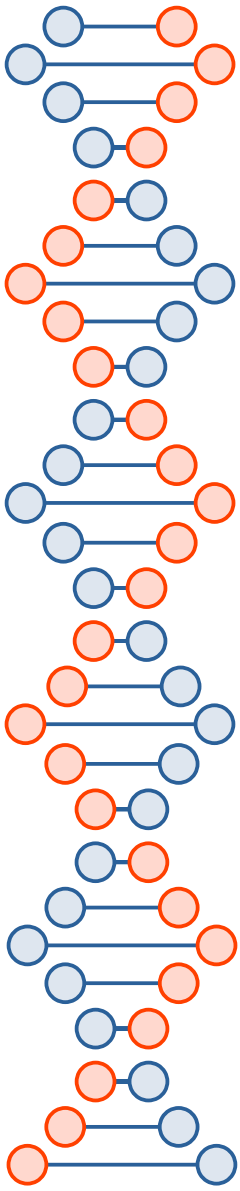
Definicións:

- Enzimas de restricción: tixeiras
- Vector: onde viaxa o noso xene
- Ligasas: para unir os distintos fragmentos de ADN
- Transxénico ou xeneticamente modificado: individuo que leva un ou máis xenes doutra especie



Clons





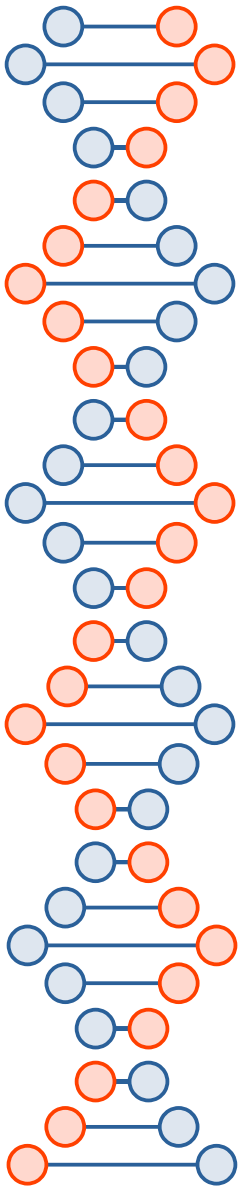
Clons

- Vantaxes:

- Fáciies de xerar
- Fáciies de coidar

- Inconvintes:

- Ante un cambio no medio todas morren.
- Ante un axente patóxeno, se unha morre, todas morren...
- Os xenes non definen totalmente ao exemplar



Bioética

- Que pasaría se as aseguradoras coñecesen que somos portadores dun xene que nos vai causar no futuro...invalidez, cangro...cambia de país!!
-