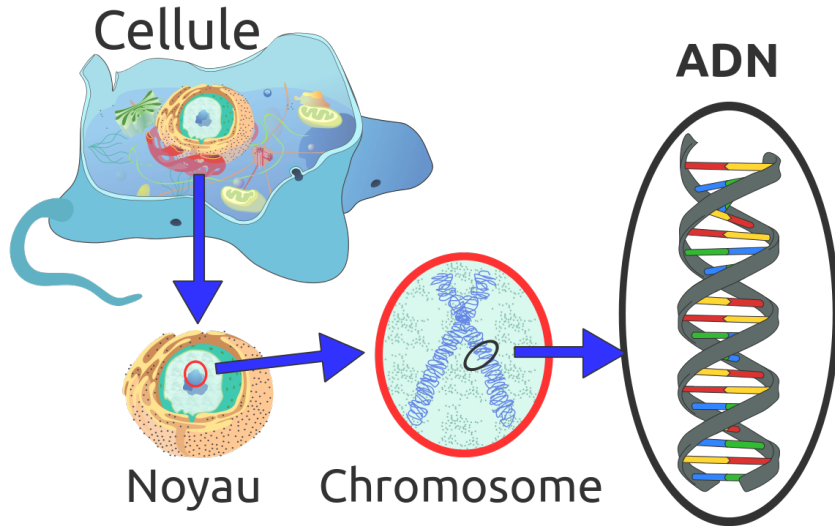
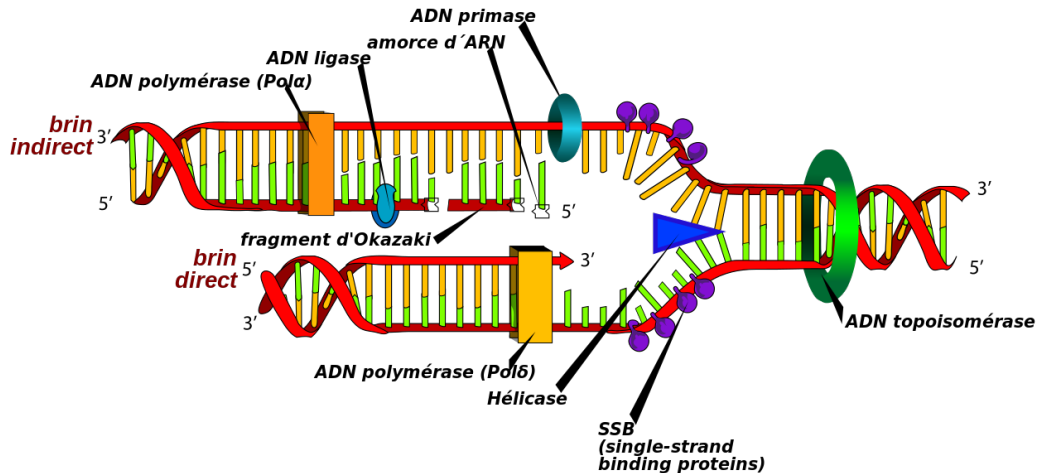


Biologie moléculaire

LFILO 2202
séance 9



Réplication d'ADN



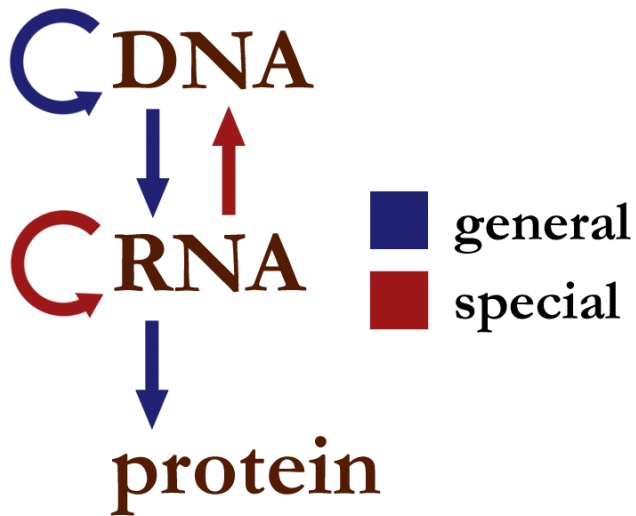
Théorie fondamentale de la biologie moléculaire



Une fois passé de l'ADN aux protéines, « l'information » la-dedans ne pourrait pas retourner dans l'autre direction.

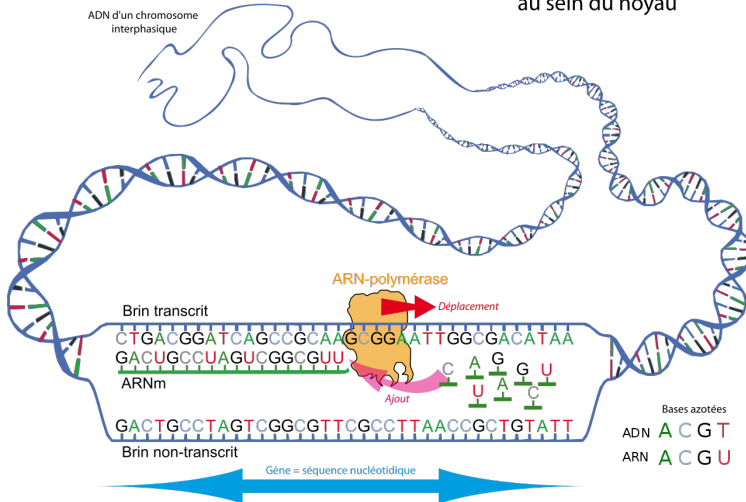


Théorie fondamentale

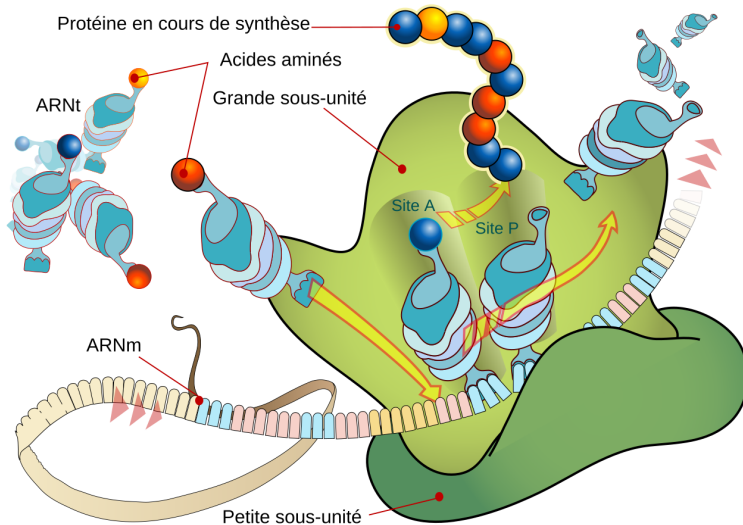


Transcription

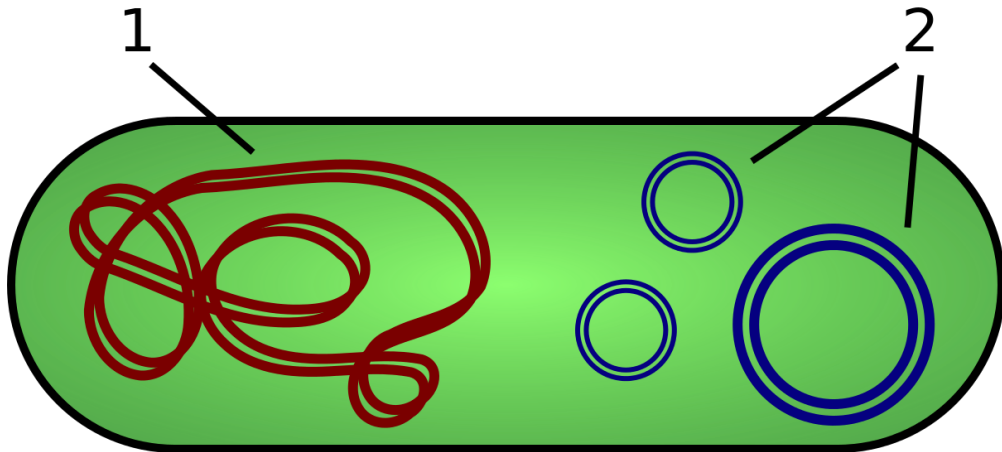
Transcription de l'ADN en ARNm
au sein du noyau



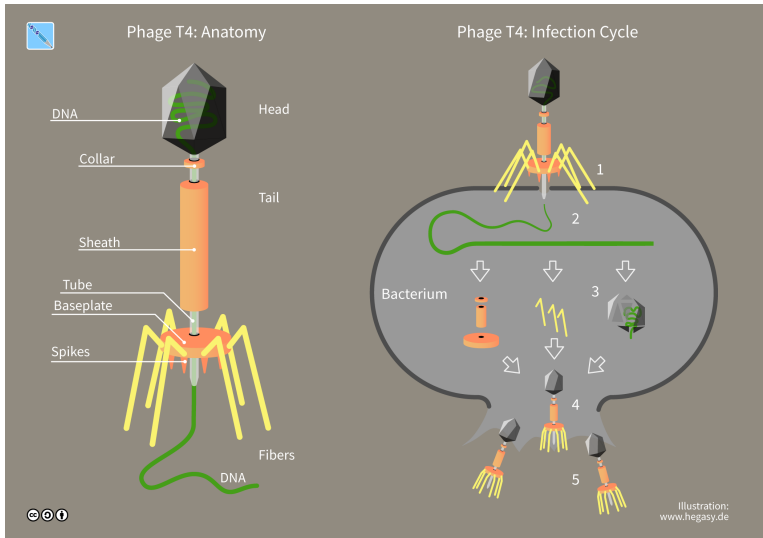
De ARNm aux protéines



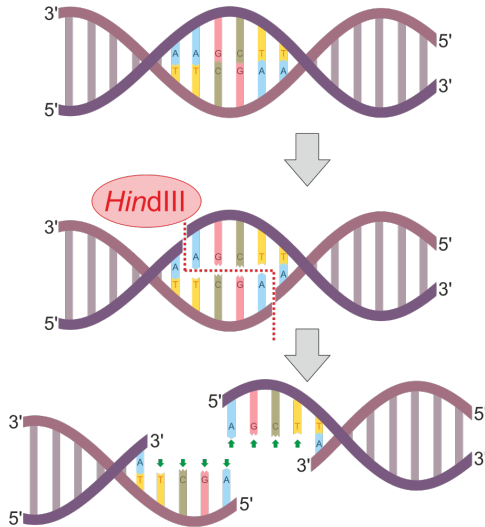
Plasmides et bactéries



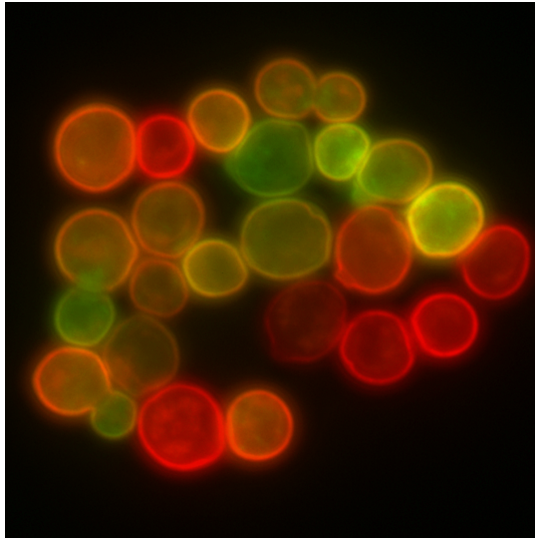
Bacteriophage



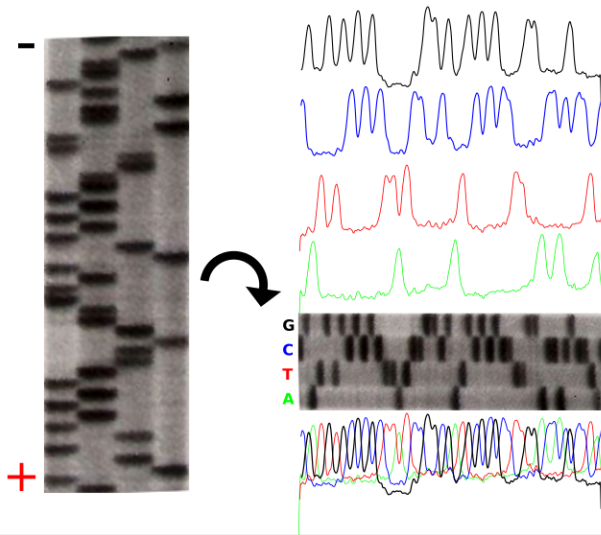
Enzymes de restriction



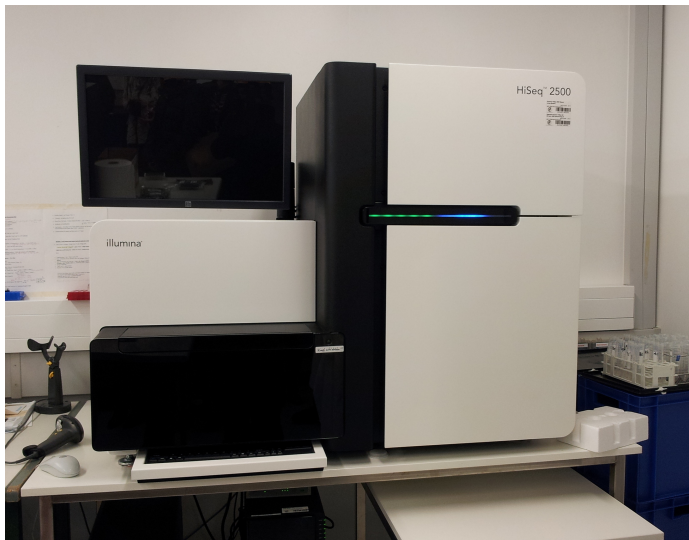
Modification génétique



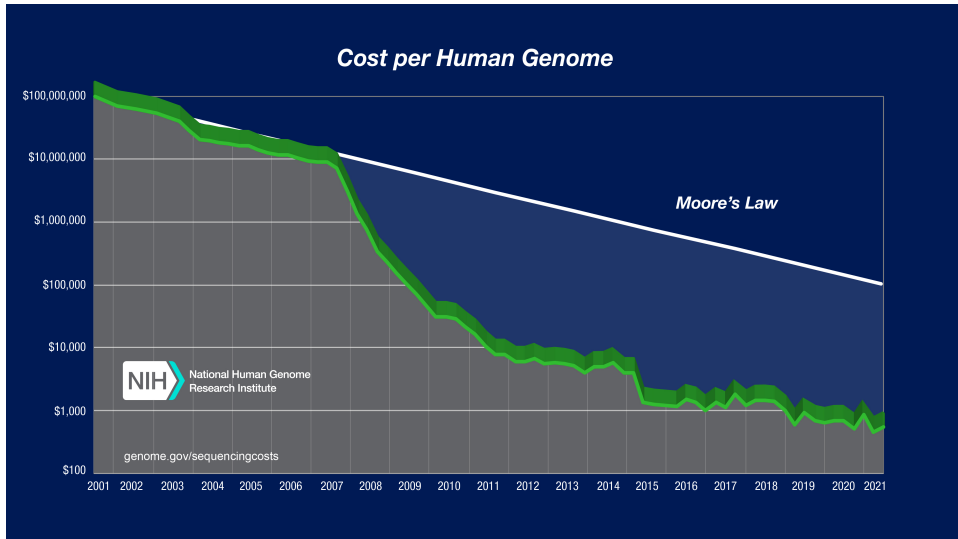
Séquençage d'ADN



Séquençage d'ADN



Séquençage d'ADN



Cellules germinales et somatiques

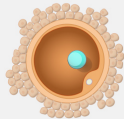
Germ line (germ cells)

Haploid

23 chromosomes (n) in human



Sperm



Ovum (egg)

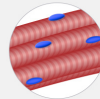
Somatic cells

Diploid

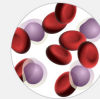
46 chromosomes (2n) in human



Fertilized egg



Skeletal and muscle cells



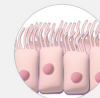
Blood cells



Stem cells



All other cells



Organ and tissue cells

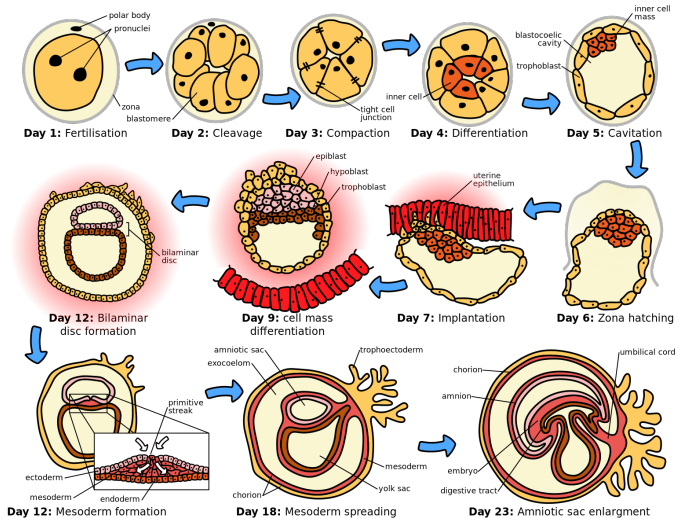


Fat cells

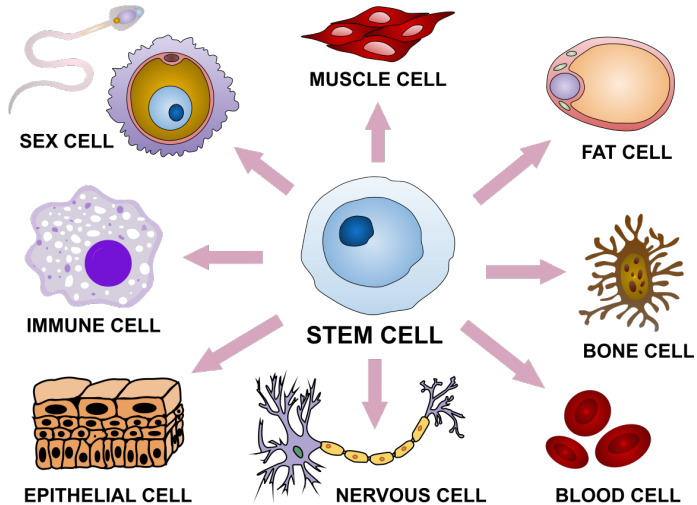


Neuron cells

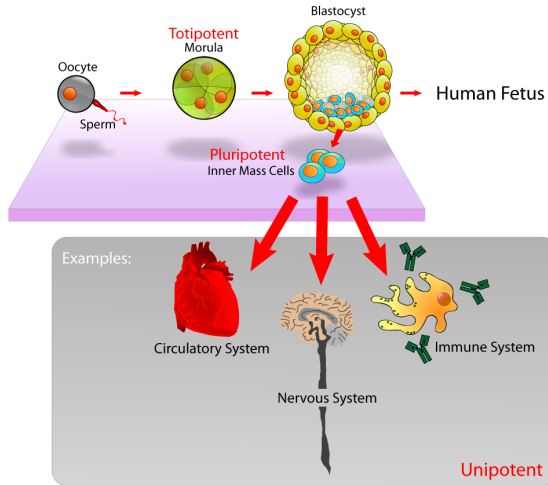
Embryogenèse



Cellules souches



Cellules souches

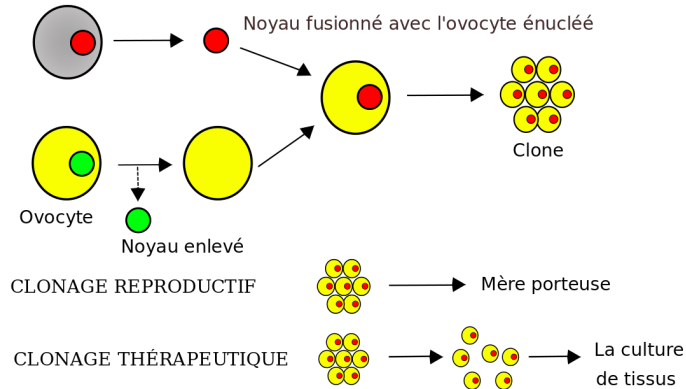


FIV

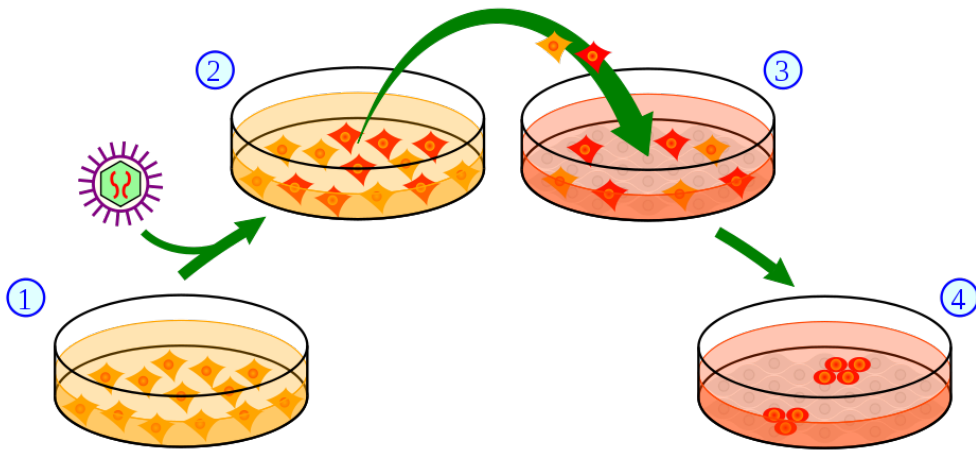


Clonage

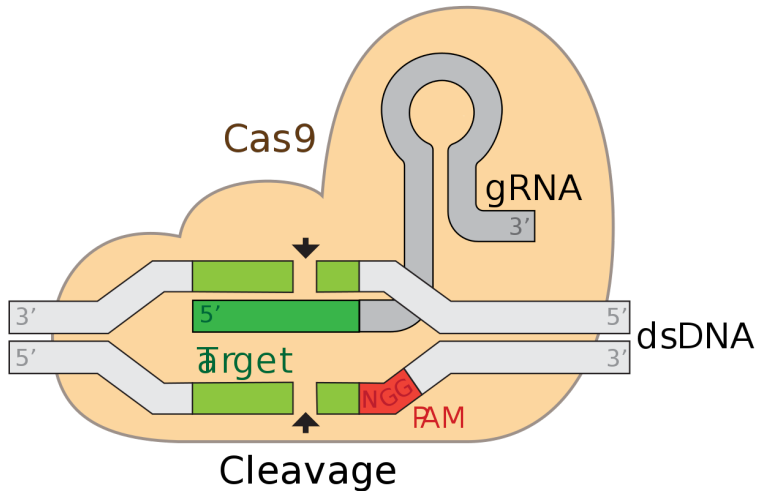
Le corps cellulaire somatique avec gènes souhaités



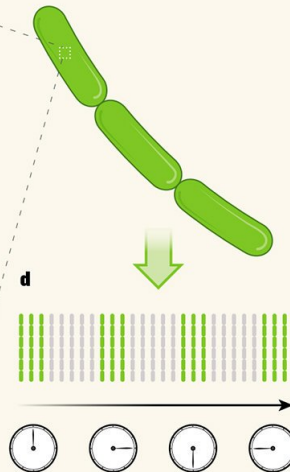
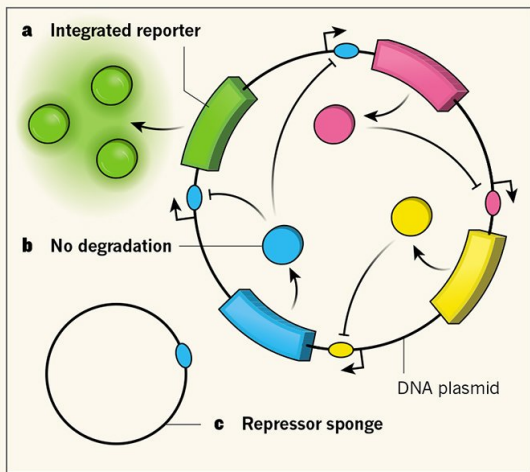
Cellules souches iPS



CRISPR/Cas9

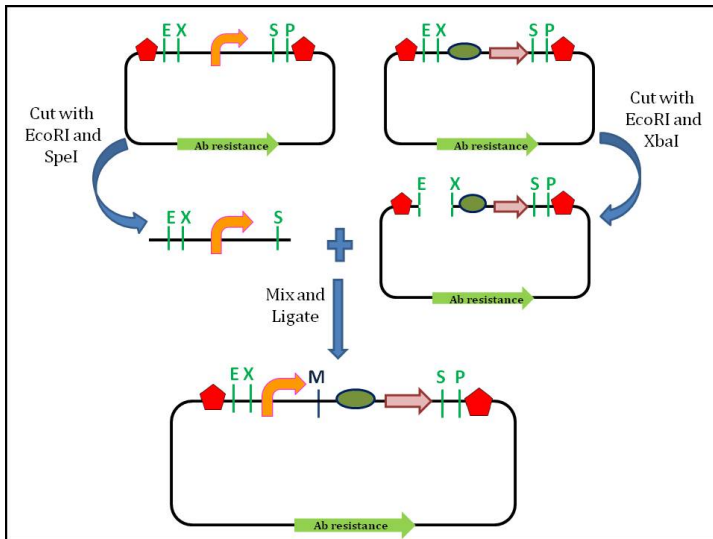


Le « repressilator »



BioBricks

 promoter	 primer binding site
 cds	 restriction site
 ribosome entry site	 blunt restriction site
 terminator	 5' sticky restriction site
 operator	 3' sticky restriction site
 insulator	 5' overhang
 ribonuclease site	 3' overhang
 rna stability element	 assembly scar
 protease site	 signature
 protein stability element	 user defined
 origin of replication	



Organoïdes

