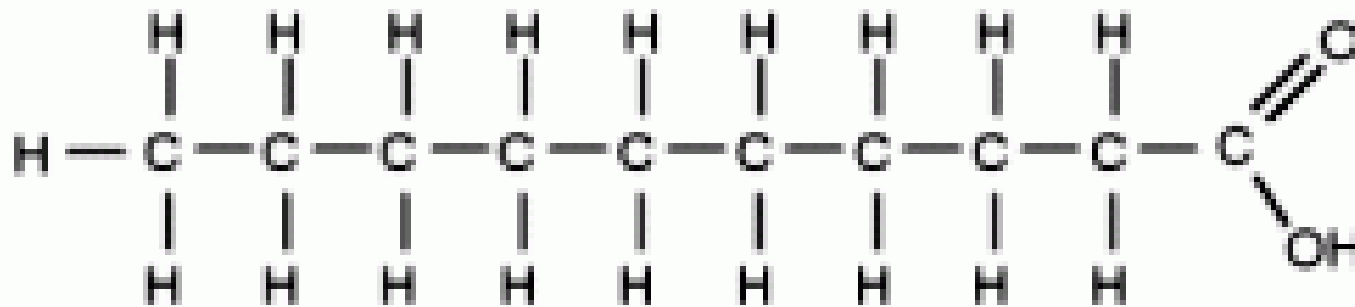


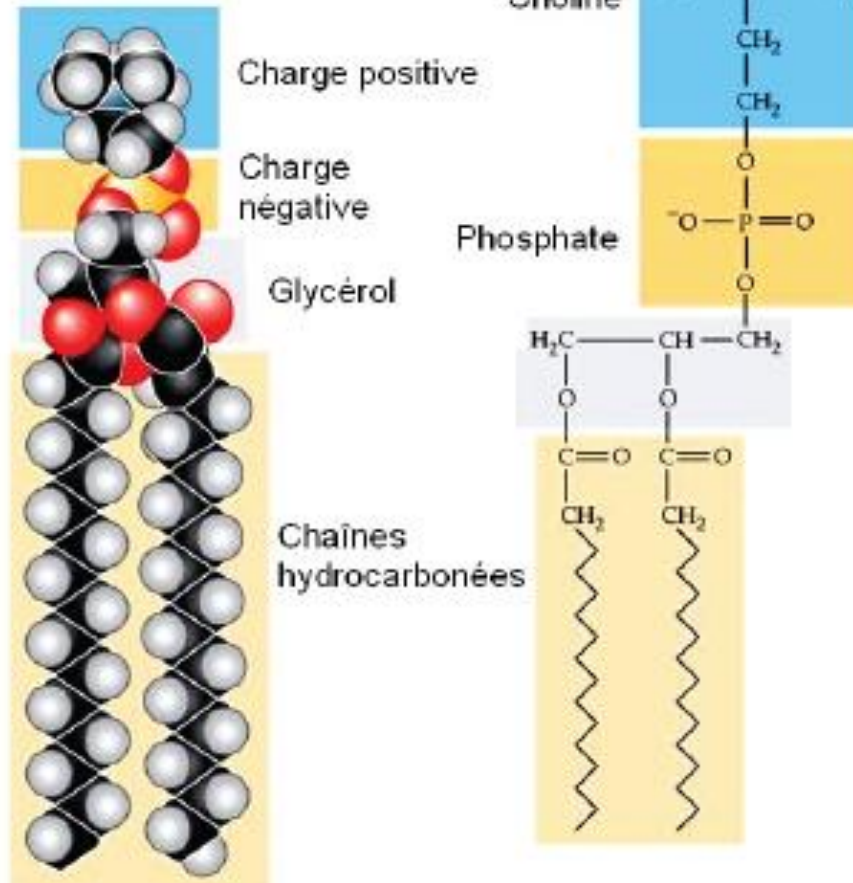
Micrographie prise au MET montrant l'ultrastructure de la membrane plasmique

LES LIPIDES MEMBRANAIRES

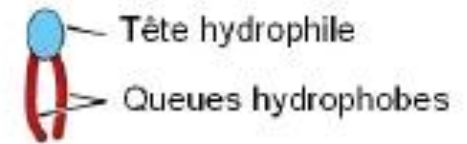


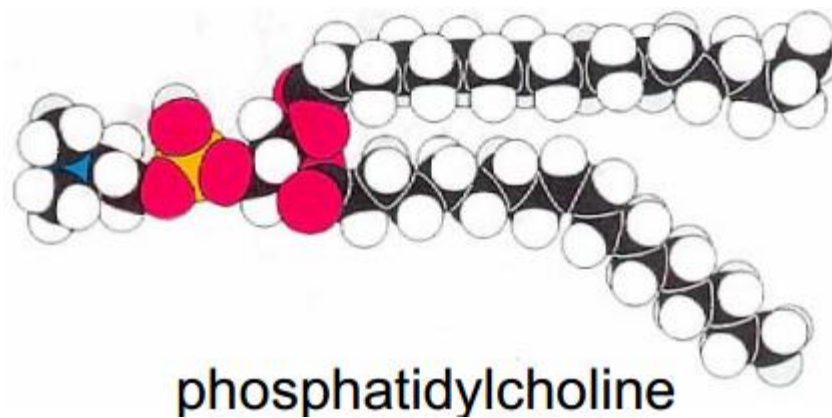
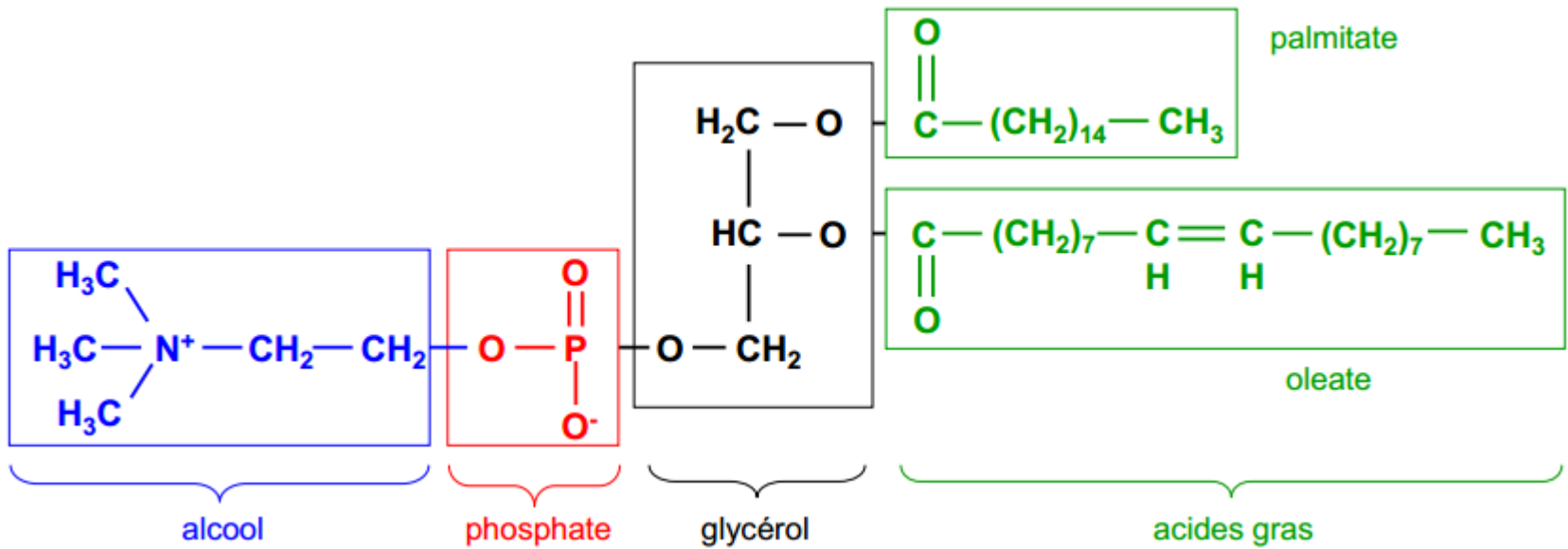
Acide gras

Phosphatidylcholine



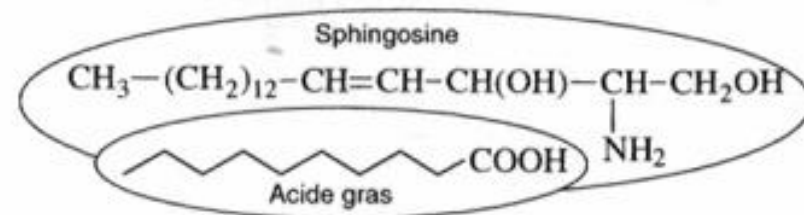
Phospholipide membranaire, représentation symbolique



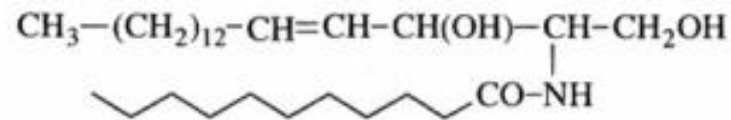


tête polaire	nom classique	symbole
-H	acide phosphatidique	PA
-CH ₂ CH ₂ NH ₃ ⁺ (alcool aminé)	phosphatidyléthanolamine	PE GPL azoté
-CH ₂ CH ₂ N ⁺ (CH ₃) ₃ (alcool aminé)	phosphatidylcholine	PC GPL azoté
$ \begin{array}{c} \text{CHOH-CHOH} \\ \diagdown \quad \diagup \\ \text{-CH} \quad \text{CHOH} \\ \diagup \quad \diagdown \\ \text{CHOH-CHOH} \end{array} $	phosphatidylinositol	PI GPL non azoté
-CH ₂ CH(COO)NH ₃ ⁺ acide aminé	phosphatidylsérine	PS GPL azoté
-CH ₂ CHOH-CH ₂ OH	phosphatidylglycérol (cardiolipide)	PG

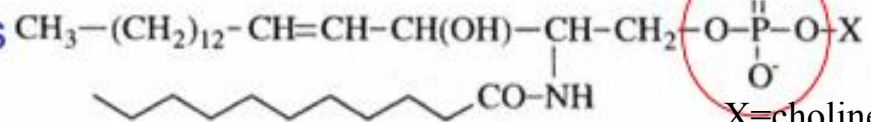
Sphingolipides



Céramide

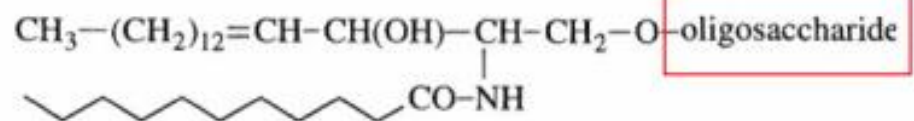


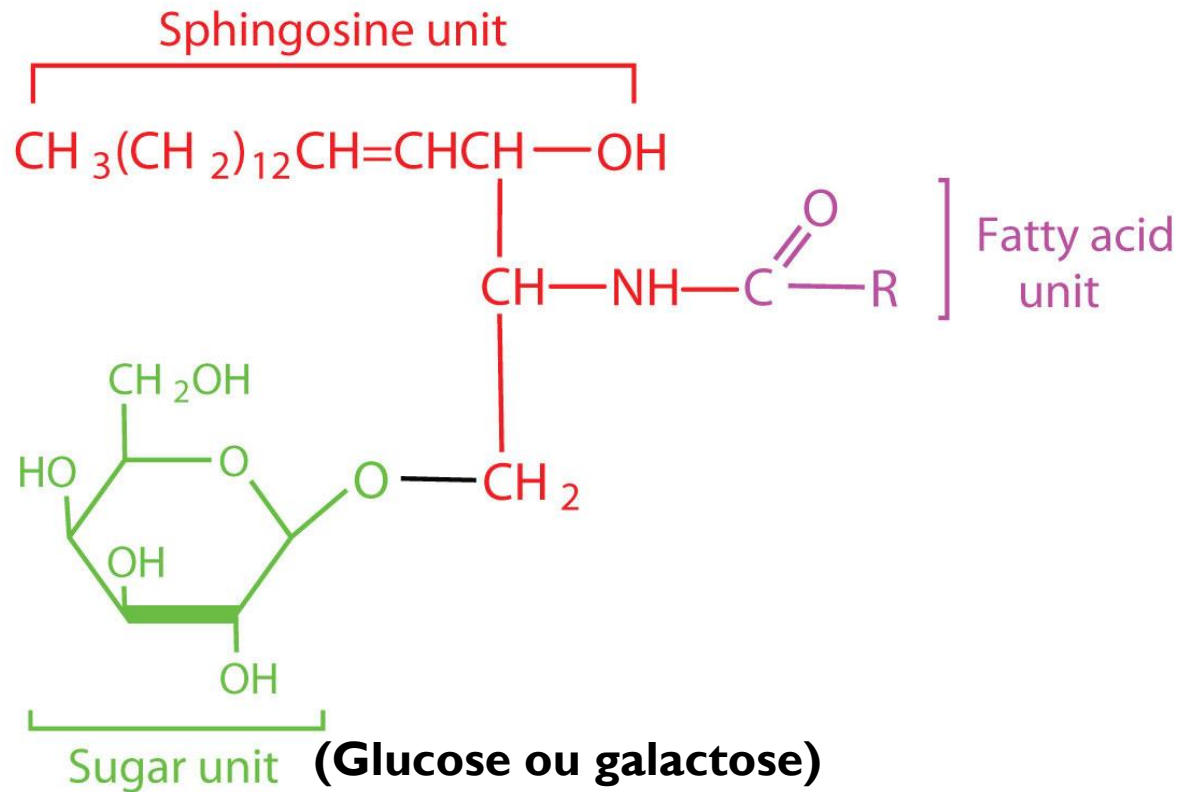
Sphingophospholipides
sphingomyéline



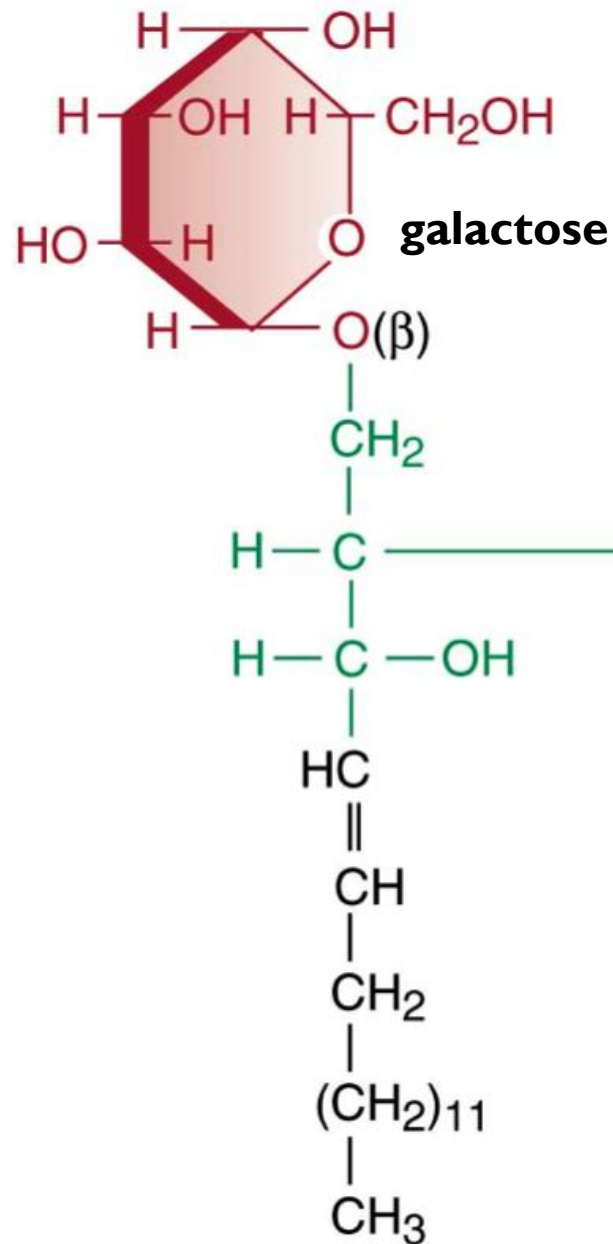
X=choline
(phosphocholine)

Sphingoglycolipides
Cérébrosides, gangliosides

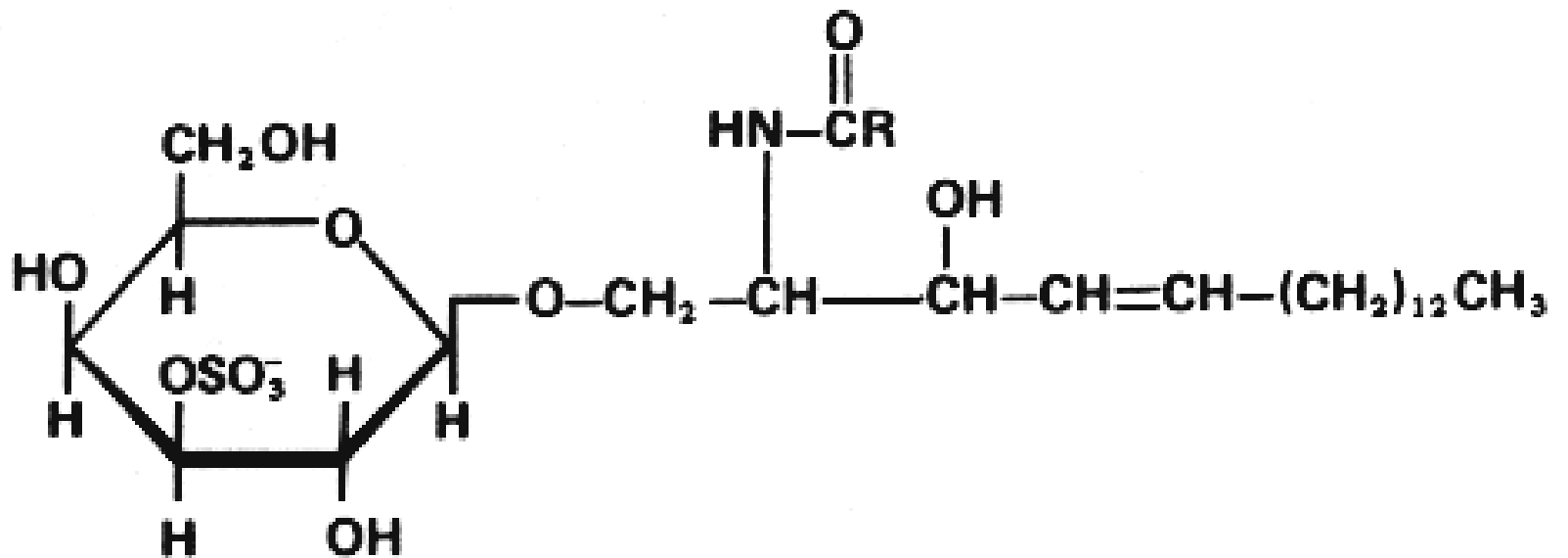




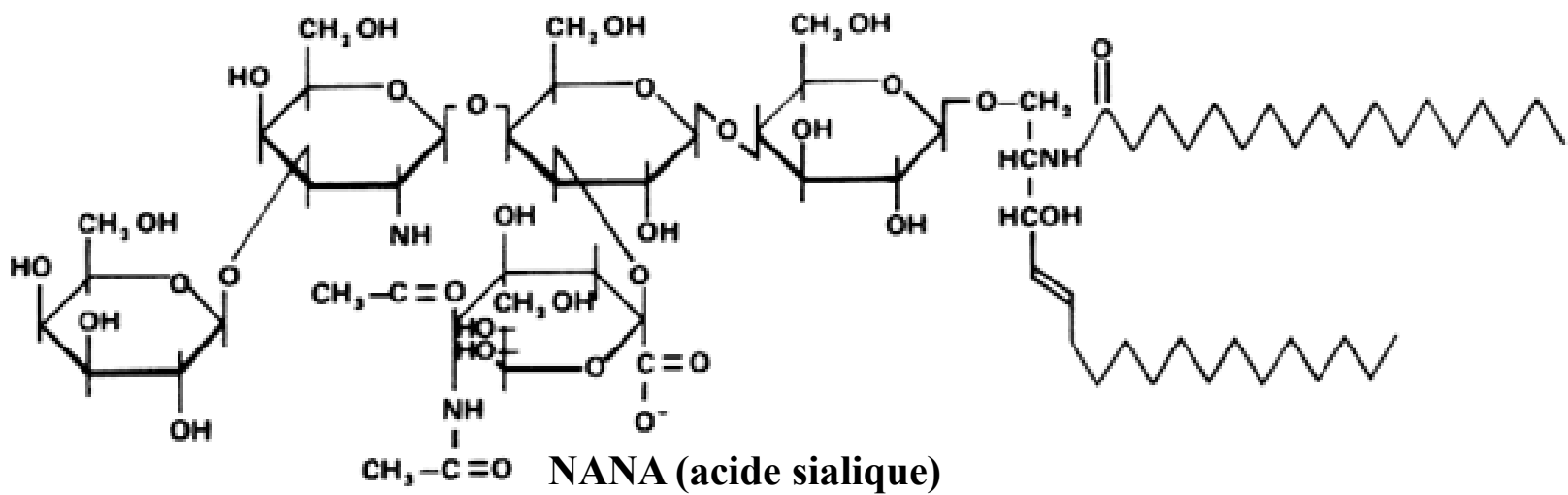
Les cérébrosides



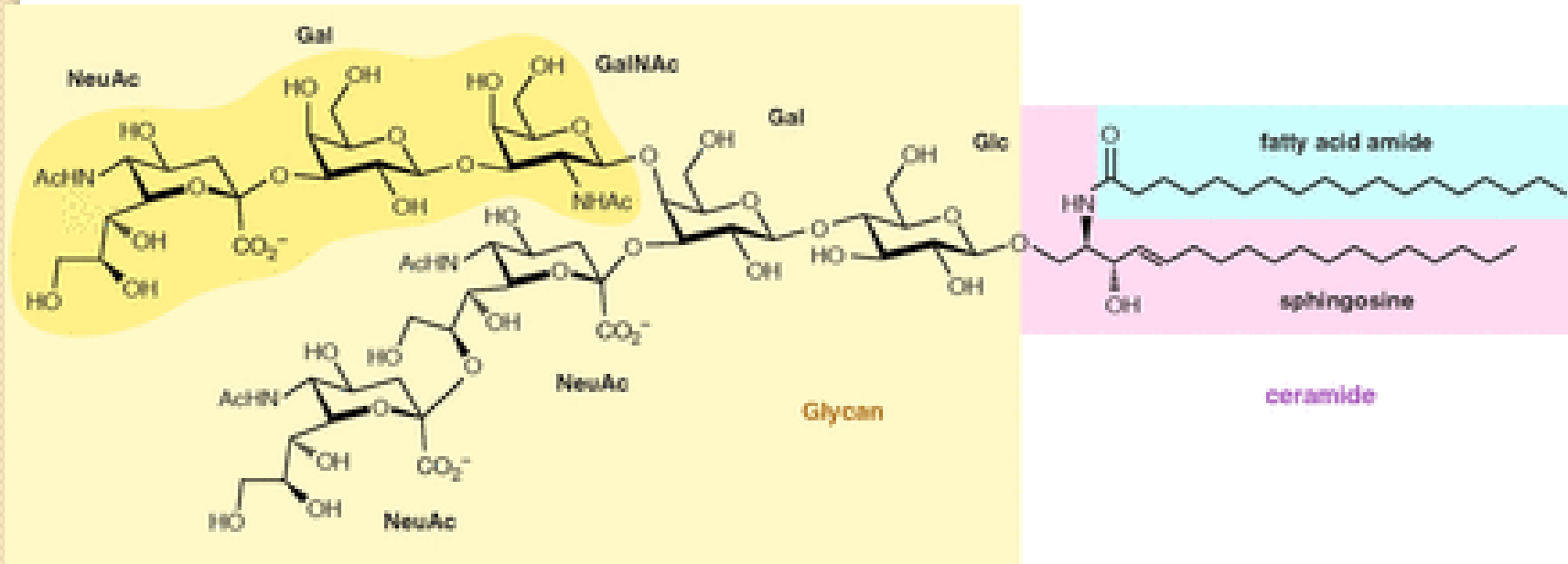
Structure of a galactocerebroside containing a C_{24} fatty acid.



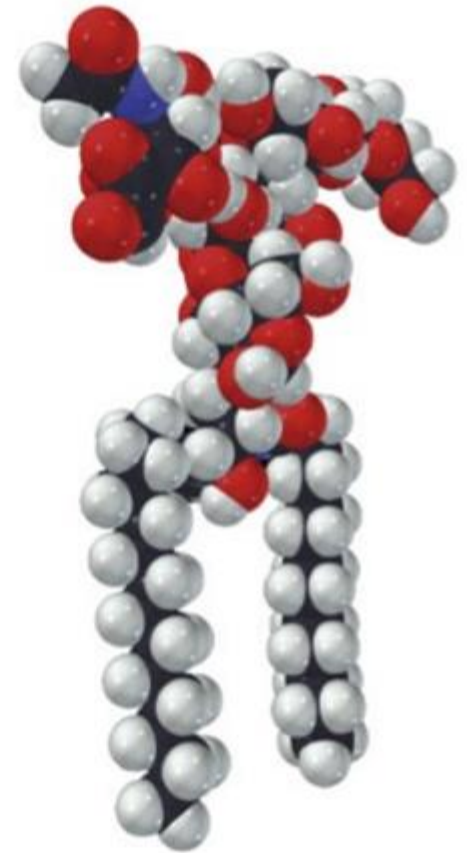
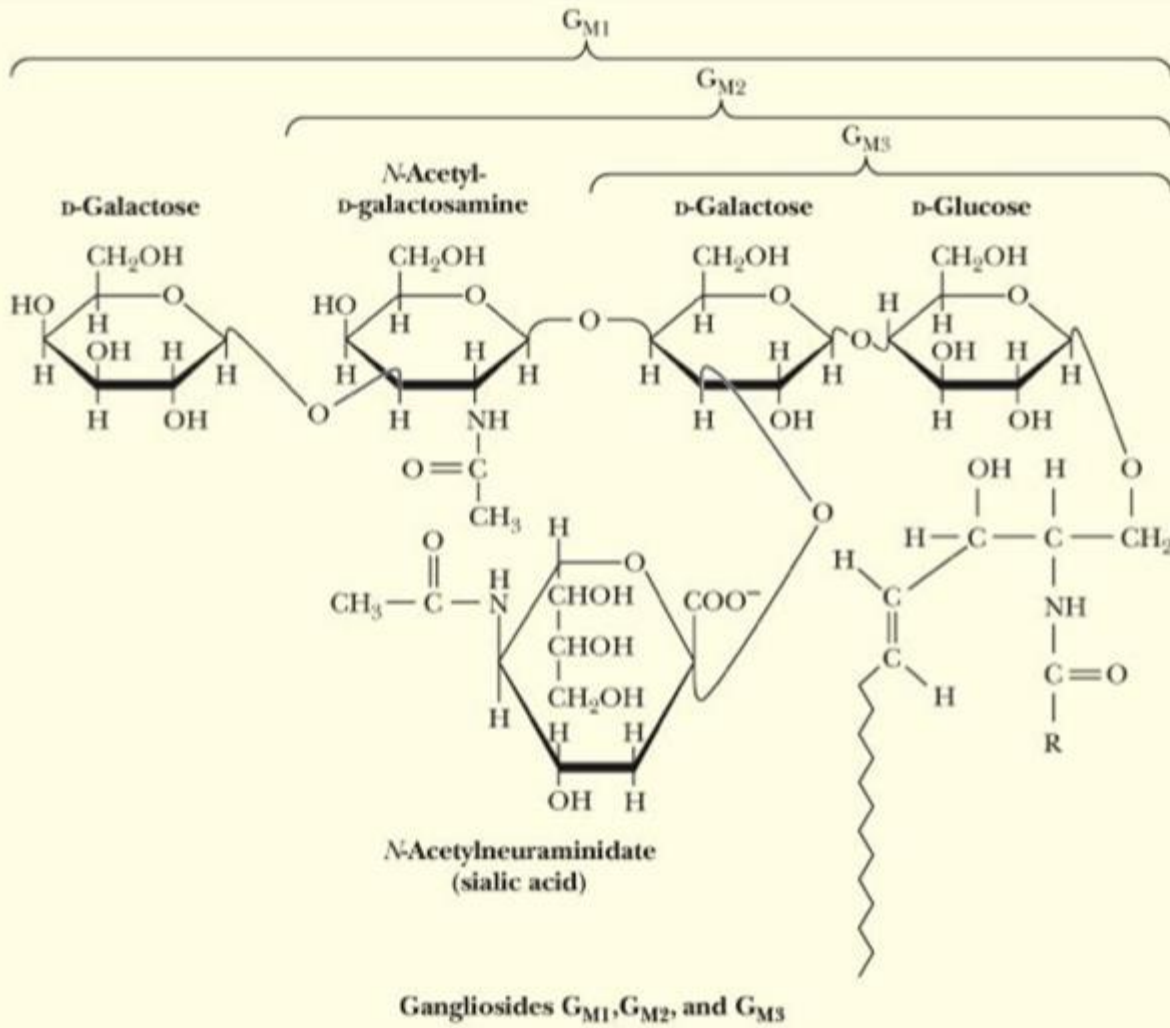
Cérébroside-3-sulfate (sulfatide)



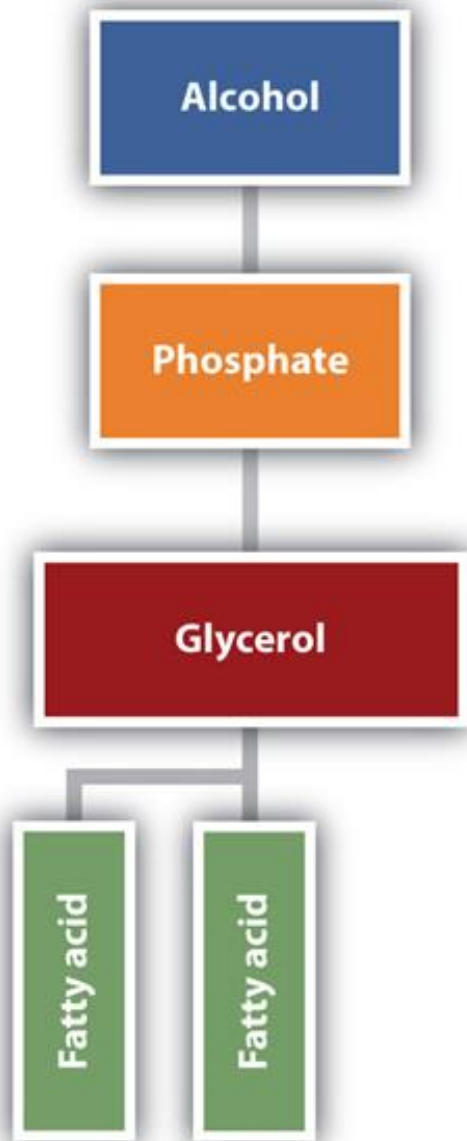
Ganglioside (GM1)



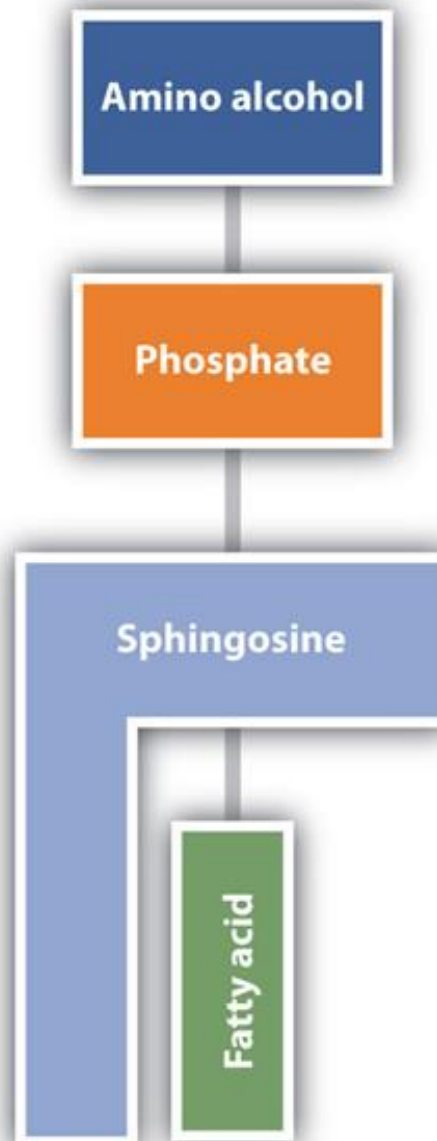
Ganglioside (GT1)



Gangliosides

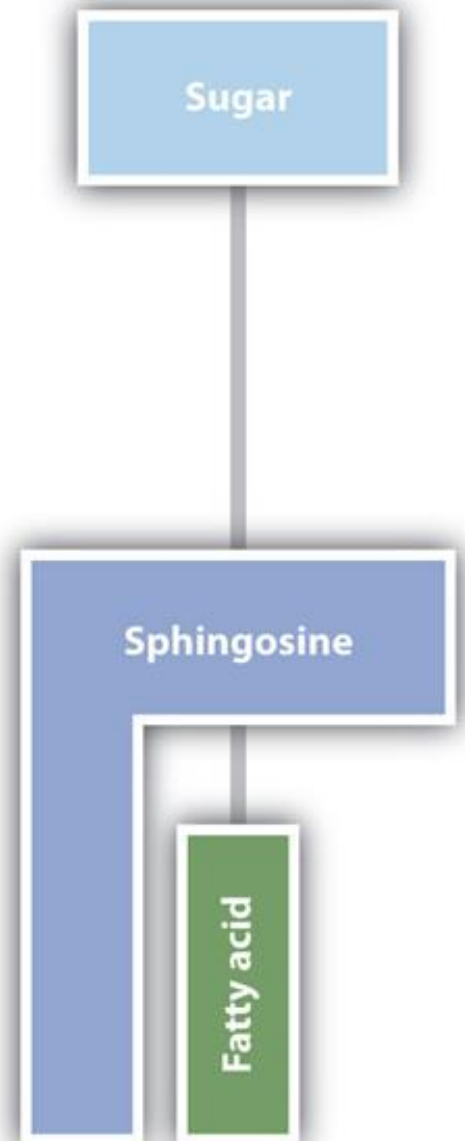


GPL

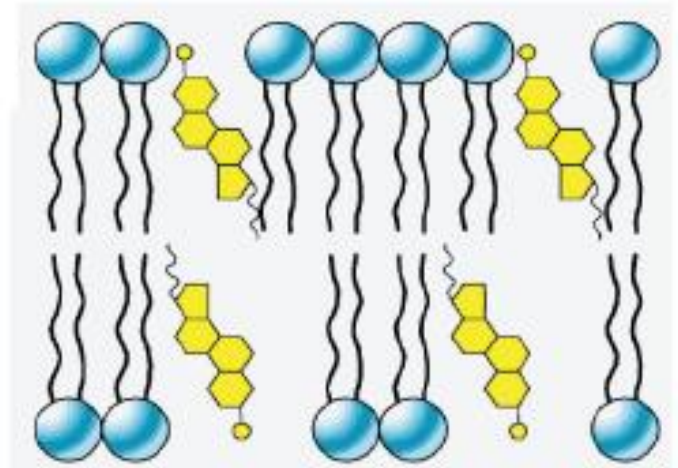
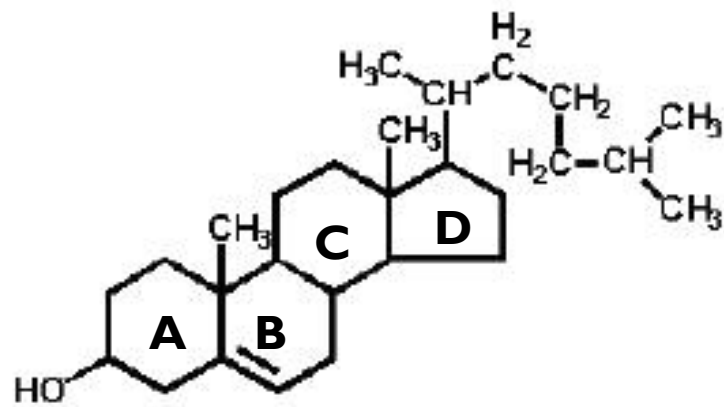


sphingomyéline

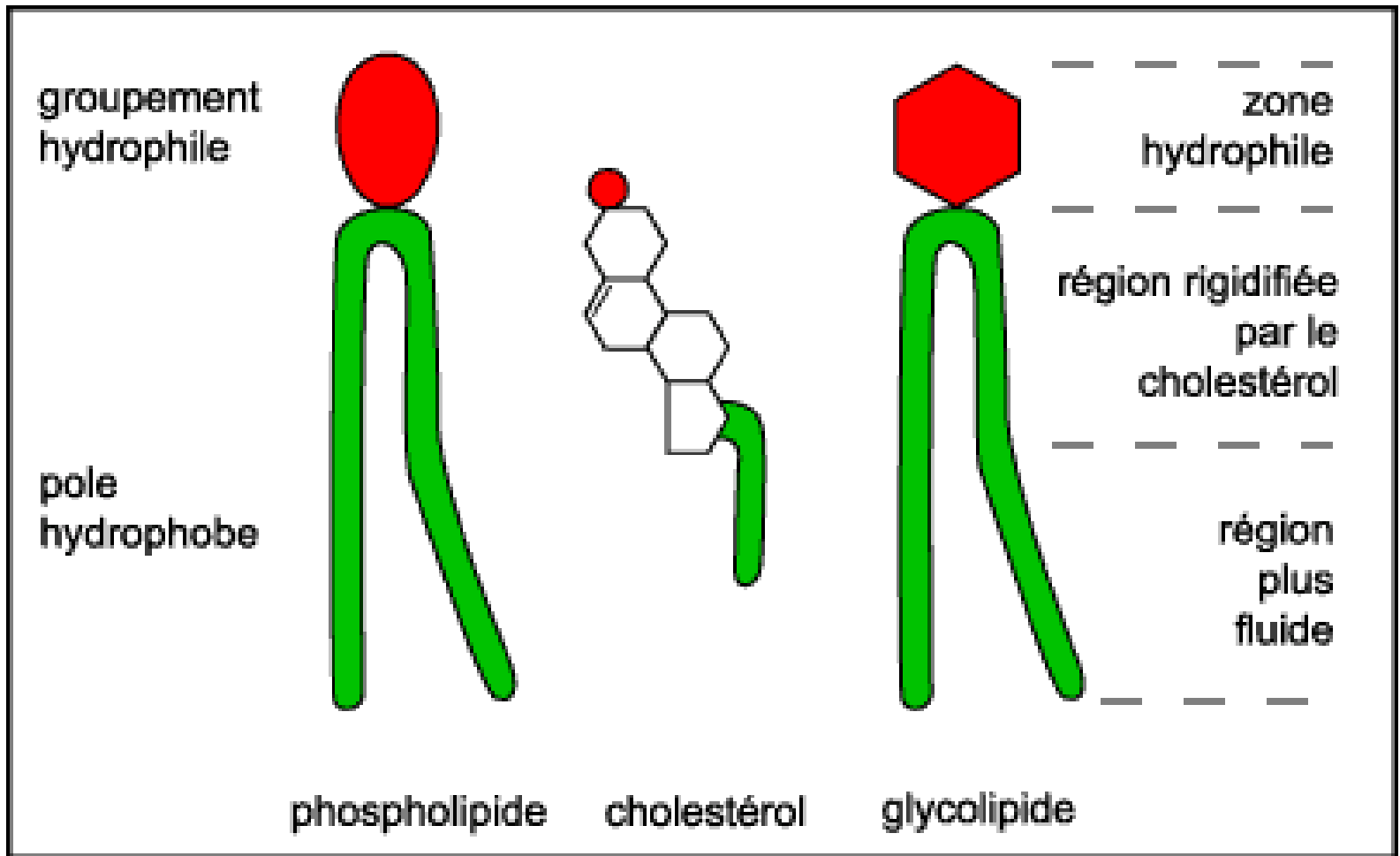
Mme HADDAD



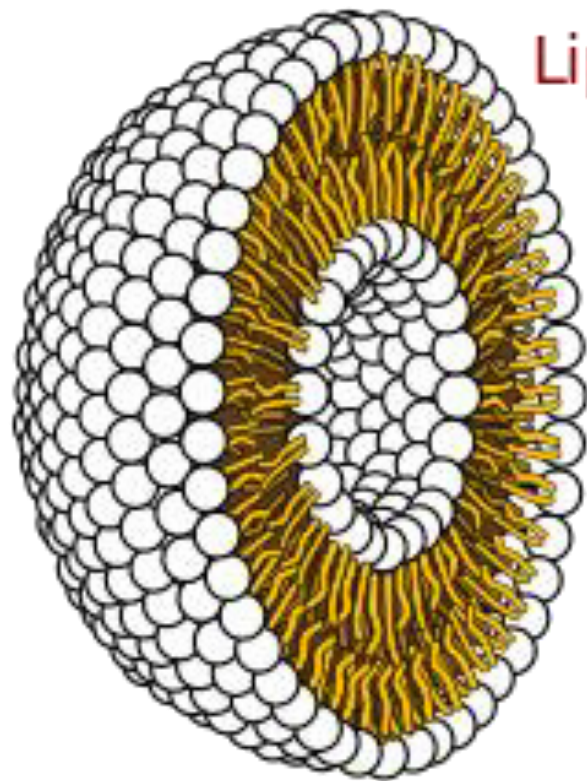
cérébroside



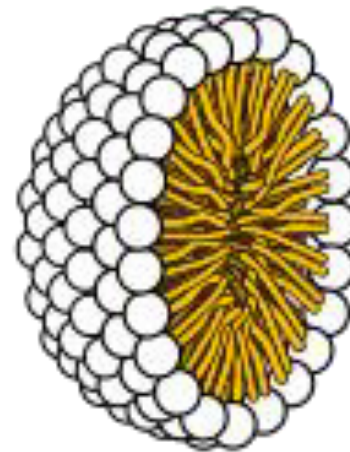
Le cholestérol



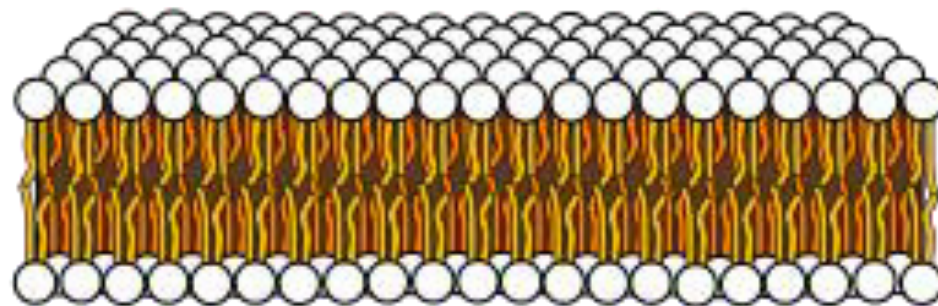
Caractère amphiphile des lipides



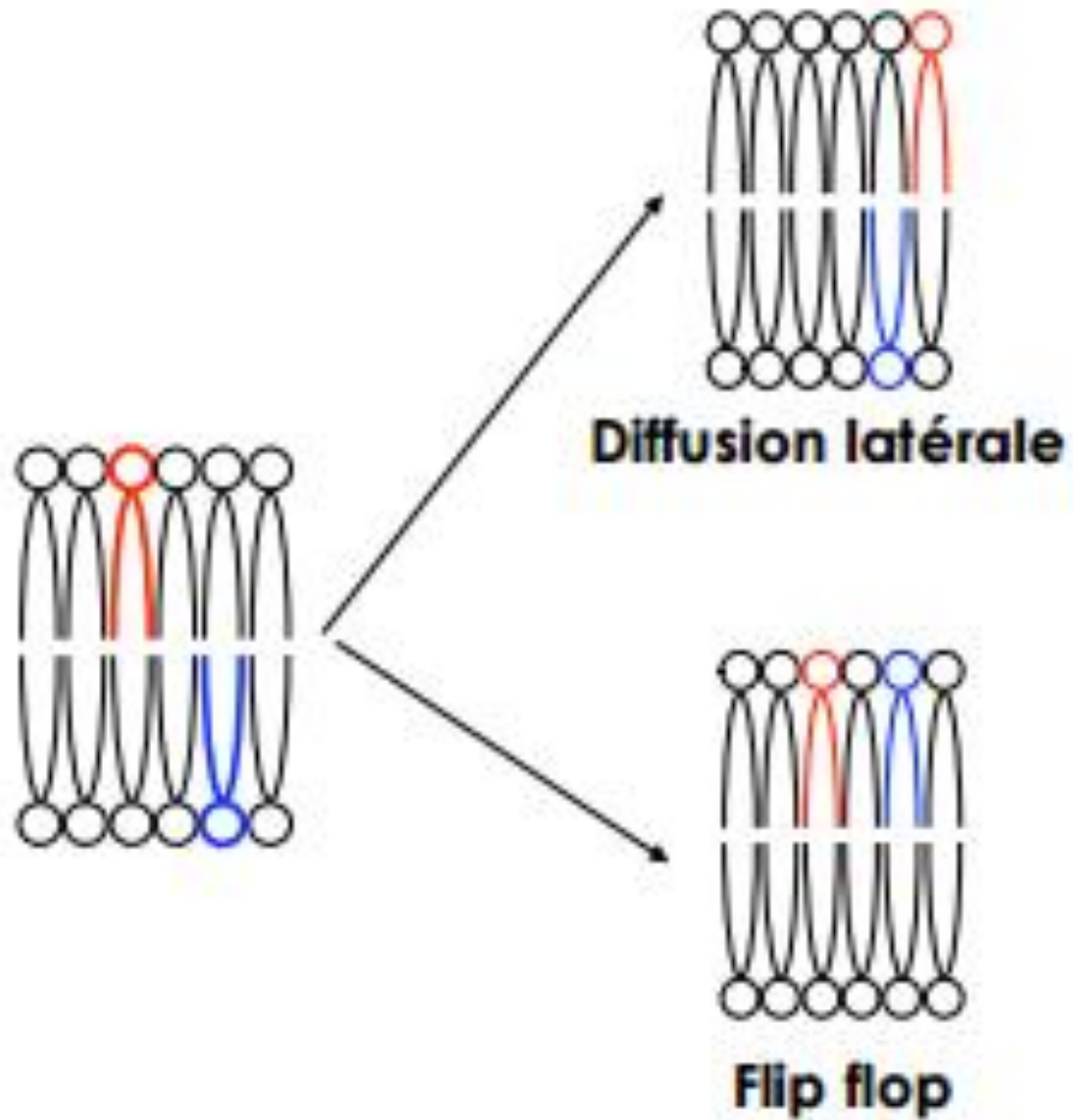
Liposome



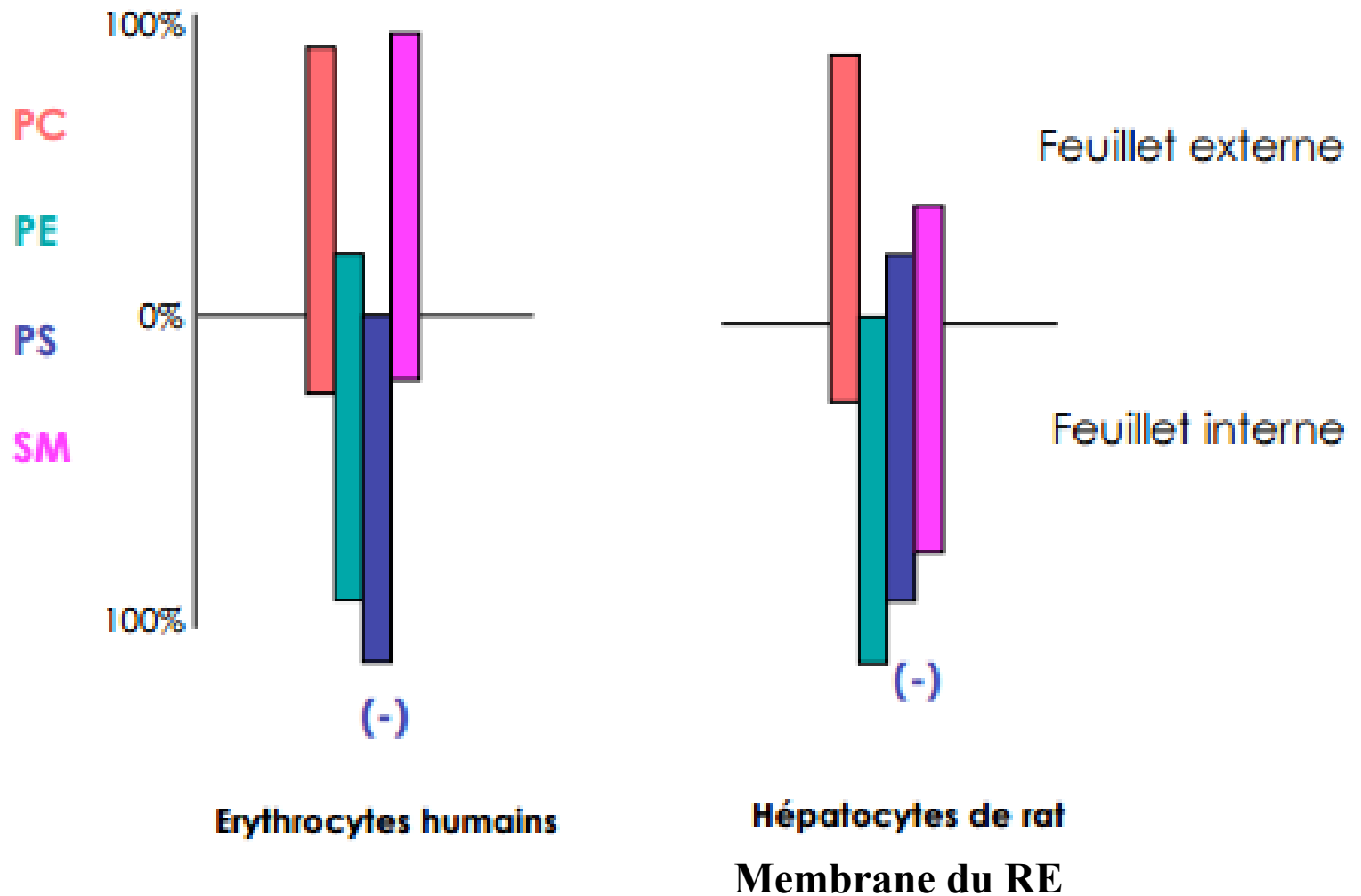
Micelle

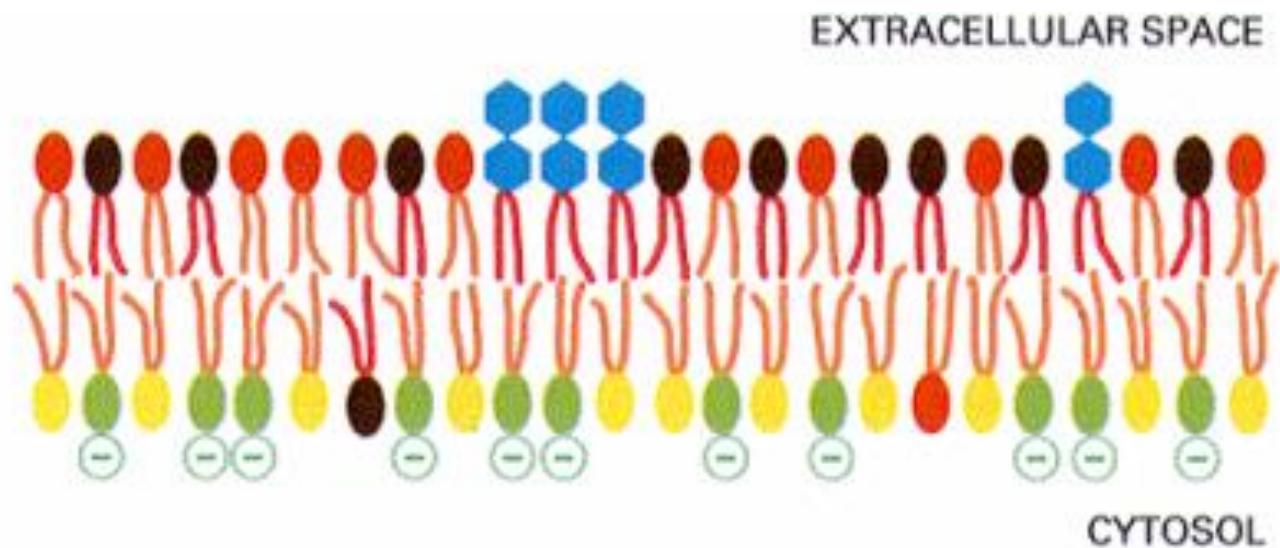


Bicouche lipidique



Les lipides ont une distribution asymétrique dans les feuillets membranaires





membrane plasmique

extérieur

intérieur

Phosphatidylserine

0

100

Phosphatidylethanolamine

10

90

Phosphatidylcholine

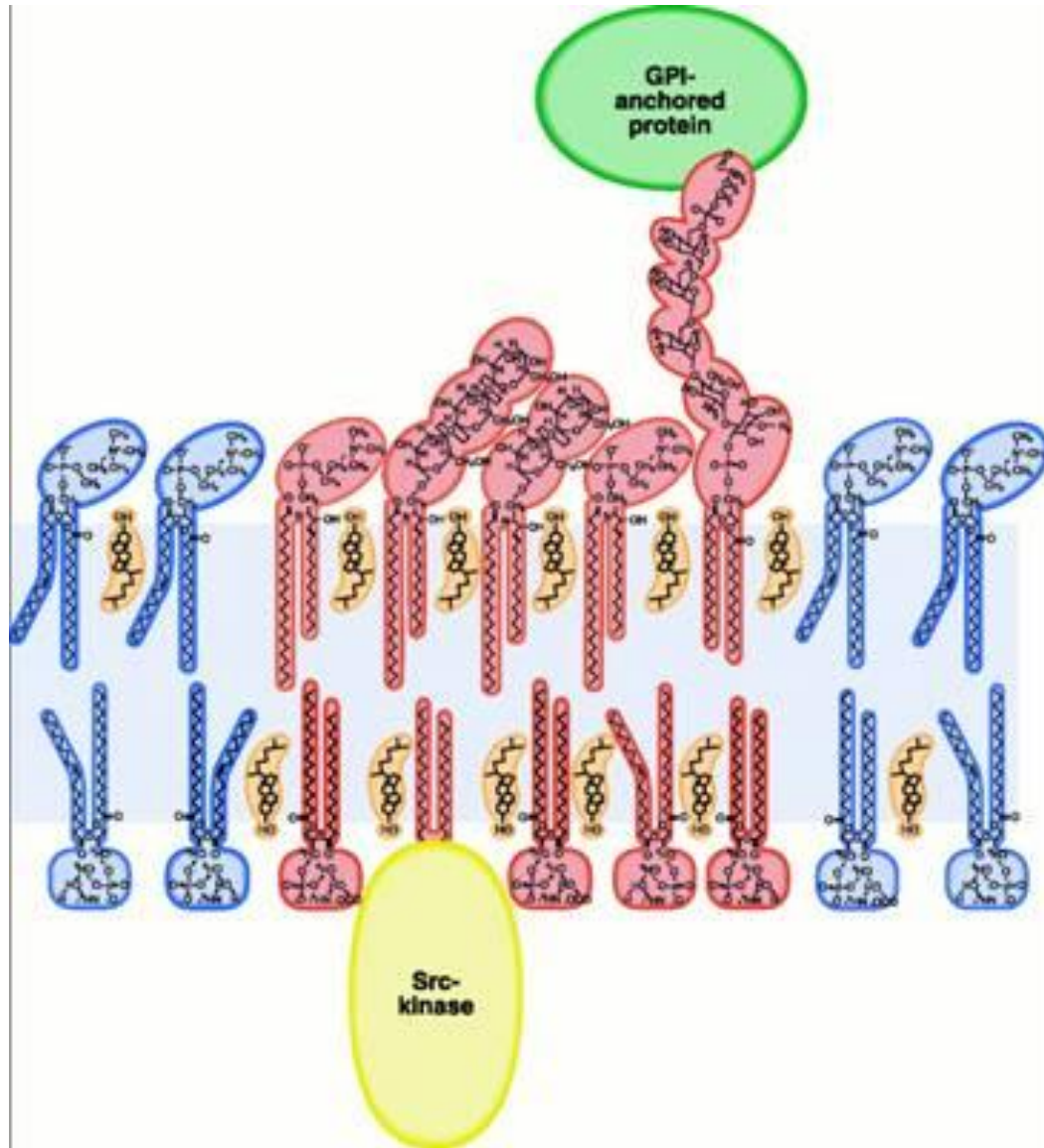
90

10

Glycolipides

100

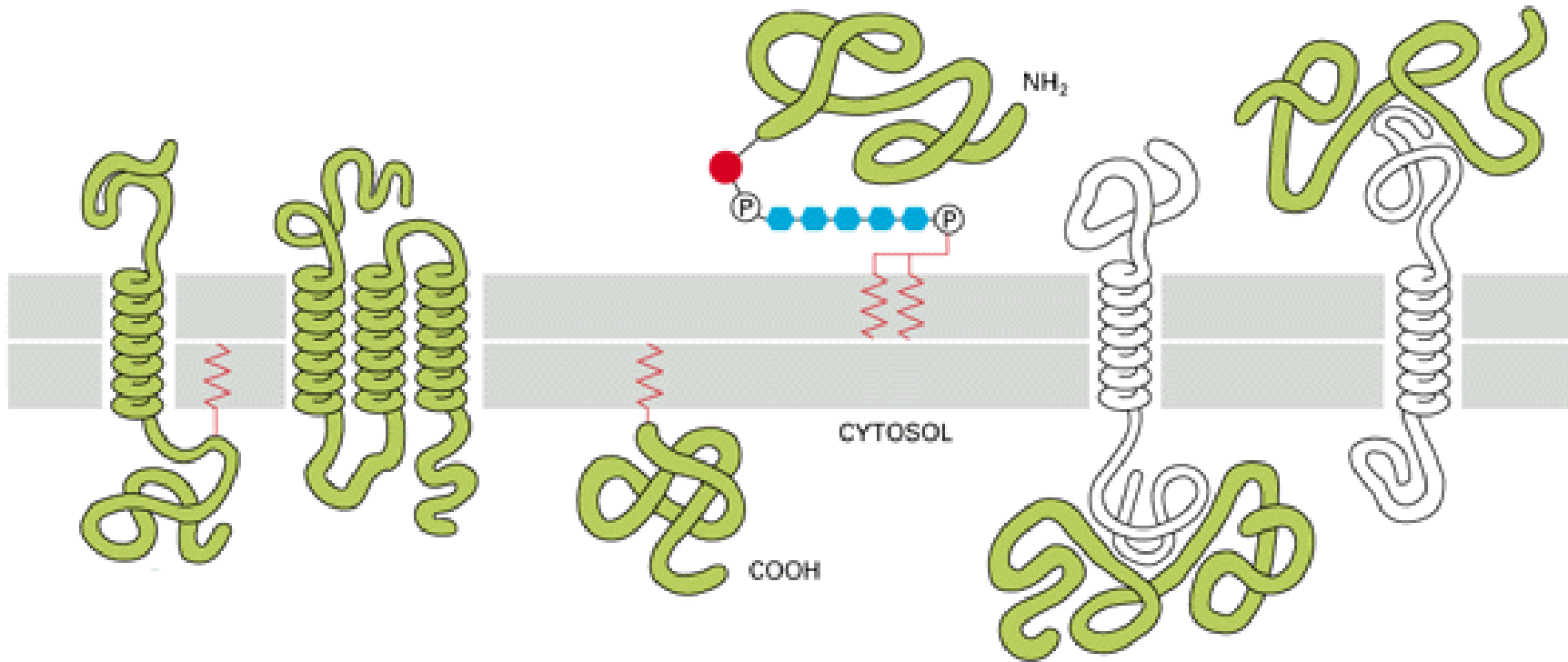
0



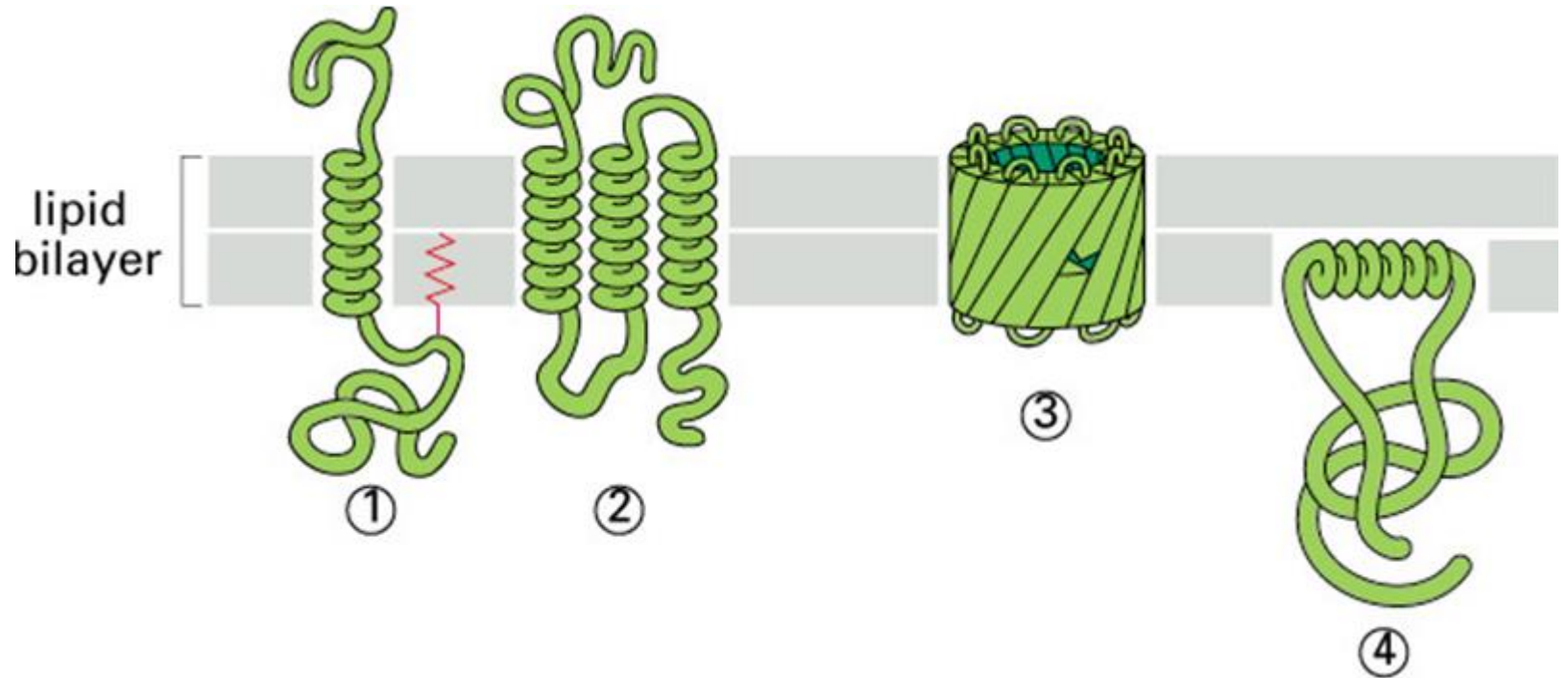
Les radeaux membranaires

Mme HADDAD

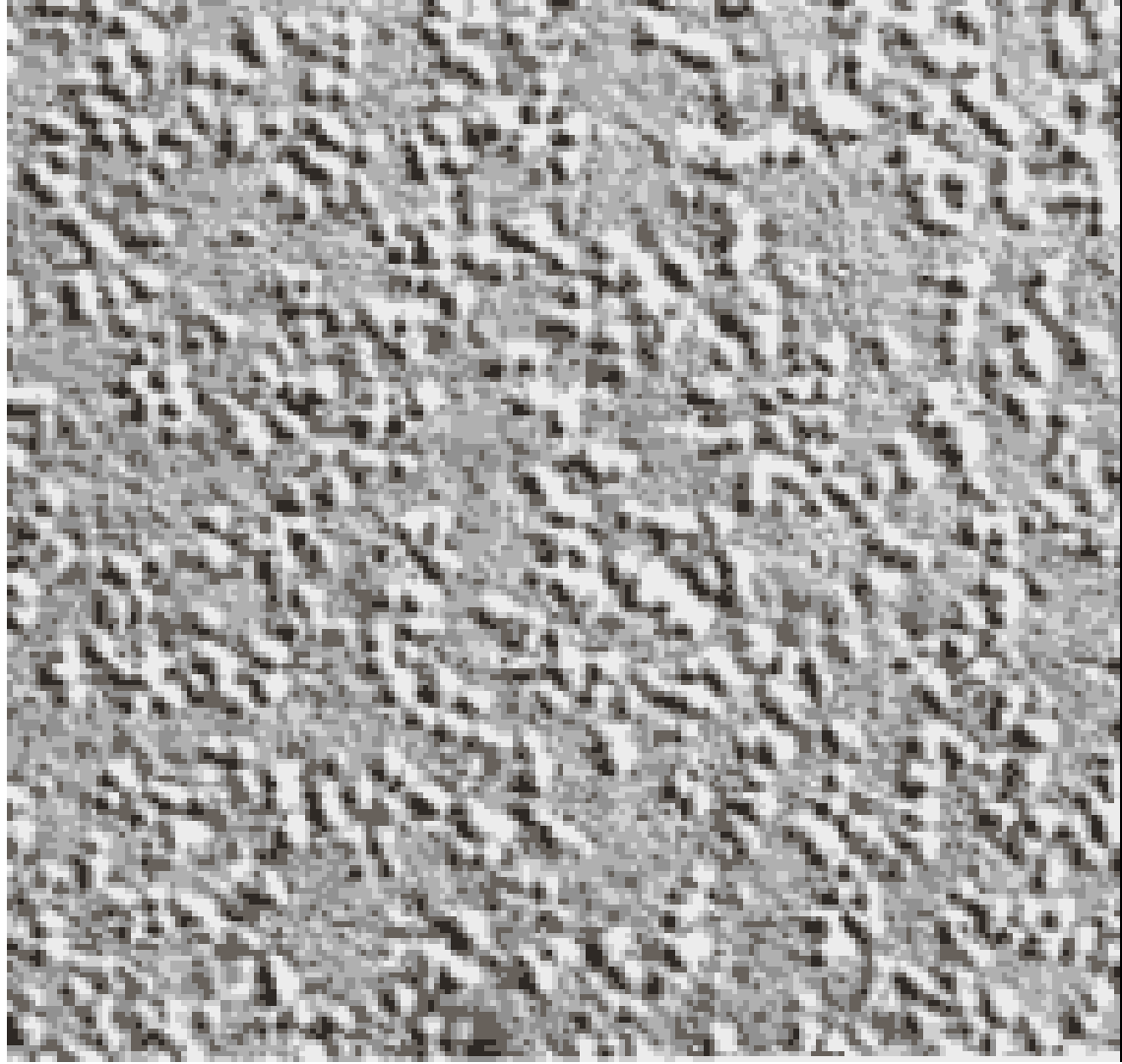
LES PROTÉINES MEMBRANAIRES

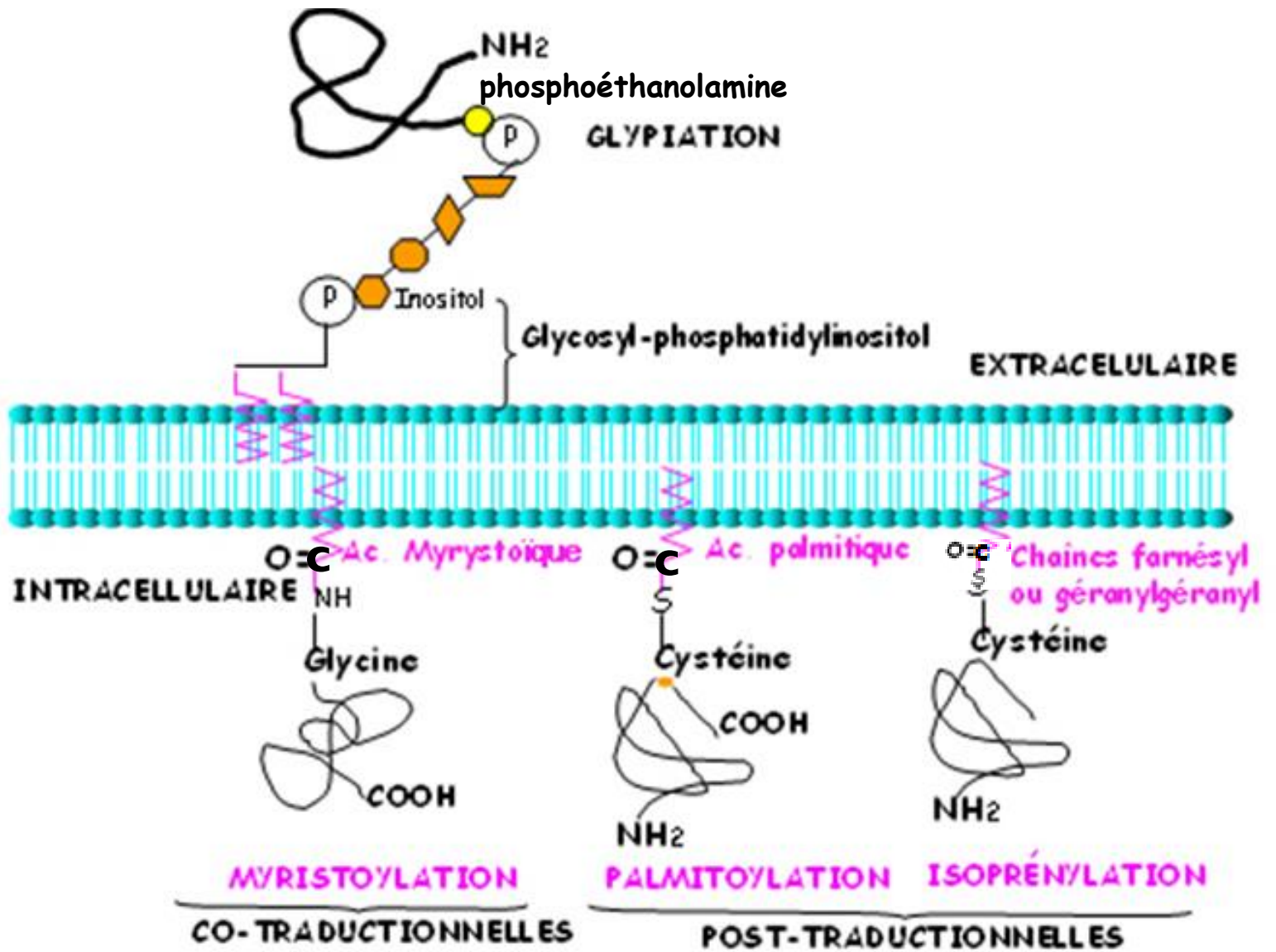


protéines intrinsèques et extrinsèques



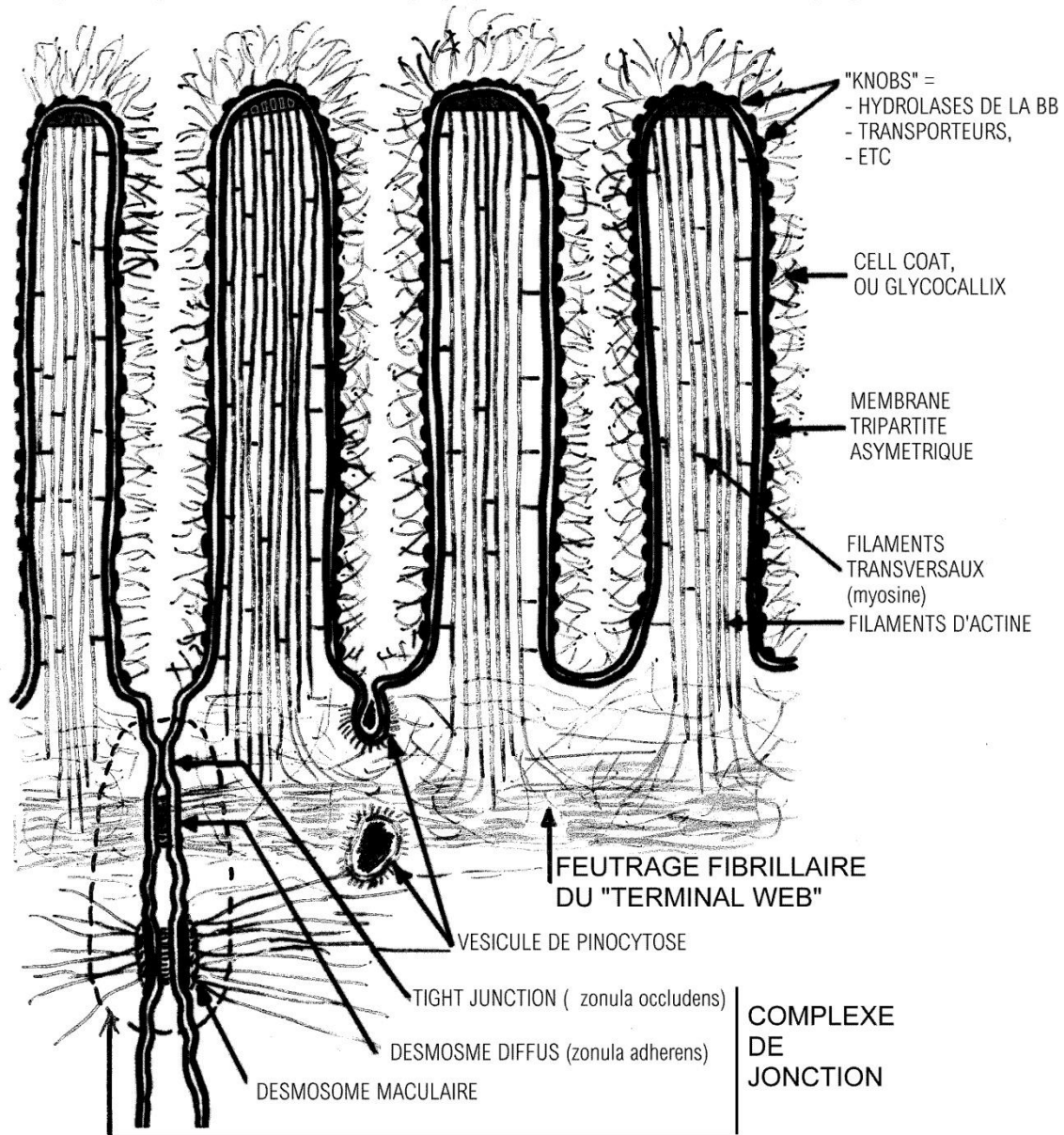
Différentes topographies des protéines intrinsèques

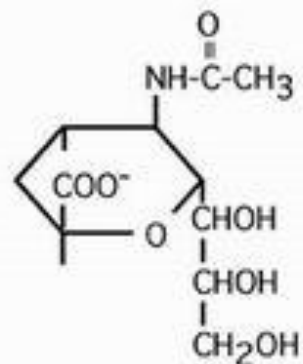
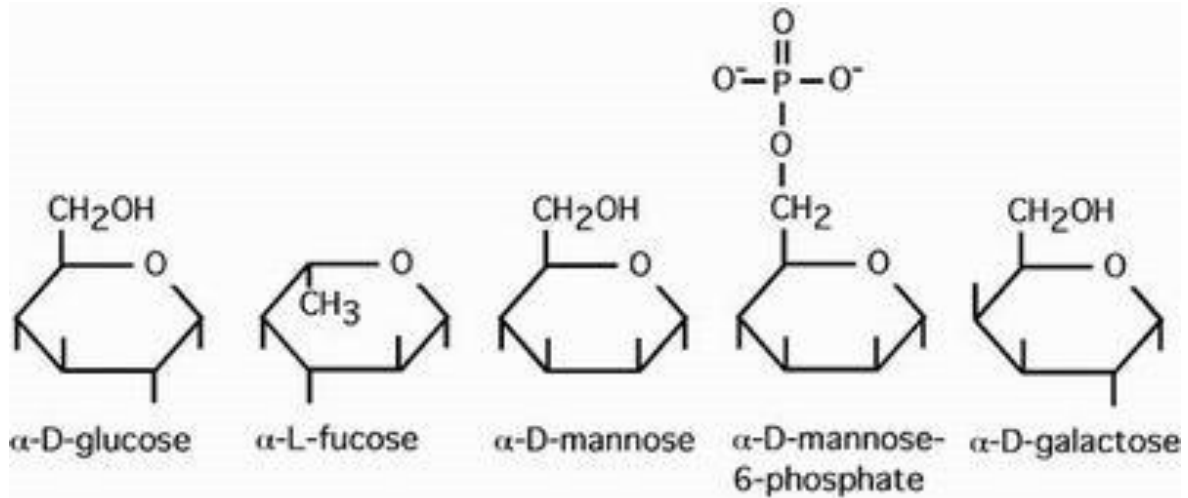




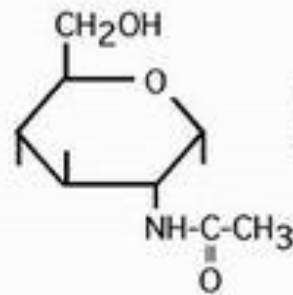
Modes d'ancrage des protéines extrinsèques

BORDURE EN BROSSE DE L'ENTEROCYTE

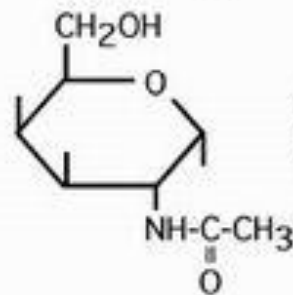




acide N-acétyl
neuraminique
(NANA)



N-acétylglucosamine
(GluNAc)



N-acétylgalactosamine
(GalNAc)

