

Faculté de pharmacie

Séminaire de l'axe

« Formulation et analyse des médicaments »



Mechanistic Studies on Cellular Drug and Gene Targeting

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Pavillon Jean Coutu

12h00 – S1-111

À l'invitation du professeur Françoise Winnik

Glycosaminoglycans (GAG) are anionic polysaccharides that are expressed in the cells and extracellular space. In our studies we have explored their role in cellular delivery of DNA complexes, demonstrating that they have inhibitory role in DNA delivery. The inhibition may be caused by the binding of anionic GAGs with cationic nanoparticles. Furthermore, it seems that with some DNA carriers excess of polycation is needed to overcome the GAG barrier in delivery. Some GAGs, particularly, hyaluronic acid, may facilitate delivery via CD44 receptor specific mechanisms. This has been utilized in ocular gene delivery. In addition, we have shown that TAT peptide mediate enhancement of delivery is sequence independent and new computational molecular dynamics on the liposomal surfaces.

Ce séminaire a été rendu possible grâce à la collaboration de Rx&D

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