

Doctoral College Metabolic & Cardiovascular Disease



IMPAIRED TRAFFICKING OF INSULIN AND AMYLOID **BETA PROTEINS IN ALZHEIMER'S BRAIN:** UNDER-EXPLORED DIMENSION OF BLOOD-BRAIN **BARRIER DYSFUNCTION?**

GUEST LECTURE by

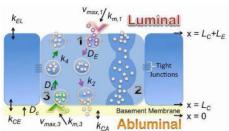


Prof. Karunya Kandimalla, PhD

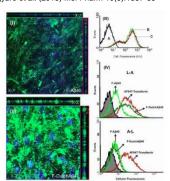
Department of Pharmaceutics & Brain Barriers Research Center, University of Minnesota, Minneapolis, USA

> Monday, 25.07.2016 11:00

SR 26.K3, Department of Pathophysiology & Immunology, MUG (Heinrichstrasse 31a, basement)

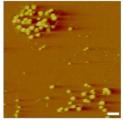


Description of the bood-brain-barrier model Agyare et al. (2013) Mol Pharm 10(5):1557-65

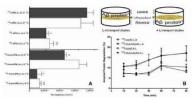


Endothelial accumulation of F-DutchA640

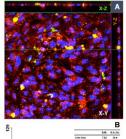
compared to that of F-A β 40 is higher in the luminial-abluminal direction but similar in the abluminal-luminal direction. Agyare et al. (2013) Mol Pharm 10(5):1557-65

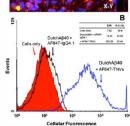


Atomic force micrograph of nanovehicles (NVs). Jaruszewski et al. (2014) Biomaterials 35:1967-76



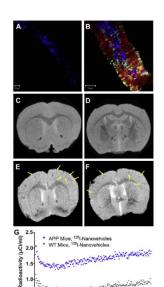
similar abluminal-to-luminal permeability of 125I-DutchAβ40 compared to that of ¹²⁵I-Aβ40 in vitro. Agyare et al. (2013) Mol Pharm 10(5):1557-65





The uptake of Alexa Fluor 647 labeled TNVs by fluorescein labeled DutchAβ40 treated human microvascular endothelial cell monolayers imaged using laser confocal microscopy.

Agyare et al. (2014) J Control Release 185:121-9



Uptake of AlexaFluor 647-nanovehicles in brain ateriole of wild type and APP transgenic mouse. Jaruszewski et al. (2014) Biomaterials