

## DANDRITE Topical Seminar

**Tuesday 8 August 2023**

**From 11.30 – 12.15  
Building 1870, room 816**



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### **The blood brain barrier; Structure, function and role in drug delivery**

The brain capillary endothelium serve as a gateway to the brain for nutrients and solutes but also act as a barrier for endogenous as well as exogenous compounds (the blood-brain barrier, BBB) which has implications for therapeutic modalities. The barrier's structural components are endothelial cells, pericytes, astrocytes, and together with microglia and neurons form the Neurovascular Unit (NVU).

The inherent difficulty of delivering pharmaceutical compounds across the BBB due to its impermeability will be discussed. Advancements in barrier in vitro design, drug delivery strategies, including nanotechnology, bioengineered molecules, focused ultrasound, and receptor-mediated transcytosis all holds promise to accelerate CNS drug development but also have limitations, which will be treated.

**Host:** Prof. Poul Nissen, Dept. Molecular Biology and Genetics, Aarhus University

*Everyone interested is most welcome to join the seminar*