K1/K2 Seminar Series 2016

Lars Herfindal

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When: Wednesday, 3rd of February, 14.15-15:00
Where: Store Auditorium, 3rd floor, Sentralblokken
Chair: Svein Haavik

"Therapeutic nanoparticles for delivery of anti-cancer drugs."

The development of new anti-cancer agents is slowed down by poor pharmaco-kinetic profile of the compounds. Likewise many of the drugs in use also have limitations such as severe toxic side effects, short half-life in plasma or poor drug loading in the tumour. *Therapeutic nanocarriers have emerged as a powerful tool to improve the druggability of compounds*. Nanocarriers are small (20-500nm) particles dedicated to carry drugs or diagnostic reagents in the blood. They can be designed to suit a particular drug/disease/tissue of interest, and can be modified to release their cargo under specific conditions or be decorated with targeting molecules.

We have worked with nanocarriers to improve cancer therapy. The presentation will give an overview of how we aim to solve fundamental problems in cancer therapy using lipid or polymeric nanoparticles. We have used nanocarriers to ensure co-delivery of drugs, to avoid toxic side effects, to introduce surface modification to prolong circulation time and to enhance selective delivery of drugs to cancer cells.

Everyone is welcome to attend!

Part of the Course FSKLI902 «Perspectives in translational medicine», 1 studiepoeng (1ECTS).

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