SEMINAR  FRIDAY 20.02.2015

PLACE: MedViz Facilities., Møllendalsbakken 7, 5th floor
TIME : 12:00-13:30

SPEAKERS/TITLE
Professor Bjørn Tore Gjertsen
Professor Emmet Mc Cormack
Postdoctor Spiros Kotopoulis

Seminar title: Sonoporation: From the lab to human clinical trials

ABSTRACT

Sonoporation, the use of ultrasound and stable gas microbubbles in the size range of 2–10 μm to form transient pores in cell membranes, has been of great interest as a therapeutic modality for the past decade. This technique could be used to improve the delivery of current drugs in very localised regions. Within MedViz, a translational team has been developing sonoporation for use against pancreatic cancer, a cancer with particular low survival and where limited advances in new therapy have been experienced. Through ex vivo and preclinical models the sonoporation technique we have demonstrated that it can be used safely in patients with local advanced pancreatic cancer. A companion biomarker has been developed for monitoring the sonoporation-specific cell stress, and may be a method for monitoring effect and toxicity in future clinical trials. We will present our results so far and discuss plans for further pre-clinial and clinical development of therapeutic sonoporation.