

April 10th, 12pm, BMB Seminar Room
Seminar by Assoc. Prof. Lykke Sylow, PhD
Molecular Metabolism in Cancer & Aging Group at
the University of Copenhagen



Host: Paolo Ceppi
Section of Translational Biology, BMB

**Title: Molecular basis and clinical relevance
of insulin resistance in cancer**

Research Summary:

Lykke Sylow is an Associate Professor and group leader of the Molecular Metabolism in Cancer & Aging Group at the University of Copenhagen. Her focus is on understanding the regulation of glucose uptake in response to insulin and exercise.

Metabolic dysfunction and muscle wasting in patients with cancer are associated with poor cancer prognosis, yet the molecular mechanisms causing cancer-induced metabolic dysfunction and cachexia remain to be defined.

A key link between metabolic- and muscle mass-regulation is adenosine monophosphate-activated protein kinase (AMPK). Recently, Lykkes work has centered on the role of AMPK in skeletal muscle metabolic dysfunctions in aging and cancer. She utilizes research on exercise adaptations to harness the positive effects of exercise on aging and cancer. In this talk, she will focus on AMPK' role in muscle preservation in cancer cachexia, focusing on AMPK's insulin sensitivity enhancing effect. She will put forward the argument that call for a shift in the current dogma of AMPK as a mere regulator of cell catabolism, concluding that AMPK plays an unexpected role in tissue preservation, aided by its imperative role in insulin sensitivity in cancer.