K1/K2 Seminar Series 2015

Melina Claussnitzer:
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Blame obesity on your genes? New genetic “excuse” found in too lazy fat cells

When: Tuesday, 14th of April, 14:15-15:00
Where: Store Auditorium, 3rd floor, Sentralblokken
Chair: Simon Dankel

There is a 44% chance your fat cells are a little too lazy.

The genetic alteration most strongly associated with obesity in the general population is found in DNA near the *FTO* gene. But how this DNA region promotes obesity (~3.3 kg higher BMI) has remained controversial despite more than 600 studies.

Dr. Melina Claussnitzer and colleagues, including Dr. Simon Dankel and Prof. Gunnar Mellgren at UiB/HUS, have for the first time explained genetic predisposition to obesity by a change in fat cell function. Individuals who carry the risk allele have fat cells that less effectively burn energy as heat (with more fat-storing *white* fat cells than heat-dissipating *beige/brown* fat cells).

The discovery was made possible by Dr. Claussnitzer’s groundbreaking general approach to translate genetic association signals into the underlying molecular mechanisms of a trait/disease, including finding the affected tissue/cell type and the specific molecular changes in DNA that alter cell function, opening up a new era in functional genomics/translational medicine.

Everyone is welcome to attend!

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