

Wednesday 22th October at 11:00-12:00 in room 4.39:

Professor Jacob v.B. Hjelmborg and Associate Professor Ulrich Halekoh from the Biostatistics Unit at EBB will give a lecture on:

Increased Resemblance of Telomere Length in Dizygotic Twins of Older Fathers

Abstract: Leukocyte telomere length (LTL) is a complex human trait. It is longer in women than men and influenced by environmental factors. LTL is longer in offspring of older fathers, a finding that might stem from the longer telomeres in sperm of older men.

Here we show based on two independent twin studies, comprising 1,878 twins, an increase in the resemblance of LTL between dizygotic twins of older fathers, which is not the case for monozygotic twins. A biometric model attributed the increased resemblance in LTL in the dizygotic twins to shared environment factors.

We hypothesize that this phenomenon results from an age-dependent germ stem cell selection in the fathers' testes, where the selected stem cells are more cognate with respect to telomere length, share resistance to aging, and have longer telomeres.