BBB Seminar (BMED380)

SCAN ME

Thursday, June 6. 14:30, **NB! at the 9th floor of BBB (9A110bP)**

The influence of sex hormones on cardiovascular health and adaptations to exercise training

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Whereas ageing is one of the strongest predictors of hypertension and cardiovascular events, physical activity is superior to any other alternative for maintaining cardiovascular integrity and health with age. Thus, although age *per se* is a factor, physical inactivity over many years is at least as detrimental to the cardiovascular system as is ageing. A positive aspect is, nevertheless, that even a relatively short period of effective endurance training can have marked beneficial effects of microvascular function in older individuals. Longitudinal studies examining the effects of 8-12 weeks of training in middle-aged to older individuals have shown beneficial microvascular aspects such as increased vasodilator capacity, reduced vasoconstrictor effects, increased microvascular vasodilator responsiveness and reduced vascular oxidative stress. Although both men and women present microvascular adaptions to regular physical exercise, evidence suggest that adaptive processes are slower in postmenopausal women compared to age-matched men and the decline in cardiovascular health is also known to be accelerated in women after menopause. These aspects appear to be related to the abrupt loss of estrogen as it has marked protective effects on the cardiovascular system. This talk addresses the role of exercise training and sex hormones on skeletal muscle microvascular function and vascular health in men and women.

Chairperson: Helge Wiig, Department of Biomedicine