"Biology without walls, the novel endocrinology of bone"

January 25th 2011, 14:00-15:00
Winsløwparken 25, auditorium

Abstract:

Based on the principle of functional dependence between organs we have explored whether the skeleton had more functions than the ones classically ascribed to it. Confronting evolutionary and clinical observations led us to hypothesize that there may be a coordinated, endocrine in nature, regulation of bone mass, energy metabolism and reproduction. We have so far focused on the relationship between bone mass and energy metabolism. This analysis verified that whether we looked at food ingestion, appetite control of glucose homeostasis there is a tight interplay between bone mass accrual and energy metabolism.

This interplay is orchestrated by hormones that appear during evolution with the skeleton (leptin and osteocalcin) and by others that are more ancient (serotonin and insulin). The seminar will review our current knowledge about this co-regulation.

Contact: Linda Harkness, lharkness@health.sdu.dk tlf. (6550) 4081