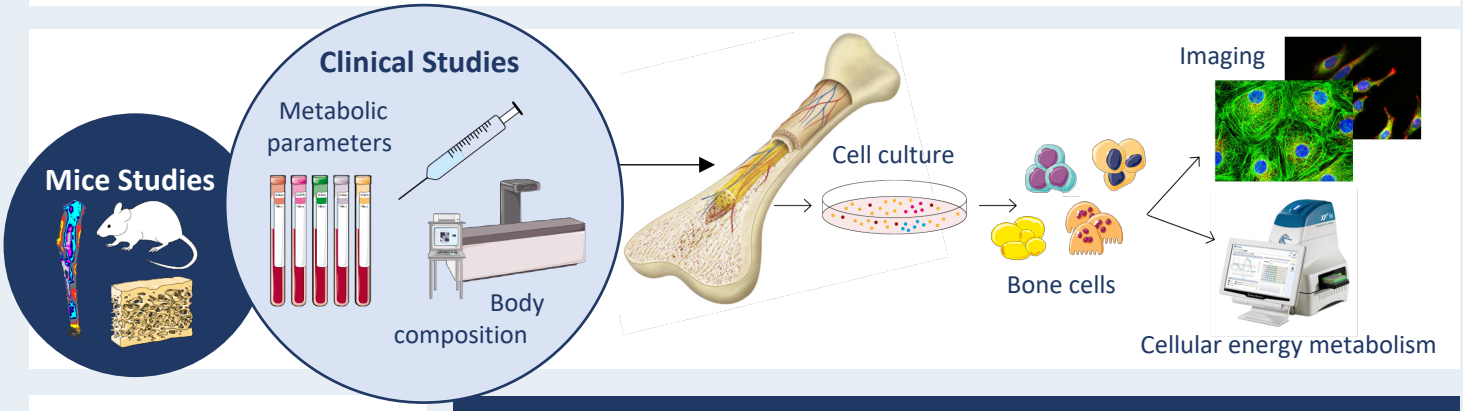
Frost Group

Molecular Endocrinology Department - KMEB

In the Frost Group our focus is on bone metabolism and the interplay between bone and whole-body energy metabolism with special emphasis on type 1 and type 2 diabetes, mitochondrial function and the effect of incretin hormones



For more information about projects please contact Morten Frost; **mmfnielsen@health.sdu.dk** or Nina Hansen; **nwhansen@health.sdu.dk**

The KMEB-lab - who are we?

We are a multidisciplinary research lab split between the Department of Endocrinology at the University Hospital of Odense and the University of Southern Denmark. Our profile includes medical doctors, basic researchers, Ph.D.-students, master students, and lab technicians. Most of our projects are done in collaboration with international research units. KMEB.SDU.DK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MOLECULAR ENDOCRINOLOGY DEPARTMENT

Projects	Description
Bone resorption potential after an acute infusion of incretin hormones	GLP-1 and GIP are intestinal hormones which effect on bone are believed to be beneficial but has so far not been investigated in bone cells. This is a clinical study where you will investigate the effect of an Infusion of these hormones on the bone cell energy metabolism and bone formation/resorption potential.
The effect of Semaglutide on bone energy metabolism	Semaglutide is a GLP-1 receptor agonist, which is used in the medical treatment of type 2 diabetes and which increases the activity of human bone cells. The mechanisms behind is unknown. This is a clinical study where you will investigate the effect of Semaglutide on the energy metabolism of bone cells.
Cellular bioenergetics in rare diseases	The mitochondria are the primary source of energy in our cells. The constant maintenance of bone tissue is a highly energy demanding process and thus patients with mitochondrial defects have an increased risk of bone fragility. This is a clinical study where you will investigate the energy metabolism of bone cells from patients with mitochondrial defects and from healthy controls.
Type 1 diabetes and fracture risk	Type 1 diabetes is associated with an increased fracture risk, although the underlying mechanisms remain unknown. In this study you will investigate bone cells and bone tissue from type 1 diabetic patients and healthy controls to describe the cellular phenotype.