

Professor Torben Hansen

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Torben Hansen is Professor of Metabolic Genetics at CBMR, University of Copenhagen, where he leads the Hansen Group within Genomic Physiology and Translation. His research uses genetic and genomic data — from chip-genotyping to whole-genome sequencing — to identify the loci underlying diabetes and obesity, and integrates this with proteomic, metabolomic, and gut- and oral-microbiome data to build a multi-layered picture of metabolic disease. His group also applies these approaches to childhood obesity, studying the genetic and proteomic drivers of disease and treatment response in children with obesity.

A key focus of the group's work is studying the genetic architecture of the Greenlandic isolated population, which has enabled the identification of novel disease-risk genes, including *TBC1D4* and *ADCY3*. Among his group's findings, a loss-of-function variant in the sucrase-isomaltase gene, common among Greenlanders, was shown to be associated with a markedly healthier metabolic profile in adult carriers, pointing to a potential new target for improving metabolic health more broadly.