**24.06. 2021 at 11 am Thorsten Hornemann, University Zürich**

**“Dysregulated sphingolipid homeostasis as a cause for childhood ALS”**

Th. Hornemann is professor for clinical chemistry and head of the lipidomics research facility at the Institute for Clinical Chemistry, University Zurich. His primary interest is the sphingolipid metabolism where he pioneered by identifying several new lipid metabolic pathways. He discovered and characterized a class of atypical and toxic 1-deoxySphinglipids (1-deoxySL) as pathogenic metabolites causing the inherited peripheral neuropathy HSAN1 and established 1-deoxySL as relevant factors for the diabetic sensory neuropathy. He has long-standing experiences in analytical chemistry and LC-HRMS-based lipidomics (targeted and untargeted). He and his team developed several unique analytical methods and metabolic labelling techniques to investigate the structure, function and metabolism of sphingolipids with a particular focus on rare and atypical sphingolipid metabolites. He also established several lipid metabolites and lipid based metabolic signatures as diagnostic and prospective biomarkers for cardio-metabolic diseases including NAFLD, CVD, MetS and T2DM.