

## Biography Dr Jens-Christian Holm

Head Consultant in Paediatrics, MD, PhD, Associate Professor, Head and founder of The Children's Obesity Clinic, European Centre for Obesity Management, Head and founder of the HOLBAEK Study. Dept. of Paediatrics. Holbaek University Hospital, Holbaek, Denmark.

Dr Jens-Christian Holm started in obesity research 30 years ago where he based on insights from the discovery of leptin developed, financed, conducted, evaluated and wrote his PhD-thesis. Dr Holm studied longitudinal changes in leptin, leptin receptor and insulin during changes in the degree of obesity in children and adolescents in order to try to predict changes in the degree of obesity inspired by the minimal model by Bergman. In 2007, Dr Holm founded – and has since been the leader of – *The Children's Obesity Clinic* in Holbaek., Dr Holm has established a framework for evaluation, communication, diagnosis, and long-term management of childhood obesity entitled, the *HOLBAEK Model*, which constitutes a real and present paradigm shift in obesity understanding, communication, and treatment. In more than 30 international, peer-reviewed, scientific papers the *HOLBAEK model* have demonstrated clinical results across healthcare sectors in terms of reductions in the degree of obesity and fat mass as well as improvements in hypertension, lipid and glucose metabolism, fatty liver, sleep apnea, physical activity, appetite, quality of life, self-esteem, bullying, and own body acceptance. These results are independent of social class, the degree of obesity, genetic risk scores for obesity, disturbed eating and show concomitant weight loss among parents. *The Children's Obesity Clinic* in Holbæk, Denmark has since been appointed as an *European Center of Obesity Management*, where Dr Holm has been sharing knowledge with other Centers of Management. The work surrounding the *HOLBAEK Model* has a widespread clinical endorsement with more than 80% of Danish municipalities having applied this model to their everyday obesity management routine. Since the beginning, the patients receiving the *HOLBAEK Model* have been monitored in a clinical research registry, *The HOLBAEK Study*, including now more than 9,000 children, adolescents, and young adults including a wide array of genetic and phenotypic data and biological samples. Through the past 15 years, Dr Holm has taken the initiative to more than 22 PhD studies which have contributed to more than 130 international peer-reviewed scientific papers covering many aspects of early onset obesity and metabolic disease during growth and development. The *HOLBAEK Study* is involved in large international consortia conducting translational research, which have recently led to publications in high-impact journals. Dr Holm`s engagement in basic and translational research has contributed to the discovery of novel genetic mutations associated with obesity, produced reference materials for a wide range of biomarkers, studied the effect of obesity on early growth (including pregnancy) and showing an important window of opportunity for intervention in preschool children. His endocrinological studies have covered adipokine aspects of obesity including leptin, the soluble leptin receptor, adiponectin, insulin, neonatal to adolescent growth, insulin resistance, thyroid axis, and seeking to link the degree of obesity to health. Further, Dr Holm has developed a high-level, evidence-based, healthcare professional educational programme on obesity management and communication that recently gained international recognition by being awarded the *Best National Training Programme in Europe 2022*. Furthermore, Dr Holm has been an active member of *The European Association for the Study of Obesity (EASO)* and co-chair of the *Childhood Obesity Task Force* and contributed to policy- and positions statements, as well as the planning of scientific programs of consecutive European Congress on Obesity (ECO) in nearly a decade. In addition, Dr Holm has as an international obesity expert been a regular member of the EASO Masterclass faculty. Dr Holm has contributed as an invited speaker at multiple and numerous national and international conferences and has been invited to take part of advisory boards of several governments and pharmaceutical companies.