

## Curriculum vitae



Prof. Markolf Hanefeld, Director of Centre for Clinical Studies, Technical University Dresden

I gained my MD in 1961 and was awarded the PhD in 1974. My research interests include internal medicine, metabolism, diabetology and endocrinology. The academic career started in the Medical Academy “C. G. Carus” in Dresden in the Diabetes Department of Prof. Haller.

In the seventeenth I worked on liver changes in metabolic diseases. The major result was the finding that the fatty liver is mainly a symptom of disease of the metabolic syndrome. We furthermore could clarify that the peroxisome proliferation observed during long term intake of fibrates is a benign adaptation and not a precancerous stage with risk of carcinoma after long-term intake of fibrates. This was also the first time that we came to the **concept of the metabolic syndrome** with steatosis hepatis as one of the components.

In 1970 I initiated the **Diabetes Intervention Study (DIS)**, the first intervention trial with newly diagnosed type 2 diabetes that used intensified health education as intervention measure. This study was the first to show that improved quality of postprandial hyperglycaemia is associated with a lower cardiovascular and all-cause mortality. In 1981 I published together with Dr. W. Leonhardt the first comprehensive description of the metabolic syndrome with a clear definition and a review of epidemiological, clinical and pathophysiological evidence for this concept. In 1990 the DIS, whose principle investigator I was, was finished.

Since 1989 we performed numerous clinical trials on new oral antidiabetic drugs with focus on antihyperglycaemic agents and the effect on the postprandial state. This was one source for the **STOP-NIDDM** trial where subjects with IGT are treated with acarbose vs. placebo. The major endpoint was the conversion of IGT to diabetes. Dresden was the biggest centre in this multinational trial. We could show that control of postprandial hyperglycemia not only reduces the conversion of IGT to type 2 diabetes but also significantly prevents cardiovascular complications and hypertension.

To further evaluate the importance of post-challenge hyperglycaemia I initiated the **Risk factors in IGT for Atherosclerosis and Diabetes (RIAD)** study that analyses the impact of various risk factors in the postprandial state on intima-media-thickness of the arteries and prognostic factors for conversion of IGT to diabetes. Data on that have recently been published in top journals identifying 2 hour post-challenge plasma glucose as an independent risk factor for IMT at the same level of significance as LDL- and HDL-cholesterol.

In 1974 I became a member of the European Atherosclerosis Society and was elected in its executive committee. Furthermore, I am a member of the Council of Atherosclerosis of ISFC and the International Task Force for the Prevention of Coronary Heart Disease. I was the founder of the Saxonian model of education and care for diabetes and of the Saxony-Thuringia Expert Forum for Diabetes and Metabolic Diseases. In 1990-1992 I founded the Saxonian Society of Metabolic Diseases and Endocrinopathies and in 1991 – a Communication Centre for Diabetes, Metabolic Diseases and Nutrition in Dresden.

In 1994 I became an active member of the New York Academy of Sciences and in 1995 a member of the Ludwig-Heilmeyer Society. In 1996 I was elected the President of the German Atherosclerosis Research Society. I was a lecturer on endocrinology and metabolism at the University of Dresden from 1975-2000. In that time I was consultant for endocrinology and diabetes at the Medical Faculty in Dresden and responsible for the education programmes for patients with diabetes. More than 100 students and young scientists were guided by myself to get their MD and 10 to get their PhD. In 1996 I became a Visiting Professor of the Private University in Buenos Aires. In 2000 I was appointed to a Honorary Professor of the University of Havana, Cuba. I am also a member of numerous national and international advisory boards for the prevention of diabetes and its complications.

In 2003 I became honorary member of the Bulgarian Obesity Society. In the same year I was decorated with the Rudolf Schönheimer medal of the German Atherosclerosis Research Society.

I have published 12 monographs and more than 400 original articles in scientific journals on diabetes, lipoprotein disorders, atherosclerosis research and the metabolic syndrome.

From 1985-1991 I was head of Department of Endocrinology and Metabolism of the Medical Clinic of the Medical Academy Dresden. In 1995 I became director of the Institute and Outpatient Clinic of Clinical Metabolic Research of the Medical Faculty “C.G.Carus”, Technical University Dresden. Since 2000 I am the director of the Centre for Clinical Studies of the Technical University Dresden.

At time I am investigator/principal investigator of more than 30 studies. I was/am in the steering committee of STOP-NIDDM, NAVIGATOR, ORIGIN, DIS study etc.