

## Pressemitteilung

# Deutsches Zentrum für Diabetesforschung Birgit Niesing

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### DZD Researcher Robert Wagner Receives the Werner Creutzfeldt Award

The German Diabetes Association (DDG) has given the Werner Creutzfeldt Award to DZD researcher Prof. Dr. Robert Wagner. With this award, the specialist society honors his extraordinary achievements in the field of research into the pathogenesis of prediabetes and type 2 diabetes from various aspects of organ crosstalk. The award ceremony will take place during this year's Diabetes Congress (May 8 to 11) in Berlin.

Prof. Wagner heads the "Clinical Study Center" working group at the DZD partner German Diabetes Center in Düsseldorf and is W3 Professor for Clinical Diabetological Metabolic Research at Heinrich Heine University Düsseldorf. The scientific focus of Prof. Wagner's work is on clinical translational research into the pathogenesis of type 2 diabetes and its complications. One of his focal points is understanding the heterogeneity of diabetes, which will lead to the development of precision medicine approaches to prevent late complications.

#### Heterogeneity of prediabetes

Wagner's research led to important insights into the heterogeneity of prediabetic metabolism. He was able to show that there are six subtypes of prediabetes, which differ in the development of the disease, the risk of diabetes and the development of complications.

The findings are based on data from 899 people at risk of diabetes but not yet diagnosed, who took part in the Tübingen Family Study and the study of the Tübingen Lifestyle Program of the DZD partner Institute for Diabetes and Metabolism Research (IDM) over a period of 25 years. Based on oral glucose tolerance tests, magnetic resonance measurements of body and liver fat and genetic examinations, Wagner and his team identified three prediabetes subtypes that have a rather low risk of type 2 diabetes – but also three subtypes with a high risk of progression. The latter are also more likely to develop severe courses and complications.

### On the way to more precise diabetology

Type 2 diabetes is a disease with a greatly varying course. Together with DDZ researchers, Wagner used an innovative algorithm to stratify people with type 2 diabetes based on routine data and thus illustrate the metabolic diversity of diabetes.

These findings on the subtyping of diabetes and prediabetes might help to assess individual risks and courses of type 2 diabetes better and earlier in the future. One practical application would be to establish monitoring, prevention and therapy programs tailored to the individual subtypes.

#### Werner Creutzfeldt Award

The Werner Creutzfeldt Award is presented by the DDG to German-speaking medical researchers for outstanding work in the field of pathophysiology and therapy of diabetes mellitus. The award, initiated and sponsored by Lilly in honor and memory of Prof. Dr. med. Dr. h.c. Werner Creutzfeldt, was presented for the first time in 2007. The award is endowed with €10,000.