PRESS RELEASE

**Elric Zweck Receives Karl Oberdisse Award 2021**

**A new study by the German Diabetes Center shows that type 2 diabetes affects the energy metabolism in the human heart muscle. For this study, this year's Karl Oberdisse Award was presented to the scientist Elric Zweck.**

**Düsseldorf (DDZ) –** Changes in energy metabolism play a key strategic role in the development of heart failure. This, in turn, is a common complication of diabetes. However, until now it was unclear whether these changes were caused by the diabetes itself or by other concomitant diseases. A new study by the German Diabetes Center has now provided evidence that the human heart muscle in type 2 diabetes actually has a reduced oxygen turnover and can therefore draw on less energy. This is directly related to the elevated blood glucose caused by diabetes.

The first author of this new study is Elric Zweck, who since 2017 has been working on this project as a research associate at the German Diabetes Center and the Department of Cardiology, Pneumology and Angiology at Heinrich Heine University (HHU) and Düsseldorf University Hospital (UKD). He was honored with the Karl Oberdisse Award for his research paper this year. Zweck received the award together with Dr. Irina Kube of the Department of Endocrinology, Diabetology and Metabolism, Essen University Hospital. The North Rhine-Westphalian Society for Endocrinology and Diabetology confers the award annually for the best clinical or experimental paper in the field of endocrinology and diabetology by scientists in North Rhine-Westphalia.

“What is special about Elric Zweck's research paper is that we are now able to better understand the heart's energy metabolism and derive new therapies from it. His study shows that the heart muscle in otherwise apparently healthy hearts has a restricted energy metabolism in type 2 diabetes. He has shown new ways in which we can better help people with diabetes-related heart failure in the future,” said Professor Michael Roden, scientific director and board member of the German Diabetes Center. The mitochondria – cell components that are mainly responsible for supplying the heart with energy – can therefore convert less oxygen. The results thus point to certain components of the energy metabolism in the heart muscle. They could thus serve as new targets for the treatment and diagnosis of diabetes-associated heart failure.

The award was presented in a virtual ceremony at the annual meeting of the North Rhine-Westphalian Society for Endocrinology and Diabetology on January 29, 2021 by its president, Professor Harald Klein of the Bergmannsheil University Hospital in Bochum. "I am very pleased about the trust placed in me and hope that this will herald a new stage in my research work,” Zweck said. “Together with our team at the DDZ, I look forward to further exciting projects and want to build on this success."

The German Diabetes Center (DDZ) is a German reference center for diabetes. Its objective is to contribute to the prevention, early detection, diagnosis and treatment of diabetes mellitus. At the same time, the research center aims at improving the epidemiological data situation in Germany. DDZ is in charge of the multicenter German Diabetes Study and serves as point of contact for all players in the health sector. In addition, it prepares scientific information on diabetes mellitus and makes it available to the public. DDZ is part of the Leibniz Association (Wissenschaftsgemeinschaft Gottfried Wilhelm Leibniz, WGL) and is a partner of the German Center for Diabetes Research (DZD).

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