



DZD

German Center for
Diabetes Research

DZD-NEWS 2/2015

Dear Reader,

In this newsletter you will find reports about the diverse activities of the DZD which took place in Germany and internationally during the first half of this year. Also in this issue, we are pleased to present two of the interesting research findings which were published by DZD scientists during this period and a list of awards and project grants DZD researchers have received.

Prof. Dr. Dr. h.c. H.-U. Häring

Prof. Dr. M. Hrabě de Angelis

Prof. Dr. M. Roden

Prof. Dr. A. Schürmann

Prof. Dr. M. Solimena

Dr. A. Glaser

DZD Workshop with Many Participants in Munich

Following the successful evaluation, the DZD has now launched a new phase. More than 150 scientists from all fields of research came to Munich to participate in the DZD Workshop 2.0 at Helmholtz Zentrum München. In highlight talks, various speakers presented the research program DZD 2.0, thus giving the participants an overview of the current state of research in the DZD. In a festive award ceremony, ten DZD awards were presented to young scientists who excelled at international conferences and congresses in 2014.

On the second day, the next work packages were discussed intensively in translational research groups. The exchange in the epigenetics work group, an important new research field and "hot topic" in the DZD, was especially exciting. The successful workshop concluded with a session on the topic of data and knowledge management, which will be further expanded within the framework of DZD 2.0.

Current DZD Publications:



Successful First Step towards Prevention of Type 1 Diabetes

In the international Pre-Point Study, DZD scientists from Dresden and Munich have achieved a positive immune response in children with increased diabetes risk through the oral administration of insulin.

What was special about this study is that the insulin was administered prophylactically as an immunization-like treatment before the children had any autoimmune response, i.e. before the children had developed autoantibodies. There were no adverse side effects. The aim of this immunization-like treatment is to generate immune tolerance to the body's own proteins and thus to prevent an autoimmune response that can lead to type 1 diabetes. More extensive further studies will follow. If the insulin treatment prevents the autoimmune disease over a sustained period, a further study will investigate whether an insulin vaccination will be able to prevent the onset of diabetes.

Source: JAMA April 21, 2015



Link between Consumption of Red Meat and Type 2 Diabetes Risk

As numerous observational studies demonstrate, people who eat a lot of red meat (beef, pork or lamb) have an increased risk for type 2 diabetes.

Why this is so has not been adequately researched. Now, an interdisciplinary DZD research team has identified biomarkers that may provide new clues. High ferritin levels and low concentrations of the protein building block glycine are linked both to high meat consumption and increased diabetes risk.

Thus, oxidative stress and inflammatory responses could explain the association between the consumption of red meat and diabetes. Moreover, in people with high red meat consumption, altered values of four lipids were observed that are released from the liver into the bloodstream. These findings indicate that a disturbed liver lipid metabolism is involved in the association between high red meat consumption and diabetes risk.

Source: Am J Clin Nutr. June 1, 2015



DZD-Partner

DDZ
Deutsches Diabetes-Zentrum

HelmholtzZentrum münchen
Deutsches Forschungszentrum für Gesundheit und Umwelt

DIFE Deutsches Institut für
Ernährungsforschung
Potsdam - Rehbrücke

**Universitätsklinikum
Carl Gustav Carus**





DZD presentations to patients and to the scientific community

Translational diabetes research in type 1 and type 2 diabetes was the focus of the DZD symposium at the largest German **Diabetes Congress of the DDG**. There it was shown in detail how findings from basic research can be translated into practical applications that affect people's lives. DZD Professor Norbert Stefan, this year's DDG Congress President, explained the Prediabetes Lifestyle Intervention Study (PLIS) of the DZD.

The booth of the DZD was a popular meeting place for German and international scientists and physicians. Here, along with the stimulating discussions, interviews were recorded for broadcast. A DZD team participated again this year in the Diabetes Run to benefit the SMS initiative (see column on the right: Awards and Prizes)

Approximately 400 participants attended the **14th International Immunology of Diabetes Society Congress in Munich**, chaired by DZD Professor Anette-Gabriele Ziegler.



DZD Board Member Prof. Michele Solimena chaired the 2015 **Gordon Research Conference "Frontiers in Pancreatic Research"** in the U.S. and presented the DZD and its research results to the participating physicians and scientists working at the international forefront of research.

Many researchers from the U.S. and countries of the Danube River region came to Düsseldorf for the **30th Danube Symposium and the 10th Congress of the Central European Diabetes Association** chaired by DZD Board Member Prof. Michael Roden.

The **3rd Patients' Day of the German Information Service Munich**, which took place this year in Nuremberg, featured presentations by DZD scientists. The DZD was represented with an information booth. A major attraction was the digital memory game on diabetes.



Federal Health Minister Hermann Gröhe personally congratulated the German Diabetes Center (DDZ) in Düsseldorf, a partner in the DZD, on the 50th anniversary of its founding. In his address, he pointed to the most recent successes of the DZD.



More information on all events can be found at www.dzd-ev.de/en/news/news



Prof. Hrabé de Angelis, DZD board member, in an interview with Diabetes-TV

Prof. Roden and Prof. Häring in a discussion with Prof. Zierath from Karolinska Institutet, Stockholm

Awards and Prizes for DZD Scientists

Prof. Andreas Birkenfeld, PLID, received the Ferdinand Bertram Award of the DDG for his research achievements on metabolic regulation.

Prof. Andreas Fritsche, IDM, was awarded the Werner Creutzfeldt Prize of the DDG for his research on the pathophysiology and therapy of diabetes mellitus.

Dr. Martin Heni, IDM, was honored by the DDG with the Silvia King Prize for clinical diabetology.

Prof. Reinhard Holl of the University of Ulm was awarded the Hans Christian Hagedorn project grant.

Dr. Angela Hommel, PLID, received the Hellmut Mehnert project grant of the DDG.

Prof. Karsten Müssig, DDZ, received the IN FORM supporter logo at the didacta 2015 for his project for elementary school students "SMS. Be smart. Join in. Be fit."

PD Dr. Sebastian Schmid of the University of Lübeck was awarded the Menarini project grant.

Prof. Dr. Anette-Gabriele Ziegler, HMGU, was awarded the Brownlee Visiting Professor Lectureship at Harvard Medical School, Boston, USA.

Prof. Dr. Dan Ziegler, DDZ, is recipient of the research award 2015 of the Heinz Bürger-Büsing Foundation for his research on diabetic neuropathies.

Imprint

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Phone: +49 (0)89-3187-4718, E-Mail: contact@dzd-ev.de, www.dzd-ev.de

Board of Directors: Prof. Dr. Hrabé de Angelis, Prof. Dr. Roden, Prof. Dr.

Dr. Solimena Managing Director: Dr. Astrid Glaser

Edited by: DZD Head Office

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