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Press Release



Cancer Research Award for HZI Scientist

January 16th, 2012: Lars Zender receives Johann-Georg-Zimmermann Award

Prof. Dr. Lars Zender has received one of the most distinguished German cancer research awards. The Johann-Georg-Zimmermann Award, endowed with 10 000 Euro, highlights Zender's findings on chronic liver damage and liver cancer development. Liver cancer (hepatocellular carcinoma) developed in livers after chronic infection with Hepatitis-B and -C virus. Zender is heading a research group at the Helmholtz Centre for Infection Research (HZI) in Braunschweig, Germany, and holds a professorship for experimental gastrointestinal oncology at the Hannover Medical School (MHH). He has pioneered the development of systems to conduct RNA interference screens *in vivo*. The award ceremony took place on Monday, 16th January, at the MHH.

Another award, the Johann-Georg-Zimmermann Medal, endowed with 5 000 Euro, was given to Prof. Dr. Peter Krammer from the German Cancer Research Centre (DKFZ) in Heidelberg. Both awards are annually donated by the Deutsche Hypothekenbank. The Johann-Georg-Zimmermann Award distinguishes junior scientists for their current research projects, while the Johann-Georg-Zimmermann Medal recognizes the lifetime achievements of personalities in cancer research. Prof. Lars Zender applies so-called RNA interference screens in order to find new cancer genes and therapeutic targets for the treatment of hepatocellular carcinoma. RNA interference is a complex mechanism that "silences" genes. This mechanism determines to a large extent, which genes – from the entire wealth of available genetic material – are finally active. Thus, RNA interference offers a new opportunity to intervene in the genetic regulation without manipulating the genes themselves. Together with only a few research groups worldwide Zender has developed the technical expertise to apply RNA interference and RNA interference screens in tumors of mice and to search for new therapeutic targets in the living organism. This method avoids problems that may occur when RNA interference screens are conducted in cultured cells of human tumors. New therapeutic targets that are identified by this method have a great potential to improve both the treatment and the prevention of liver cancer.

In 2009, Prof. Lars Zender accepted a professorship for gastrointestinal oncology at the MHH. Moreover, he supervises the project "Liver Regeneration" in the Excellence Cluster Rebirth, and he manages a project in the Collaborative Research Centre TRR 77 on Hepatocellular Carcinoma. Prof. Zender heads an Emmy Noether junior research group at the HZI and the MHH. He has already received numerous awards for his scientific research.

Prof. Peter Krammer was honoured with the Johann-Georg-Zimmermann Medal 2012 for his pioneering work on programmed cell death – so-called apoptosis. Apoptosis is the most frequent form of natural cell death in organisms. This mechanism removes cells that are no longer required for cell function or during embryogenesis, or contain defective genetic material. If this protective mechanism fails – resulting in too many or too few programmed cell deaths – diseases arise. A too low apoptosis rate is, for example, a central problem in cancer and autoimmune diseases. Prof. Krammer's research work is regarded as a key to

understanding the signalling pathways that regulate the mechanism of programmed cell death. Prof. Krammer is spokesman of the priority programme “Tumor Immunology” and heads the Department of Immune Genetics at the DKFZ in Heidelberg.

Further information:

Johann-Georg-Zimmermann Award and Medal:

Both awards are among Germany’s most traditional and best endowed research awards and are donated by the Deutsche Hypo Bank since 1972. Numerous German and international scientists have already been honoured. Professor Dr. Harald zur Hausen, winner of the Nobel Prize in Medicine, received the Johann-Georg-Zimmermann Medal 2006/2007.

The Helmholtz Centre for Infection Research (HZI):

The Helmholtz Centre for Infection Research contributes to the achievement of the goals of the Helmholtz Association of German Research Centres and to the successful implementation of the research strategy of the German Federal Government. The goal is to meet the challenges in infection research and make a contribution to public health with new strategies for the prevention and therapy of infectious diseases.

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