Ralf Bartenschlager

CURRICULUM VITAE

Ralf Bartenschlager studied biology at the University of Heidelberg. Following his degree (1987) and doctorate (1990) in Heidelberg under the supervision of Heinz Schaller at the ZMBH (Zentrum für Molekulare Biologie), he moved to Hoffmann-La-Roche in Basel, Switzerland, to conduct his postdoctoral studies until 1993. Here, he began his scientific work on the Hepatitis C Virus (HCV), which remains one of his key research focuses today. Back in Germany, he habilitated in 1999 in the specialist field of virology at the University of Mainz, and there became group head at the Institut für Virologie. In Mainz, he was appointed Professor for Molecular Virology in 2000 and since 2002 has been the holder of the Chica and Heinz Schaller endowed professorship for "Molecular Virology" at the University of Heidelberg. Since the beginning of 2014, he has also headed the department of "Virus-associated carcinogenesis" at the German Cancer Research Center (DKFZ), and is spokesman for the "Infection and cancer" research project there.

In 2000, he was presented with the advancement award of the town of Clausthal-Zellerfeld. In 2008 he was awarded with the Behring Lecture, and in 2013 with the Lautenschläger Research Prize. Since 2013, he has been a member of the *Deutsche Akadamie der Naturforscher Leopoldina*, the German academy of science researchers.

In his scientific work, he concentrated on researching the biology of flaviviruses with a focus on HCV. As well as identifying the main targets of attack for anti-viral therapy, in 1999 he succeeded in establishing a cell culture model with which HCV RNA replication could be simulated *in vitro*. He successively improved this system and within the framework of a collaboration project further developed it into a complete system in which all stages of the virus multiplication could be studied. This work formed the basis for the development of the HCV-specific therapeutic agents available today. Alongside important contributions to the biology of the HCV and its replication strategy, Ralf Bartenschlager has opened up a new field of research since 2005 with the Dengue Virus (DENV). With this virus, which is prevalent in almost all tropical countries of the world, and which is responsible for approx. 400 million infections every year, the focus of attention is primarily on clarifying the interaction between virus and host, and on developing anti-viral substances. Comparative studies are being made of the biology of HCV and DENV, whereby alongside classic methods, systems biology and mathematical approaches are also used, as are the latest microscopy techniques.