

### Leopoldina Nationale Akademie der Wissenschaften

## Curriculum Vitae Prof. Dr. Ralf Bartenschlager

Name:Ralf BartenschlagerBorn:29 May 1958



Photo: Heidelberg University Hospital

# Major Scientific Interests: Molecular virology, immune response, flavivirus replication cycle, pathogenesis of hepatotropic viruses

Ralf Bartenschlager is a virologist working in the field of molecular virology of Flaviviridae. His research interests center around the pathogen – host interaction with a special focus on the immune response against these pathogens, the biology of the flavivirus replication cycle, the development of novel antiviral concepts and the pathogenesis of hepatotropic viruses, most notably the association of hepatitis virus infections with liver cancer.

#### Academic and Professional Career

since 2014	Head of the division "Virus-associated Carcinogenesis" at the German Cancer Research Center (DKFZ) Heidelberg, Germany
since 2002	Full professor for Molecular Virology, Department of Infectious Diseases, Heidelberg University, Germany
1999	Habilitation at Mainz University, Germany
1990	PhD thesis at Heidelberg University, Center for Molecular Biology, Germany
1981 - 1987	Studies of Biology at Heidelberg University, Germany

#### **Functions in Scientific Societies and Committees**

since 2013	Co-coordinator DZIF-TTU Hepatitis
since 2010	Member of the steering committee SFB/ TRR77 Liver cancer
2009 - 2015	Major (elected) reviewer of the German Research Foundation (DFG)
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- since 2008 Member of the steering committee "CellNetworks", Heidelberg
- 2007 2011 Member of the steering committee of the BMBF FORSYS-Initiative "ViroQuant"
- since 2005 Member of the scientific advisory board of the Society of Virology (GfV)

#### Project coordination, Membership in collaborative research projects

since 2016	Coordinator Collaborative Research Center 179 "Determinants and dynamics of elimination versus persistence of hepatitis virus infection"
since 2014	Coordinator Research Program "Infection, Inflammation and Cancer, German Cancer Research Center Heidelberg"
2009 - 2015	Speaker DFG research unit FOR1202 "Mechanisms of persistence of hepatotropic viruses"
2005 - 2008	Coordinator of the Forschungsschwerpunkt "Infection strategies of human pathogenic viruses" (Landesstiftung Baden-Württemberg)

#### **Honours and Awarded Memberships**

2022	Ernst Jung Prize for Medicine
2022	Honorary Doctorate, University Medical Center of the Johannes Gutenberg University Mainz
2021	M.W. Beijerinck Virology Prize of the Royal Netherlands Academy of Arts and Sciences
2019	Prince Mahidol Award
2017	Hector Prize
2016	Lasker-DeBakey Award
2015	Robert Koch Prize
2013	Lautenschläger Research Prize
since 2013	Member of the German National Academy of Sciences Leopoldina
2008	Behring Lecture
2006	Aschoff Medal from the Medical Society Freiburg
2002 - 2012	Foundation professorship of the Chica und Heinz Schaller-Stiftung
2002	William Prusoff Young Investigator Award from the International Society for Antiviral Research
2001	Löffler-Frosch Award of the Society for Virology Nationale Akademie der Wissenschaften Leopoldina www.leopoldina.org

2000 Robert-Koch-Förderpreis of the Bergstadt Clausthal-Zellerfeld

1991 Award for the best Ph.D. thesis from the society for molecular biological research Heidelberg

#### **Major Scientific Interests**

The research focus of Ralf Bartenschlager is virology, more precisely the viruses belonging to the family Flaviviridae. Primary topics are the Dengue virus, the most prevalent virus worldwide that is transmitted by mosquitos, and the hepatitis C virus, which is a main causative agent of acute and chronic liver diseases.

Ralf Bartenschlager is best known for his major contributions to the exploration of the replication cycle of these two viruses. One of the most important contributions was the establishment of the first robust cell culture system for the hepatitis C virus. This achievement laid the ground for the identification of the direct acting antivirals that have become available for treatment of chronic hepatitis C.

In addition, Ralf Bartenschlager has expanded his research activities towards host – pathogen interactions. A special focus is the analysis of the complex interplay between hepatitis C virus and Dengue virus with the innate and adaptive immune response. These analyses are based primarily on innovative imaging-based methods and systems biology, including mathematical modeling, with the aim to decipher the complex interactions between the host and its pathogens.