Chairmen and Speakers:

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Registration

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Venue:

Audimax
University Hospital of Essen
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The World Health Organization (WHO) estimates that 350 million people are infected with HBV, 180 million with HCV, and 33 million with HIV. China and Europe share a similar burden of HIV and HCV infection. However, despite prophylactic vaccination, HBV remains a major health problem in China. HBV, HCV and HIV show substantial differences in the rate of viral persistence. However, once persistent infection is established, they are all difficult to treat. Cells of the innate and adaptive immune system are able to fight most viruses systemically and thus prevent severe disease and viral persistence in the host. These cells use a large variety of different molecular mechanisms to directly or indirectly mediate their anti-viral activity.

In the German-Chinese cooperation (Transregio60; TRR60) we study since four years the molecular and cellular mechanisms which establish chronic infections, e.g., mutational immune escape, blockade of innate immunity, regulatory T cells, cell surface molecules involved in down regulation of T cell function. The TRR60 is unique in that it integrates research in different areas such as the initial infection, innate immunity, adaptive immunity, and immune escape. The scientists of Essen and Wuhan established a long-term research programme that is based on the existing expertise of both locations. In the last four years the TRR60 did profit from this interdisciplinary approach. Different well-established animal models enabled new strategies for the intervention or prevention of various viral infections to be tested in vivo.

Recently substantial progress has been achieved in treatment of chronic hepatitis C virus. New antiviral drugs inhibit HCV replication at different levels during replication. However, for HBV there is still a need to improve treatment as interferon only results in cure in 30% of patients and antiviral nucleos(t)ides have to be taken life-long.

This meeting focuses on development of therapeutic concepts with new vaccines or other interventions to stimulate immune response to HBV in chronic carriers. Combining antiviral treatment with immune modulations would then open the possibility to shorten time of treatment and reduce costs especially in developing countries.

This meeting wants to stimulate the scientific community and industry to focus on this problem and may come out with new therapeutic approaches in the near future. We hope that this scientific cooperation with China continues for another four years and will have benefit for the treatment of patients.

Michael Roggendorf
Esen

Dongliang Yang
Wuhan

Welcome notice:

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Michael Roggendorf
Esen

Dongliang Yang
Wuhan

Programme:

**THURSDAY JUNE 27, 2013**

**Immunopathogenesis of HBV Infections**
Chair: A. Bertoletti / U. Dittmer

14:00 Hepatitis B: From Natural History to Novel Immunological Models
Robert Thimme

14:30 HBV Immunopathogenesis: Insights for New Therapeutic Approaches
Mala Maini

15:00 Toll-like Receptor-mediated Innate Immune Responses in the Control of Hepatitis B Virus Infection
Mengji Lu

15:30 The Role of Hepatic Immune Regulation in Systemic Immunity to Viral Infection
Percy Knolle

16:00 Break

16:30 T Cell Immune Response Against HCV: What is Different from HBV?
Jörg Timm

17:00 Visualizing the Traffic and Function of Effector HBV-specific CD8 T Cells Within the Liver
Luca Guidotti

**New Vaccines**
Chair: ML Michel / G. Voss

17:30 Enhanced Immune Response to Hepatitis B Vaccination Through Immunization with a PreS1/PreS2/S Vaccine
Daniel Shouval

18:00 Effects of New Adjuvants in General and on Their Effect on anti-HBsAg Responses in Particular
Geert Leroux-Roels

**FRIDAY JUNE 28, 2013**

**New Therapeutic Concepts for Chronic Hepatitis B**
Chair: U. Protzer / C. Walker

9:00 Perspective: Towards New Concepts of Combination Therapy for Chronic Hepatitis B
Carlo Ferrari

9:30 Circumventing Failed Antiviral Immunity in Chronic HBV: Triggering Virus-Specific or Innate-like T Cell Response?
Antonio Bertoletti

10:00 Usage of Adenovirus and MVA for Therapeutic Vaccines
Geneviève Inchauspé

10:30 Break

11:00 Therapeutic Vaccines for HCV-The Devil is in the Detail
Ellie Barnes

11:30 Clinical Development of an Adjuvanted Protein Candidate Therapeutic HIV Vaccine
Geert Leroux-Roels

12:00 Special Lecture: Viral Hepatitis – History and Perspective
Wolfram Gerlich

13:00 Lunch

**Lessons from Animal Models**
Chair: J. Timm / G. Inchauspé

14:00 Testing of Therapeutic Vaccination Strategies in Mouse Models of HBV Infection
Ulla Protzer

14:30 Combining Antivirals and Vaccination for Treatment of Chronic HBV in Woodchucks
Michael Roggendorf

15:00 Developing an HIV Vaccine: The Role of Efficacy Studies in Nonhuman Primates
Klaus Überla

15:30 Restoration of Immunity in Chronic HCV Infection: Lessons from Animal Models
Klaus Überla

16:00 Break

**Lessons from Clinical Studies**
Chair: C. Ferrari / G. Gerken

16:30 Data of Clinical Study on HBV Treatment in China
Dongliang Yang

17:00 Lessons from Our Previous Clinical Trial with HBV-DNA Vaccine
Marie-Louise Michel

17:30 Electroporation for Therapeutic DNA Vaccination in Patients
Matti Sällberg

18:00 Closing remarks