

# SFB 900 Seminar Series

ALL GUESTS ARE WELCOME

## TITLE

From negative to positive ssRNA viruses: Different structural solutions to keep the genome readable and protected inside the cell

## SPEAKER

Dr. Juan Reguera, Head of Viral Macromolecular Complexes, Architecture et Fonction des Macromolécules Biologiques, Campus de Luminy, Marseille, France

## LOCATION

Lecture Hall Q, building J6, MHH, Carl-Neuberg-Str.1  
Hannover



07.11.  
2019

5.00 PM (s.t.)

### » Research of Juan Reguera

Our team focuses on understanding viral infection mechanisms often ruled by the interplay of viral proteins, cellular proteins and nucleic acids assembled into multifunctional complexes. The aim is to understand the mechanisms by which the multiple enzymatic activities are coordinated between them and regulated to efficiently carry out infection. The mainstream of our research is the functional and structural characterization of the alphavirus replication complex. Alphavirus, like chikungunya virus (CHIK) or eastern equine encephalitis virus (EEEV), cause zoonotic infectious diseases with high impact in global human health. The viral genome replication and gene expression is carried out by the multifunctional viral replication complex. Interestingly this complex can adopt different functions depending on its state of maturation. Our goal is to structurally and functionally characterize the different functional states of the replication complex in order to propose an integrative mechanistic model accurately describing at the molecular level the viral infection cycle and its regulation. The results will provide invaluable insights and tools for the development of new strategies for the treatment of these concerning infectious diseases.

Prof. Abel Viejo Borbolla  
Institute of Virology

Tel.: 0511 532-4382

✉ Viejo-Borbolla.Abel@mh-hannover.de

Dr. Maike Hinrichs, MHH  
Institute of Virology

Tel.: 0511 532-19822

✉ SFB900.Sekretariat@mh-hannover.de