

SFB 900 SEMINAR SERIES

ALL GUESTS ARE WELCOME

TITLE

IFITMs and recombinant reporter viruses.

SPEAKER

PD Dr. Michael Winkler
Team Leader/Group Leader Infection Biology, German
Primate Centre, Leibniz Institute for Primate Research,
Göttingen, Germany

LOCATION

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

12.09.
2019

5.00 PM (s.t.)

» Research of Michael Winkler

Interferon-induced transmembrane proteins (IFITMs) 1-3 are highly conserved molecules which block virus infection at the entry stage. A single nucleotide polymorphism (SNP) in human IFITM3 has been demonstrated to affect disease severity. We have identified SNP in rhesus macaque IFITM3 genes and analysed their role on virus load and survival. Reporter viruses are highly useful in analysing antiviral effects of chemicals or interferon-stimulated genes. We have developed an influenza virus carrying Gaussia luciferase (Gluc), which provides sensitive detection of infection. We also developed a recombinant system for African and South-American Zika Virus based on a bacterial artificial chromosome. Recently, we developed a fosmid-based recombinant system for a primate alphaherpesvirus, which can be used to easily modify diploid inverted repeat regions harbouring key genes for lytic and latent regulation. Gluc-based reporter viruses were used in cell susceptibility and antiviral experiments.

Prof. Martin Messerle
Institute of Virology

Tel.: 0511 532-4320

✉ Messerle.Martin@mh-hannover.de

Dr. Maike Hinrichs, MHH
Institute of Virology

Tel.: 0511 532-19822

✉ SFB900.Sekretariat@mh-hannover.de