Helmholtz-Institute for Pharmaceutical Research Saarland
HELMHOLTZ ZENTRUM FÜR INFEKTIONSFORSCHUNG
UNIVERSITÄT DES SAARLANDES

Dr. Eva Herker

Heinrich-Pette-Institute, Hamburg
Leibniz Institute for Experimental Virology

will give a presentation entitled

„Lipids Go Viral: Role of Lipid Droplets in Hepatitis C Virus Replication “

Tuesday, December 9th, 2014, at 17:00h s.t.
in Blg C4 3, Kleiner Hörsaal der Anorganischen Chemie

There is opportunity to talk with the speaker before the talk.
There will be a follow-up session (Nachsitzung).

For details and for making appointments please contact:
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Guests are welcome!

Summary

Hepatitis C Virus (HCV) replication is closely tied to the host cell lipid metabolism. Lipid droplets have emerged as key organelles for HCV replication, and it has been proposed that they serve as virion assembly platforms. The viral capsid protein core localizes to lipid droplets, recruits viral RNA replication complexes, and initiates the assembly of progeny virions at lipid droplet-associated membranes of the endoplasmic reticulum. We previously showed that a host protein involved in lipid droplet biogenesis serves as a key regulator of viral replication. The fact that HCV selectively targets a subset of lipid droplets points to an hitherto unrecognized specificity. However, why the virus targets lipid droplets and the mechanistic details of the late stages of HCV replication are still ill defined. We utilize microscopic and proteomic approaches to elucidate in molecular detail the role of lipid droplets in HCV replication.

CV

- Studies in biochemistry at the University of Potsdam and the University of Tübingen
- PhD in Biochemistry at the University of Tübingen in the lab of Frank Madeo
- Thesis on aging and cell death in yeast (summa cum laude)
- Award for the best doctoral thesis of the year of the Faculty for Chemistry and Pharmacy, University of Tübingen
- Postdoctoral fellow in the lab of Melanie Ott at the Gladstone Institute of Virology and Immunology in San Francisco
- Postdoctoral Fellowship from the Human Frontiers Science Organization
- Studying the role of a triglyceride-synthesizing enzyme (DGAT1) in Hepatitis C Virus replication and HCV core-induced lipid accumulation
- Awarded the University of California, San Francisco, Dean's Postdoctoral Prize
- Recipient of the Gladstone Institute of Virology and Immunology Award of Excellence in Science
- Since the end of 2011 Junior Research Group Leader at the Heinrich-Pette-Institute, Leibniz Institute for Experimental Virology, in Hamburg
- The group studies the role of lipids and lipid droplets in Hepatitis C Virus replication