

# TWINCORE - Seminar

Tuesday March 8th, 2016, 5 p.m.  
TWINCORE Lecture Hall

„The dual role of type III interferon in the antiviral defense and control of pathogenic inflammation“



## Prof. Rune Hartmann

Type III interferons (IFNs) or IFN $\lambda$ s regulate a similar set of genes as type I IFNs, but where type I IFN acts globally, IFN $\lambda$ s primarily target mucosal epithelial cells and protect them against the frequent viral attacks that are typical for barrier tissues. Type III IFNs also exhibit a strong antiviral effect on the human liver and has potent anti HCV effect. However, the recently discovered IFN $\lambda$ 4 isoform has dual actions: It impairs the clearance of hepatitis C virus and fundamental change the inflammatory responses in the liver. The effects of IFN $\lambda$ 4 extend beyond viral hepatitis and may play an important role in non-viral inflammatory disorders of the liver.

### Who is Rune Hartmann?

- Associated Professor Dept. of Molecular Biology and Genetics, Aarhus University,
- Before: Post-doctoral research fellow at the Cleveland Clinic and Case Western Reserve University, Cleveland Ohio (laboratory of Vivien Yee).
- "2001 Milstein Young Investigator Award." Rewarded by "The International Society for Interferon and Cytokine Research",
- Scientific interest: Mechanism of IFN $\lambda$  signaling, role of IFN $\lambda$  in viral diseases and therapeutic application of IFN $\lambda$ .

Contact: Prof. Dr. Ulrich Kalinke  
TWINCORE, Centre for Experimental and Clinical Infection Research,  
Feodor-Lynen-Str. 7, 30625 Hannover, Phone: 0511 22002 7113