

# SFB 900 SEMINAR SERIES

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### TITLE

Poxvirus MVA-based vaccines against viral emerging diseases: Ebola and Zika



## **SPEAKER**

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#### LOCATION

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





#### » Research of Juan Francisco Garcia Arriaza

Emerging infectious diseases are rapidly increasing or threaten to increase in the future, with several viral infectious diseases identified in the last 50 years. According to the World Health Organization, vaccines are the best option to control infectious diseases, saving millions of lives. Thus, it is necessary to develop novel vaccines against diseases caused by emerging viruses. In the conference it will be presented the development of novel vaccines against two viral emerging diseases, such as Ebola and Zika, using the highly attenuated poxvirus Modified Vaccinia Virus Ankara (MVA) as a viral vector. Those vaccines expressing the GP and/or the VP40 Ebolavirus antigens (MVA-Ebolavirus) or the prM-E Zika antigens (MVA-ZIKV) are able to form virus-like particles and activate the antigen-specific humoral and T-cellular immune responses in immunized mice. Remarkably, those vaccines are able to protect mice against a challenge with either Ebola virus or Zika virus. It will be discussed the results obtained with those novel vaccines, future perspectives and the benefits of this MVA vector for its use as a promising vaccine platform against novel emerging diseases.

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