Postdoc Program between the Freie Universität Berlin (FUB) and the China Scholarship Council (CSC)

Open Postdoc position at FUB for CSC scholarship candidates 2016

Please note: the postdoc position is only offered to Chinese who graduated with a PhD degree from a Chinese university.

Department/Institute:	Virology
Subject area:	Herpesvirus Latency
Professor / Research Group:	Prof. Dr. Klaus OSTERRIEDER (Mr.)
Number of open Postdoc positions:	1
Project title:	The role of hematopoietic stem cells in herpesvirus latency

Postdoc Project description:

Herpesviruses cause common viral infections. Following initial infection, the virus persists in a latent form and horses become silent carries of the virus without evidence of clinical disease. From the latent state, virus reactivates intermittently throughout life, resulting in viral shedding and clinical disease. Prophylactic measures based on vaccination have been widely used to prevent the clinical manifestations of viral infection in equine populations, but they are unable to prevent the establishment of latency. Latency allows evasion of antiviral immune responses, which represents an important problem of infection control. In order to better control infection, identification of the sites of herpesvirus latency and characterization of genes involved in maintenance of latency and reactivation is needed. Currently, a valid in vitro model to study latency is unavailable for many viruses, which has prevented advances in the understanding of virus biology. With this proposal, we will close an important gap. Using various herpesviruses as model system, we will test the hypothesis that CD34+ hematopoietic progenitor cells are a biologically relevant site of latency. We have shown in preliminary studies that CD34+ cells enriched from umbilical cord blood can be infected and a persistent/latent infection can be established that persists for weeks. Virus can be reactivated from the quiescent state. We would in this proposal characterize CD34+ cells as an in vitro model of latency and reactivation. We will define cellular and viral factors allowing establishment, maintenance and reactivation including latency-associated transcripts (LATs) as well as the IR2 and IR3 genes that were shown to down-modulate immediate-early gene expression.

Language requirements:

English: IELTS 6,5 or TOEFL 95 ibt.

Academic requirements:

Biology, Veterinary Medicine, Biochemistry, Chemistry, Genetics

Information of the professor or research group leader:

http://www.vetmed.fu-berlin.de/einrichtungen/institute/we05/mitarbeiter/osterrieder_klaus/index.html
Please note: In a first step the complete application should submit to the Beijing Office for evaluation by October 30, 2015. Please don't contact the professor before. He/She will get in contact with you after having received the complete application.