CSC-Tübingen PhD Scholarship Program

2024 application round: prospective PhD positions at the University of Tübingen

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Faculty:	Medical Faculty
Institute / Section / Subject:	Institute for Medical Virology and Epidemiology of Viral Diseases
Supervising Professor(s):	Prof. Dr. Daniel Sauter
About the Supervisor(s):	Research in the Sauter lab focuses on the interplay of innate immune responses with different viral pathogens (e.g., retroviruses, coronaviruses). The supervisor has a strong interest in elucidating the co-evolution of (zoonotic) viruses with their host species, and the mechanisms that viruses have evolved to overcome or evade immune responses. More information on the supervisor and the host lab can be found here.
Specification:	"Modulation of HIV latency by glucocorticoid receptors"
Topic Description:	Current drug regimens are unable to eradicate the Human Immunodeficiency Virus (HIV) from infected individuals due to the establishment of latent viral reservoirs. To overcome this hurdle, shock-and-kill approaches aim to reactivate latent HIV. Interestingly, the HIV genome harbors several binding sites for glucocorticoid receptors (GR), suggesting that glucocorticoids may influence HIV latency and reactivation. Moreover, GRs interfere with the transcription factors NF-κB and AP-1, which are important determinants of viral gene expression. The proposed project aims to decipher the effects of natural glucocorticoid hormones, as well as GR-modulating drugs on HIV latency and reactivation. The PhD candidate will investigate whether some of these compounds may be used to improve current shock-and-kill approaches in HIV treatment.
Degree:	PhD Exp. Med. / Dr. rer. nat.; possible integration into 'The Interfaculty Graduate School of Infection Biology and Microbiology (*IGIM*)'
Required Degrees:	Master degree in Biology, Biochemistry, Infection biology, Molecular Medicine, Biotechnology, or related degrees; expertise in infection biology, immunobiology and/or steroid hormones is a plus.
Language Requirements:	Excellent oral and written communication skills in English are mandatory.
Notes:	The project involves research under biosafety levels (BSL) 2 and 3.