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Post-doctoral scientist and Ph.D. student in Virology (Würzburg)

We are seeking both a postdoctoral researcher (Postdoc) and a Ph.D. student to work on herpes simplex virus 1 (HSV-1) latency and reactivation in human neurons using a combination of single cell mRNA sequencing, CRISPR/Cas9 and novel reverse genetics approaches. The positions are for ≥ 3 years. Employment is based on TV-L E13 (Postdoc) and 65% TV-L E13 (Ph.D. student).

In the framework of the recently funded ERC Consolidator Award *DecipherHSV to LD*, we aim to decipher novel mechanisms and their functional interplay by which HSV-1 manipulates its host cells throughout the viral life cycle. We will combined time-resolved single cell RNA-seq (scSLAM-seq ¹) with CRISPR/Cas9 to decipher the cellular and viral determinants of HSV-1 latency and reactivation ² at single cell level. Furthermore, we will pioneer novel screening approaches using advanced reverse virus genetics to decipher the functional importance of cryptic viral genetic elements ³ in productive infection, latency and reactivation.

We offer an attractive collaborative research environment and encourage the supervision and guidance of Ph.D., master and bachelor students, in order to build personal teaching and leadership skills.

Applications welcome by e-mail to: Lars.Doelken@uni-wuerzburg.de

References:

1. scSLAM-seq reveals core features of transcription dynamics in single cells.
Erhard, F.; ...; **Dölken, L.**
Nature **2019**, 571, 419–423, doi:10.1038/s41586-019-1369-y.
2. Selective inhibition of miRNA processing by an herpesvirus-encoded miRNA
Hennig T, ... ; **Dölken L** & Prusty BK
Nature. **2022**, doi: 10.1038/s41586-022-04667-4
3. Integrative functional genomics decodes herpes simplex virus 1.
Whisnant, A.W.; ... ; **Dölken L.**
Nature Communications **2020**, 11, doi:10.1038/s41467-020-15992-5.