

The Department of Cell and Developmental Biology at the Würzburg Biocenter offers

5 PhD-student positions



We study molecular, cellular and physical aspects of African Sleeping Sickness, a prototypic neglected tropical disease of poverty. Transmitted by the infamous tsetse fly, trypanosomes do not only infect humans, but also kill cattle, which poses an enormous economic burden to Sub-Saharan Africa. Besides studying the transmission and pathogenesis of trypanosomes, we employ an exceptionally broad spectrum of techniques to exploit trypanosomes as versatile cell biological model system. <https://www.biozentrum.uni-wuerzburg.de/zeb/start/>

Requirements:

A recent Master's degree in molecular or cellular biology, biophysics or a related field.
Strong analytical skills, a problem-solving and highly motivated attitude.
Creative and innovative thinking and a team-oriented mind-set.

Position 1 **Characterisation of a novel mRNA decapping enzyme**, with biochemistry and leading edge RNA biology techniques such as intra-molecular multicolour smRNA FISH ([Susanne Kramer](#))

Position 2 **Membrane biophysics of African trypanosomes**, including implementation of 3D single-molecule dynamics, live-cell super-resolution, and image processing ([Susanne Fenz](#))

Position 3 **Control of membrane traffic in African trypanosomes**, using high-end quantitative microscopy (CLEM, SIM, dSTORM), genome editing and structural biology ([Markus Engstler](#))

Position 4 **Tsetse-transmission of African trypanosomes**, with special emphasis on signalling, chemo- and mechanotaxis ([Markus Engstler](#))

Position 5 **Correlation of membrane dynamics and cell motility**, using microfluidics, single particle tracking and cryo-EM ([Markus Engstler](#))

The positions are temporary part time positions; expected employment is three years. Salary will be based on the pay scale for the public sector in Germany (TV-L) according to standard payment rules for PhD positions in natural and life sciences. Applications are welcome from suitably qualified people from all related sections of the community regardless of race, gender or disability. The University aims to increase the proportion of female employees, therefore qualified female scientists are particularly encouraged to apply. Preference will be given to people with disabilities in the case of otherwise equal aptitude.

How to apply:

Please send your application (motivation letter, CV, names of two referees and transcripts in one PDF) citing "5PhD" in the subject line by email to u.borst@biozentrum.uni-wuerzburg.de. Evaluation of candidates will begin immediately, and continue until the positions are filled.