Philipps Universität Marburg

registration number: fb16-0033-wmz-2024

Entry date:	Application deadline:	Salary:	Duration:	Volume of employment:
As soon as possible	2025-01-05	E 13 TV-H	3 years	part-time (65 %)

The University of Marburg, founded in 1527, offers multiple award-winning teaching for around 22,000 students and tackles the important issues of our time with excellent research across a broad spectrum of science.

At the department of Pharmacy, Institute of Pharmaceutical Chemistry, RNA biochemistry, the research group of **Dr. Benedict Tan**, is currently accepting applications for a

Doctoral Researcher/PhD Student – Mitochondrial Gene Expression

Mitochondria, the powerhouses of the cell, contain its own unique genome (mtDNA), whose gene products are essential for life. To match the energy requirements of specific cell types (e.g., neurons, cardiomyocytes), the expression of mitochondrial genes must be tightly and dynamically regulated, but our understanding of this process is still naïve.

In this project, we will investigate how the first two steps of mitochondrial gene expression (transcription and RNA processing) are mechanistically coupled, and how defects to this process contribute to a variety of rare and incurable human diseases. We will do this using sophisticated biochemical methods that reconstitute specific steps of mitochondrial RNA metabolism *in vitro*, using purified mitochondrial proteins. We will also study whether unique RNA structures in specific mitochondrial genes can regulate mitochondrial RNA processing. Through this, we aim to generate robust platforms with which we can design and screen highly-specific drugs to treat mitochondrial disease. Join our vibrant RNA community and build a network of interdisciplinary collaborations!

This project is funded by the German Research Foundation (Deutsche Forschungsgemeinschaft, DFG).

Further information can be found here: bit.ly/tanlabmarburg

Full details can be found by following the **registration number** above or the **QR code** below: