

## **Master Thesis Opportunity**

### **Functional Characterization of CNS-Associated miRNAs in Pediatric ALL**

We are offering an exciting Master's thesis project in the field of pediatric leukemia research, available with immediate start in the research group Leukemia at the Department of Pediatrics and Adolescence Medicine (supervision: Dr. rer. nat. Vera Münch).

#### **Project Overview**

The project focuses on the validation and functional characterization of microRNAs (miRNAs) that are associated with central nervous system (CNS) infiltration in acute lymphoblastic leukemia (ALL), using patient-derived xenograft (PDX) models.

#### **Main Tasks**

- Validation of miRNA expression patterns in CNS ALL PDX samples
- Functional analysis of selected miRNAs in relation to molecular markers previously linked to CNS involvement in ALL

#### **Methods and Techniques**

- Quantitative real-time PCR (qPCR)
- Transfection of miRNA mimics and inhibitors
- *In vitro* experiments using leukemia cell lines
- Hands-on work with primary material derived from the PDX ALL mouse model

#### **Your Profile**

- Highly motivated Master's student in Molecular Medicine, Biomedicine, or a related field
- Basic experience in molecular biology techniques
- Strong interest in leukemia research and experimental work
- Team-oriented and reliable work ethic

#### **We Offer**

- Supervision in a dynamic and supportive research environment
- Hands-on training in translational leukemia research methods
- Opportunity to contribute to a clinically relevant and high-impact project

Interested students are encouraged to apply as soon as possible.

Please send a brief motivation letter, CV, and transcript of records to:

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