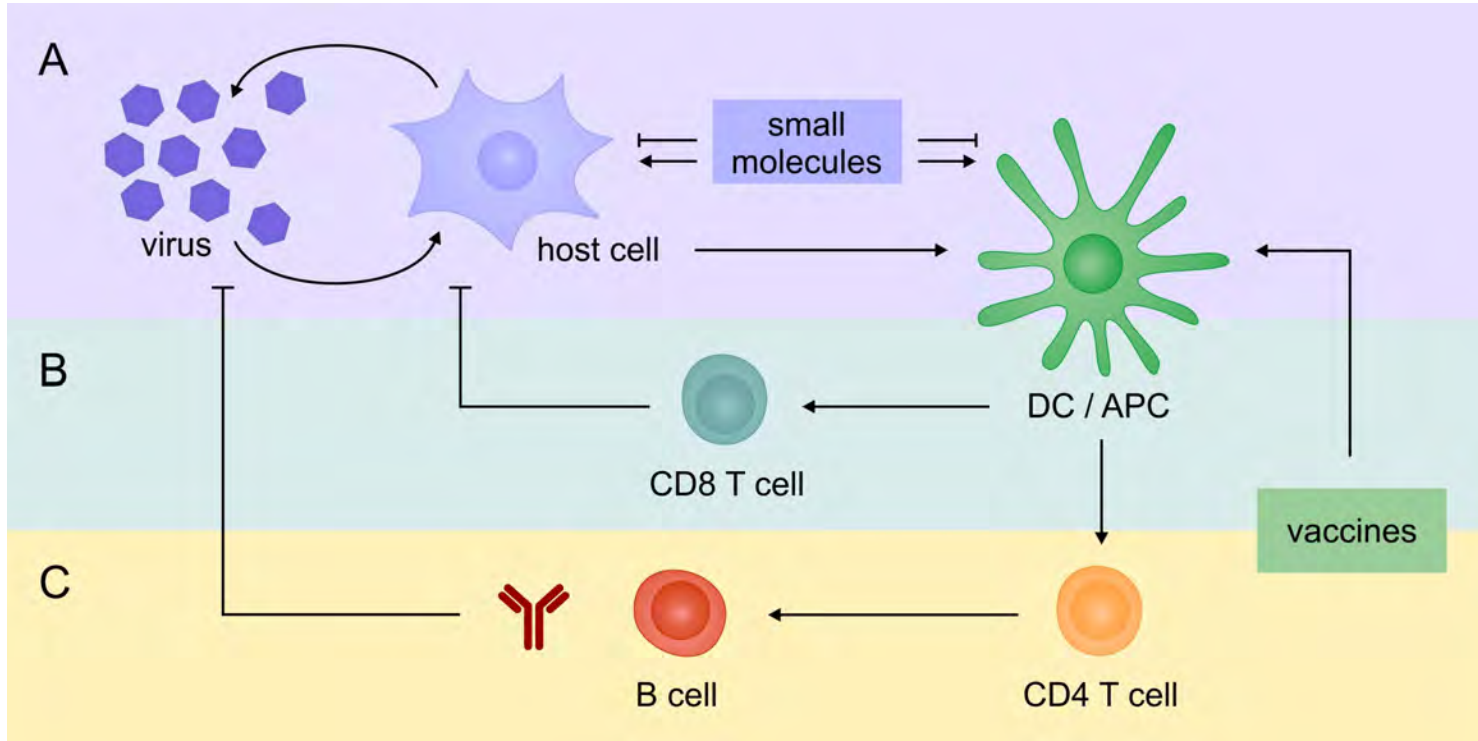


CALL FOR APPLICATIONS

Medical Doctoral (Dr. med.) student positions available

GRK 2504: Novel antiviral approaches



Our research programme aims to explore novel approaches for antiviral chemotherapy and immune intervention that build upon recent developments in molecular virology and immunology. The individual research projects address **antiviral small molecules (area A)**, **immune cell-mediated antiviral effects (area B)**, and **antibody-based approaches (area C)**. Altogether, we envision multimodal antiviral strategies that combine antiviral chemotherapy with immune-based interventions as the most promising path towards the control of persistent viruses. **For excellent candidates, we offer MD thesis projects embedded in the training programme of GRK 2504 based on a 1-year fellowship for a research sabbatical.**

Open positions and training programme

#	PI(s)	Thesis topic
Area A: Antiviral small molecules		
A1	M. Marschall	Addressing the broadness of antiherpesviral activity in drug synergism between direct-acting and host-directed kinase inhibitors
Area B: Harnessing T-cell immunity		
B6	A. Ensser	RNA mediated delivery of MCMV targeted CAR for the generation of MCMV specific effector T cells
B3 + C3	K. Nganou-Makamdop & M. Thomas	CMV-specific humoral immunity among HIV-infected pregnant women
Area C: Antibody-based immunotherapy and prophylaxis		
C4	F. Neipel	Analysis of the antibody response in patients recovered from Kaposi's sarcoma and identification of neutralizing antibodies
C5	K. Überla & F. Ferrazzi	Analysis of spike-specific IgG subclass response in SARS-CoV-2 breakthrough infections for the identification of immunological factors contributing to an IgG4 antibody switch
C5	K. Überla & F. Ferrazzi	Comparison of the HIV-1-specific B cell receptor repertoire in humans and antibody-humanized mice after three immunizations with soluble trimers of the HIV-1 envelope glycoprotein (Env)

Feb 2024 – Sep 2024

Oct 2024 – Sep 2025

Oct 2025 – Sep 2026

- Qualification phase
- (in parallel to studying medicine)
- lecture: Basics of antiviral strategies
 - introduction to methods
 - 5 day lab course
 - course: proposal writing with thesis proposal submission

- Experimental phase
- (research sabbatical 1 semester fellowship 1 year)
- experimental work
 - internal seminar
 - guest seminar
 - colloquia
 - retreat

- Evaluation phase
- (in parallel to studying medicine)
- scientific presentation
 - scientific writing
 - participation at conference
 - writing of thesis and manuscript

Dr. med.