



The **Laboratory of Experimental Immunology** of the Institute of Virology is seeking for medical students that aim to perform a comprehensive experimental thesis.

Doctoral Thesis for MD Students

We are a committed research group at the University of Cologne that studies **Human Immunology** with a particular interest in antibody responses to HIV-1 and other infectious pathogens. Our goal is to precisely understand the biology of humoral immunity and to use this knowledge to effectively prevent and treat **Infectious Diseases**.

To this end, we work with a wide range of techniques in molecular immunology and facilitate different humanized mouse models. Moreover, we conduct clinical trials that enable us to translate our findings into clinical applications.

Our group is dedicated to provide an excellent work environment for pursuing forefront and innovative science, and strongly supports the development of medical students who are interested in basic and clinical research.

If you are curious to address and solve scientific questions as well as enjoying working in a young research team, please feel free to contact us at any time and meet with us in the CMMC building. Communication skills in English will be necessary as well as a good pre-clinical/physikum performance. Given the nature our Research projects, a commitment of one year is necessary.

For further questions or application, please do not hesitate to contact us:

Prof. Dr. Florian Klein or Dr. Daniela Weiland

email: florian.klein@uk-koeln.de or daniela.weiland@uk-koeln.de,

phone: +49 221 478 89699; website: www.klein-lab.de

For further information concerning our research the following publications are recommended:

- Safety and antiviral activity of combination HIV-1 broadly neutralizing antibodies in viremic individuals. Bar-On Y.*, Gruell H.*, Schoofs T., Pai JA., Nogueira L., Butler AL., Millard K., Lehmann C., Suárez I., Oliveira TY., Karagounis T., Cohen YZ., Wyen C., Scholten S., Handl L., Belblidia S., Dizon JP., Vehreschild JJ., Witmer-Pack M., Shimeliovich I., Jain K., Fiddike K., Seaton KE., Yates NL., Horowitz J., Gulick RM., Pfeifer N., Tomaras GD., Seaman MS., Fätkenheuer G., Caskey M., Klein F., Nussenzweig MC. *Nature Medicine* 2018.
- Antibody 10-1074 suppresses viremia in HIV-1-infected individuals. Caskey M.*, Schoofs T.*, Gruell H.*, Settler A., Karagounis T., Kreider E.F., Murrell B., Pfeifer N., Nogueira L., Oliveira T.Y., Learn G.H., Cohen Y.Z., Lehmann C., Gillor D., Shimeliovich I., Unson-O'Brien C., Weiland D., Robles A., Kümmerle T., Wyen C., Levin R., Witmer-Pack M., Eren K., Ignacio C., Kiss S., West A.P., Mouquet H., Zingman B.S., Gulick R.M., Keler T., Bjorkman P.J., Seaman M.S., Hahn B.H., Fätkenheuer G., Schlesinger S.J., Nussenzweig M.C.*, Klein F.*. *Nature Medicine* 2017.
- Antibodies in HIV-1 Vaccine Development and Therapy. Klein F, Mouquet H, Dosenovic P, Scheid JF, Scharf L, Nussenzweig MC. *Science* 2013.