



The AG Schlößer at the Center for Molecular Medicine Cologne is seeking for a medical student who aims to perform a comprehensive experimental thesis.

## Doctoral Thesis for MD Students in Tumor Immunology

**Our laboratory** studies the role of the immune system in solid cancer. Our research projects include the development of immunotherapies in mice, translational in vitro projects with samples from tumor patients and clinical studies.

We are interested in the cellular and humoral anti-tumor immune response and strategies of the tumor to escape these responses. Moreover, we study the influence of immunotherapies, such as checkpoint inhibition, on the anti-tumor immune response.

**The project** includes the implantation of tumor tissue from cancer patients into humanized mice and the subsequent treatment with innovative immunotherapies. In the initial phase, the experiments can be performed alongside your studies. In the final phase, one or better two research semesters will be necessary to perform the more intensive experiments. We will support you with a grant application for financial compensation.

A willingness to perform mouse experiments is necessary for this project. Previous knowledge with mouse work is NOT required.

If you are interested to solve scientific questions as well as enjoy working in a young research team, please feel free to contact us or directly send an application with CV to:

Dr. Kerstin Wennhold

Kerstin.wennhold@uk-koeln.de

### Exemplary references of the work group:

Thelen M, Keller D, Lehmann J, Wennhold K, Garcia-Marquez MA, and Schlößer HA, et al., Immune responses against shared antigens are common in esophago-gastric cancer and can be enhanced using CD40-activated B cells. *J Immunother Cancer* 2022

Thelen M, Wennhold K, Lehmann J, Schlößer HA, et al., Cancer-specific immune evasion and substantial heterogeneity within cancer types provide evidence for personalized immunotherapy. *NPJ Precision Oncology* 2021

Leuchte K, Staib E, Schlößer HA, et al., Microwave ablation enhances tumor-specific immune response in patients with hepatocellular carcinoma. *Cancer Immunology Immunotherapy* 2020

Schlößer HA, Thelen M et al., B cells in esophago-gastric adenocarcinoma are highly differentiated, organize in tertiary lymphoid structures and produce tumor-specific antibodies. *OncolImmunology* 2019

Wennhold K, Thelen M, Schlößer HA, et al., CD86<sup>+</sup> Antigen-Presenting B Cells Are Increased in Cancer, Localize in Tertiary Lymphoid Structures, and Induce Specific T-cell Responses. *Cancer Immunology Research* 2019