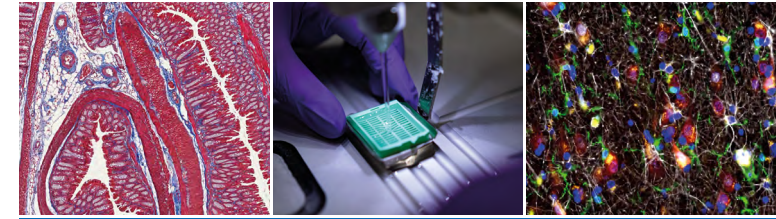


## Core Facilities – Technologies, equipment and expertise for ambitious research goals

The Interdisciplinary Center for Clinical Research (IZKF) provides valuable resources for a cost-effective, high-quality research environment.

A wide range of technologies and state-of-the-art equipment are available for all RWTH Aachen University researchers. Experienced technology experts provide services at every stage of the research process, including experimental design, method development, sample work-up, and data interpretation, on a partial cost recovery basis.



**IHF** Immuno-histochemistry Facility **IZKF**

## Equipment

- Tissue processor
- 2 tissue embedding centers
- 2 sliding microtomes
- 2 rotary microtomes with cool-cut and section transfer system
- 1 cryotome
- Autostainer for histological staining
- Printer for printing tissue embedding cassettes
- Printer for printing slides
- Cover slipper
- Fritz Slidescanner
- Keyence BZ-X810 fluorescence microscope



**Martina Tappe**

mtappe@ukaachen.de  
Tel.: +49 241 80 80265



**BIF** Brain Imaging Facility

**PF** Proteomics Facility

**CMF** Confocal Microscopy Facility

**FCF** Flow Cytometry Facility

**TF** Transgenic Facility

**2PIF** Two-Photon Imaging Facility

**IHF** Immuno-histochemistry Facility

**GF** Genomics Facility



**3D SRF** Super Resolution Facility



**Karen De Bruyne, M.A.**

**IZKF Scientific Coordinating Office**

Pauwelsstraße 30 | D-52074 Aachen  
Elevator D5 | 4th floor | room 44  
+49 (241) 80 80034  
izkf@ukaachen.de

Processing and staining of tissue samples for microscopy

Competent advice and support

Provision of equipment for histological/immunohistological procedures

Digital microscopy and documentation

**Martina Tappe**

**Immunohistochemistry Facility**

elevator C3/C4 | 3rd floor | corridor 43 | room 19  
Pauwelsstrasse 30, 52074 Aachen  
Tel.: +49 241 80 80265  
immunohistochemistryfacility@ukaachen.de

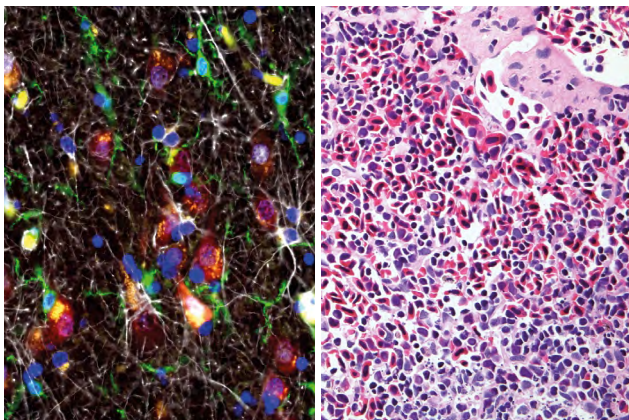
## Why use the Immunohistochemistry Facility, and how can you use it to your advantage?

Histological studies are used in many fields such as research, diagnosis, and education to visualize the molecular and structural components of tissues and cells and to detect structural integrity or alterations of the integrity in diseased tissue.

To prepare sample tissues for microscopic study a series of technical procedures are necessary, including fixation, processing, embedding, sectioning and staining.

The staining result depends not only on the chemical composition of the tissue but also on the correct fixation and processing of the tissue.

Besides classical histological staining, immunohistological staining is widely used in diagnosis and basic research to characterize cells and tissues. The use of antibodies can provide information about the presence of certain cell types in a tissue section. Furthermore, specific antibodies are used to identify proliferating or apoptotic cells and to reveal the expression and localization of proteins such as transcription factors, receptors and signal molecules.



The Immunohistochemistry Facility team

Our Immunohistochemistry Facility offers expert advice and support in the planning and conducting of histological and immunohistological experiments.

We boast efficient equipment, digital microscopy and a first-rate quality management system.

Users of the facility can order all services for a fee. They also can use our equipment to perform their work themselves for a fee.



## What services do we offer?

- Pre-experimental advice
- Assistance with sample preparation
- Provision of label printers for cassettes and slides
- Dehydration of fixed tissues
- Embedding in paraffin
- Cryopreservation
- Preparation of tissue sections (paraffin and cryosections)
- Antigen unmasking in the steamer

- Histological staining (HE, EVG, PAS, etc.)
- Immunohistochemical staining
- Establishment of new antibodies
- Validation of a staining by appropriate positive and negative controls and verification of the staining in the context of the antigen and tissue morphology
- Digital microscopy (slide scanner)
- Keyence BZ-X810 fluorescence microscope

