The IMTR has maintained a long-term and fruitful collaboration with the Forschungscampus STIMULATE - Solution Centre for Image Guided Local Therapies located at the campus of the Otto von Guericke University Magdeburg. We have the possibility to resort to the technical equipment of the angiography and magnetic resonance imaging laboratories for addressing specific research approaches. This cooperation enables us to provide you with a state-of-the-art technology to support and accompany your acute and chronic studies in large animals.

THE ANGIO SUITE
The state-of-the-art angiography lab is equipped with a robot-based flat-panel X-ray C-arm system. This lab is exclusively intended for research purpose without patient care and offers therefore inimitable opportunities for the development and evaluation of devices for minimal invasive therapies under clinical conditions. The evaluation process is conducted i.a. in animal models. Trainings and instructions for clinicians or technicians are feasible as well.

SYSTEM SIEMENS ARTIS ZEGO
- C-Arm based X-ray system mounted on high-precision robot-arm
- Large (40cm) Flat-Panel detector
- CT functionality (DynaCT) incl. a large volume feature (no truncations)
- Image acquisition speed: up to 60 fps
- C-arm rotation speed: up to 100°/s
- 56” Large Display (8 Mpixel)

Anesthesia and patient monitoring
- Dräger Fabius Plus anesthesia workstation
- Contrast agent injector
  - Metron Accutron HP
  - LV3000
THE MRI SUITE

The state-of-the-art MRI lab is equipped with a 3T MR scanner featuring a wide, short bore design. The scanner is exclusively operated for research purposes. It offers inimitable opportunities for the development and evaluation of devices for minimal invasive therapies under clinical conditions for functional MRI research, coil development or MRI sequence design. The operation of the MRI lab outside of the hospital, i.e. without patients enables reliable planning and execution of extensive studies.

MRI SYSTEM
- Siemens MAGNETOM Skyra: 3T MRI
- Wide bore system (diameter: 70cm)
- Integrated Total Imaging Matrix
- Coils for head, thorax, abdomen, spine and limb applications
- FOV: 50 x 50 x 45cm³
- Undockable patient table
- Wireless ECG based gating

Audiovisual patient stimulation for fMRI
- Video projector + deflection mirrors (Covilex)
- Audio system mkll+ (MR confon)

Temperature measurements
- Optocon FOTEMP 4
- 4-ch fiber optic measurement system

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