

Modular Curriculum

This training program is a series of three modules about eloquent brain tumor treatment and structured as follows:

- Module 1: TMS - Transcranial magnetstimulation (250€)
Module 2: White Matter Tractography (250€)
Module 3: Surgery of eloquent brain tumors (750€)

Trainers

Prof. Dr. Peter Vajkoczy

Chair of the Department of Neurosurgery,
Charité - Universitätsmedizin Berlin

PD Dr. Thomas Picht*

Head of the Image Guidance Lab,
Charité - Universitätsmedizin Berlin

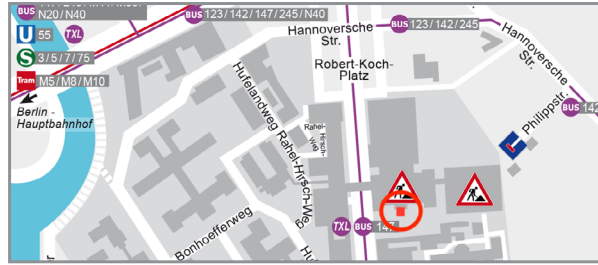
Lucius Fekonja

Head of the research group Digital Twin,
Charité - Universitätsmedizin Berlin

Partners



*scientific director



Location

Seminar rooms,
Campus Charité Mitte, 10117 Berlin
Luisenstraße 64 | Room 15003 (15th floor)

Arrival

with public transportation
S+U Berlin-Hauptbahnhof (S5/S7/S75/S9)
U Naturkundemuseum (U6)
U Oranienburger Tor (U6)
S+U Friedrichstr. (S1/S2/S5/S7/S75/S9/U6)

Please note that Berlin-Mitte doesn't provide a great number of parking spaces. Therefore, using the city's public transportation system would definitely be a good alternative. If you decide to travel via public transportation, we recommend using www.bvg.de for planning your route.

Host

Charité Universitätsmedizin Berlin
Berliner Simulations- und Trainingszentrum
Charitéplatz 1 | 10117 Berlin
Contact person: Christine Thol
berliner-simulationstraining@charite.de
Tel. +49 30 450 531 229
Fax +49 30 450 7 531 229

Registration

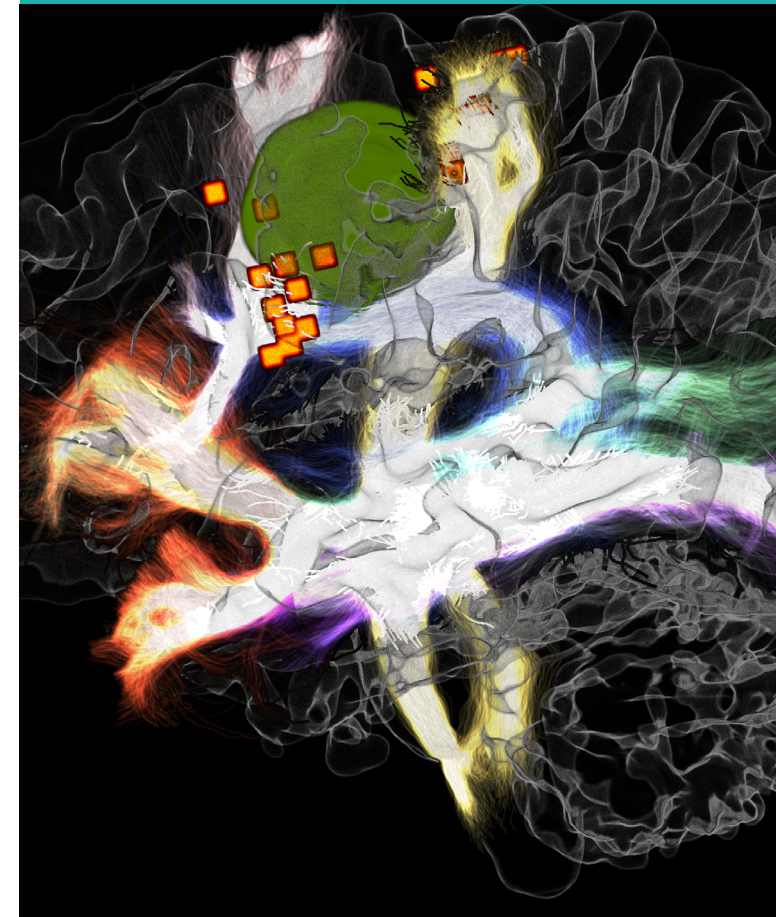
via E-Mail: berliner-simulationstraining@charite.de
Online website: best.charite.de

Participant limit: 12



Berliner Simulations- & Trainingszentrum

Treatment of the eloquent brain tumor
Module 2: White Matter Tractography



“it's good to know, it's BeST to simulate”



Dates

04th September 2020

11th December 2020

Registration fee

250 € per Participant

Clinical relevance

Due to the progress made in terms of individualization of modern therapy methods in neurosurgery, non-invasive functional diagnostics are expected to become even more relevant than they already are. Being able to create a visual representation of individual functional networks benefits the planning process of therapy strategies as well as the actual procedures. Furthermore, it enables personalized risk stratification for surgery.

One method of non-invasive functional brain diagnosis is fiber tractography – a technique that is based on diffusion weighted MRI sequences. It is an application-oriented research field having enormous potential and developing at high speed. In order to integrate tractography into already existing clinical workflows, reliable recommendations for standardized workflows and interpretation of results are required. Also the variety of different tractography-algorithms and recommendations concerning raw data acquisition poses a challenge itself.

What can you expect?

At first, we will offer you a brief insight in the basics of tractography. Participants will be provided with a sufficient amount of information to afterwards be able to evaluate different tractography approaches in a clinical context. The overall goal of this event is to teach participants to autonomously do a tractography of the corticospinal tract and of the main language fascicles in clinical routine.

Competencies taught

- Basic skills in brain anatomy
- Basic skills in functional anatomy
- Basic understanding in tractography
- Autonomously carrying out a tractography of the motor-/language network
- Pitfall-management in difficult cases

Training schedule

- 14.00 Tractography introduction
 - dMRI and DTI basics
 - functional neuroanatomy, hodotopy basics
 - „hot seat“ tractography preparation
- 14.30 „hot seat“ language tractography
 - landmarks of the most important language fascicles
 - visualisation of healthy and pathological language networks
- 17.00 „hot seat“ motor tractography
 - depiction of the pyramidal tract (healthy and peritumoral)
- 18.00 clinical application of the results
- 18:30 Quiz and debriefing
- 19.00 END OF THE COURSE

The first module of this series about the treatment of the eloquent brain tumor addresses [transcranial magnetic stimulation](#). It is held [right before the second module](#) begins, so if you would like to spend the entire day with us in Berlin, feel free to book both modules. Please take a look at the first module's flyer for further information about this training unit!