MIC Workshop: Vascular imaging using contrast-enhanced microCT approach (=microangioCT)

Date: 21-23rd of October 2019, 2 days

Start/End: 13.00 on 21.10.2019/ 12.00 on 23.10.2019

Location: University of Bern, Institute of Anatomy

Organizer: Jointly offered by PD Dr. med. Ruslan Hlushchuk, University of Bern, Institute of Anatomy, Prof. Valentin Djonov, University of Bern, Institute of Anatomy, Prof. Dr. Britta Engelhardt, University of Bern, Theodor-Kocher-Institute and the Microscopy Imaging Center of the University of Bern (MIC, www.mic.unibe.ch).

Teachers/Tutors: Members of MicroCT-Group (R. Hlushchuk, D. Haberthür, O. Khoma, F. Wieland) and others

Target students / participants: PhD students (in particular specialising in Cutting Edge Microscopy); postdoctoral researchers, personnel of imaging facilities

Number of participants: Max 20

Registration: via KSL
KSL Stamm-Nr.: 457126
ILIAS: 457126-HS2019-0: MiroangioCT

Reward: 1 ECTS

Description/Structure: The objective of the course is to introduce the participants to the (micro)vascular imaging using contrast-enhanced microCT.

Afternoon 21.10.2019:
- Short presentations of participants’ own projects.
- Lectures providing background information on microcomputed tomography as 3D-imaging approach and on its various aspects.

22.10.2019 – Practical part:
- Focus on developing practical skills in sample preparation and handling, selection of scanning parameters at the two available microCT-scanners (Skyscan 1172 and Skyscan 1272).
- Design/preparation of custom-made sample holders (3D-Printer)
- Practical training on perfusion of small lab animals with ex vivo contrast agent(s).

Morning 23.10.2019:
- Training on dataset reconstruction and visualization of the results (video and still images).
- Quiz test and feedback.

Assessment: Participation to all activities, a presentation and a quiz test at the end of the course.

Costs: 280 CHF.
Optional: PhD students of the GCB are applicable to refund of costs by the PhD program Cutting Edge Microscopy.