Vascular Cell Biology – Practical Course for GCB students

Dates: 8. 4. 2024 – 12. 4. 2024
Time: full days – full week participation required
Organizers/Tutors: Prof. Dr. Britta Engelhardt, Dr. Urban Deutsch, Prof. Dr. Ruth Lyck, Dr. Steven Proulx
Venue: Theodor Kocher Institute, Freiestrasse 1, 3012 Bern

Course Description:
The weeklong laboratory course gives a practical and theoretical introduction into methods of vascular cell biology

- Analysis of vascular development by employing transgenic reporter mice
- Isolation and culture of primary vascular and lymphatic endothelial cells
- Human induced pluripotent stem cell derived endothelial cell cultures
- Phenotypic characterization of primary endothelial cell cultures: detection of contaminating cells etc by immunofluorescence stainings and analysis by fluorescence microscopy and flow cytometry
- Determining functional alterations of endothelial cells in inflammation: phenotype, vascular permeability and adhesiveness for blood components in vitro and in vivo

Limitations: 6-8 students (with waiting list)
Priority will be given to those students who have selected this course in agreement with their mentor, within the framework of the GCB and have listed it as «mandatory requirement» in their Doctoral Agreement

Credits: 2.0 ECTS
Registration: via CTS/KSL, root no. 103079 (with active waiting list)
Deadline for registration: Thursday, March 1st, 2024
Exam: Oral discussion on last day and written report