



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, March1st, 2024

Exam: Oral discussion on last day and written report