



LUDWIG-
MAXIMILIANS-
UNIVERSITÄT
MÜNCHEN

ANATOMISCHE ANSTALT
LEHRSTUHL II
PROF. DR. CHRISTOPH SCHMITZ



Quantitative 3D Microscopic Analysis of Isolated Human Peripheral Placental Villous Trees: Theory and Practice

Date: Friday, 16th of February, 2018 – Saturday, 17th of February, 2018

Venue: Department of Anatomy II (“Anatomische Anstalt”), Pettenkoferstr. 11, 80336 Munich, Germany

Friday: Macroscopic Analysis and Sampling for Quantitative Microscopy

- 2 pm Get-together and Welcome in the Department of Anatomy
- 2.30 pm Introductory Remarks: “Principles of Processing and Sampling of Human Placentas for Quantitative Microscopy including 3D Microscopy” (**H.-G. Frank**), Q and A
- 3 pm
- Practical demonstration of entry routine, macroscopic data acquisition, and approach to systematic random sampling of placentas in the laboratories of the department, Q and A.
 - Practical demonstration of sampling for quantitative 3D Microscopy
 - Participants will have ample opportunity to train sampling of peripheral villous trees under guidance of experienced staff members of the department.
 - Participants will have the opportunity to isolate peripheral villous trees from previously deparaffinated archived tissues.
 - Fixation protocols (for freshly isolated villous trees), dehydration, and mounting of isolated villous trees will be demonstrated and mounting of pre- processed villous trees can be trained by the participants.
- 7 pm Q and A session and discussion of staining protocols and immunohistochemical protocols for isolated peripheral villous trees (**H.-G. Frank**)
- ~8 pm Lunch at a restaurant in walking distance from the department

Saturday: 3D Microscopic Analysis of Isolated Peripheral Villous Trees

- 9 am “The camera lucida principle and its application to the biological trees, especially the villous tree” (**H.-G. Frank**)
- 9.30 am “An Overview on the Practical Process of 3D Microscopic Analysis of Isolated Villous Trees” (**E. Haeussner**)
- 10 am
- Step for Step demonstration of a routine evaluation under the microscope (**E. Haeussner**)
 - Training and exercise at microscopes by the participants, supervised by experienced staff
 - Q and A
- 11.30 am Lunch
- 12.30 pm “Data Structures obtained by 3D Microscopic Analysis and their Evaluation” (**E. Haeussner**)
- 1 pm
- Step by Step demonstration of an advanced evaluation including placement of markers during analysis
 - Training and exercise by the participants supervised by experienced staff
 - Demonstration of examples with immunohistochemical protocols involved in sample preparation.
 - Q and A, discussion of questions of participants with regard to their own running or planned projects
- ~4.30 pm End