

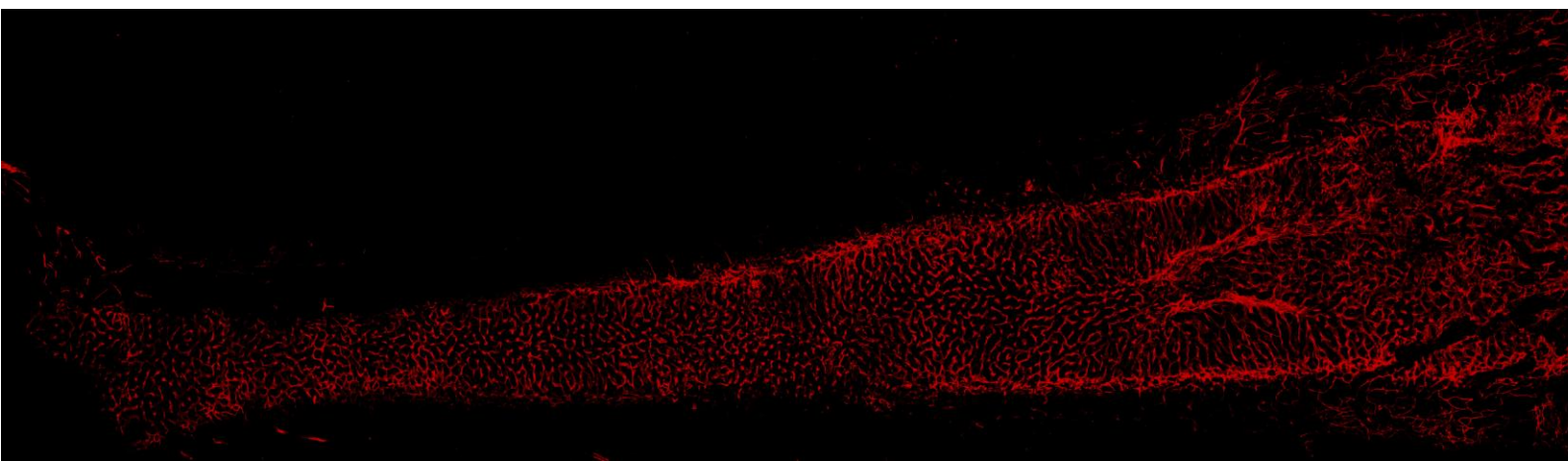


μBONE Workshop

TOPIC: Organotypic models and advanced imaging tools to dissect the biology of human bone metastasis

When: November 25th, 2020

Where: Virtual zoom meeting



Organizer: Alexander Schäffer

The workshop will focus on new modelling and imaging strategies to dissect the biology of bone metastatic disease. We will provide training for whole bone preparation and high-resolution imaging of bone metastatic lesions followed up by quantitative analysis and spatial distribution. Additionally, we will provide training on recently established fully human 2D and 3D organotypic niche models that contain essential constituents of the bone marrow niche. These models allow exploration of cellular interactions between tumor and bone resident stromal cells in a fully human and modular setting.

Detailed program

10AM – 10.15AM

Welcome and introduction by Alexander Schäffer

Block 1

10.15AM – 11.15AM

- Current models of bone metastasis (presentation)
- Intra-caudal injections as experimental model for human bone metastasis (video + discussion)
- Sample preparation and staining for whole bone imaging (video + discussion)
- Whole bone imaging and introduction to data analysis (video + discussion)

Block 2

11.30PM – 12.30PM

- Establishing 2D co-cultures using primary ECs, MSCs and bone metastatic cells (video + discussion)
- Exploring cellular interactions using the CQ1 imaging platform (video + discussion)

Block 3

12.45.30PM – 1.45PM

- Establishing 3D organotypic co-cultures using primary ECs, MSCs, collagen scaffolds and bone metastatic cells (video + discussion)
- Exploring cellular interactions in 3D using the CQ1 imaging platform and image analysis (video + discussion)

2PM – 2.15PM

- Closing remarks and discussion