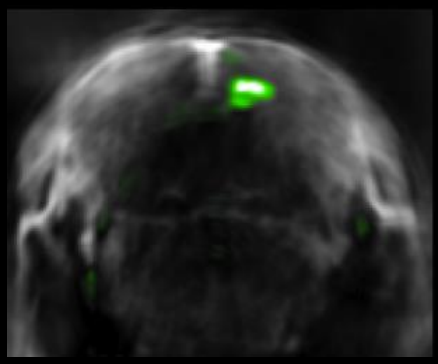
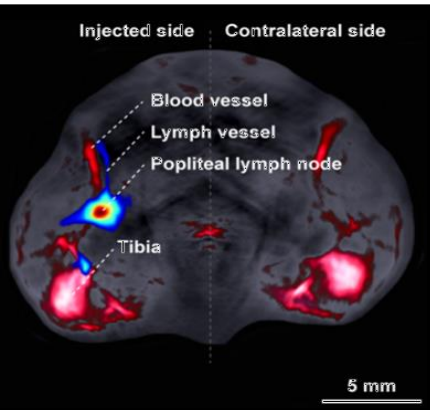
iTheraMedical
Listening to Molecules

Multispectral Optoacoustic Tomography (MSOT)

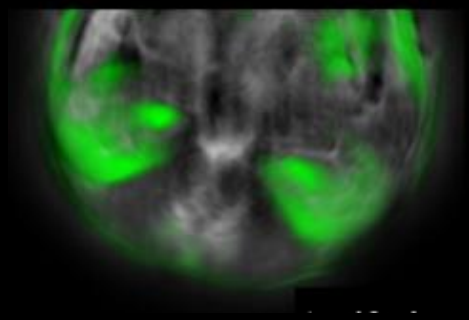
High Resolution Functional and Molecular Imaging in Small Animals (And Man)



Cross section of mouse glioma



Cross section demonstrating Lymph drainage



Measuring kidney function *in vivo*

In the context of EU PRISAR Project: image guided surgery

Host: Prof. Dr. Frauke Alves and Dr. Joanna Napp

Dr Tim Devling, iThera Medical

UMG, Lecture Room 55

Thursday, 16th of July 2015, 11.15 a.m.

Multispectral Optoacoustic Tomography (MSOT) is a powerful imaging modality that visualises the spectral response of chromophores *in vivo*, with high resolution, to depths of several centimetres. Uniquely, it provides the capacity to separate endogenous signals of interest such as oxy-/deoxy-hemoglobin & tissue contrast from extrinsically administered agents including nanoparticles and fluorescent dyes or proteins. Here we will outline the principle of MSOT imaging & show the use of MSOT to characterize a range of disease models and applications including cancer, nanomedicine, neurobiology, cardiovascular and inflammation. Furthermore, as a novel clinical imaging modality, we will highlight some of the recent clinical results.