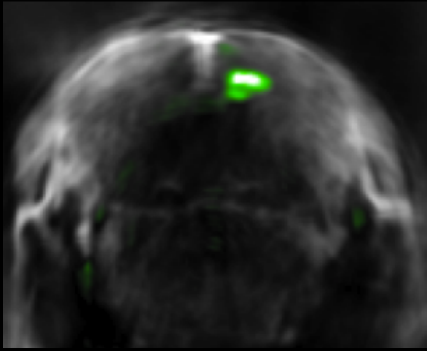
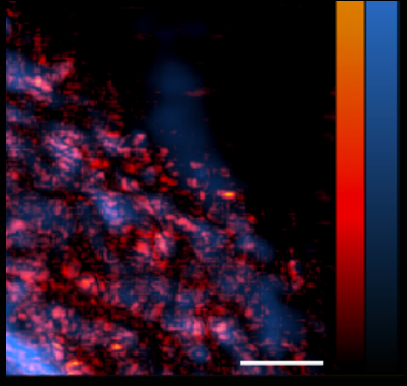


Optoacoustic Tomography: High Resolution Functional and Molecular Imaging in Small Animals and Man

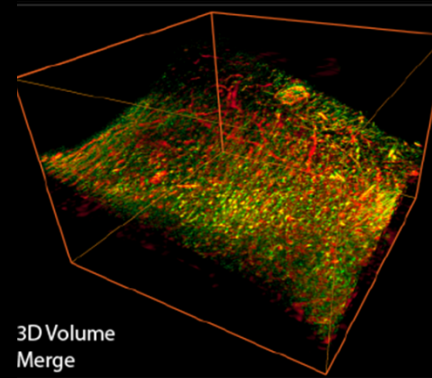
iTheraMedical
Listening to Molecules



Imaging tumour
function



Cell tracking in vivo
at depth



Imaging vascular
structures

Dr Tim Devling, iThera Medical
BHF building – room C222/223
11h
28.01.2020

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 image and quantify endogenous signals of interest such as oxy-/deoxy-haemoglobin, lipids and collagen from administered agents including nanoparticles and fluorescent dyes or proteins. Moreover, the recent development of Raster Scanning Optoacoustic Mesoscopy (**RSOM**) has provided a tool for imaging structures and cells at resolution of 10 micron at depths of many millimetres. Here the technique and current applications will be presented and discussed.