

## Introduction of the Cellvizio endomicroscopy system

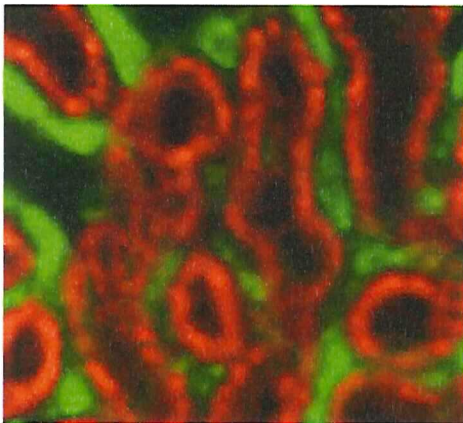


**Ziad Benelkadhi – Mauna Kea Technologies**

Tuesday, 14<sup>th</sup> of July, 4:30 pm

UMG Lecture Room 04

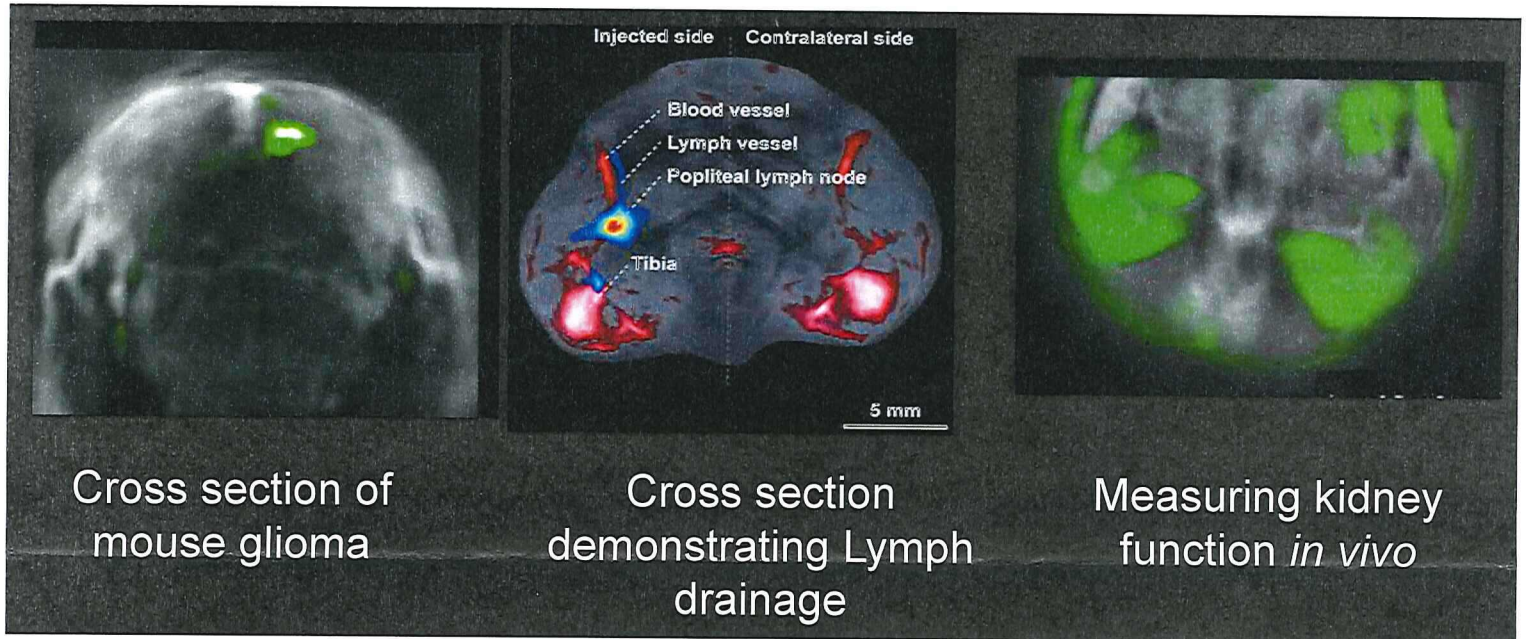
In the context of EU PRISAR Project: image guided surgery  
Host: Prof. Dr. Frauke Alves and Dr. Joanna Napp



The Cellvizio Lab systems allows minimally invasive deep tissue  
*in vivo* imaging down to cellular resolution.  
It offers a huge variety of applications from  
oncology, neurology, cardiology, infectious diseases and many more!

# 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, 16<sup>th</sup> of July 2015, 11.<sup>15</sup> 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.