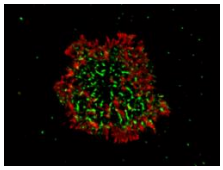
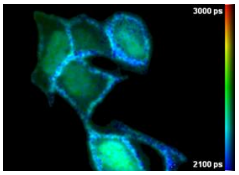
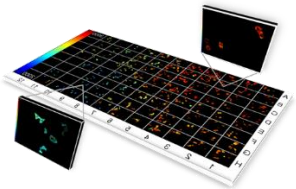
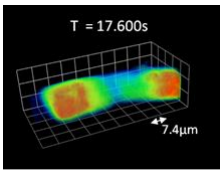
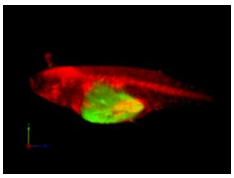





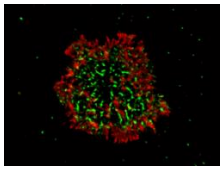
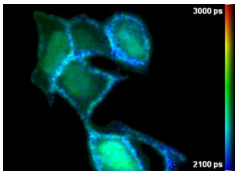
Multidimensional fluorescence imaging technology: super-resolution, HCA and preclinical imaging

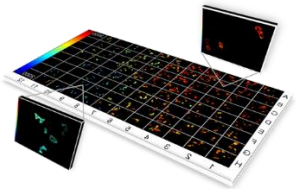
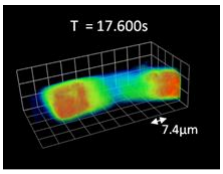
Photonics Group workshop on MDFI for biology, HCA and drug discovery

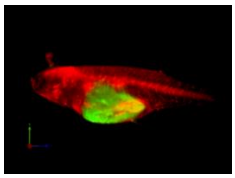
Friday 21st July, 2017, Clore Lecture Theatre, Room 213 Huxley, Imperial College London, SW7 2AZ

0930	*Coffee*	*Outside Clore lecture Theatre*
1000	Maggie Dallman	Welcome
1005	Paul French	Overview of multidimensional fluorescence imaging and metrology research portfolio
1030	Chris Dunsby	3D fluorescence imaging with oblique plane microscopy and multiphoton microscopy/endoscopy
1100	James McGinty	Optical projection tomography applied to cancer, diabetes and epigenetics
1130	Keynote I: Suliana Manley (EPFL)	Expanding horizons with automated, large field-of-view super-resolution microscopy
1215	*Buffet lunch*	*(TBA)*
1245	*<u>Laboratory tours (assemble level 6 Blackett)</u>* *Low cost STORM with multimode lasers and fibres* *Open source automated FLIM/FRET plate reader* *In vivo optical projection tomography of zebrafish disease models* *Oblique plane microscopy for high speed volumetric imaging*	
1400	Paul Frankel (UCL)	Imaging zebrafish models of disease
1430	Frederik Görlitz	Combining super-resolved microscopy with FLIM
1445	Wenjun Guo	Automated FLIM/FRET of kinetochore protein interactions
1500	Elizabeth Noble	FLIM of plant metabolism: mapping agrochemical distributions
1515	Tom Watson	Volume of interest OPT
1530	*Tea and poster session*	*(TBA)*
1630	Keynote II: Erik Sahai (Francis Crick Institute)	Imaging therapy failure
1715	*Closing remarks*	*Future trends and priorities*
	Drinks & canapés	*(TBA)*

BBSRC bioscience for the future
EPSRC Engineering and Physical Sciences Research Council
MRC Medical Research Council
Technology Strategy Board Driving Innovation
wellcome trust



Posters (provisional)

Super resolved microscopy

Stina Guldbrand	STED microscopy with plasmonic nanoparticles
Sunil Kumar	Low-cost STORM microscopy
Ian Munro	HPC STORM data processing
Tim Runcorn	New fibre lasers for STED microscopy
Sheila Xie/Stina Guldbrand	STORM microscopy of DNA and AID

FLIM and FRET

Yuriy Alexandrov	FLIM/FRET of fluorescent proteins – realistic dipole distribution
Frederik Görlitz	Open source automated multiwell plate FLIM applied to cell-based FRET assays for protein-protein interactions and SIM + FLIM
Alex Sardini	Imaging of AMPK activity in tumour-stromal interactions with improved FRET biosensors
Edwin Garcia Castano	Automated FLIM/FRET of tumour spheroids expressing FRET biosensors
Sunil Kumar	Multiphoton FLIM/FRET in 3-D cell culture

Mesoscopic to macroscopic fluorescence tomography

Hugh Sparks	OPM and 3D HCA
Vincent Maioli	Application of oblique plane microscopy to spectral ratiometric FRET in tumour spheroids
Marie-Claire Ramel, Ralf Wenz	FLIM of FRET biosensors in live zebrafish
Sam Davis	Practical OPT technology and its applications including imaging of live adult zebrafish
Yuriy Alexandrov, Sam Davis	Software tools for OPT including OMERO data storage and rapid 3-D image reconstruction on demand
Laura Wisniewski (UCL)	Adult zebrafish and their application to in vivo longitudinal studies of cancer and anticancer therapies

There is no charge to attend this meeting and all are welcome. However, we request that you register on Eventbrite (search for "Imperial MDFI workshop").

If you would like to present a poster, please email paul.french@imperial.ac.uk with a short title and abstract.

AstraZeneca British Heart Foundation CAIRN RESEARCH gsk GlaxoSmithKline Kentech Instruments