Course and seminar room with workstations

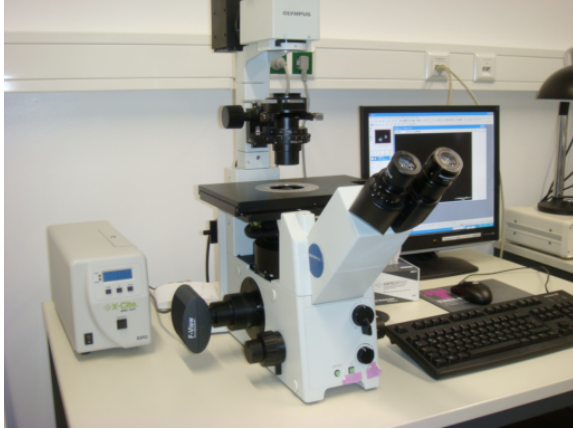Hands-on microscopy courses...

... and theory sessions

The ZMBH Imaging Facility course and seminar room is permanently equipped with:
- 3 widefield fluorescence microscope systems
- 5 computer workstations for image analysis and processing
(specifications see below)

Course and seminar room with workstations

Microscope systems:

Olympus IX71, inverted microscope

Objectives:
UPlanFl 10x/0.30 Air Ph1
LC PlanFl 20x/0.40 Air Ph1
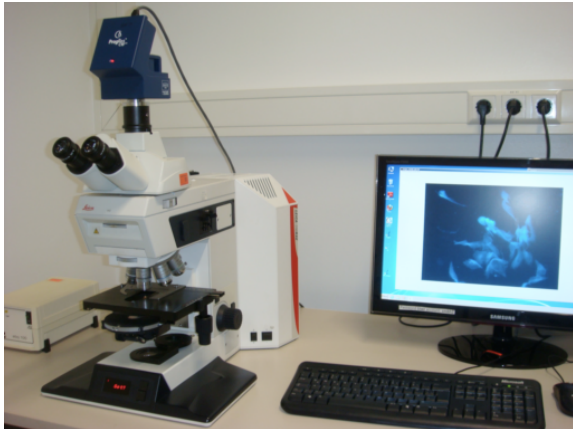LC PlanFl 40x/0.60 Air Ph2
UPlanSApo 100x/1.40 Oil
Filters for:
DAPI, CFP, GFP, YFP, mCherry
Camera: Olympus Soft Imaging Systems F-View
Software: Olympus Soft Imaging Systems CellF 2.8

Leica DMRXE, upright microscope

Objectives:
PL Fluotar 2.5x/0.07 Air
PL Fluotar 10x/0.30 Air PH1
PL Fluotar 20x/0.50 Air PH2
PL Fluotar 40x/0.70 Air PH2
PL Fluotar 100x/1.30 Oil PH3
Filters:
Ex BP 340-380, Em LP 425 (DAPI)
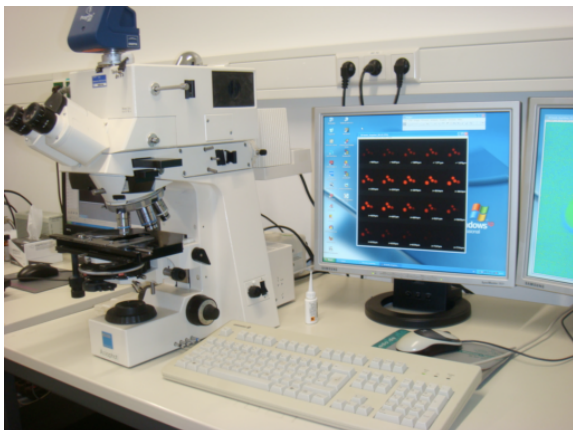Ex BP 450-490, Em BP 515-560 (GFP)
Ex 530-595, Em LP 615
Ex 570/50, Em 640/40
Camera: Jenoptik ProgRes C10plus
Software: Jenoptik ProgRes CapturePro

Zeiss Axiophot, upright microscope

Objectives:
Plan NEOFLUAR 10x/0.30 Air
Plan NEOFLUAR 20x/0.50 Air
Plan NEOFLUAR 40x/0.75 Air
Plan-APOCHROMAT 63x/1,40 Oil
Plan NEOFLUAR 100x/1.30 Oil Iris (NO UV (DAPI)!)
Filters:
Ex G 365, Em LP 420 (DAPI)
Ex 450-490, Em LP 520 (GFP)
Ex BP 546, Em LP 590 (mCherry)
Camera: Jenoptik ProgRes MF USB
Software: Jenoptik ProgRes CapturePro

Course and seminar room with workstations

Computer workstations:

	Workstation 1	Workstation 2	Workstation 3	Workstation 4	Workstation 5
Processor	Intel Core i7 930@2.80 GHz	AMD Phenom II X4 850	AMD Phenom II X4 850	AMD Athlon II X4 640	Intel Pentium 4 CPU 2.60 GHz
Operating system	Windows 7, 64 bit	Windows 7, 64 bit	Windows 7, 64 bit	Windows 7, 64 bit	Windows XP, 32 bit
Cores	4	4	4	4	1
Threads	8	4	4	4	2
Memory Type	DDR3, 24 GB	DDR3, 8 GB	DDR3, 8 GB	DDR3, 8 GB	DDR, 2 GB
Graphics	NVIDIA GeForce GTX480, 1536 MBytes	AMD Radeon HD 6700, 1024 MBytes	AMD Radeon HD 6700, 1024 MBytes	Radeon HD 5770, 1024 MBytes	NVIDIA Quadro4 750 XGL, 128 MBytes
Licensed software	• Olympus CellR 3.2 • Zeiss ZEN 2010 (FRET, FRAP, 3D, Multiple Time Series, FCS)	• Olympus xcellence rt 1.2			
Extras	3D: NVIDIA GeForce 3D Vision with shutter glasses, Samsung Syncmaster 120 Hz monitor				

Viewer software:
Leica LAS AF Lite, LCS Lite, Simulator
Zeiss LSM Image Browser, AxioVision
Nikon NIS Viewer
Olympus Soft Imaging Viewer

Image analysis/processing:
ImageJ (http://rsbweb.nih.gov/ij/))
FIJI (http://fiji.sc/wiki/index.php/Fiji)
ImageSurfer (http://imagesurfer.cs.unc.edu/)
CellCognition CecogAnalyzer (http://cellcognition.org/)