

Alhibah, Mohammad		
Decoding life's secrets: the dynamic power of video-rate and quantitative FLIM		32
Ancora, Daniele	Presenter: Crevenna, Alvaro	
MATISSE, a fast, robust and blind spectral unmixing algorithm		33
Auer, Anne		
Fluorescence imaging of anti-myocardial antibodies from patients with heart disease using induced pluripotent stem cell-derived cardiomyocytes		34
Belyaev, Ivan		
BEXIS2 – a user-friendly platform for metadata management		35
Benziane, Anass		
Evaluating the heterodimerization of nuclear receptors and their binding ligand affinity using FLIM-FRET and FCS		36
Bevilacqua, Carlo		
Brillouin microscopy for live-imaging of mechanical properties in biology		37
Bigott, Kevin		
Next generation non-toxic clearing and labeling with fluorescent REAfinity antibodies for enhanced 3D visualization of tissues and organs.		38
Boissonnet, Tom		
Building on strong foundations: the impact of contributing to open source scientific software		39
Boissonnet, Tom	Presenter: Weidtkamp-Peters, Stefanie	
TiM 2025: an incubator for FAIR image data management		40
Bondarenko, Vladyslav	Presenter: Dieter, Julia	
Multi-sample mounting for live imaging in light-sheet microscopy & beyond		128

Borriero, Carolina	
Expansion microscopy for high-resolution analysis of the spatial correlation among transcriptional regulators	42
Bortolomeazzi, Michele	
Introducing omero-vitesse: an OMERO.web plugin for multimodal data viewing.	43
Bosch, Bram	
Use of AI based label free predictions for primary airway epithelial cell assays	44
Broek, Bram van den	
Foci Analyzer: a versatile Fiji macro for quantifying nuclear and cellular foci in fluorescence microscopy images	45
Castro-Olvera, Gustavo	
FAIR data management at SLN	46
Charoy, Camille	
Get more out of HREM images	47
Ciccarelli, Alessandro	
Fast, gentle, and deep imaging of 3D cell models: comparative study of fluorescence microscopy techniques for organoids and thick samples	48
Coll Lladó, Montserrat	
Deep inside a gorgonian coral	49
Cresens, Charlotte	
Supporting super-resolution projects – a facility perspective	50
Cserép, Csaba	
A multi-modal microscopy approach to investigate perisomatic modulation of neurons by microglia	51
Darwish-Miranda, Nasser	Presenter: Milius, Doreen
Integrating Force Probing modalities to light microscope systems	52

Davis, Samuel		
Imaging of freely moving organisms with mesoscopic oblique plane microscopy and sample tracking		53
De Ponti, Federico	Presenter: Verbeke, Jérémy	
A multimodal imaging approach to characterize the phenotype and functional relevance of LAM-like Kupffer cells in the injured liver		54
Deguchi, Takahiro		
MINFLUX tracking for monitoring stepping dynamics of kinesin-1 in live cells		55
Diestler, Klara		
Core facility leadership and management course – an interactive workshop to empower core facility managers by GerBI-GMB and hfp consulting		56
Escolano Caselles, Joan Carles		
Enhancing large-scale BioAFM mechanical characterization with SmartMapping		57
Fallesen, Todd L.		
A community effort to demystify high performance computing for image analysis		58
Fallisch, Arne	Presenter: Nitschke, Roland	
Spectral fluorescence standards for the calibration and performance validation of fluorescence microscopes		59
Faraj, Noura	Presenter: de Lange, Eline	
Visualization of the pancreas in living label-free zebrafish using Raman microscopy		60
Feldhaus, Christian		
The dark, the black, and the contrast		61
Ferrer Ortas, Júlia		
Direct adaptive optics (AO) for fast aberration correction and high spatial resolution deep intravital imaging applications		62

Ganley, Emma	
protocols.io: a tool for imaging facilities to share methods	63
Garzon-Coral, Carlos	
Oblique plane microscopy enables high-throughput organoid screening for drug discovery	64
Giakoumakis, Nikolaos	
Dry Immersion Microscopy to foster multiscale long-term live imaging	65
Hanne, Janina	
News from the German Biolmaging society	66
Hochreiter, Bernhard	
Relational databases for QC and facility organization	67
Hwang, Wonsang	Presenter: Coto Hernandez, Ivan
Super-resolution fluorescence lifetime imaging microscopy	68
Imbeni, Milo	
Deep learning for segmentation of vessels and microglia in lightsheet microscopy volumes stained with Tomato Lectin	69
Ishikawa-Ankerhold, Hellen	
Intravital microscopy sheds light on platelet production and immune functions	70
Ishikawa-Ankerhold, Hellen	Presenter: Fried, Hans; Ishikawa-Ankerhold, Hellen
Advancing intravital microscopy through collaboration and open science	71
Jiang, Junqing	
Commutable, dimensionally traceable 3D standards for multimodal microscope calibration and quality control	72
Jost, Aurélie	
Chosen imaging projects at the Microverse Imaging Center	73

Kemmer, Isabel		
Putting FAIR principles into action - Euro-Biolmaging's FAIR data toolkit		75
Kim, Haesoo	Presenter: Combettes, Bruno	
Advancing holotomography for multi-dimensional, high-resolution imaging of mouse brain tissue and organoid structures		74
Klaus, Severina		
Beyond the barrier: introducing the Heidelberg – Hamburg Infectious Disease Imaging Association (HHH-IDIA) for advanced microscopy of pathogens in high-biosafety-containment laboratories		76
Koenig, Marcelle	Presenter: Bayer, Mathias	
Expanding the horizon of fluorescence correlation spectroscopy (FCS) with SPAD arrays: a promising outlook for new applications		77
Kovsted, Carl Emil Schøier		
Using a scrolling interference pattern to characterize nanoparticles		78
Krooß, Ksenia		
National research data infrastructure for microscopy and bioimage analysis (NFDI4BIOIMAGE) – get organized with us		79
Lagerholm, Berndt		
Evaluation of structural illumination microscopy performance with standardized multi-colour bead imaging and analysis workflow: Point Spread Function dimensions, Chromatic shifts, Dispersion, and more		80
Lampe, Marko	Presenter: Marcello, Marco	
Embed, image, rinse and repeat: a new hydrogel with improved optical properties for light microscopy and nanoscopy		81
Le Guyader, Sylvie	Presenter: Imreh, Gabriela	
Improving light microscopy training routines with evidence-based education		82

Lee, Hoyeon	Presenter: Combettes, Bruno	
AI-assisted segmentation and quantitative assessment of cellular senescence using holotomography		83
Liu, Nasi	Presenter: Le Dévédec, Sylvia	
RNA splicing reprogramming to combat triple-negative breast cancer		84
Lladó, Anna	Presenter: Zhang, Chong; Lladó, Anna	
High Content Screening model to study colorectal cancer		85
Llodrá González, Jaime Andrés	Presenter: Belyaev, Yury	
Boosting precision in cryo-CLEM via deconvolution		86
Luik, Torec		
BIOMERO: a scalable and extensible image analysis framework		87
Madhu, Manivannan	Presenter: Chang, Po-Ling	
Super-resolved live imaging of pseudo-fixed mitochondria by self-photoblinking of carbon dots		88
Mallm, Jan-Philipp		
IO-FAST - Initiative for FAIR spatial data		89
Marinageli, Matteo	Presenter: Bianchini, Paolo	
Exploring Hypericin interactions with viral-mimetic membranes using advanced microscopy		90
Mathur, Aastha	Presenter: Mirza, Maria	
foundingGIDE: founding a Global Image Data Ecosystem		91
Morales-Curiel, Luis Felipe		
Deep learning models for 3D bioluminescence imaging in fourier light field microscopy with subsecond exposure times		92
Mubarak, Fathima Shirooza		
The interplay of cell mechanics and dynamics during chick gastrulation: a Light-Sheet Microscopy approach		93

Müller, Franziska E.	Presenter: Zeug, Andre	
Quantitative optical analysis of astrocytic Ca²⁺ signaling using GCaMP-based indicators and sensors: advancing imaging and interpretation		94
Narayanasamy, Kaarjel		
Overcoming bottlenecks in microscopy using deep learning: A case study in cryo-fluorescence microscopy		95
Neumann, Sophie		
Fluorescence-labeling in bacterial imaging		96
Nicola, Tiziana	Presenter: Nicola, Tiziana; Knorr, Sebastian	
A confocal laser scanning microscopy method for the absolute quantification of live Campylobacter cells in chicken meat		97
Palmisano, Ralf		
Utilising quantitative DNA-PAINT super-resolution microscopy to investigate receptor clustering of bone marrow-derived dendritic cells (BMDCs)		98
Pan, Titusz	Presenter: Le Dévédec, Sylvia	
Enhancing AI-readiness of bioimaging data with content-based identifiers (BIO-CODES)		99
Parthoens, Eef	Presenter: Hernandez Varas, Pablo; Parthoens, Eef	
Cross-core cooperation - a key to enabling Alzheimer's disease research		100
Piazza, Simonluca		
Photon resolved image scanning microscopy		101
Planagumà, Jesús		
STED microscopy reveals microglia-mediated epitope spreading in a mouse model of anti-NMDAR encephalitis		102
Popov-Celeketic, Dusan	Presenter: Fehér, Anna	
Point REscan GAIA: live cell super resolution imaging beyond 500 µm in depth		103

Popov-Celeketić, Dusan	Presenter: Fehér, Anna	
Line REscan confocal systems for fast and deep live cell imaging		104
Power, Rory		
Custom microscopy development at the EMBL Imaging Centre		105
Prevedel, Robert	Presenter: Dieter, Julia	
Novel high-resolution brillouin microscopy in space & time		129
Rajaeipour, Pouya		
Adaptive optics in microscopy using deformable phase plates		107
Reis, Yara		
Global BioImaging: strengthening international collaboration and sustainability in Imaging Science		108
Rhodes, Christopher	Presenter: Gunkel, Manuel; Halavatyi, Aliaksandr	
Smart Microscopy Working Group: highlights and future plans		109
Ribeiro, Maria Leonor		
Dual-action nanoparticles for lung cancer therapy with metabolic imaging insights		110
Saigal, Nihit		
Building of a cryo-super-resolution microscope for cryo-correlative light and electron microscopy		111
Samsom, Roos-Anne		
Automated imaging workflow for Forskolin induced swelling assay in Cystic Fibrosis: advancing personalized medicine through high-throughput screening with primary intestinal organoids		112
Schmidt, Christian		
Bridging communities with OME-Zarr: enabling large N-dimensional array data sharing through NFDI4BIOIMAGE and founding GIDE projects		113
Sisamakís, Evangelos	Presenter: Bayer, Mathias	
New analysis options push the limits of FLIM imaging modalities		114

Smith, Matthew		
Validating the veracity of 3D segmentations		115
Sommer, Florian		
High-speed two-photon intracellular calcium imaging with kHz frame rates		116
Sparks, Hugh	Presenter: Colombelli, Julien	
Dual-view oblique plane microscopy (dOPM) for high-content imaging of complex and heterogeneous 3D cancer organoid models		117
Stuut, Christiaan		
The new frontier of super-resolution: label-free meets SIM for live-cell imaging		118
Swoger, Jim		
Cell 3D Positioning by Optical encoding (C3PO) and its application to spatial transcriptomics		119
Szeponik, Louis		
Tissue imaging of oligonucleotides – cell type specific distribution and knock-down analysis in the same tissue section		120
Tejeda González, Blanca		
DYNAMIC micropatterns as a novel tool to study immune synapse formation and activation of B cells		121
van der Steen, Krijn		
Human-on-of-the-loop segmentation optimization using 3D visualization and interaction		122
Verschuuren, Marlies		
Smart and precise data-driven microscopy of neuronal cell models		123
Viken Grini, Jonas	Presenter: Sandvold Beckwith, Marianne	
Open-source cyclic microscopy setup for high throughput sequential multiplex imaging		124

Vondrasek, David	Presenter: Basello, Davide	
Identification of cell types in Langerhans islets in label-free microscopy		125
Walsh, Dietrich		
3D targeting in cryo-volume imaging of high-pressure frozen samples		126
Weber, Andre	Presenter: Zuschmitter, Werner	
Label-free wide-field fluorescence lifetime imaging of NADH and FAD		127
Whiteley, Isabell		
Open source ScanImage-based quality control software for multiphoton microscopes		41
Yurlova, Larisa		
A novel method for FlexAble labeling of primary antibodies with fluorophores, flow dyes and oligonucleotides		106
Zimmermann, Timo	Presenter: Dieter, Julia	
Single detector image scanning microscopy		130