Final program

Keynote lectures / Tutorials: 30' per speaker; other scientific talks: 15' per speaker (altogether)

Wednesday, October 18th

12:30 – 13:00	**Registration**
13:00 – 15:45	**Tutorial: Basic Cytometry** Chair: Gerstner AOH
	Flow Cytometry *Shapiro H; The Center for Microbial Cytometry and Howard M. Shapiro, M.D., P.C., West Newton, MA, USA* Slide based Cytometry *Lenz D; Purdue University, West Lafayette, IN, USA* *Tárnok A; Heart Center Leipzig, Germany* Image Analysis *Robinson JP; Purdue University, West Lafayette, IN, USA* Fluorescent dyes *Glatzel A, Invitrogen, Karlsruhe, Germany* Intracellular cytokine staining *Lehmann I / Herberth G; Umweltforschungszentrum Leipzig, Germany*
15:45 – 16:00	**Coffee break**
16:00 – 16:30	Opening Ceremony Welcome notes ***Schlegel M,*** *Vice-Rector Research of the University of Leipzig* ***Meixensberger J****, Dean of the Medical Faculty, University of Leipzig*
16:30 – 18:00	**Keynote Lectures** Chair: Robinson JP
	L02: CYTOMETRY 2006 - Is small still beautiful? *Shapiro H* **L01**: Bound atmospheres on small bodies of the solar system *Beisker W*
18:00 – 20:00	**Reception – and official opening of industry exhibition**

Room 1A/B **Room 1C/D** **Room 2A** **Foyer** **Ground floor**

Thursday, October 19th

08:00 – 10:30	**Tutorial: Advanced Cytometry** Chair: Davies D, Endl E	
	Antigene specific T-cell cytometry *Scheffold A / Kirchhoff D; Deutsches Rheuma-Forschungszentrum Berlin, Germany* Microorganisms *Müller S; Umweltforschungszentrum Leipzig, Germany* Advanced cell proliferation analysis *Brockhoff G, Diermeier S; University of Regensburg, Germany* Correlative microscopy *Neumüller J; Medical University of Vienna, Austria* Quantum dots *Chamberlain S; Invitrogen, Eugene, OR, USA* How to run a core facility *Davies D; FACS Lab, London, UK*	
10:30 – 10:45	**Coffee break**	
10:45 – 11:00	Welcome notes ***Tárnok A,*** *President of the German Society for Cytometry (DGfZ)*	
11:00 – 13:00	**Keynote Lectures** Chair: Shapiro H, Beisker W	
	L11: Analytical Cytometry in Czech Republic: Perspectives and possibilities of co-operation in central europe *Kozubík A* **L46**: Detection of cellular reactivity to autoantigens *Sack U* **L10**: Characterising protein associations with flow and image cytometric FRET *Szöllösi J* **L33**: Cytomics and the Integration of Next Generation Technologies *Robinson JP*	
13:00 – 14:00	**Lunch**	
14:00 – 15:00	**guided Poster session** Chair: Viergutz T, Endl E	
15:00 – 17:00	**Session: Cell Biology** Chair: Szöllösi J, Kozubek S	**Session: Clinical Cytomics / Immunology** Chair: Sack U, Scheffold A
	L12: Effects of Interleukin-2 (IL-2) on neonatal macrophage-T cell interactions *Orlikowsky TW* **L13**: Absolute Immunophenosubtyping in Head and Neck Cancer Patients *Pieper K* **L14**: Comparative analysis of the liver reducing growth of different vertebral animals after partial hepatectomy *Karapetyan AF* **L15**: Comparative determination of apoptotic markers detected by flow cytometry and correlation with other methods *Vaculová A* **L16**: Role of the platelet-activating factor in terminal differentiation of ovarian follicles *Viergutz T* **L17**: Caspase-9 inhibitor as a potential therapeutic agent in the treatment of endometriosis? *Chrobak A* **L62**: Toluidine blue image cytometry test for sperm chromatin integrity: novel clinical threshold for male fertility prognosis	**L47**: Analysis of mediators in exhaled breath condensate by fluorescent bead assay *Sack U* **L48**: Challenge for 8 colour panels to improve sensitivity of minimal residual disease detection in childhood acute lymhoblastic leukemia *Mejstříková E* **L49**: Association between neuropeptides, Th1/Th2 polarization and allergy risk in children *Herberth G* **L50**: Dendritic and natural killer cell changes following organ transplantation *Sack U* **L51**: Postoperative effusions and oedema prediction by apoptosis of circulating T - lymphocytes during paediatric cardiac surgery *Bocsi J* **L52**: Lymphocyte transfer from blood into cerebrospinal fluid (CSF) in aging humans *Kleine TO* **L53**: Antigen targeting to the intracellular MHC class II pathway via gene gun vaccination enhancesTh1 polarisation

	Erenpreiss J **L35**: Applying MELK-Technology in a Data-mining and Validation Study to Identify a Cell- and Disease-related Combinatorial Molecular Phenotype in Clinical Diagnostics on Peripheral Blood Mononuclear Cells *Bartsch S*	and CD4 memory T cell formation *Karsten G* **L54**: Flow cytometric analysis of the pharmacological effects on circulating dendritic cells and T cells in human heart transplant recipients *Barten M*
17:00 – 17:15	**Coffee break**	
17:15 – 19:30	**Company Tutorials** Chair: Viergutz T, Schwarzmann P	
	Contributions to Essential Healthcare and New Developments in Clinical Immunology *Ost V, Partec GmbH* Der "CellLab Quanta SC" - Ein neuer Fluoreszenz-Zell-Analysator; Bewährte Messprinzipien neu kombiniert. *Braun M, Beckman Coulter GmbH* Non-Invasive Assessment of Unlabelled Live Cell Cultures - A New Enabling Tool for High Content Screening Applications *Bill Staffopoulos, MAIA SCIENTIFIC* Guava Technologies - A revolution in Flow Cytometry *Ohl L, Guava Technologies* Customized BD flow cytometers - new possibilities in cell analysis and sorting *Fleischer J, BD Biosciences* TransFix™ - Cellular antigen stabilization solution from Invitrogen *Steinbrecher M, Invitrogen*	
19:30	**Dinner**	

Friday, October 20th

09:00 – 11:00	**Keynote Lectures** Chair: Scheffold A, Radbruch A	
	L39: High Tech Pathology *Knüchel R* **L40**: Coexpression of erbB-Receptor-Tyrosine-Kinases: From Phenotype to Function *Brockhoff G* **L18**: Short-term variation of the phytoplankton assemblage in the Bay of Marseille (France) monitored by in situ flow cytometry *Thyssen M* **L26**: New methods in optical and molecular tumor imaging – an update *Wessels J*	
11:00 – 11:15	**Coffee break**	
11:15 – 13:00	**Session: Tumor biology** Chair: Knüchel R, Brockhoff G	**Session: Microbiology** Chair: Bley T, Thyssen M
	L28: The nuclear architecture of HER2neu and centromere 17 in ductal breast carcinoma and non-neoplastic ductal epithelium *Hausmann M* **L41**: Photodynamic therapy (PDT) in renal cell carcinoma - In vitro inhibition of metabolism and apoptosis induction by hypericine *Wessels JT* **L42**: A Dissociation and Staining Procedure for Paraffin-Embedded Tissues Enabling Flow-Sorting of Normal Stromal Cells and Tumour Cell Subpopulations for Further Molecular Genetic Analysis *Corver WE* **L43**: In vitro photodynamic therapy of childhood rhabdomyosarcoma *Seitz G* **L44**: High-resolution cytometry of selected genetic elements in human adenocarcinoma cells induced to differentiate *Bártová E* **L45**: Radio- and Chemoinduced Multidrug Resistance in a Colon Carcinoma Cell Line *Bartkowiak D* **L55**: Generation and characterisation of single tumor spheroids for high throughput cell function and toxicity analysis *Ivascu A*	**L19**: Flow Cytometry Analysis of the Viability of Pollutant Degrading Bacteria Exposed to Weak Electric Fields *Shi L* **L20**: Study of the physiological heterogeneity of Cupriavidus necator during growth on toxic substrate *Wiacek C* **L21**: New Approaches in the Diagnostics of Contaminants from Complex Samples by Biomagnetic Separation *Steingroewer J* **L22**: Analysis of carbon sharing in a 4-chlorosalicylate degrading consortium by combining stable isotope labelling and fluorescence activated cell sorting techniques *Pawelczyk S* **L23**: Determination of the microbial diversity in the sediment of a drinking water reservoir in Germany *Röske K* **L24**: Flow Cytometric monitoring of heterologous gene expression in Schizosaccharomyces pombe *Weber J*
13:00 – 14:00	**Lunch**	
14:00 – 15:45	**Session: Advanced / in-vivo imaging** Chair: Wessels J, Friedl P	**Session: Plant Cytometry** Chair: Obermayer R, Denis M
	L30: Slide Based Cytometry - State of the art systems *Tárnok A* **L05**: Quantitative analysis of fluorescent data from four-dimensional confocal studies *Godlewski MM* **L06**: High-resolution cytometry represents the main technology used in the Laboratory of Molecular Cytology and Cytometry *Kozubek S* **L07**: Evaluation of proliferation and programmed cell death in the intestinal mucosa of young rats *Slazak P* **L08**: Microtubulated endothelium-specific organelles (Weibel-Palade bodies) are supplied with von Willebrand factor via the trans Golgi network (TGN). A study using	**Keynote lecture L38**: Flow cytometric chromosome sorting and the wheat genomics *Doležel J* --- **L57**: Stress sensing by Bio-optic approaches *Wilhelm C* **L58**: Using population genomics to elucidate the evolutionary origins and functional genetics of apomixis in the Boechera holboellii complex *Sharbel T* **L60**: Applications of flow cytometry in plant biosystematics, ecology and population biology *Suda J* **L61**: Novel Methods for In Situ Localisation of Lipase and Phospholipase Activity During Germination of Oilseeds

	correlative microscopy *Neumüller J* **L09**: A novel approach to objective automated cell screening and evaluation of indirect immunofluorescence test on fixed HEp-2 cells *Hiemann R* **L56**: Arivis Browser – a software system for handling large, multi dimensional image data *Götze C*	*Bhatla SC*
15:45 – 16:00	**Coffee break**	
16:00 – 17:30	**Session: Novel instrumentations and applications** Chair: Valet G, Rothe G	
	L27: Late apoptotic changes in chromatin structure and DNA content detected with Vybrant ® DyeCycle™ stains *Godfrey WL* **L29**: Flow Cytometry of subcellular structures… the need of new detectors *Beisker W* **L31**: Preparation and Fixation Induced Cell Deformations: Mathematical Description and Experimental Perspectives *Schmitt E* **L32**: Analysing the cell cycle in brain sections using Laser Scanning Cytometry (LSC) *Mosch B* **L36**: Improved tissue cytometry (Tissomics) by multimodal slide based cytometry, confocal imaging and volume rendering *Tárnok A* **L59**: Optimal detection of red-excited dyes in polychromatic flow cytometry *Kalina T*	
17:30 – 17:50	Presentation of the Klaus Goerttler Price 2005 **Tytus Bernas** *Minimizing photobleaching during confocal microscopy of fluorescent probes bound to chromatin: role of anoxia and photon flux*	
17:50 – 18:00	**Coffee break**	
18:00 – 19:30	**DGfZ General meeting**	

Saturday, October 21st

09:00 – 11:00	**Keynote Lectures** Chair: Tárnok A	
	L25: Qdot® nanocrystals for biological applications *Chamberlain S* **L03**: Clinical multiphoton tomography *König K* **L04**: Multiphoton microscopy of deep cancer cell dissemination in vitro and in vivo: from individual to collective cell invasion mechanisms *Friedl P* **L34**: Multi-Parametric Test Battery for Monitoring the Physiology of Living Nerve Cells in vitro *Weiss DG*	
11:00 – 11:30	**Announcement** *Poster Award and selected papers* Introduction of 2007 DGfZ congress *Brockhoff G*	
11:30 – 11:45	**Coffee break**	
11:45 – 14:15	**Tutorial: Clinical Cytometry** Chair: Sack U	**Core Facility** Chair: Endl E, Davies D
	Clinical cell proliferation analysis *Corver WE; University Medical Centre, Leiden, The Netherlands* Monitoring of immune suppressive drugs *Barten M; Heart Center Leipzig, Germany* GMP and GLP for Cytometry *Sack U; IKIT Leipzig, Germany* Cellular monitoring of HIV patients *Rothe G; Zentrum für Laboratoriumsmedizin Bremen, Germany* Basics of molecular and optical imaging in pre-clinical tumor research *Wessels J; University of Göttingen, Germany*	Aim of the Core Unit meeting is to give support to those who manage one central instrument up to a complete core unit. Topics: Management, costs, and fees, problems in managing multi user instruments *Endl E; University Bonn* *Davies D; FACS Lab, London*