

# SCIENTIFIC PROGRAM

## 15th Annual Meeting of the German Society for Cytometry

Deutsche Gesellschaft für Zytometrie (DGfZ)

in collaboration with the

Centre for Environmental Research (UFZ)  
Leipzig-Halle GmbH



Leipzig, October 19-22, 2005  
Germany



**Leipziger Kubus**  
Centre for Environmental Research Leipzig-Halle GmbH



# Program – Lectures and Tutorials

## Wednesday, October 19<sup>th</sup>

16:00 – 16:30	Registration
16:30 – 17:00	Opening Ceremony Welcome note: <b>Schlegel M</b> , Vice-Rector Research of the University of Leipzig <b>Emmrich F</b> , Fraunhofer IZI, Leipzig
17:00 – 18:30	<b>Keynote Lectures</b> Chair: <i>Emmrich F</i>  <b>L63:</b> Stem cells in tissue engineering <i>Sarraf C</i>  <b>L51:</b> Slices of Life: Multispectral Histology <i>Levenson RM</i>  <b>L62:</b> Multi-Colored Fluorescent Protein-Based Imaging in Live Animals: The New Cell Biology <i>Hoffman RM</i>
18:30	Pre-Congress Reception



# Thursday, October 20<sup>th</sup>

08:30 – 13:00	<p><b>Tutorial: Basic Cytometry</b> (Fortbildungsveranstaltung der DGfZ) Chair: <i>Lenz D</i></p> <p>Flow cytometry <i>Tárnok A; Heart Center Leipzig</i></p> <p>Slide based cytometry – possibilities and limitations <i>Lenz D / Gerstner AOH; University West Lafayette/Bonn</i></p> <p>Fluorescent dyes - basics <i>Glatzel A; Caltag, Hamburg</i></p> <p>History of flow cytometry <i>Valet G; MPI, Martinsried</i></p> <p>Analysis and software of cytometric data <i>Bocsi J; Heart Center Leipzig</i></p> <p>Quantitative histology and histopathology <i>Ecker RC; TissueGnostics, Vienna</i></p> <p>FRET and Fluorescence Correlation Spectroscopy <i>Szöllösi J / Vereb G; University Debrecen</i></p> <p>Statistical methods for evaluation of diagnostic tests <i>Keller T; Acomed, Leipzig</i></p>	<p><b>Tutorial: Advanced Cytometry</b> (Fortbildungsveranst. der DGfZ) Chair: <i>Ulrich H</i></p> <p>Cytometric monitoring of biotechnological processes <i>Bühner J / Weber J; TU Dresden</i></p> <p>Diagnosis of agammaglobulinemia – possibilities of flow cytometry <i>Warnatz K; University Freiburg</i></p> <p>Phenotyping of B-cells <i>Schlesier M; University Freiburg</i></p> <p>Analysis of T-cells <i>Gruber R; University Munich</i></p> <p>Circulating blood stem cells <i>Cross M; University Leipzig</i></p> <p>Cell sorting, sorting of stem cells <i>Cross M; University Leipzig</i></p> <p>FACS analysis of specific functions of dendritic cells in the whole blood <i>Barten MJ; Heart Center Leipzig</i></p> <p>Intracellular cytokine staining <i>Lehmann I; UFZ, Leipzig</i></p> <p>Apoptosis <i>Sarraf C; University Westminster, UK</i></p>
13:00 – 14:00	<b>Lunch</b>	
14:00 – 14:20	<p>Welcome notes <i>Schüürmann G, Umweltforschungszentrum Leipzig-Halle GmbH</i></p>	
14:20 – 15:50	<p><b>Keynote Lectures</b> Chair: <i>Radbruch A</i></p> <p><b>L73:</b> Cytometry in the post – Genomic Aerea <i>Radbruch A</i></p> <p><b>L56:</b> Flow cytometric quantitation of immunosuppressive drug effects on immune cells <i>Klupp J</i></p> <p><b>L52:</b> Distinguished Photons: Multispectral Fluorescence Imaging In Vivo <i>Levenson RM</i></p>	
15:50 – 16:35	<b>Coffee break</b>	
16:35 – 17:35	<p><b>Session: Clinical Cytometry I</b> Chair: <i>Sack U, Barten MJ</i></p> <p><b>L06:</b> The role of platelet activity in coronary artery bypass occlusion. Prague-4 trial subanalysis <i>Osmancik P</i></p> <p><b>L11:</b> Quality control of cell analysis in human cerebrospinal fluid (CSF): external pilot trials with CSF controls of the Joint German Society of Clinical Chemistry and Laboratory Medicine (DGKL) <i>Kleine TO</i></p> <p><b>L27:</b> Pharmacodynamics of T-cell functions for monitoring immunosuppression <i>Barten MJ</i></p> <p><b>L50:</b> Implementation of a practicable low-cost assay using a density-based CD4+ T- Cell depletion method for the monitoring of HIV-infected individuals <i>Bold A</i></p>	<p><b>Session: Systems Biology and Cytomics</b> Chair: <i>Levenson RM, Valet G</i></p> <p><b>L39:</b> Human Cytome Project, Cytomics and Systems Biology: Towards the Resolution of Biocomplexity <i>Valet G</i></p> <p><b>L14:</b> Focused COMBO-FISH for Selected Nanosized Genomic Regions <i>Schmitt E</i></p> <p><b>L43:</b> Predictive medicine by cytomics and systems biology approaches <i>Tárnok A</i></p>
17:35 – 18:00	<b>Coffee break</b>	
18:00 – 19:30	General meeting of the DGfZ	Poster Session
19:30	<b>Dinner</b>	
21:30	<b>Russian Bar &amp; Disco</b>	

# Friday, October 21<sup>st</sup>

09:15 – 10:45	<b>Key note Lectures</b> Chair: <i>Knuechel R</i>		
	<b>L54:</b> Multiparameter flow cytometry of solid tumours <i>Cornelisse CJ</i>		
	<b>L57:</b> Flow Cytometric Analysis of Oxidative Stress and DNA Repair in E. coli WP2 Tester Strains Deficient in Genes of Antioxidant Defence <i>O'Connor J-E</i>		
	<b>L64:</b> Development and Dynamics of Pseudomonas aeruginosa Biofilms <i>Tolker-Nielsen T</i>		
10:45 – 11:30	<b>Coffee break</b>		
11:30 – 13:00	<b>Session: Tissue analysis</b> Chair: <i>Luther E, Ecker RC</i>	<b>Session: stem cell biology and cytometry</b> Chair: <i>Sarraf C, Scheffold A</i>	<b>Session: Cancer biology and cytometry I – Head and Neck</b> Chair: <i>Gerstner AOH, Remmerbach TW</i>
	<b>L08:</b> Microscopy-Based Multicolor Tissue Cytometry (MMTC) <i>Ecker RC</i>	<b>L22:</b> The advances in scanning fluorescent microscopy, (automated slide handling, metal-halide illumination, software features) means significant advantage for routine applications <i>Varga V</i>	<b>L04:</b> Tumor environment uncouples distinct functions of human plasmacytoid dendritic cells <i>Brocks C</i>
	<b>L23:</b> Experiences in Automatic Classification of Colon and Gastric Digital Slides <i>Ficsór L</i>	<b>L34:</b> Kinin-B1 Receptor Activity during Commitment of P19 Teratocarcinoma Cells to Neuronal Differentiation <i>Ulrich H</i>	<b>L18:</b> Migration of human myeloid dendritic cells (MDC) is affected by C-reactive protein <i>Frenzel H</i>
	<b>L24:</b> Combined Serial Section-based 3-D Reconstruction of Cervical Carcinoma with H&E/p16INK4a Alternate Staining <i>Braumann UD</i>	<b>L44:</b> Identification of putative target genes of Gfi1 within HSC <i>Kosan C</i>	<b>L19:</b> Distinct isolation procedures of myeloid dendritic cells (MDC) from peripheral blood <i>Brocks C</i>
	<b>L36:</b> Characterization of the Ectopic Fetal Heart Implant Early Development <i>Delrée P</i>	<b>L49:</b> Stem cell markers associated with the side population of fresh and cryopreserved human umbilical cord blood <i>Cross M</i>	<b>L20:</b> Stromal Cell Resistance to Cytostatic Drug Combinations in Head and Neck Carcinoma <i>Dollner R</i>
	<b>L47:</b> Analysis of Chromatically Stained Tissues and TMA's by Laser Scanning Cytometry <i>Luther E</i>	<b>L68:</b> Weibel-Palade bodies as markers for transition of endothelial progenitor cells into matured endothelial cells <i>Neumüller J</i>	<b>L26:</b> Effectiveness of liquid based cytology (LBC) in oral brush biopsy: a comparison of conventional cytopreparation techniques <i>Remmerbach TW</i>
			<b>L33:</b> Head and Neck Cancer: Multicolor Flow-Cytometric Analysis of CD4+ and CD8+ Tumor Antigen-Specific T-Cells using Peptide-MHC-Class I and II Tetrameric Complexes <i>Albers A</i>
13:00 – 14:00	<b>Lunch</b>		
14:00 – 16:00	<b>Session: Clinical Cytometry II</b> Chair: <i>Cornelisse CJ, Neumüller J</i>	<b>Session: microbiological Biofilms and Plant Cytometry</b> Chairs: <i>Tolker-Nielsen T, Neu TR, Meister A, Obermayer R</i>	<b>Session: Cancer biology and cytometry II</b> Chair: <i>Friedländer E, Brockhoff G</i>
	<b>L59:</b> Apoptosis of circulating lymphocytes during paediatric cardiac surgery <i>Bocsi J</i>	<b>L65:</b> Microelectrode technique and Confocal Laser Scanning Microscopy (CLSM) -Investigation of mass transfer and turnover in biopellets of Aspergillus niger <i>Hille A</i>	<b>L45:</b> Double staining of Fluorescence-in-situ-hybridisation-(Urovysion®) and Ki-67 immunohistochemistry for detection of genetic aberrations in precancerous lesions of the bladder. <i>Koufou S</i>
	<b>L01:</b> Changes of active caspase-3 and its inhibitor survivin in leukemic cells in response to initial prednisone therapy in children with acute lymphoblastic leukemia. <i>Urasinska E</i>	<b>L69:</b> Investigation of growth characteristics and structure of phototrophic biofilms by confocal laser scanning microscopy (CLSM) <i>Zippel B</i>	<b>L46:</b> Local stimulation using magnetic microspheres in the assessment of ErbB signalling <i>Friedländer E</i>
	<b>L16:</b> Density of expression of CD52 antigen on lymphocytes, CD34+ cells from graft of peripheral blood stem cells and tumor cells from patients with chronic B-cell lymphoproliferative diseases <i>Klabusay M</i>	<b>L71:</b> Confocal Analysis (ConAn) - a program for digital image analysis of microbial films and aggregates <i>Staudt C</i>	<b>L09:</b> An active role of CD97 in the progression of colorectal carcinoma <i>Galle J</i>

	<p><b>L30:</b> Determinants of phagocytic activity of cord blood macrophages <i>Gille C</i></p> <p><b>L31:</b> Effect of Interleukin-10 and Interferon-gamma on cord blood macrophages (CBMF) and MF of adults (PBMF) with respect to their influence on phagocytic activity <i>Gille C</i></p> <p><b>L21:</b> Image spectral cytometry for sperm chromatin testing: new solutions <i>Tsarev I</i></p> <p><b>L02:</b> A new focus algorithm for automated microscopy <i>Nitschke J</i></p>	<p><b>L72:</b> Fluorescence Lifetime IMaging (FLIM) of Syto 13 stained bacteria as a measure for microbial activity <i>Neu TR</i></p> <p>.....</p> <p><b>L40:</b> Impact of environmental and endogenous factors on endopolyploidization of angiosperms <i>Jovtchev G</i></p> <p><b>L66:</b> Genome size in <i>Cirsium</i> (Asteraceae) and its relation to natural hybridization <i>Bures P</i></p> <p><b>L67:</b> Phytoplankton biomass and biodiversity is a key feature of water quality <i>Wilhelm C</i></p> <p><b>L70:</b> Flow-based strategies for the analysis of complex genomes of Triticeae <i>Bartos J</i></p>	<p><b>L15:</b> Herceptin and Omnitarg: two HER2-targeting antibodies with different impact on breast cancer cells <i>Diermeier S</i></p> <p><b>L32:</b> AMIDA – A New Technology for Early Cancer Detection <i>Lang S</i></p> <p><b>L42:</b> A pilot study of combined PCR and flow cytometry approach: confirmation of leukemic origin of immunophenotypic subsets in bone marrow by PCR <i>Mejstrikova E</i></p> <p><b>L17:</b> Concentration dependent changes in apoptotic and proliferation index of in vitro cultured tumor cells by resveratrol and formaldehyde <i>Bocsi J</i></p>
16:00 – 16:30	<b>Coffee break</b>		
16:30 – 18:00	<p><b>Session: Novel Instrumentations and reagents</b> Chair: <i>Vereb G, Raum K</i></p> <p><b>L05:</b> ElektraTM - Image based Single Cell Selection in Micro Devices <i>Müller T</i></p> <p><b>L25:</b> Assessment of elastic properties of osteoblast cells using quantitative scanning acoustic microscopy <i>Klemenz F</i></p> <p><b>L28:</b> siRNA mediated gene knock-down in primary mouse T cells <i>Mantei A</i></p> <p><b>L61:</b> Automated Analysis Of Nuclear Complexes using SMI Microscopy <i>Baddeley D</i></p>	<p><b>Session: Microbiology - Physiology</b> Chairs: <i>O'Connor J-E, Bley T</i></p> <p><b>L58:</b> DNA and protein arrays in biotechnology <i>Stahl F</i></p> <p><b>L10:</b> Physiology of living individual <i>Saccharomyces cerevisiae</i> cells - a three colour approach <i>Achilles J</i></p> <p><b>L12:</b> Population profiles of a stable, commensalistic bacterial culture grown with toluene under sulphate-reducing conditions <i>Vogt C</i></p> <p><b>L29:</b> Proliferation and Biocompatible Materials in Bacteria –Population Patterns and Proteome Profiles of Polymer - State based synthesising Subpopulations <i>Wiacek C</i></p> <p><b>L55:</b> Agglutination measurement – a new way for characterization of biotechnological processes working with yeast cells <i>Esche H-J</i></p>	<p><b>Session: Chip technology and cytometry</b> Chair: <i>Gierse A, Ulrich H</i></p> <p><b>L07:</b> Investigation of the effects of Ratjadone on the gene expression level via flow cytometry and DNA Chip technology <i>Gierse A</i></p> <p><b>L35:</b> Development of Anti-kinin B1 Receptor Aptamers as a Tool for Imaging using Laser-scanning Cytometry <i>Ulrich H</i></p> <p><b>L41:</b> A Normalized Meta-Database of Affymetrix Microarrays for transcriptome analysis <i>Frericks M</i></p> <p><b>L53:</b> Development of a new zebrafish (<i>Danio rerio</i>) embryo test system using gene expression profiling to asses the risk of chemical compounds in the aquatic environment. <i>Vess C</i></p>
19:00 – 21:00	<b>Sightseeing</b> (at one's own expense, only limited vacancies available, registration on the reception)		
21:00	<b>Dinner at the historical "Auerbachs Keller"</b> (at one's own expense, only limited vacancies available, registration on the reception)		

# Saturday, October 22<sup>nd</sup>

08:30 – 10:00	<p><b>Keynote Lecture</b> Chair: <i>Hemmer J</i></p> <p><b>L48:</b> Ultra Slow Manipulation – A New Way for Stress-reduced and Physiological Handling of Individual Animal and Human Cells <i>Fuhr GR</i></p> <p><b>L60:</b> Receptor tyrosine kinases driving cell proliferation – their molecular interactions assessed by modern microscopic approaches <i>Vereb G</i></p> <p><b>L37:</b> The Core Flow Cytometry Facility: current and future challenges <i>Davies D</i></p>	
10:00 – 10:30	<p><b>Coffee break</b></p>	
10:30 – 14:00	<p><b>Tutorial: Clinical Cytometry</b> (Fortbildungsveranstaltung der DGfZ) Chair: <i>Valet G</i></p> <p>Selection of fluorescent dyes in multicolor flow cytometry <i>Schiemann M; University Munich</i></p> <p>FACS analysis in primary immune deficiencies <i>Schulze I; University Berlin</i></p> <p>Immunophenotyping by multiparametric flow cytometry – diagnosis and monitoring in acute leukaemia <i>Ludwig W-D; Charite Berlin</i></p> <p>Therapy based prediction of etiopathology of individuals by multiparametric molecular data pattern analysis <i>Valet G; MPI, Martinsried</i></p> <p>Phenotyping of tumor cells <i>Seliger B; University Halle</i></p> <p>Pharmacodynamic monitoring of immune suppressive drugs after heart and lung transplantations <i>Barten MJ; Heart Center Leipzig</i></p> <p>RILIBÄK-adapted realization of flow cytometry <i>Sack U; University Leipzig</i></p>	<p><b>Core Unit</b></p> <p>Aim of the Core Unit meeting is to give support to those who manage one central instrument up to a complete core unit.</p> <p>Topics: Management, costs, and fees, problems in managing multi user instruments</p> <p><i>Endl E; University Bonn</i> <i>Davies D; FACS Lab, London</i> <i>Riddell A; EMBL Heidelberg</i></p>
14:00 – 14:30	<p><b>Farewell</b></p>	

# Program – corporate presentations

## Thursday, October 20<sup>th</sup>


08:30 – 17:35	<b>DAKO Cytomation</b> <i>Practical aspects on multicolor flowcytometry with CyAn ADP</i>
08:30 – 13:00	<b>Technical University of Dresden</b> <i>Cytometric monitoring of biotechnological processes</i>
09:00 – 12:00	<b>BD Biosciences</b> <i>09:00 Nachweis von Phosphoproteinen in Signaltransduktionswegen mittels Durchflusszytometrie</i> <i>10:30 Detection of Phosphoproteins in Signal Transduction Pathways</i>
11:00 – 13:00	<b>evotec Technologies</b> <i>Image based single cell selection using ELEKTRA</i>

## Friday, October 21<sup>st</sup>

11:30 – 18:00	<b>DAKO Cytomation</b> <i>Practical aspects on multicolor flowcytometry with CyAn ADP</i>
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## Saturday, October 22<sup>nd</sup>

10:30 – 14:00	<b>DAKO Cytomation</b> <i>Practical aspects on multicolor flowcytometry with CyAn ADP</i>
10:30 – 14:00	<b>BD Biosciences</b> <i>10:30 Kompensation – die Welt der Farben</i> <i>12:15 Compensation: Problems Solutions Insights</i>
10:30 – 12:30	<b>TissueGnostics</b> <i>Microscopy-Based Multicolor Tissue Cytometry (MMTC)</i>
10:30 – 14:00	<b>Workshop: Caltag Laboratories / Labor Reising-Ackermann und Partner</b> <i>Zap 70 ein prognostischer Marker der CLL - Was ist beim intrazellulären Nachweis am Durchflußzytometer zu beachten?</i>  Dieser Workshop findet im Labor Reising-Ackermann in der Strümpellstraße 40 statt. Ein Shuttlebus wird bereitgestellt.

 laboratory 206

 laboratory 305

 Room 2A

 Room 1C+D

 Room 219