

# **ANALYTICAL CYTOMETRY IV**

**BRNO/SOUTH MORAVIA**

**JUNE 23 – 26, 2007**

**THE CONFERENCE IS UNDER AUSPICES OF**

**PROF. RNDR. VÁCLAV PAČES, DRSC.**

**CHAIRMAN OF ACADEMY OF SCIENCES OF THE CZECH REPUBLIC**

**CONFERENCE PROGRAM**

<b>Saturday June the 23<sup>rd</sup> 2007</b>	
11.00 – 17.30	Bike Excursion (South Moravia region)
17:30	Registration Counter Opens
18.30 – 20.30	Opening Ceremony

<b>Sunday June the 24<sup>th</sup> 2007</b>		
Morning Session I (8.30 - 10.30) <i>Plenary Lectures, Stem Cells</i> <b>Chairman: A. Kozubík</b>		
8.30 – 9.20	Cytomics and the Integration of Next-Generation Technologies	Robinson J. P.
9.20 – 10.10	Flow cytometry and cell proliferation: what we can do, or is propidium iodide staining enough?	Witkowski J.
10.10 – 10.30	Stemness: mechanisms controlling stem cell self-renewal and differentiation	Motlík J. et al.
<b>Coffee Break (10.30 – 11.00)</b>		
Morning Session II (11.00 - 12.50) <i>Plenary Lectures, Advanced Cytometry, Data Analyses</i> <b>Chairmen: J. Motlík, S. Kozubek</b>		
11.00 – 11.50	How to overcome trastuzumab resistance in ErbB2 targeted immunotherapy	Szöllösi J. et al.
11.50 – 12.10	Optimizing light through put in image cytometry	Kozubek M. et al.
12.10 – 12.30	Optimal detection setup in 9-colors polychromatic flow cytometry	Kalina T. et al.
12.30 – 12.50	Correlation structure of gene expression data	Pavlík T. et al.

**Sunday June the 24<sup>th</sup> 2007**

**Lunch (13.00 – 14.30)**

Afternoon Session I (14.30 -16.15)

*Advanced Cytometry*

**Chairmen: S. Kozubek, J. Vondráček**

14.30 – 14.45	Fluorescent microscopy of living cells	Vařecha M. et al.
14.45 – 15.00	The role of cytoskeletal networks in plasmid DNA intracellular trafficking toward the cell nucleus and intranuclear movement of plasmid DNA	Ondřej V. et al.
15.00 – 15.15	Lamin a/c deficiency and nuclear structure	Galiová G. et al.
15.15 – 15.30	Nuclear topography of the c-myc gene and its transcript in HT-29 cells during enterocytic differentiation	Harničarová A. et al.
15.30 – 15.45	Deconvolution methods and their application in fluorescence microscopy	Kašík M.
15.45 – 16.00	cDNA microarrays in combination with both fluorescent <i>in situ</i> hybridization and immunostaining techniques	Stejskal S. et al.
16.00 – 16.15	Protein microarrays	Šimara P. et al.

**Coffee break 16.15 - 16.45**

Afternoon session II (16.45 – 18.30)

16.45 – 18.30	Poster Session	
18.30 – 20.30	<b>CSAC Meeting</b>	
20.30 – 24.00	<b>Welcome Party</b>	

<b>Monday June the 25<sup>th</sup> 2007</b>		
Morning session III (8.30 – 10.30) <i>Plenary Lectures, Plant Cytometry</i> <b>Chairman: J. Doležel</b>		
8.30 – 9.20	The Her2 Receptor-Tyrosine-Kinase in the Context of erbB-Receptors - Importance to Diagnosis and Therapy of Solid Tumors	Brockhoff G.
9.20 – 10.10	Incorporating flow and image cytometry into systems biology	Galbraith D.W.
10.10 – 10.30	Chromosome sorting using flow cytometry facilitates genome analysis in barley, rye and wheat	Doležel et al.
<b>Coffee Break 10.30 - 11.00</b>		
Morning session IV (11.00 - 12.40) <b>Chairmen: B. Říhová, J. Hofmanová</b>		
11.00 – 11.20	The role of an anti-apoptotic Mcl-1 protein in regulation of colon cancer cell sensitivity to TRAIL-induced apoptosis	Vaculová A. et al.
11.20 – 11.40	PML/RARa fusion oncoprotein, new mechanisms of gene deregulation in leukemia and aimed therapy	Falk M. et al.
11.40 – 12.00	Comparison of dendritic cells in healthy volunteers and subjects with monoclonal gammopathy and/or multiple myeloma	Kovářová L. et al.
12.00 – 12.20	Challenge for 8 color panels to improve sensitivity of minimal residual disease detection in childhood acute lymphoblastic leukemia. Evaluation of minimal residual disease and non leukemic background in the bone marrow during the therapy	Mejstříková E. et al.
12.20 – 12.40	Contribution of CD127 for human regulatory T cells immunophenotyping	Král V. et al.
<b>Lunch 13.00 - 14.30</b>		

<b>Monday June the 25th 2007</b>		
Afternoon Session III (14.30 -15.45) <i>Cell Biology and Signaling</i> <b>Chairmen: M. Červinka, K. Souček</b>		
14.30 – 14.45	Importance of cellular lipid modulation for apoptotic and differentiation response of colon epithelial cells	Hofmanová J. et al.
14.45 – 15.00	Effect of hypoxia on chemoresistance and cell cycle changes of neuroblastoma cell lines	Hraběta J. et al.
15.00 – 15.15	Apoptosis and inhibition of gap-junctional intercellular communication induced by LA-12, a novel hydrophobic platinum(IV) complex	Turánek J et al.
15.15 – 15.30	Aberrant CD66c and leukemic cell signaling	Kanderová V. et al.
15.30 – 15.45	Efficient gene transfer into in-vitro cultures using the Amaxa nucleofection system and fluorescence-activated cell sorting of EGFP <sup>+</sup> cells	Borský M. et al.
<b>Coffee Break 15.45 - 16.00</b>		
Afternoon Session IV (16.00 - 19.00)		
16.00 – 17.00	Poster Session	
17.00 – 19.00	Sponsor Presentations	
20.00 – 24.00	<b>Conference Dinner</b>	

<b>Tuesday June the 26<sup>th</sup> 2007</b>		
Morning session V (8.30 - 10.30) <i>Stem Cells</i> <b>Chairmen: J. Motlík, P. Vodička</b>		
8.30 – 8.45	A new alternative in the isolation of porcine epidermal stem cells	Klíma J. et al.
8.45 – 9.00	Biodegradable porous hydrogels with biomimetic structure modification – cell culture study	Vodička P. et al.
9.00 – 9.15	Chondrogenic potential of the rabbit mesenchymal stem cells after allotransplantation into the physeal defect	Hlučilová J. et al.
9.15 – 9.30	Dental pulp stem cells: phenotypic changes according to culture conditions	Soukup T. et al.
<i>Data Analyses</i> <b>Chairmen: L. Dušek, J. Jarkovský</b>		
9.30 – 9.45	Computational biology and its contribution to the data analysis in molecular biology and genetics	Dušek L. et al.
9.45 – 10.00	Multivariate statistical methods in analysis of immunological data: case study on patients with cvid and iga deficiencies	Jarkovský J. et al.
10.00 – 10.15	Technological, mamnagement and analytic background for multi-centric standardized collection of cytogenetic and molecular-genetic data in clinical registers: case study on camelia registry (chronic myelogenous leukemia)	Mužík J. et al.
10.15 – 10.30	Pitfalls and quests of DNA microarray data analysis: case study on patients with DLBCL lymphoma	Budinská E. et al.
<b>Coffee Break 10.30 - 11.00</b>		
Morning session VII (11.00 - 12.45) <i>Plant Cytometry</i> <b>Chairmen: J. Doležel, J. Suda</b>		
11.00 – 11.15	Flow cytometry as a powerful tool in plant conservation biology	Suda J. et al.
11.15 – 11.30	<i>Allium oleraceum</i> : polyploid complex of european geophytes	Šafářová L. et al.
11.30 – 11.45	GC content in plant genomes	Bureš P. et al.

<b>Tuesday June the 26th 2007</b>		
11.45 – 12.00	Isolation of chromosome-specific genes by combining chromosome flow sorting and DNA hybridization techniques	Hobza R. et al.
<i>Experimental oncology</i> <b>Chairman: M. Hajdúch</b>		
12.00 – 12.15	Macarpine - New supravital DNA probe	Slaninová I. et al.
12.15 – 12.30	Influence of sample purity on gene expression: different types of separation of B-chronic lymphocytic leukemia cells	Kotašková J. et al.
12.30 – 12.45	Multidrug resistance proteins and their significance in asthma bronchiale and nonspecific inflammatory bowel diseases	Džubák P. et al.
<b>Lunch 13.00 - 14.30</b>		
Morning Session VI (8.30 -10.00) <i>Clinical Cytometry</i> <b>Chairmen: T. Eckschlager, M. Klabusay</b>		
8.30 – 8.45	Human peripheral blood lymphocyte subsets as irradiation dose indicators – a flow cytometric study	Řeháková Z. et al.
8.45 – 9.00	Flow-cytometry analysis employment in estimation of reactive oxygen species production in human ejaculate samples	Novotný J. et al.
9.00 – 9.15	Multiplexed fluorescent bead array analysis of cytokines in septic patients	Průcha M. et al.
9.15 – 9.30	Expression of adhesion molecules on CD34 <sup>+</sup> mobilized peripheral blood stem cells	Suková V. et al.
9.30 – 9.45	Indirect quantification of doxorubicin nuclear accumulation	Hovorka O. et al.
9.45 – 10.00	Defects of immunity - late effect of childhood cancer and its treatment?	Eckschlager et al.

**Tuesday June the 26th 2007**

**Coffee Break 10.30 - 11.00**

Morning Session VIII (11.00 - 12.30)

*Clinical Cytometry*

**Chairmen: T. Kalina, M. Svoboda**

11.00 – 11.15	Analysis of chimerism in patients after allogeneic bone marrow transplantation in cells of T, B, NK, monocyte and granulocyte lineages isolated by fluorescence-activated cell sorting	Klabusay M. et al.
11.15 – 11.30	Molecular taxonomy and predictive systems of human cancers based on gene expression profiling	Svoboda M.
11.30 – 11.45	Huntington disease and detection of steroid receptors	Molíková R. et al.
11.45 – 12.00	Detection of circulating tumor cells in colorectal cancer patients using real-time RT-PCR method	Kesselová M. et al.
12.00 – 12.15	Corelation of CEA and CA 19-9 serum levels with CEA expression and clinical characteristics of colorectal cancer patients	Srovnal J. et al.
12.15 – 12.30	Preparation of monoclonal antibody anti-lactosylceramide (LacCer) and their presence in lysosomal storage disorders	Koubek K. et al.
<b>12.45 – 13.00</b>	<b>Declaration of „Contest of Young Scientists“ winners, Closing Remarks</b>	
<b>Lunch 13.00 - 14.30</b>		