

# **1<sup>st</sup> Molecular Cell and Immune Biology (MCIB) Winter School**



**Krompachy, Slovakia**

January 8-11, 2008

# 1<sup>ST</sup> Molecular Cell and Immune Biology (MCIB) Winter School

## Program:

### January 8.

8am Departure from the LSB parking area  
8:30-8:45am Departure from the Student Hostel  
3:00pm: Arriving Krompachy

4:30-7:00pm **Section 1:**

**Chair: Péter Boross**

### **Nuclear Hormone Receptor Research Laboratory**

4:30-4:45  
Laszló Nagy: Introduction

### **Regular talks**

4:45-5:00  
Attila Szántó: Regulation of  $\alpha$ P2 by PPAR $\gamma$

5:00-5:15  
Britt Nakken: PPAR $\gamma$  regulated CathepsinD expression in dendritic cells

5:15-5:30  
Lajos Széles: Identification and characterization of vitamin D3 signaling and primary transcriptional targets in early phases of human dendritic cell development

5:30-5:45  
Dániel Törőcsik: Activation of LXR during DC differentiation potentiates the response to LPS signaling.

5:45-6:00  
Adrienn Gyöngyösi: CD82 a new potential target gene of PPAR $\gamma$

6:00-6:15  
Szilárd Póliska: Genetic characterization of a complex human disease

### **Hot topic**

6:15-6:30  
Attila Pap: Regulated retinoid production by DCs: link to autoimmune diseases

### **Techniques**

6:30-6:40

Bálint L. Bálint. The Needle in a Haystack - Revealing Biology Behind the Chip on Chip Data Clusters

6:40-6:50

Péter Brázda: Detection of molecular mobility in living cells - Investigation of RXR-dynamics using fluorescence microscopy

**Unsolved mysteries:**

6:50-7:00

László Nagy: The endogenous ligand of PPAR $\gamma$

7:00pm Dinner

**January 9.**

7:00am: Breakfast

8:00-11:00am **Section 2:**

**Chair: Beáta Scholtz**

**Apoptosis Research Group**

**Keynote**

8:00-8:30

Laszlo Fesus: Transglutaminase 2, Phagocytosis of dying cells, Inflammation

**Hot topic**

8:30-8:50

Goran Petrovski and Gizem Ayna: Engulfed autophagic cells can induced inflammasome formation

**Regular talks**

8:50-9:05

Ilma Korponay-Szabo: Induction of transglutaminase antibodies by deamidated gliadin peptides

9:05-9:20

Zsófía Vecsey and Boglárka Tóth: Epitope mapping of coeliac anti-transglutaminase immunoglobulins

9:20-9:35

Zoltán Balajthy: Functional analysis of TG2 siRNA expressing NB4 cells in the process of ATRA induced neutrophil granulocyte differentiation

9:35-9:50

Krisztián Csomós: Gene expression analysis of TG2 deficient neutrophils

9:50-10:05

András Mádi: Investigation on glycosylated proteins from apoptotic NB4 cells differentiated toward neutrophils

10:05–10:20

Gábor Keresztes and Zoltán Doró: Characterization of mononuclear phagocytes based on their phagocytic capacity

10:20-10:35

Zoltán Nemes: Pätnást minut vyrecnost v Krompachy

### **Techniques**

10:35-10:45

Gábor Zahuczky: TLDA and gene silencing of apopto-phagocytic genes in macrophages

### **Unsolved mysteries**

10:45-10:55

Judit Hodrea: Is TG2 present on the surface of macrophages and dendritic cells?

10:55 - 11:05

Éva Csósz: Substrate specificities of TG2

11:00am-4:30pm      Skiing or Bustrip

5:00-7:00pm: **Section 3:**

**Chair: Bálint L. Bálint**

### **Laboratory of Retroviral Biochemistry**

#### **Keynote**

5:00-5:30

József Tözser: Retroviral processing as target for chemotherapy

#### **Regular talks**

5:30-5:45

Péter Boross: Inhibition and structural studies with GRL-98065, a potent HIV-1 protease inhibitor

5:45-6:00

Pálma Bander: Kinetic analysis of wild-type and mutant HIV-1 proteases being in a fusion form

6:00-6:15

Gabriella Miklóssy: Macromolecular inhibitors of HIV-1 protease

## **Department of Biophysics and Cell Biology**

### **Keynote**

6:15-6:45

Gábor Szabó: Landmarks of infinite landscapes: rafts in the cell membrane and rifts in the chromatin.

### **Regular talk**

6:45-7:00

Zsolt Bacsó: Versatile methods for molecular cell biological applications: LSC and flow-cytometric microbead assays

7:00pm: Dinner

### **January 10.**

7:00am: Breakfast

8:00-11:00am: **Section 4:**

**Chair: Zsolt Bacsó**

### **Laboratory of Apoptosis Signaling**

#### **Keynote**

8:00-8:30

Zsuzsa Szondy: Signals regulating thymocyte selection processes besides the T cell receptor

#### **Regular**

8:30-8:45

Katalin Tóth: Retinoids promote the glucocorticoid-mediated death of thymocytes

8:45-8:55

Krisztina Köröskényi: Inhibition of proinflammatory cytokine production of macrophages by apoptotic cells

#### **Hot topic**

8:55-9:10

Beáta Tóth: Role of tissue transglutaminase in the phagocytosis of apoptotic cells

## **Department of Immunology**

### **Keynote**

9:10-9:40

Attila Bácsi: The role of plasmacytoid dendritic cells in innate and adaptive immunity

### **The Laboratory Animal Core Facility**

#### **Regular talks**

9:40-9:50

Tamás Rőszer: The Laboratory Animal Core Facility in 2008

9:50-10:00

Tamás Rőszer: Characterization of bone and lipid homeostasis abnormalities in diabetic animals deficient in macrophage nuclear receptor signaling

### **Proteomics Core Facility**

#### **Regular talks**

10:00-10:20

Sperka Tamás: Current and future services of the Proteomics Core Facility

10:20-10:30

Kamilla Bereczki: Application of MALDI-TOF mass spectrometer for protein and peptide studies

### **Nucleic Acid Research Laboratory**

#### **Regular talk**

10:30-10:45

János Aradi: New results on the biological activity of modified nucleotides

10:45-11:00

György Fenyőfalvi: Development of new qPCR based telomerase assay: Telometrix 1.0

#### **Unsolved mysteries**

11:00-11:10

János Aradi: Partially solved mystery: mode of action of s<sup>4</sup>UMP, at two levels

11:10am-4:30pm      Skiing or Bustrip

5:00-7:00pm **Section 5:**

**Chair: Gábor Keresztes**

**Clinical Genomics Center**

**Keynote**

5:00-5:15

Beata Scholtz: Genomics Center 2007

**Regular talks**

5:15-5:30

Gabor Boros Investigation of CpG island methylation in small cell lung cancer

5:30-5:45

Zsolt Czimmerer: Tumor-specific microRNAs in small cell lung cancer

5:45-6:00

Edit Miko: Potential role of microRNAs in the metastatic phenotype of SCLC

**Laboratory of Nutritional Bioactivation and Bioanalysis**

**Keynote**

6:00-6:20

Ralph Rühl: Carotenoid and PUFA metabolites as novel activators of nuclear hormone receptors: An Update

**Regular talks**

6:20-6:30

Gamze Aydin: Effect of lycopene and lycopene metabolites on nuclear hormone pathway activation

6:30-6:40

Janine Gericke: Influence of lutein on  $\beta$ -carotene mediated nuclear receptor specific gene induction in in vitro and in vivo studies

6:40-6:50

Johanna Mihály: Influence of poly-unsaturated fatty acids and their mono-hydroxylated metabolites on gene expression of nuclear receptor specific target genes

6:50-7:00

Kathrin Weiss: Influence of dietary fat / oil and vitamin A on the lipid composition and the gene regulation of lipid metabolism

7:00pm

Dinner

**January 11.**

7:00am	Breakfast
9:00am	?



## Useful information

**Talks are 25 minutes + 5 minutes discussion, 12 minutes + 3 minutes discussion or 8 minutes + 2 minutes discussion.**

You can find informaton about the hotel: [www.hotelplejsy.com](http://www.hotelplejsy.com)

<http://www.slovenskyraj.sk/vylety/plejsy/hu.html>

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