

2nd Molecular Cell and Immune Biology (MCIB) Winter School



Krompachy, Slovakia

January 6-9

2nd Molecular Cell and Immune Biology (MCIB) Winter School

Program:

January 6

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

4:00-6:50 pm **Section 1:**

Chair: Bálint L Bálint

Cell Death and Differentiation

Keynote

4:00-4:20
László Fésüs: Autophagic cell death

Regular talks

4:20-4:35
Zoltán Balajthy: Effects of siRNA knock-down of TG2 in ATRA-induced NB4 cell differentiation process.

4:35-4:50
András Mádi: Investigation on inflammasome activation by uptake of genomic DNA and
Introduction of a rapid approach for inducing autophagic cell death

4:50-5:05
Gizem Ayna: Clearance of dying autophagic cells induces the inflammasome pathway in mouse macrophages

5:05-5:20
Zoltán Doró: Phagocytosis substrate specificity in macrophages

5:20-5:35
Krisztián Csomós: Gene expression studies on type 2 transglutaminase knockdown myeloid cells lines

5:35-5.50
István Németh: Identification of interacting partners of TG2 in differentiated NB4 cells

5.50-6:05
Máté Demény: Monitoring TG2 activity by FRET

6:05-6:20

Zoltán Nemes: Ešte raz nejaký prejav v Krompachy

6:20-6:35

Róbert Király: Calcium binding of transglutaminase 2

Unsolved mystery

6:35-6:50

Judit Hodrea: Is there any TG2 on the surface of human macrophages and dendritic cells?

7.00pm

Dinner

January 7

7:00am

Breakfast

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

Chair: Árpád Lányi

TG2 and Coeliac Disease

Keynote

8:00-8:20

Ilma Korponay Szabó: Is coeliac disease an antibody-mediated disorder ?

Regular talk

8:20-8:35

Zsófia Vecsey: Investigation of the coeliac epitope utilizing samples from different patient groups

Apoptosis Signaling

Keynote

8:35-8:55

Zsuzsa Szondy: Phagocytosis of apoptotic cells

Regular talks

8:55-9:10

Krisztina Köröskényi: Adenosine is a soluble mediator of immune downregulation induced by apoptotic cells

9:10-9:25

Zsolt Sarang: Loss of TG2 modulates the LPS-induced proinflammatory cytokine production in resident peritoneal macrophages

9:25-9:40

Katalin Tóth: Retinoids induce apoptosis in mouse thymocytes via upregulation of the Nur77 transcription factor.

Unsolved mystery

9:40-9:55

Éva Garabuczi: What regulates tissue transglutaminase expression in the dying thymocytes *in vivo*?

Nutritional Bioactivation and Bioanalysis

Keynote:

9:55-10:15

Ralph Rühl: Novel LC-MS methods and new food derived nuclear receptor ligands

Regular talks

10:15-10:30

Johanna Mihály: Retinoids and atopic dermatitis

10:30-10:45

Gamze Aydin: 'Determination of nuclear receptor activation by lycopene intransgenic reporter animal models'

10:45-11:00

Janine Gericke: Influence of lutein on β -carotene mediated nuclear receptor specific gene induction in /in vitro/ and /in vivo/ models

11:00am-4:30pm Skiing or Bus trip

4:30-7:00pm **Section 3:**

Chair: Katalin Goda

Immunology

Keynote

4:30-4:50

Árpád Lányi: HOFI/PXSH3D2B is a homologue of FISH/Tks5 regulates lamellopodia formation and cell spreading.

Regular talk

4:50-5:05

Attila Szabó: Type I. interferon production by dendritic cells: The role of intracellular helicases

Retroviral Biochemistry

Keynote

5:05-5:25

József Tözsér: Proteases and their inhibitors: basic and applied research.

Regular talks

5:25-5:40

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

5:40.5:55

Attila Mokánszki: Cloning and purification of HIV-2 protease.

5:55-6:10

Beáta Bozóki: Studies on the Substrate Specificity of Alphavirus Proteinases

6:10-6:25

János Mótyán: Examination of the substrate binding sites of α -amylase enzymes.

Clinical Biochemistry and Molecular Pathology

Keynote

6:25-6:45

István Balogh: Molecular genetic analysis of ion channel/cotransporter disease

7:00pm: Dinner

January 8

7.00am: Breakfast

8.00-11.00am: **Section 4:**

Chair: István Balogh

Regulation of gene expression

8:00-8:10

Laszlo Nagy: Introduction

Keynote

8:10-8:30

Zoltan Simandi: New research objects and tools: ES and iPS

Regular talks

8:30-8:45

Balint L. Balint: The role of PRMT1 in embryonic stem cell differentiation and gene expression

8:45-9:00

Lajos Szeles: The role of RXR signaling in DC gene expression

9:00-9:15

Zsolt Czimmerer: Examination of an alternative macrophage activation specific miRNA (mir-342)

9:15-9:30

Attila Pap: The expression profile of the nuclear receptor superfamily in dendritic cells and macrophages

9:30-9:45

Adrienn Gyongyosi: Characterization of target genes of PPAR γ in monocyte-derived human dendritic cells

9:45-10.00

Eva Kiss-Toth: Phenotypic characterization of kidney function in PPAR γ macrophage specific knockout mice

10.00-10.15

Peter Brazda: Rush and affection: The mobility of RAR

Unsolved mystery

10:15-10.30

Tamas Varga: Negative regulation of gene expression by PPAR γ : the case of TAL1/SC

Gene expression and disease

Regular Talks

10.30-10.45

Szilard Poliska: Comparison of peripheral gene expression in chronic inflammatory diseases

10.45-11.00

Edit Mikó: Possible role of differentially expressed microRNAs in small cell lung cancer

11.00-4.30 Skiing or Bustrip

4.30.-6.55

Section 5:

Chair: András Mádi

Nucleic Acid Research

Keynote

4:30-5:10

János Aradi: *Quo vadis* old man: success, failure and new ideas in the Nucleic Acid Research Laboratory

Biophysics and Cell Biology

Keynote

5:10-5:30

Gabor Szabó: Chromatin: a blow-up.

Regular Talks

5:30-5:45

Katalin Goda: Topological heterogeneity of cell-surface P-glycoprotein molecules

5:45-6:00

Zsuzsa Toth: Conformation dependent clustering of P-glycoprotein

Proteomics

Keynote

6:00-6:20

József Tózsér: Proteomic Core Facility 2008.

Regular talk

6:20-6:35

Éva Csósz: Pros and cons of electrophoresis - the viewpoints of a proteomics lab.

Animal Core Facility

Keynote

6:35-6:55

Tamás Röszer: Annual report of the Laboratory Animal Core Facility - 2008

January 9

7.00 am

Breakfast

Useful informations

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

Tel: 053 /4298015

Fax: 053/ 4298016

e-mail: hotel@skipleysi.sk

Éva Dögei: 06/30/2488-133