

5th Molecular Cell and Immune Biology Winter Symposium



*organized by the
Molecular, Cellular and Immune Biology Doctoral School
and Molecular Medicine Program
University of Debrecen*

Galyatető 4-7 January, 2012

Nemzeti Fejlesztési Ügynökség
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A projektek az Európai Unió támogatásával, az Európai Szociális Alap társfinanszírozásával valósulnak meg.



18:25-20:00 pm Dinner

20:00-21:55 pm **Section 2:**

Chair: Goran Petrovski

Intorductory lectures

20:00-20:20

Attila Bácsi:

Sirtuins in inflammation: friends or foes?

20:20-20:40

Szilvia Benkő:

Nod-like receptors and the different types of human macrophages

Regular Talks

20:40-20:55

Aliz Varga:

Ragweed pollen extract generated ROS enhance LPS-induced IL-1b secretion via NLRP3 inflammasome in human macrophages

20:55-21:10

Krisztina Köröskényi:

Adenosine inhibits proinflammatory cytokine production of LPS-induced macrophages

21:10-21:25

Ákos Tisza:

The role of the 8-oxoguanine in the inflammatory processes

21:25-21:40

Marietta Budai:

Immunomodulatory effect of Aloe Vera extract on human macrophages

21:40-21:55

Zsolt Czimmerer:

Is Mir-210 a human macrophage activation state specific microRNA?

5 January

7:00 am Breakfast

8:00-10:25 am **Section 3**

Chair: Attila Bácsi

Intorductory lectures

8.00-8.20

Goran Petrovski:

Induction of Autophagy and Cell Death in Cultured ARPE-19 Cells and Related Clearance Mechanisms

8.20-8:40

Zsolt Sarang:

Investigation of the role of LXR receptor activation on apoptotic cell uptake of mouse macrophages

Regular talks

8.40-8.55

Endre Kristóf:

Role of ICAM3 and its interacting partners in the phagocytosis of apoptotic neutrophil granulocytes by human macrophages

8:55-9:10

Éva Garabuczi:

Dexamethasone might promote phagocytosis of apoptotic cells by macrophages via activating the LXR pathway

9:10-9:25

Gizem Ayna:

Upstream mechanisms of NALP3 inflammasome activation with dying autophagic cells in mouse macrophages'

9:25-9:40

Edina Keresztesi:

Role of adenosine A3 receptors in the regulation of proinflammatory cytokine production in macrophages engulfing apoptotic cells

9:40-9:55

Anitta Sárvári:

Adipocyte cell death and clearance

9:55-10:10

Bea Kiss:

Retinoids induce apoptosis in thymocytes via activating Nur77

10:10-10:25

Anna Pallai:

GluLys dipeptide produced by transglutaminase inhibits the proinflammatory cytokine production of LPS stimulated macrophages

10:25 am-16:00 pm Skiing, swimming, and excursion

16:00-18:25 pm **Section 4:**

Chair: Zsolt Bacsó

Intorductory lectures

16:00-16:20

András Mádi:

Lasker Award 2011: Molecular mechanism of protein folding in the cell

16:20-16:50

Mónika Fuxreiter:

Towards therapeutic applications of protein disorders

16:50-17:05

János Aradi:

Redox regulation by thiol disulfide exchange processes; cell membrane as redox barrier

17:05-17:25

Kajal Kanchan:

Biochemical characterization of hTG2 and investigation of its interacting partners

Regular talks

17:25-17:40

Zsófia Simon-Vecsei:

Structural analysis and clinical significance of celiac disease antibody epitopes on transglutaminase 2

17:40-17:55

Ferenc Tóth:

Exploration of HIV-1 capsid mutants

17:55-18:10

Beáta Bozóki:

Studies on the substrate specificity of alphavirus proteases

18:10-18.25

Minh Doan:

Immunophenotyping by imaging cytometry in atopic dermatitis

18:25- 20:00 pm Dinner

20:00-21:55 pm

Section 5:

Chair: Endre Barta

Intorductory lectures

20:00-20.20

Zsolt Bacsó:

Raftology update 2011

20:20-20.40

Katalin Goda:

Catalytic mechanism of drug transporting ABC proteins

Regular talks

20:40-20:55

Zsuzsa Gutayné Tóth:

Cholesterol dependent trafficking of Pgp conformational states

20:55-21:10

Gábor Szalóki:

Plasmamembrane drug sequestration in ATPase deficient MDR1 mutants

21.10-21:25

Orsolya Bársony:

Elucidation of the catalytic intermediates of P-glycoprotein

21:25-21:40

Melinda Paholcsek:

Aspergillus diagnostics in Debrecen

21:40-21:55

Krisztina Matúz:

Studies on the inhibition of the gammaretrovirus XMRV protease

6 January

7:00 am Breakfast

8:00-10:25 am

Section 6:

Chair: István Szatmári

Intorductory lectures

8:00-8:20

Gábor Szabó:

To be or not to be impartial in chromatin research

8:20- 8.40

Lóránt Székvölgyi:

Global mapping of chromosomal R-loops and single-strand nicks"

8:40-8:55

Tamás Varga:

Macrophage PPARgamma is a regulator of tissue regeneration

Regular talks

8:55-9:10

László Imre:

Global epigenetic and structural changes in chromatin accompanying embryonic stem cell differentiation

9:10-9:25

Réka Albert:

Role of Human Corneal Stroma-Derived Mesenchymal-Like Stem Cells in Immunity, Wound Healing and Angiogenesis

9:25-9:40

Ixchelt Cuaranta:

Gene expression analysis during Adipocyte differentiation from PPARg knock out iPS cells

9:40-9:55

Attila Pap:

PPARgamma null mouse line, new approaches to study the function of this receptor

9:55-10:10

Boglárka Tóth:

Primary cellular defects in coeliac-risk cells

10:10-10:25

Beáta Tóth:

Immortalization of primary Human Umbilical Vein Endothelial Cells (HUVECs)

10:25 am-16:00 pm Skiing, swimming, and excursion

16:00-17:40 pm **Section 7:**

Chair: Szilvia Benkő

16:00-16:20

Ralph Ruehl:

Update about the lipidomic profile and application for inflammatory diseases

16:20-16:40

Bálint Bálint:

Deep sequencing pipeline for everyone

16:40-17:00

Zsolt Keresztessy:

Protein Expression and Cell Engineering developments and services at Debrecen Clinical Genomic Center

17:00-17:20

Éva Csősz:

Body fluid proteomics. Annual report: Proteomics Core Facility in 2011

17:20-17:40

Attila Pap:

Laboratory Animal Core Facility, an overview of 2011 year

17:40-18:10 pm **Section 8:**

Poster viewing

Renáta Bencsik:

Generation and characterization of GFP expressing inducible embryonic stem cell lines

Krisztián Bene:

Human monocyte-derived dendritic cell responses to commensal bacteria

Tímea Beregi:

Exporing of SMRT/NCoR core complex expression during the neuronal differentiation

Pál Botó:

Modulation of embryonic stem cell-derived dendritic cell development by Hoxa4 and Hoxb4

Gyöngyi Buchan:

Detection of tissue transglutaminase in human mesenchymal stem cells

Lívia Gazda:

Studies on retrotransposone Ty1 and Ty3 proteases

Gergely Joós:

Effect of retinoic acid on the phagocytosis of apoptotic cells

Gergely Kalló:

Brain tumor protein quantitation by targeted proteomic approach

Erika Takács:

Comparison the gene expression profile of embryonic stem cell- versus bone marrow-derived dendritic cells

Szabolcs Tarapcsák:

Interaction of retinoids with ABCG2

18:10-20:00 pm Dinner

20:00-21:40 pm **Section 9:**

Chair: István Balogh

Intorductory lectures

20:00-20.20

Ralph Ruehl:

Identification of novel endogenous and nutritional relevant ligands for RAR and RXR receptors

20:20-20.40

Zsuzsanna Nagy:

Identification of novel putative co-factors for PPARg and IL-4 induced STAT6

Regular talks

20:40-20.55

Péter Brázda:

Nuclear receptors on the run

20:55-21:10

Zoltán Simándi:

The nuclear receptor coactivator PRMT1 is a context-dependent repressor

Educational issues

21:10-21:40

Beáta Scholtz:

New Molecular Biologist Master Program

7 January

7:00 am Breakfast

8:00-10:05 am **Section 10:**

Chair: Katalin Goda

Intorductory lectures

8:00-8:20

István Balogh:

Mutation testing in monogenic diseases

8:20-8:50

Endre Barta:

The newest functional genomics results reveal interesting details of genome-wide transcriptional landscape

Regular talks

8:50-9:05

Gergely Nagy:

High correlation between GRO-seq enhancer transcripts and ChIP-seq peaks

9:05-9:20

György Fenyőfalvi

"Come on, let's twist again, like we did last year" - Quantifying DNA superhelicity in eukaryotic cell nuclei

9:20-9:35

János Mótyán:

Probing the inhibitor complexes of Xenotropic Murine Leukemia Virus (XMRV) protease by molecular modeling

9:35-9:50

Mohamed Mahdi:

HIV-2 Protease as a chemotherapeutic target

9:50-10:05

Bertalan Meskó:

Pharmacogenomics of autoimmune diseases

General discussion

10:15pm

Concluding remarks:

László Nagy
Éva Rajnavölgyi
József Tőzsér
Gábor Szabó
László Fésüs