4th Molecular Cell and Immune Biology Winter School



organized by UD Genomed (Debrecen, Hungary)

Galyatető January 11-14, 2011

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Program:

January 11

16:00 pm Opening: László Fésüs

16:30-18:25pm **Section 1:**

Chair: Zoltán Balajthy

Intorductory lectures

16:30-16:50 Árpád Lányi: HOFI. seriously

16:50-17:10 Zsuzsanna Nagy: Molecular characterization of the putative interaction between PPARg and IL-4 induced STAT6

Regular talks

17:10-17:25 Tünde Fekete: Endotoxin tolerance in human monocyte derived dendritic cells

17:25-17.40 Adrienn Gyöngyösi: The role of PPARg receptor in the retinoid pathway of human dendritic cells

17.40-17:55 Judit Hodrea: Molecular mechanisms in glucocorticoid induced upregulation of apoptotic cell phagocytosis in dendritic cells 17:55-18:10 Kitti Pázmándi: Human plasmacytoid dendritic cells exposed to oxidative stress promote Th2 polarization

18:10-18:25 Zsolt Czimmerer Identification of new human alternative macrophage activation markers

18:25-20:00pm Dinner

20:00-22:05pm Section 2:

Chair: Zsolt Bacsó

Intorductory lecture

20:00-20:15 István Balog: Molecular analysis of severe inherited diseases affecting cholesterol metabolism

20:15-20:30 Gábor Szabó: ABC, lest we die? Regulation of ABC transporters by ATP.

Regular Talks

20:30-20:45 Orsolya Bársony: Relationships between UIC2 mAb binding and the catalytic cycle of Pglycoprotein revisited

20:45-21:00 Péter Brázda: The diffusion profiles of RAR and RXR: a comparison based on correlation spectroscopy measurements

21:00-21:15 Balázs Bravics: Investigation the interaction between nuclear receptors by fluorescence cross correlation spectroscopy (FCCS) and fluorescence resonance energy transfer (FRET) 21:15-21:30 Krisztina Matúz: Studies ont he inhibition of gammaretrovirus XMRV protease.

21:30-21:45 Péter Lábiscsák: Protein characterization and bacterial identification using top-down proteomics approaches.

21:45-22:05 Éva Csősz: Proteomics solutions in solving complex problems. 2010 in the Proteomics Core Facility - annual report.

January 12

7:00am Breakfast

8:00-10:30am Section 3

Chair: István Balogh

Intorductory lectures

8.00-8.20 Goran Petrovski: The vascular endothelial growth factor (Lasker Clinical Medical Research Award, 2010)

8.20-8:40 Endre Barta: What can we learn from the bioinformatic analysis of ChIP-seq data?

Regular talks

8.40-8.55 Gergely Nagy: Model systems for studying the promoter evolution

8:55-9:10 János Mótyán: In vitro and in silico studies on α-amylase enzymes 9:10-9:25 Bertalan Meskó: Peripheral blood gene expression in autoimmune diseases

9:25-9:40 Szilárd Póliska: Genetic analysis of chronic inflammatory diseases

9:40-9:55 Alíz Varga: Nod-like receptors (NLRs) in epithelial cells

9:55-10:10 György Fenyőfalvi: Come on and twist again! Superhelicity revisited

10:10-10:30 Bálint L. Bálint: An update about the Clinical Genomics Center: Next Generation Sequencing has arrived to Debrecen!

10:30am-16:30pm Skiing, swimming, and excursion

16:30-18:30pm **Section 4:**

Chair: Attila Bácsi

Intorductory lecture

16:30-16:50 Zsolt Bacsó: Endocytosis of rafts

Regular talks

16:50-17:05 Zsuzsa Gutayiné Tóth: Trafficking with Pgp

17:05-17:20 Zsolt Sarang: Retinoids enhance the phagocytic activity of macrophages engulfing apoptotic cells 17:20-17:35 Krisztina Köröskényi: Involvement of adenosine A2A receptors in engulfment-dependent apoptotic cell suppression of inflammation

17:35-17:50 Edina Keresztes: Involvement of adenosine A3 receptors in the regulation of engulfmentdependent apoptotic cell suppression of inflammation

17:50-18:05 Gizem Ayna: Clearence of dying autophagic cells induces the inflammasome pathway in primed mouse macrophages

18:05-18.20 Zoltán Doró: Proinflammatory cytokine (IL-6,IL-1ß) studies after phagocytosis of differently dying cells by murine macrophages

18:20-18:30 Endre Kristóf: Role of ICAM3 in the phagocytosis of apoptotic neutrophils by human macrophages

18:30- 20:00pm Dinner

20:00-21:50pm Section 5:

Chair: Szilvia Benkő

Intorductory lectures

20:00-20.20 László Fésüs: The leptin story (Lasker Basic Medical Research Award, 2010)

20:20-20.50 István Szatmári: The Stem Cell Laboratory. Recent development in stem cell discoveries.

Regular talks

20:50-21:05 Boglárka Tóth: Adhesion and proliferation studies on coeliac-risk HUVECs

21:05-21:20 Anitta Sárvári: Studying in vitro human adipocytes' apoptosis

21.20-21:35 Zoltán Simándi: Retinoid signaling in embryonic stem cell differentiation

21:35-21:50 Réka Albert: Cultivation of limbal stem-cells derived corneal epithelium on different biologic materials for clinical transplantation.

January 13

7:00am Breakfast

8:00-10:30am Section 6:

Chair: Bálint L. Bálint

Intorductory lectures

8:00-8:20 Zsuzsa Szondy: Potential signals regulating apoptosis and phagocytosis of apoptotic thymocytes in the thymus

8:20- 8.40 Ralph Rühl: Retinoids, carotenoids and PUFAs: Novel bioactive metabolites and effects on atopic diseases

Regular talks

8:40-8:55 Yasamin Kasiri: Lycopene: Pro-vitamin A activity and nuclear receptor activation 8:55-9:10 Bea Kiss: Retinoids induce a Nur77-dependent apoptosis in mouse thymocytes

9:10-9:25 Katalin Tóth: Retinoids promote glucocorticoid-induced apoptosis of thymocytes by enhancing the transcriptional activity of the glucocorticoid receptor

9:25-9:40 Éva Garabuczi: Retinoids might contribute to the upregulation of transglutaminase 2 in apoptotic thymocytes

9:40-9:55 Janine Gericke: Retinoid signalling in the skin: Relevance for atopic dermatitis

9:55-10:10 Attila Pap: Phenotypic characterization of a full body PPARgamma KO mouse

10:10-10:30 Ralph Rühl: The Lipidomics Core Facility

10:30am-16:30pm Skiing, swimming, and excursion

16:30-18:00pm **Section 7:**

Chair: Árpád Lányi

Intorductory lectures

16.30-17:00 Sándor Bíró: Genetics of polymorphism

Regular talks

17:30-17:45 Gergely Buglyó: Clinical association of mutations and expression abnormalities of the gene WT1

17:45-18.00 Róbert Király: Investigation of transglutaminase 2 SNP variants

18:00-18:30pm Section 8:

Poster viewing

Zsófia Agod:

Characterization of CD84 splice variants in immunocompetent cells

Erika Berényi (iGEM Team):

Developing and testing of apoptosis inducing Tet-on eucaryotic expression system relevance to iGEM FRC25 standard

Bence Dániel:

Characterization of the putative direct physical interaction between PPARg and STAT6 by GST pulldown experiments

Mária Golda: Functional study of the retrotransposon-derived protein PEG10

Gergely Joós: Retinoids enhance the phagocytotic capacity of macrophages engulfing apoptotic cells

Melinda Paholcsek: Novel methods in Aspergillus diagnosis

Katalin Sándor (iGEM Team): Investigation of activity of Caenorhabditis elegans nuclear receptors to complex environmental samples

Krisztina Szabó: Inhomogeneous static magnetic field affects pollen-induced allergic airway inflammation in mice

Gábor Szalóki: Interactions of retinoids with P-glycoprotein

Szabolcs Tarapcsák: Interactions of retinoids with ABCG2

18:30-20:00pm Dinner

20:00-21:45pm Section 9:

Chair: István Szatmári

Intorductory lectures

20:00-20.20 Attila Bácsi: The possible role of 8-oxoguanine in the development of inflammation 20:20-20.40 Tamás Varga: Macrophage PPARg and muscle regeneration

Regular talks

20:40-20.55 Emöke Bartók: Metabolism and bioactivation of lycopene

20:55-21:10 Johanna Mihály: PUFAs, PUFA-metabolites and eicosanoids in human atopic dermatitis

21:10-21:25 Ferenc Tóth: "In vitro" experiments with the capsid mutants of HIV-1.

21:25-21:45 Attila Pap: Laboratory Animal Core Facility 2010

January 14

7:00am Breakfast

8:00-10:30am Section 9:

Chair: Katalin Goda

Intorductory lectures

8:00-8:20 Lóránt Székvölgyi: Epigenetic regulation of homologous recombination in the yeast Saccharomyces cerevisiae

8:20-8.40 Bálint L. Bálint: Carl Wieman about a scientific aproach to science education

Regular talks

8:40-8:55 István Német: Studying proinflammatory cytokine production of tissue transglutaminase deficient neutrophil granulocytes

8:55-9:10 Melinda Oros: Ethanol increases phosphate-mediated mineralization and osteoblastic transformation of vascular smooth muscle cells

9.10-10.10 Bálint L. Bálint and the iGEM Team Debrecen-Hungary: Modular tools and team work: results of the Debrecen-Hungary team at the MIT in Boston

General discussion

10:30pm

Concluding remarks:

Éva Rajnavölgyi József Tőzsér Gábor Szabó László Fésüs