

Welcome to the European Medical Students' Conference 2012 in Debrecen, Hungary

It is a great honor and pleasure for us to present the European Medical Students' Conference (EMESCO) in Debrecen. The idea of organizing this international scientific conference has been seeded in our minds for a long time and now we feel prepared to take on this important project, bringing back a tradition of old times of the Medical Faculty of University of Debrecen.

The Organizing Committee (OC) is based on an epic cooperation of the four student societies of the Medical and Health Science Center: the Hungarian Medical Students' International Relations' Committee, the Council of Students' Research Society, the Sántha Kálmán College for Advanced Studies and the Student Union of the UD MHSC.

In the year of 2012, the University of Debrecen is celebrating the 100th anniversary of its foundation. For this reason the OC have the perfect opportunity to create a meaningful celebration and productive conference. With the theme event and keynote lecture we wish to tribute to the János Szentágothai Memorial Year and neurosciences.

We wanted to create a platform where medical students and students engaged in biomedical research from all around the world can present their own research, share their experiences, interact with other students and enjoy the hospitality of the University of Debrecen Medical and Health Science Center. We hope you will become a part of our celebration and being in the heart of the continent, Hungary may serve as a bridge between the Western and Eastern parts of Europe, and the European medical students and young doctors will make their bonds stronger and take steps in shaping our futures.

We welcome you all to Debrecen, Hungary!

The Organizing Committee of EMESCO 2012

Scientific programme summary

ORAL SESSION I – NEUROLOGY, NEUROBIOLOGY

Saturday, October 20, 9:00 – 10:45

Chair: Miklós Antal, Department of Anatomy, Histology and Embryology

KAPLAN USMLE STEP 1 COURSE INTRODUCTION Saturday, October 20, 11:00 – 11:15

ORAL SESSION II – PREVENTIVE MEDICINE AND BASIC SCIENCE

Saturday, October 20, 11:15 – 13:00

Chair: Margit Balázs, Department of Biomarker Analysis

ORAL SESSION III – CARDIOVASCULAR MEDICINE, ENDOCRINOLOGY

Sunday, October 21, 9:00 – 10:30

Chair: Endre Nagy, Department of Endocrinology

ORAL SESSION IV – SURGERY, ODONTOLOGY, DERMATOLOGY

Sunday, October 21, 11:00 – 12:30

Chair: András Berta, Department of Ophtalmology

ORAL SESSION V – IMMUNOLOGY, MICROBIOLOGY

Sunday, October 21, 15:00 – 16:45

Chair: Edit Bodolay, Department of Clinical Immunology

ORAL SESSION VI – CELL BIOLOGY, HISTOLOGY, PHARMACEUTICAL SCIENCES

Sunday, October 21, 17:00 – 19:00

Chair: Árpád Tósaki, Department of Pharmacodynamics

ORAL SESSION VII – HEMATOLOGY, HEMOSTASIS, LABORATORY MEDICINE, ONCOLOGY

Monday, October 22, 9:00 – 10:45

Chair: János Kappelmayer, Department of Laboratory Medicine

ORAL SESSION VIII – MOLECULAR BIOLOGY, GENETICS, GENOMICS

Monday, October 22, 11:00 – 12:45

Chair: Viktor Dombrádi, Department of Medical Chemistry

All oral sessions will be held in the lecture hall of the Theoretical Building.

POSTER SESSION I

Saturday, October 20, 13:30 – 15:00

Chair: János Szöllősi, Department of Biophysics and Cell Biology

POSTER SESSION II

Sunday, October 21, 13:00 – 14:30

Chair: László Virág, Department of Medical Chemistry

All posters will be exhibited on the mezzanine level of the Theoretical Building.

O-VIII.6 Bence Farkas

Faculty of Medicine, University of Debrecen, Debrecen, Hungary

STUDIES ON THE INHIBITION OF A GAMMARETROVIRAL PROTEASE

O-VIII.7 Zsuzsanna Gaál, Andrea Kiss, Dóra Dedinszki, Ferenc Erdődi

Department of Medical Chemistry, University of Debrecen, Debrecen, Hungary

INFLUENCE OF PROTEIN PHOSPHATASE-1 INHIBITORY PROTEINS ON THE
DEPHOSPHORYLATION OF RETINOBLASTOMA PROTEIN

POSTER SESSION I

Saturday, October 20, 13:00 – 14:30

Chair: János Szöllősi, Department of Biophysics and Cell Biology

P-I.1 Srdjan Milanov, Dusica Ognjanovic, Goran Davidovic, Violeta Iric-Cupic

Faculty of Medical Sciences, University of Kragujevac, Serbia

RELATIONSHIP BETWEEN HYPERTENSION AND LOW HDL-CHOLESTEROL LEVELS AS
RISK FACTORS IN PATIENTS WITH STEMI

P-I.2 Éva Bódi, Ferenc Peles, István Fekete, Dávid Andrási, Béla Kovács

Institute of Food Science, Quality Assurance and Microbiology, University of
Debrecen, Debrecen, Hungary

UPTAKE OF SELENITE AND SELENATE DURING GERMINATION OF WHEAT AND PEA AS
WELL AS THE EFFECT OF TREATMENTS IN THEIR MICROBIOLOGICAL STATE

P-I.3 László Kolop

Department of Anatomy, Histology and Embryology, University of Debrecen,
Debrecen, Hungary

EFFECTS OF GLYCINE ON CARTILAGE FORMATION IN HIGH DENSITY CELL CULTURES

P-I.4 Orsolya Kárász, Vencel Katona

UD-HAS “Lendület” Cell Physiology Research Group, Department of
Physiology, University of Debrecen, Debrecen, Hungary

THE ROLE OF THE PROTEIN KINASE C SYSTEM IN THE REGULATION OF TRPC6 IN
PODOCYTES

P-I.5 Stefan Simovic, Goran Davidovic, Violeta Iric-Cupic, Srdjan Milanov

Faculty of Medical Sciences, University of Kragujevac, Serbia

HEMATOCRIT LEVELS AS MORTALITY PREDICTOR IN PATIENTS WITH STEMI AND
HEART RATE GREATER THAN 80BMP

Detailed scientific programme

P-I.6 Attila Somogyi, Ervin Wolf

Department of Anatomy, Histology and Embryology, University of Debrecen, Debrecen, Hungary

RESPONSES OF CNS NEURONS TO SINUSOIDAL CURRENT INPUTS - A TEST OF THE DISCRIMINATING POWER OF A NEW METHOD TO MAP DENDRITIC ARCHITECTURES

P-I.7 Adrienn Veronika Lakatos, Anita Spanyol

Department of Physiotherapy, University of Debrecen, Debrecen, Hungary
LOCOMOTOR SYSTEM STATUS OF THE PRESCHOOL CHILDREN IN THE LOOK OF THEIR SOCIAL SITUATION

P-I.8 Radu Mirica, Alexandra Banica, Gabriel Ianosi

UMF Carol Davila, Bucharest, Romania

BILIARY ILEUS - TWO-STAGED TREATMENT

P-I.9 Evgenia Gushchina

Northern State Medical University, Arkhangelsk, Russia

CT, MRI AND AG IN DIAGNOSTICS OF BRAIN TUMORS

P-I.10 Seyed Hossein Taravati¹, Mohammad Reza Doroudian¹, Sepideh Beykzadeh¹, Masoud Nazeri², Mohammad Shabani², Fatemeh Abareghi²

¹Department of Anesthesiology, Kerman University of Medical Sciences, Kerman, Iran ²Medical Students Research Committee, Kerman University of Medical Sciences, Kerman, Iran

EFFECTS OF FENTANYL, SUFENTANIL AND ALFENTANIL AS PREMEDICATION ON POSTOPERATIVE NAUSEA AND VOMITING (PONV) IN GYNECOLOGIC LAPAROSCOPY

P-I.11 Mostafa Ghaffari, Mohamad Namvar, Alireza Abdi, Hadi Rezaei, Saeed Raeisi, Mohammad Hassan Sharafi

Occupational Medicine Department and Research Center, School of Medicine, Hemmat Campus, Tehran University of Medical Sciences, Tehran, Iran

ASSOCIATION BETWEEN CIGARETTE SMOKING AND SLEEP DISTURBANCES AMONG INDUSTRIAL WORKERS

P-I.12 Nishant Joshi

Oslo University College, International Public Health Summer School, Oslo, Norway

IDENTIFYING THE CHALLENGES IN PROMOTING SOCIAL CHANGE AND FACILITATING POLICIES TO SUPPORT MATERNAL AND CHILD HEALTH IN EGYPT

P-I.13 Seyyed Mohammad Mahdy Mirhosseini, Masood Ghorbani, Reza Bidaki

Isfahan University of Medical Sciences, Isfahan, Iran

PREVALENCE OF CORACOCARTICOID FORAMEN AND ITS IMPORTANCE IN BRAIN SURGERY

P-I.14 Masoud Nazeri^{1,2}, Fatemeh Abareghi¹, Mohammad Shabani², Leila Golchin²

¹Medical Students Research Committee, Kerman University of Medical Sciences, Kerman, Iran ²Neuroscience Research Center, Kerman University of Medical Sciences, Kerman, Iran

AMYGDAL DYSFUNCTION AS A POSSIBLE NEURAL BASIS FOR STRESS-INDUCED ALTERATIONS IN NOCICEPTION AND COGNITIVE FUNCTIONS: IMPLICATION OF NMDA RECEPTORS

P-I.15 Nishant Joshi

Medical University of Pleven, Pleven, Bulgaria

INDIA HEALTHCARE SYSTEM, STATUS OF MILLENNIUM DEVELOPMENT GOALS IN INDIA

P-I.16 Ilia Nadareishvili

David Tvildiani Medical University, Tbilisi, Georgia

LEAD AND HUMAN HEALTH

P-I.17 George Hayek

Department of Ophthalmology, University of Pécs, Pécs, Hungary

EFFECT OF ANTI-VEGF INJECTIONS (LUCENTIS) ON READING SPEED IN WET-AMD PATIENTS

P-I.18 Gergely Fodor¹, Ádám Balogh², Dániel Érces³, Marianna Balázs², Ferenc Peták¹, Barna Babik²

¹Department of Medical Physics and Medical Informatics, ²Department of Anaesthesiology and Intensive Therapy, ³Institute of Surgical Research, University of Szeged, Szeged, Hungary

CHANGES IN AIRWAY AND LUNG TISSUE MECHANICS IN ASPIRATION-INDUCED LUNG INJURY: DIFFERENTIATION OF DIRECT AND INDIRECT MECHANISMS IN A PORCINE MODEL

P-I.18 Gergely Fodor¹, Ádám Balogh², Dániel Érces³, Marianna Balázs², Ferenc Peták¹, Barna Babik²

¹Department of Medical Physics and Medical Informatics, ²Department of Anaesthesiology and Intensive Therapy, ³Institute of Surgical Research, University of Szeged, Szeged, Hungary

CHANGES IN AIRWAY AND LUNG TISSUE MECHANICS IN ASPIRATION-INDUCED LUNG INJURY: DIFFERENTIATION OF DIRECT AND INDIRECT MECHANISMS IN A PORCINE MODEL

Introduction: Aspiration of gastric contents is a major anaesthesiological complication and deteriorates lung function via direct mechanisms and indirect mechanisms related to enhancement of vagal tone. The aim of the present study is to separately measure the role of these mechanisms and to estimate the beneficial effect of a high level of positive end-expiratory pressure (PEEP).

Method: We selectively intubated the main bronchi of thoracotomized, mechanically ventilated pigs while a PEEP of either 4 cmH₂O (n=5) or 10 cmH₂O (n=6) was maintained. 0.5 ml/kg gastric juice mixed with 0.1 N hydrochloric acid to a pH of 2 was instilled into the right lung, while the other lung was left intact. The input impedance of the pulmonary system (Z_L) was recorded for the affected and intact lungs alternately before aspiration and for 120 minutes thereafter. Airway resistance (Raw), tissue damping (G) and elastance (H) were obtained from the Z_L spectra by model fitting.

Results: Significant increases were observed in the airway and tissue mechanical parameters in the affected right lung with peak responses occurring at 15 minutes. These increases proved to be greater while a PEEP of 4 cmH₂O was maintained as opposed to a PEEP of 10 cmH₂O (Raw: 292±188[SE]% vs. 30±14%, G: 863±481% vs. 67±38%, H: 383±191% vs. 46±22%; p<0.05). On the contrary, no significant changes in the mechanical parameters were observed in the intact lung sides. In the animals with 10 cmH₂O of PEEP, the mechanical parameters showed a recovery after 120 minutes in the affected lung side, however the pigs with 4 cmH₂O of PEEP did not recover after 120 minutes.

Conclusion: These findings evidence i) the acute development of bronchoconstriction and diminished lung tissue mechanics following acid aspiration with peak responses after 15 minutes, ii) that the magnitude and the duration of the lung damage is more moderate while 10 cmH₂O of PEEP is maintained as opposed to 4 cmH₂O, iii) that the negligible detrimental change on the intact lung side may indicate that the vagally-mediated bronchoconstriction might have played an insignificant role.