2nd International Symposium on
ADIPOBIOLOGY AND ADIPOPHARMACOLOGY
(ISAA)

Organized by the Bulgarian Society for Cell Biology
23-25 October 2009, Varna, Bulgaria
MESSAGE FROM THE CHAIRMAN

A Symposium for our times

Dear Colleagues,

It is our pleasure to welcoming you to the 2nd International Symposium on Adipobiology and Adipopharmacology (ISAA), 23-25 October 2009, Varna, Bulgaria. The Symposium is organized by the Bulgarian Society for Cell Biology.

Major non-communicable diseases (NCD), including obesity and related diseases, are responsible for 85% of deaths in Europe (see The 2008-2013 Action Plan for the Global Strategy for the Prevention and Control of NCD: www.who.int/nmh/Actionplan-PC-NCD-2008.pdf). The cost for the care of consequences of NCD is an enormous burden for the economy of the country in addition to the human suffering. In 2005, the World Health Organization estimated that approximately 1.6 billion adults were overweight and at least 400 million of them clinically obese. To these sad numbers, we should disappointingly add nearly 70,000 Bulgarians who die from stroke and myocardial infarction each year in a country with a population of less than 8 million people, as it was also alarmed in our paper Homo obesus Bulgaricus published in volume 6, 2007 of CV Network Online, an official forum of the International Academy of Cardiovascular Sciences.

Arguably, we have to learn more about the molecular control of food intake and energy homeostasis, the adipose tissue taking a central role in their regulation.

The Symposium is designed to provide a state-of-the-science overview of recent advance in adipobiology, also translational research in the field. We hope that it will be a stimulating scientific and educational event. Together to capture the scope and depth of the exciting field of adipobiology and adipopharmacology.

And friendship (friendomics).

On behalf of the Bulgarian Society for Cell Biology

George N. Chaldakov
PROGRAM

Day 1: Friday, 23 October 2009
Registration: 3 - 6 PM
Fee (payable in situ): 170.– Euros
For Bulgarian citizens: 50.– BGN
No registration fee for students
Venu: Festival and Congress Center, Varna

In vivo veritas
Welcome party: 7 PM
State-of-the-science, candlelight lecture
DELINEATING ADIPOSE-DERIVED SIGNALS FROM NOISE IN THE PATHOGENESIS OF OBESITY AND RELATED CARDIOMETABOLIC DISEASES
Gema Frühbeck
Pamplona, Spain

Day 2: Saturday, 24 October 2009
Opening: 8:50 AM
Session 1, 2, including coffee break: 9 AM – 1 PM
Lunch: 1:15 - 2:30 PM
Session 3, 4, including coffee break: 2:45 – 7:00 PM
Gala dinner: 8 PM
Piano bar: 11 PM…

Session 5-7, including coffee break: 9 AM – 1:00 PM
Lunch: 1:15 – 2:30 PM
Trip to Balchik, a city along the Black sea, about 40 km North from Varna: 3 PM – 6 PM…

SCIENTIFIC PROGRAM

Day 2: Saturday, 24 October 2009
Session 1
Adipose tissue’s Cinderella
State-of-the-science lecture
SITE-SPECIFIC PROPERTIES AND PARACRINE INTERACTIONS IN MAMMALIAN ADIPOSE TISSUE: IMPLICATIONS FOR CROHN’S DISEASE AND HIV INFECTION
Caroline M. Pond
Milton Keynes, UK

Jeffrey Friedman gave leptin in the beginning
State-of-the-science lecture
DEVELOPMENT OF LEPTIN ANTAGONISTS AND THEIR EVENTUAL USE AS MEDICAL MODALITIES
Arieh Gertler and Eran Elinav
Rehovot and Tel Aviv, Israel
State-of-the-science lecture

**LEPTIN AS AN ENDOGENOUS CARDIAC HYPERTROPHIC FACTOR: STUDIES INTO MECHANISMS**
Morris Karmazyn, Venkatesh Rajapurohitam, and Asad Zeidan
London, Ontario, Canada

**LEPTIN INCREASES PLATELET ACTIVITY IN THE RAT:**
*IN VITRO AND IN VIVO STUDIES*
Andrzej Marciniak, Grażyna Wójcicka, and Jerzy Bełtowski
Lublin, Poland

**DIET-INDUCED ALTERATIONS IN LEPTIN EXPRESSION CAN OCCUR INDEPENDENTLY OF CALORIC INTAKE**
Richelle S. McCullough, Andrea L. Edel, Renee K. LaVallee, Chantal Bassett, Elena Dibrov, David P. Blackwood, Bradley P. Ander, and Grant N. Pierce
Winnipeg, Canada

**PATHOPHYSIOLOGICAL AND PHARMACOLOGICAL IMPORTANCE OF PLACENTAL LEPTIN**
Zoran Bojanić, Vladmila Bojanić, Stevo Najman, Gorana Rančić, and Snežana Jančić
Niš and Kragujevac, Serbia

**LEPTIN-INDUCED CHANGES IN ERYTHROCYTE DEFORMABILITY AFTER IN VITRO OXIDATIVE STRESS**
Esin Ileri Gurel, Nurten Seringec, Okan Arihan, Vildan Tasdemir, and Neslihan Dikmenoglu
Ankara, Turkey

**Session 2 Adipokines**

State-of-the-science lecture

**ADIPOPROTEOMICS, A VALUABLE TECHNOLOGY FOR FASCINATING FAT**
Johan Renes
Maastricht, The Netherlands

State-of-the-science lecture

**ADIPOKINE CONCENTRATIONS ARE SIMILAR IN FEMORAL ARTERY AND CORONARY VENOUS SINUS BLOOD: EVIDENCE AGAINST IN VIVO ENDOCRINE SECRETION BY HUMAN EPICARDIAL FAT**
Harold S. Sacks and Eric Johnson
Memphis, TN, USA

**ROLE OF RESISTIN AND INTERLEUKIN-6 IN THE METABOLIC SYNDROME**
Arif Ata, Ahmet Ergün, and S. Kenan Köse
Ankara, Turkey

**Session 3 Obesity and Homo obesus**

State-of-the-science lecture

**ADIPOCYTE HYPOXIA: A KEY MODULATOR OF ADIPOSE TISSUE FUNCTION IN OBESITY?**
Paul Trayhurn and Stuart Wood
Liverpool, UK
MATERNAL NUTRITION DURING PREGNANCY AND ADIPOSITY IN THE OFFSPRING
Sukhinder K. Cheema and Kanta Chechi
St. John’s, Newfoundland, Canada

A PERSPECTIVE ON THE IMPACT OF OBESITY, DIABETES, AND LIFESTYLE ON CARDIOMETABOLIC HEALTH
Harpal S. Buttar
Ottawa, Ontario, Canada

IMMUNE SYSTEM RESPONSE TO STRESS: OBESITY AS A NOVEL MODULATOR
Bilge Pehlivanoglu
Ankara, Turkey

SESSION 4 The metabolic syndrome
State-of-the-science lecture
HYPERLEPTINEMIA, PARAOXONASE 1 AND PROTEIN HOMOCYSTEINYLATION: IMPLICATIONS FOR PROATHEROGENIC EFFECT OF THE METABOLIC SYNDROME
Jerzy Bełtowski, Grażyna Wójcicka, Ewelina Łowicka, and Hieronim Jakubowski
Lublin and Poznañ, Poland and Newark, New Jersey, USA

METABOLIC SYNDROME AND NERVE GROWTH FACTOR: EFFECTS OF METFORMIN AND NONSTEROIDAL ANTI-INFLAMMATORY DRUG TREATMENT
Mariyana Hristova, Valeria Colafrancesco, Marco Fiore, and Luigi Aloe
Varna, Bulgaria and Rome, Italy

THE EFFECTS OF EXERCISE ON SERUM BRAIN-DERIVED NEUROTROPHIC FACTOR
Yu Nofuji, Masataka Suwa, Haruka Sasaki, and Shuzo Kumagai
Fukuoka and Miyagi, Japan

METABOLIC SYNDROME AND CARDIAC AUTONOMIC NEUROPATHY IN TYPE 2 DIABETIC PATIENTS
Zorica Rašić-Milutinović, Gordana Peruničić-Peković, Tamara Popović, and Branislav Milovanović
Belgrade, Serbia

METHYLENETETRAHYDROFOLATE C677T POLYMORPHISM IN METABOLIC SYNDROME
Cristina Hotoleanu
Cluj-Napoca, Romania

THE ROLE OF HOMOCYSTEINE AND FOLIC ACID IN CORONARY ARTERY DISEASE
Dragan Djuric, Krstic D, Vladimir Jakovljevic, and Olivera Stanojlovic
Belgrade and Kragujevac, Serbia

INFLAMMATORY MARKERS AND CARDIOVASCULAR PARAMETERS IN THE PREDICTION OF MORTALITY IN HEMODIALYSIS PATIENTS
Gordana Perunivic-Pekovic, Zorica Rasic-Milutinovic, A. Ignjatovic, and Marija Glibetić
Belgrade, Serbia

Session 5  Diabetes

State-of-the-science lecture
NERVE GROWTH FACTOR, PANCREATIC BETA CELLS, ADIPOSE TISSUE AND DIABETES MELLITUS
Marcia Hiriart
Mexico, Mexico

State-of-the-science lecture
MECHANSIMS FOR THE DEVELOPMENT OF DIABETIC ANGIOPATHY AND ITS PREVENTION: ENEMIES AND FRIENDS WITHIN
Hiroshi Yamamoto, Takuo Watanabe, Yasuhiko Yamamoto, Hideto Yonekura, Seiichi Munesue, Kazuyo Ooe, Takahiro Sugihara, Hidehito Saito, So Motoyoshi, and Dong Han
Kanazawa, Japan

RELATIONSHIP OF PLASMA PHOSPHOLIPIDS FATTY ACIDS AND THE HOMEOSTASIS MODEL OF INSULIN RESISTANCE IN TYPE 2 DIABETIC PATIENTS: A PILOT STUDY
Tamara Popović, Zorica Rašić-Milutinović, Gordana Peruničić-Peković, Aleksandra Arsić, and Marija Glibetić
Belgrade, Serbia

OXIDATIVE STRESS IN HEALTH AND DISEASE: FOCUS ON LIPID PEROXIDATION
Vladimir Lj. Jakovljevic, Dejan Cubrilo, Snezana Pesic, Sasa Raicevic, and Dragan M. Djuric
Kragujevac and Belgrade, Serbia

COLD EXPOSURE AND ADIPOSE NITRIC OXIDE AND MAST CELLS: INFLUENCE ON AORTA CONTRACTILITY
Neşe Tunçel, Esin Peker, Erol Şener, Arın Güldal, Muzaffer Tunçel, George N. Chaldakov, Fatma Töre, and Varol Şahintürk
Eskişehir and Bolu, Turkey and Varna, Bulgaria

Session 6  Cancer

State-of-the-science lecture
SERUM-BORNE FACTORS IN CANCER PATIENTS WITH ADVANCED CACHEXIA: INFLUENCE ON ADIPOSE CELLS
Fred Haugen, Svein Dueland, and Christian A. Drevon
Oslo, Norway

ADIPOSE TISSUE AROMATASE AND BREAST CANCER: A VIEW OF (ADIPO)PHARMACOLOGIST
Stanislav Yanev
Sofia, Bulgaria
MOLECULAR MECHANISMS INVOLVED IN REGULATION OF ADIPOGENESIS IN MESENCHYMAL STEM CELLS AND TUMOR-ASSOCIATED FIBROBLASTS
Florina Bojin, Calin Tatu, Oana Gavriliuc, Carmen Bunu, and Virgil Paunescu
Timisoara, Romania

SESSION 7  Bioesthetics

STAY THIN: A FIGHT AGAINST OREXINS AND GHRELIN
Irina Stoyanova
Enschede, The Netherlands and Stara Zagora, Bulgaria

CLINICAL AND EXPERIMENTAL STUDY OF ADIPOSE TISSUE BEHAVIOR AFTER AUTOLOGOUS FAT GRAFTING
Pepa Atanassova and Regina Khater
Plovdiv, Bulgaria

In vino veritas
PRENATAL EXPOSURE TO ETHANOL BUT NOT RED WINE CAUSES AGE-RELATED DEFICITS IN RODENTS: IMPLICATION OF NERVE GROWTH FACTOR AND BRAIN-DERIVED NEUROTROPHIC FACTOR
Marco Fiore, Mauro Ceccanti, and Luigi Aloe
Rome, Italy

EFFECTS OF ACUTE AND CHRONIC ALCOHOL INTAKE ON CORTICAL EXCITABILITY
Marina Romeo and Marco Ceccanti
Rome, Italy

Dance Round lectures

CHRONOBIOLOGY OF ADIPOSE TISSUE: PINEAL-ADIPOSE NETWORK
Gorana Rančić, Vladmila Bojanić, Neše Tunçel, and George N. Chaldakov
Niš, Serbia, Eskişehir, Turkey, and Varna, Bulgaria

THE ADIPOSE TISSUE AS A THIRD BRAIN
George N. Chaldakov, Anton B. Tonchev, and Luigi Aloe
Varna, Bulgaria and Rome, Italy

Coda
Discussion speaker:
Gema Frühbeck
Pamplona, Spain

Welcome-again words
George N. Chaldakov
Chairman, ISAA

Note
The duration of State-of-the-science lectures is 20 minutes/lecture, other lectures 10 minutes/lecture, Dance Round lectures 5 minutes/lecture, and Concluding discussion 30 minutes. Stay tuned to the ISAA chronobiology, please.
The Abstracts will be published in Adipobiology, An International Journal of Adipose Tissue in Health and Disease, volume 1, 2009.
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