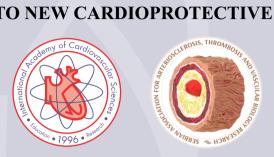
6th MEETING OF EUROPEAN SECTION AND 7th MEETING OF NORTH AMERICAN SECTION OF THE INTERNATIONAL ACADEMY OF CARDIOVASCULAR SCIENCES (IACS)

"CARDIOMETABOLIC DISEASES: HOW NEW RESEARCH MAY LEAD TO NEW CARDIOPROTECTIVE THERAPY"



Organized by the International Academy of Cardiovascular Sciences -European and North American Sections Serbian Association for Arteriosclerosis, Thrombosis and Vascular Biology Research



FINAL PROGRAM

Meeting Venue: Hotel Fontana, Vrnjacka Banja, Serbia (Date: September 11th-14th, 2019) Pre-Meeting Venue: Hotel Sumarice, Kragujevac, Serbia (Date: September 10th, 2019)

CME accredited by the Health Council of Serbia

Vrnjacka Banja, Serbia September 11th-14th, 2019

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FOREWORD

Dear Colleagues,

We are very pleased to inform you that the 6th Meeting of European Section and 7th Meeting of North American Section of the International Academy of Cardiovascular Sciences will be jointly held during September 11th-14th, 2019 in Vrnjacka Banja (Vrnjacka Spa, Vrnci Spa) with pre-meeting clinical cardiology symposium in Kragujevac. For the last 18 years, the Serbian Physiological Society and Serbian Association for Arteriosclerosis, Thrombosis and Vascular Biology Research organized a series of national and internationally recognized congresses and meetings in the field of atherosclerosis, cardiovascular biology, risk factors and health. These meetings were recognized internationally, attracted a worldwide scientific audience, and had been supported by the Federation of European Physiological Societies (FEPS), the International Union of Physiological Sciences (IUPS), the International Society for Pathophysiology (ISP), the International Academy of Cardiovascular Sciences (IACS), and the International Atherosclerosis Society (IAS). Such success in former years directed us to plan and organize this cardiovascular event in order to improve research background, and make easier approach to the global research cooperation. Our wish is having this meeting traditional and progressive, and to attract the researchers from abroad and especially from surrounding countries. This time meeting is more directed to cardiometabolic diseases and research, risk factors, oxidative stress and inflammation, genetics, cardiovascular protection, epidemiology, prevention, nutrition, exercise and hyperbaric physiology however translational and applied aspects in cardiovascular research will be also presented. The scientific program will include a broad mix of topics from molecular, cellular and integrative aspects of cardiovascular sciences going ahead to the scientific problems covered by the international scientific community.

We really hope that this meeting is a unique opportunity for all participants to exchange their ideas and give their own contribution in this fruitful cooperation. Finally, spa resort Vrnjacka Banja, located in central Serbia is not only the place where you will find typical Serbian spirit of life, but also the place which is known for the worldwide recognized sacral and historical objects and monuments, museums, galleries etc. Vrnjacka Banja have been known for their curative properties since Roman times, and it is the queen of all mineral springs in Balkans, harmoniously balanced in its beautiful natural surroundings. The resort features a number of beautiful 19th and 20th century villas around the spring and on top the surrounding hills. Today Vrnjacka Banja is an oasis of health, energy and beauty and a well-developed tourist destination, popular among domestic and foreign guests seeking spa treatments or a relaxing getaway in the countryside.

We appreciate your participation and wishing you warm welcome to Vrnjacka Banja and central Serbia.

On behalf of the Organizing & Program Committee Gary Lopaschuk, Andras Varro, Vladimir Jakovljevic and Dragan Djuric

MEETING CO-CHAIRS

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PROGRAM AT GLANCE

Tuesday, September 10th, 2019

(Pre-Meeting Venue: Hotel Sumarice, Kragujevac)

14.00-18.15 Pre-Meeting on Clinical Cardiology Topics

Wednesday, September 11th, 2019

(Meeting Venue: Hotel Fontana, Vrnjacka Banja)

Arrival and Registration

- 13.00-16.00Pre-Symposium on Diabetes Mellitus (Medical and Spa Resort Merkur)16.30-19.30Welcome Messages
- Presidential Address
 Keynote Speakers (three, 30 min each talk)
 Presentations of the Serbian Physiological Society Awards
 Special Presentations by the IACS
 19.30 CV Network Group Photo
 Welcome Reception

Thursday, September 12th, 2019

Parallel Scientific Sessions/Each talk 20 min including discussion

09.00-12.30	Two Parallel Scientific Sessions
13.00-14.30	Lunch Break
14.30-17.45	Two Parallel Scientific Sessions
18.00-19.30	Poster Session 1

19.30 Dinner

Friday, September 13th, 2019

Parallel Scientific Sessions/Each talk 20 min including discussion

- 09.00-13.00 Two Parallel Scientific Sessions
- 13.00-14.30 Lunch Break
- 14.30-18.30 Two Parallel Scientific Sessions
- 18.30-20.00 Poster Session 2
- 20.00 Free Evening/IACS North American and European Boards Meetings

Saturday, September 14th, 2019

Parallel Scientific Sessions/Each talk 20 min including discussion

- 09.00-11.00 Three Parallel Scientific Sessions
- 11.15-12.45 Young Investigator Awards Competition
- 12.45-13.00 Concluding Remarks
- 13.30-19.30 Excursion to Serbia Countryside with Lunch and Wine Tasting
- 20.30 IACS Awards Session/Gala Dinner



PROGRAM

WEDNESDAY, SEPTEMBER 11th, 2019

Venue: Hotel Fontana, Vrnjacka Banja (Rooms F2 plus F3)

WELCOME MESSAGES/PRESIDENTIAL ADDRESS/ KEYNOTE LECTURES/AWARDS

16.30 - 19.30

Bolli R (Louisville, USA), President, IACS
Dhalla N (Winnipeg, Canada), Executive Director, Honorary Life President, IACS
Djuric D (Belgrade, Serbia), Chair, Program Committee
Jakovljevic V (Kragujevac, Serbia), Chair, Organizing Committee
Lalic N (Belgrade, Serbia), Chairman, National Expert Committee for Diabetes
Lopaschuk G (Edmonton, Canada), President, IACS-North America
Ostadal B (Prague, Czech Republic), Past President, IACS
Pierce G (Winnipeg, Canada), President-Elect, IACS
Varro A (Szeged, Hungary), President, IACS-Europe

Chair: Dhalla N (Winnipeg, Canada)

Presidential Address

CURRENT STATUS OF CELL THERAPY FOR HEART DISEASE (30 min)

<u>Bolli R</u>

Jewish Hospital, Heart and Lung Institute, Department of Medicine, Division of Cardiovascular Medicine, Institute of Molecular Cardiology, Cardiovascular Innovation Institute, University of Louisville School of Medicine and Physicians Outpatient Center, Louisville, USA Chair: Ostadal B (Prague, Czech Republic)

Naranjan Dhalla Honorary Lecture (30 min) A JOURNEY FROM BASIC RESEARCH TO CLINICAL TRIALS ON THE EFFECTS OF DIETARY FLAXSEED ON CARDIOVASCULAR HEALTH Pierce GN

Canadian Centre for Agri-food Research in Health and Medicine, Institute of Cardiovascular Sciences, St. Boniface Hospital, Department of Physiology and Pathophysiology, Rady Faculty of Health Sciences, University of Manitoba, Winnipeg, Canada

Keynote Lecture (30 min) STIMULATING CARDIAC KETONE OXIDATION AS AN APPROACH TO TREAT HEART FAILURE

Lopaschuk G

Department of Pediatrics, Faculty of Medicine and Dentistry, University of Alberta, Edmonton, Canada

Keynote Lecture (30 min) SUDDEN DEATH OF TOP ATHLETES: POSSIBLE MECHANISM BASED ON CELLULAR ELECTROPHYSIOLOGICAL CONSIDERATION Varro A^{1,2}

¹Department of Pharmacology and Pharmacotherapy, Faculty of Medicine, University of Szeged, Szeged, ²MTA-SZTE Research Group of Cardiovascular Pharmacology, Hungarian Academy of Sciences, Szeged, Hungary

PRESENTATIONS OF THE SERBIAN PHYSIOLOGICAL SOCIETY AWARDS FOR LIFETIME ACHIEVEMENT IN PHYSIOLOGICAL SCIENCES

Moderators: Djuric D (Belgrade, Serbia), Jakovljevic V (Kragujevac, Serbia)

SPECIAL PRESENTATIONS BY THE INTERNATIONAL ACADEMY OF CARDIOVASCULAR SCIENCES

Moderators: Bolli R (Louisville, USA), Dhalla N (Winnipeg, Canada)

19.30 CV NETWORK GROUP PHOTO (in front of main entrance to hotel)

WELCOME RECEPTION

THURSDAY, SEPTEMBER 12th, 2019

SYMPOSIUM 1: TRANSCRIPTION, TRANSLATION AND EPIGENETICS IN HEART FAILURE (Room F2)

9.00-10.30

Chairs: Dhingra S (Winnipeg, Canada), Lopaschuk G (Edmonton, Canada)

REMODELING CHROMATIN ARCHITECTURE IN HEART FAILURE Vondriska TM

David Geffen School of Medicine, University of California, Los Angeles, USA

TARGETING THE CAMKII-HDAC4 INTERACTION TO TREAT HEART FAILURE

<u>Dewenter M</u>¹, von der Lieth A¹, He T¹, Chen L¹, Beckendorf J², Lewis J³, de Angelis MH⁴, Zimmermann W⁵, Klebl B⁶, Katus HA², Backs J¹

¹Institute of Experimental Cardiology, University of Heidelberg, Heidelberg, and German Centre for Cardiovascular Research (DZHK), Partner Site, Heidelberg/Mannheim, ²Department of Cardiology, Angiology and Pneumology, University of Heidelberg, Heidelberg, and German Centre for Cardiovascular Research (DZHK), Partner Site, Heidelberg/Mannheim, ³Chemical Biology Core Facility, European Molecular Biology Laboratory (EMBL), Heidelberg, ⁴German Mouse Clinic, Institute of Experimental Genetics, Helmholtz Zentrum Munchen, Munchen, ⁵Institut fur Pharmakologie und Toxikologie, Universitatsmedizin Gottingen, Gottingen, ⁶Lead Discovery Center, Dortmund, Germany

HDAC11 PROMOTES CARDIOMETABOLIC DISEASE THROUGH TRANSCRIPTIONAL AND NON-GENOMIC MECHANISMS Makingay TA

McKinsey TA

School of Medicine, Division of Cardiology, University of Colorado Anschutz Medical Campus, Aurora, USA

TRANSCRIPTIONAL CONTROL OF CARDIAC FIBROSIS

Czubryt M

Institute of Cardiovascular Sciences, St. Boniface Hospital Albrechtsen Research Centre, University of Manitoba, Winnipeg, Canada

SYMPOSIUM 2: ADVANCES IN ARRHYTHMIA RESEARCH (Room F3)

9.00-10.30

Chairs: Dobrev D (Essen, Germany), Jespersen T (Copenhagen, Denmark)

COMPARISON OF THE ANTIARRHYTHMIC AND ELECTROPHYSIOLOGICAL EFFECTS OF DESETHYLAMIODARONE AND ITS PARENT COMPOUND AMIODARONE

<u>Virag L</u>¹, Hornyik T¹, Kohajda Zs², Szlovak J¹, Gazdag P¹, Koncz I¹, Nagy N^{1,2}, Juhssz V¹, Varga R¹, Sztojkov A³, Jost N^{1,2}, Baczko I¹, Varro A^{1,2}

¹Department of Pharmacology and Pharmacotherapy, Faculty of Medicine, University of Szeged, ²MTA-SZTE Research Group of Cardiovascular Pharmacology, Hungarian Academy of Sciences, ³Department of Pharmaceutical Technology, Faculty of Pharmacy, University of Szeged, Szeged, Hungary

ANTI-AF EFFECTS OF SK CHANNEL INHIBITION - FROM RAT TO HUMAN TO HORSE

Jespersen T

Department of Biomedical Sciences, University of Copenhagen, Copenhagen, Denmark

ROLE OF INFLAMMATORY SIGNALING IN ATRIAL FIBRILLATION Dobrev D

Institute of Pharmacology, Faculty of Medicine, University Duisburg-Essen, Essen, Germany

WITHDRAWAL OF SIMULATED OBSTRUCTIVE SLEEP APNEA PARTIALLY REVERSES ATRIAL ARRHYTHMOGENIC SUBSTRATE IN RATS

Linz B^{1,2}, Hohl M², Nickel A³, Lang L², Boor P⁴, Wong D⁴, Sanders P⁵, Bohm M², Jespersen T¹, Linz D⁵

¹Faculty of Health and Medical Sciences, Department of Biomedical Sciences, University of Copenhagen, Copenhagen, Denmark, ²Klinik fur Innere Medizin III, Kardiologie und Angiologie, Universitatsklinikum des Saarlandes, Homburg/Saar, ³Universitatsklinikum Wurzburg, Deutsches Zentrum fur Herzinsuffizienz, Wurzburg, ⁴Institut fur Pathologie & Medizinische Klinik II Universitatsklinikum Aachen, Aachen, Germany, ⁵University of Adelaide, SAHMRI, Adelaide, Australia

10.30-10.45 Coffee Break

SYMPOSIUM 3: TRANSLATING BASIC DISCOVERIES INTO CLINICAL APPLICATIONS (Room F2)

10.45-12.30

Chairs: Kukreja R (Richmond, USA), Singla D (Orlando, USA)

IMPORTANCE OF COMPARTMENTED SIGNALING IN THE DEVELOPMENT OF NOVEL THERAPEUTICS: PHOSPHODIESTERASE 1C DIRECTS FROM THE FRONT

Maurice D

Department of Biomedical and Molecular Sciences, Queen's University, Kingston, Canada

DETERMINANTS OF HEART DISEASE IN WOMEN: NEW TARGETS, NEW OPPORTUNITIES

Gros R¹, Chorazyczewski J¹, Pickering JG¹, Ding Q², Feldman RD^{1,2}

¹Departments of Medicine, Physiology and Pharmacology, Robarts Research Institute, London, ²Albrechtsen Research Centre, Winnipeg Regional Health Authority and the University of Manitoba, Winnipeg, Canada

CARDIAC SPECIFIC CRE INDUCES DILATED CARDIOMYOPATHY IN POSTNATAL MYOCARDIUM

Rehmani T, <u>Tuana BS</u> Department of Cellular and Molecular Medicine, University of Ottawa, Ottawa, Canada

GENE X ENVIRONMENT INTERACTIONS IN CONTEXT OF PERSONALIZED MEDICINE

Hamet P, Tremblay J

Department of Medicine, CRCHUM, Universite de Montr eal and OPTITHERA Montreal, Montreal, Canada

DIETARY INTERVENTIONS AND FUNCTIONAL FOODS PREVENT CARDIOVASCULAR DISEASES THROUGH DIVERSE MECHANISMS Buttar H

Department of Pathology and Laboratory Medicine, Faculty of Medicine, University of Ottawa, Ottawa, Canada

SYMPOSIUM 4: ADVANCES IN CARDIOVASCULAR PROTECTION AND THERAPY I (Room F3)

10.45-12.30

Chairs: Djuric D (Belgrade, Serbia), Slezak J (Bratislava, Slovak Republic)

A NEW APPROACH FOR THE PREVENTION AND TREATMENT OF CARDIOVASCULAR DISORDERS. MOLECULAR HYDROGEN SIGNIFICANTLY REDUCES THE EFFECTS OF OXIDATIVE STRESS Slezak J¹, Buday J², Surovy J², Kura B¹

¹Institute for Heart Research, Centre of Experimental Medicine, Slovak Academy of Sciences, Bratislava, ²EVPU N. Dubnica, Slovak Republic

FOLIC ACID AND CARDIOVASCULAR HEALTH: NON-HOMOCYSTEINE DEPENDENT EFFECTS IN CARDIOMETABOLIC MODELS

<u>Djuric DM</u>¹, Jakovljevic Uzelac J¹, Mutavdzin S¹, Kostic S¹, Stojanovic M¹,

Gopcevic K², Labudovic Borovic M³, Obrenovic R⁴, Stankovic S⁴, Jakovljevic V^{5,6}

¹Institute of Medical Physiology "Richard Burian", Faculty of Medicine, University of Belgrade, ²Institute of Chemistry in Medicine "Prof. Dr. Petar Matavulj", Faculty of Medicine, University of Belgrade, ³Institute of Histology and Embryology "Aleksandar Dj. Kostic", Faculty of Medicine, University of Belgrade, ⁴Centre of Medical Biochemistry, Clinical Centre of Serbia, Belgrade, ⁵Department of Physiology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, Serbia, ⁶Department of Human Pathology, 1st Moscow State Medical, University IM Sechenov, Moscow, Russian Federation

QUERCETIN AS POTENTIAL CARDIOPROTECTIVE AGENT IN I/R INJURY: ROLE OF SELECTED COMORBIDITIES AND COMEDICATIONS

<u>Bartekova M</u>^{1,2}, Ferenczyova K¹, Kalocayova B¹, Kindernay L¹, Tribulova N¹, Okruhlicova L¹, Dovinova I³, Ravingerova T¹, Barancik M¹

¹Institute for Heart Research, Centre of Experimental Medicine, Slovak Academy of Sciences, ²Institute of Physiology, Faculty of Medicine, Comenius University, ³Institute of Normal and Pathological Physiology, Centre of Experimental Medicine, Slovak Academy of Sciences, Bratislava, Slovak Republic

POLYPHENOLS: FROM BASIC TO APPLIED INVESTIGATIONS

<u>Jakovljevic V</u>^{1,2}, Zivkovic V¹, Srejovic I¹, Jakovljevic B³, Bolevich S⁴, Jeremic N⁵, Jeremic J⁵, Milosavljevic I⁵, Nikolic Turnic T⁵, Cikiriz N⁶, Mitrovic M⁷, Bolevich S²

¹Department of Physiology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, ²Department of Human Pathology, 1st Moscow State Medical University IM Sechenov, Moscow, ³High Medical College of Professional Studies in Belgrade, Belgrade, ⁴Department of Human Pathophysiology, 1st Moscow State Medical University IM Sechenov, Moscow, Russian Federation, ⁵Department of Pharmacy, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, ⁶Department of Exercise Physiology, Institute of Hygiene, Military Medical Academy, Belgrade, ⁷Pharmanova, Belgrade, Serbia

THE ROLE OF DIETARY POLYPHENOLS IN THE PREVENTION OF ATHEROSCLEROSIS DEVELOPMENT-MECHANISMS OF ACTION

Krga I^{1,2}, Tamaian R³, Morand C², Vidovic N¹, Glibetic M¹, Milenkovic D²

¹Centre of Research Excellence in Nutrition and Metabolism, Institute for Medical Research, University of Belgrade, Belgrade, Serbia, ²University Clermont Auvergne, INRA, UNH, CRNH Auvergne, Clermont-Ferrand, France, ³National Institute for Research and Development for Cryogenic and Isotopic Technologies, Rm. Valcea, Romania

13.00-14.30 Pause/Lunch

SYMPOSIUM 5:

STRUCTURE-FUNCTION CONSEQUENCES OF CARDIAC RYANODINE RECEPTORS MUTATIONS AND IMPLICATION TO ARRHYTHMOGENESIS (Room F2)

14.30-16.00

Chairs: Czubryt M (Winnipeg, Canada), Morad M (Charleston, USA)

STRUCTURE AND FUNCTION OF RYANODINE RECEPTOR IN DISEASE OF HEART AND SKELETAL MUSCLE

Marks A

Department of Physiology and Cellular Biophysics, Columbia University College of Physicians & Surgeons, New York, USA

INTERACTION BETWEEN CALCIUM AND CAFFEINE BINDING SITES OF CARDIAC RYANODINE RECEPTOR: EVIDENCE FROM CRISPR/CAS9 RYR2 GENE-EDITED MUTATIONS

<u>Morad M</u>, Zhang XH, Yamaguchi N Cardiac Signaling Center, School of Medicine University of South Carolina, Charleston, USA

ARE HIPSC-CM FROM RYR2-R420Q PATIENTS A GOOD MODEL FOR STUDYING CPVT1 MECHANISMS?

Yin LH¹, Joanne P^{1,2}, Perrier R¹, Gerbaud P¹, Nicolas V³, Zorio E⁴, Benitah JP¹, Gomez AM¹

¹UMR-S 1180, INSERM, Universite Paris-Sud, Universite Paris-Saclay, Châtenay-Malabry, ²Sorbonne Universite, UMR 8256, Paris, ³UMS IPSIT, Univ Paris-Sud, US 31 INSERM, UMS 3679 CNRS, Châtenay-Malabry, France, ⁴Hospital Universitario la Fe, Valencia, Spain

RYR2 MUTATIONS OUTSIDE THE CANONICAL CPVT DOMAINS: ARRHYTHMIAS INVOLVING A STRUCTURAL SUBSTRATE Alvarado FJ,¹ Valdivia HH^{1,2}

¹Department of Medicine, University of Wisconsin School of Medicine & Public Health, ²Cardiovascular Research Center, University of Wisconsin, Madison, USA

SYMPOSIUM 6: ADVANCES IN CARDIOVASCULAR BIOLOGY, ATHEROSCLEROSIS AND HYPERTENSION I

14.30-16.00

Chairs: Muntean D (Timisoara, Romania), Papp Z (Debrecen, Hungary)

OXIDATIVE MODIFICATIONS OF CARDIOMYOCYTE PASSIVE STIFFNESS

Bodi B¹, Martha L¹, Toth A^{1,2}, Papp $Z^{1,2}$

¹Division of Clinical Physiology, Faculty of Medicine, University of Debrecen, Debrecen, ²HAS-UD Vascular Biology and Myocardial Pathophysiology Research Group, Hungarian Academy of Sciences, Debrecen, Hungary

THE ROLE OF MONOAMINE OXIDASE IN CARDIOMETABOLIC DISEASES: A COMING-OF-AGE STORY

Muntean D

Department of Functional Sciences - Pathophysiology, Center for Translational Research and Systems Medicine, "Victor Babes" University of Medicine and Pharmacy, Timisoara, Romania

THE EFFECT OF THYMOSIN BETA-4 DOMAINS ON POST-HYPOXIC CARDIAC REGENERATION AND REPAIR

<u>Bock-Marquette I^{1,4,5}</u>, Hinkel R², Ball H³, Thatcher J⁵, Faskerti G¹, Maar K¹, Olson EN⁴, Kupatt C², Gallyas F¹

¹Department of Biochemistry and Medical Chemistry, Szentagothai Research Centre, University of Pecs Medical School, Pecs, Hungary, ²Internal Medicine I, University Clinic Grosshadem, Munich, Germany, ³Protein Chemistry Technology Center, ⁴Molecular Biology and ⁵Cardiovascular and Thoracic Surgery, University of Texas Southwestern Medical Center, Dallas, USA

GENETIC BASIS OF ATHEROSCLEROSIS: FROM VASCULAR REMODELING TO CLINICAL ENDPOINTS

Djuric T

Institute of Nuclear Sciences "Vinca", Laboratory for Radiobiology and Molecular Genetics, University of Belgrade, Belgrade, Serbia

16.00-16.15 Coffee Break

SYMPOSIUM 7: CARDIOPROTECTIVE STRATEGIES IN DIABETES (Room F2)

16.15-17.45

Chairs: Tipparaju S (Tampa, USA), Tuana B (Ottawa, Canada)

CARDIOPROTECTIVE EFFECTS OF DIETARY SULPHUR-CONTAINING AMINO ACIDS IN DIABETES

<u>Tappia PS</u>

Asper Clinical Research Institute and St. Boniface Hospital Albrechtsen Research Centre, Winnipeg, Canada

PYRUVATE DEHYDROGENASE AS A THERAPEUTIC TARGET FOR IMPROVING DIASTOLIC FUNCTION IN CARDIOMYOPATHIES Ussher JR

Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, Edmonton, Canada

DYSBIOTIC 1-CARBON METABOLISM IN HYPERTENSIVE CARDIAC REMODELING

George AK, Singh M, Pushpakumar SB, Homme RP, Metreveli N, <u>Tyagi SC</u> Department of Physiology, University of Louisville School of Medicine, Louisville, USA

POLYGENIC RISK SCORES FOR THE PREDICTION OF CARDIOVASCULAR OUTCOMES IN PATIENTS WITH DIABETES Tremblay J^{1,2}, Chalmers J³, Awadalla P⁴, Woodward M³, Hamet P^{1,2}

¹Department of Medicine, CRCHUM, University of Montreal, Montreal, ²OPTITHERA, Montreal, ³The George Institute for Global Health, University of New South Wales, Sydney, Australia, ⁴Ontario Institute for Cancer Research, University of Toronto, Toronto, Canada

SYMPOSIUM 8: HYPERBARIC OXYGENATION IN CARDIOMETABOLIC DISEASE

16.15-17.45

Chairs: Ivanov M (Belgrade, Serbia), Zivkovic V (Kragujevac, Serbia)

HYPERBARIC OXYGEN PRECONDITIONING DECREASES KIDNEY INJURY MOLECULE-1 EXPRESSION IN THE KIDNEY OF HYPERTENSIVE RATS SUBJECTED TO RENAL ISCHEMIA Ivanov M¹, Kovacevic S², Miloradovic Z¹, Brkic P³, Jovovic D¹, Mihailovic Stanojevic N¹, Vajic JU¹, Karanovic D¹, Jeremic R³, Zivkovic M⁴,

Nesovic Ostojic J²

¹University of Belgrade, Institute for Medical Research, National Institute of Republic of Serbia, Belgrade, ²University of Belgrade, Institute of Pathophysiology, Faculty of Medicine, Belgrade, ³University of Belgrade, Institute of Medical Physiology, Faculty of Medicine, Belgrade, ⁴University of Belgrade, Institute of Pathology, Faculty of Medicine, Belgrade, Serbia

HYPERBARIC OXYGEN AND CALCIUM CHANNEL MODULATORS AS PRECONDITIONING TOOLS IN RAT MODEL OF GLOBAL ISCHEMIA

<u>Zivkovic V</u>¹, Petkovic A², Bradic J², Srejovic I¹, Jeremic J², Draginic N², Andjic M², Samanovic Milojevic A¹, Stanisic D³, Simonovic N⁴, Bolevich S⁵, Jakovljevic V^{1,5}

¹Department of Physiology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, ²Department of Pharmacy, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, ³Department of Dentistry, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, ⁴Health Center "Vozdovac", Belgrade, Serbia, ⁵Department of Human Pathology, 1st Moscow State Medical University IM Sechenov, Moscow, Russian Federation

THE EFFECTS OF HYPERBARIC OXYGEN THERAPY ON REDOX BALANCE IN PATIENTS WITH DIABETES TYPE 2

<u>Srejovic I</u>¹, Tepic S², Petkovic A³, Jeremic N³, Zivkovic V¹, Bolevich S⁴, Bradic J³, Milosavljevic I³, Bolevich S⁵, Jakovljevic V^{1,5}

¹Department of Physiology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, ²Department of Urgent Medicine, Clinical Center "Zvezdara", Belgrade, ³Department of Pharmacy, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, Serbia, ⁴Department of Human Pathophysiology, 1st Moscow State Medical University IM Sechenov, ⁵Department of Human Pathology, 1st Moscow State Medical University IM Sechenov, Moscow, Russian Federation

SYNERGISTIC NADPH BLOCKADE AND AT2 RECEPTOR STIMULATION ENHANCE POSTISCHEMIC KIDNEY RECOVERY IN HYPERTENSIVE RATS

<u>Miloradovic Z¹</u>, Ivanov M¹, Jovovic D¹, Mihailovic Stanojevic N¹, Vajic JU¹,

Karanovic D¹, Markovic Lipkovski J²

¹University of Belgrade Institute for Medical Research, Belgrade, ²Faculty of Medicine University of Belgrade, Serbia

18.00-19.30 **POSTER SESSION I**

19.30 **DINNER**

FRIDAY, SEPTEMBER 13th, 2019

SYMPOSIUM 9: MITOCHONDRIAL DYSFUNCTION IN HEART DISEASE (Room F2)

9.00-10.30

Chairs: Mehta J (Little Rock, USA), Tyagi S (Louisville, USA)

THERAPEUTIC POTENTIAL OF OMEGA-3 EPOXYEICOSANOIDS IN CARDIOVASCULAR AND INFLAMMATORY DISEASES Schunck WH

Max Delbruck Center for Molecular Medicine, Berlin, Germany

DOES TARGETING SOLUBLE EPOXIDE HYDROLASE PRESERVE CARDIAC AND MITOCHONDRIAL FUNCTION IN AGED FEMALES?

Jamieson KL¹, Keshavarz-Bahaghighat H¹, Shah S², Sosnowski D¹, Darwesh A¹, Wang W², Zhabyeyev P², Edin M⁵, Zeldin D⁵, Kassiri Z^{2,4}, Oudit G^{2,4}, Seubert JM^{1,3,4}

¹Faculty of Pharmacy and Pharmaceutical Sciences, ²Department of Physiology, ³Department of Pharmacology, ⁴Mazankowski Alberta Heart Institute, Faculty of Medicine and Dentistry, University of Alberta, Edmonton, Canada, ⁵National Institute of Environmental Health Sciences, NIH, Research Triangle Park, Durham, USA

FUNCTIONAL ROLE AND MECHANISMS OF CYSTIC FIBROSIS TRANSMEMBRANE-CONDUCTANCE REGULATOR (CFTR) IN MYOCARDIAL INJURY AND REPAIR

Duan DD¹, Ye LL²

¹Department of Pharmacology, University of Nevada Reno School of Medicine, Reno, USA, ²Center for Phenomics of Traditional Chinese Medicine and the Affiliated Traditional Chinese Medicine Hospital, Southwest Medical University, Luzhou, China

THE INTERPLAY BETWEEN METABOLISM AND TRANSCRIPTION IN THE HEART

<u>Abdellatif M</u>

Department of Cell Biology and Molecular Medicine, Rutgers University, Newark, USA

ADVANCES IN CARDIOVASCULAR SYMPOSIUM 10: **TOXICITY** (Room F3)

9 00-10 45

Chairs: Baczko I (Szeged, Hungary), Ferdinandy P (Szeged, Hungary)

AGE AND SEX DEPENDENT CARDIAC TOLERANCE TO ISCHEMIA/ **REPERFUSION INJURY: THE ROLE OF MITOCHONDRIA**

Ostadal B

Institute of Physiology of the Czech Academy of Sciences, Prague, Czech Republic

HIDDEN CARDIOTOXICITY - PARADIGM CHANGE IN CARDIAC SAFETY TESTING IN ISCHEMIC AND COMORBID CONDITIONS: AN EXAMPLE OF ROFECOXIB

Ferdinandy P

Department of Pharmacology and Pharmacotherapy, Semmelweis University, Budapest, and Pharmahungary Group, Szeged, Hungary

DOXORUBICIN-INDUCED CARDIOMYOPATHY: IS THERE MORE THAN ONE PHENOTYPE?

Pajovic V¹, Matic M¹, Vasic M¹, Sarenac O¹, Bajic D², Japundzic Zigon N¹ ¹Institute of Pharmacology, Clinical Pharmacology and Toxicology Faculty of Medicine University of Belgrade, Belgrade, ²Faculty of Technical Sciences, University of Novi Sad, Novi Sad, Serbia

THE SIGNIFICANCE OF TRANSGENIC LOT RABBIT MODELS FOR PREDICTION OF DRUG-INDUCED VENTRICULAR ARRHYTHMIAS

Baczko I¹, Hornyik T^{1,2}, Castiglione A², Franke G², Major P³, Hiripi L³, Bosze Z³, Varro A^1 . Odening K^2

¹Department of Pharmacology and Pharmacotherapy, Faculty of Medicine, University of Szeged, Szeged, ²Institute of Experimental Cardiovascular Medicine, Heart Center University of Freiburg, Medical Faculty, Freiburg, Germany, ³NARIC Agricultural Biotechnology Institute, Godollo, Hungary

EVALUATION OF METHYLXANTHINE INDUCED CARDIOTOXICITY: A TRANSLATIONAL APPROACH

Gulati K, Ray A

Department of Pharmacology, Vallabhbhai Patel Chest Institute, University of Delhi, Delhi, India

10.45-11.00 **Coffee Break**

SYMPOSIUM 11: EXOSOMES AND STEM CELLS IN CARDIOVASCULAR THERAPY (Room F2)

11.00-12.30

Chairs: Bkaily G (Sherbrooke, Canada), Wilson D (Pomona, USA)

MATRIX REGENERATION PROTEINS IN THE EXOSOMES OF SHOULDER TENOCYTES AND MESENCHYMAL STEM CELLS Agrawal D, Thankam FG

Department of Translational Research, Western University of Health Sciences, Pomona, USA

ON EARLY MOLECULAR EVENTS IN MSC EXOSOME MEDIATED CYTOPROTECTION IN CARDIOMYOCYTES

<u>Mehta JL</u>, Kore RA University of Arkansas for Medical Sciences, Little Rock, USA

EXOSOMES CONTAINING COCK-TAIL OF ANTI-INFLAMMATORY CYTOKINES INHIBIT INFLAMMATORY CELL DEATH IN CHEMOTHERAPEUTIC DRUG INDUCED TOXICITY

<u>Singla DK</u>

Burnett School of Biomedical Sciences, University of Central Florida College of Medicine, Orlando, USA

IMMUNOLOGICAL FENCES TO ALLOGENEIC STEM CELL THERAPY FOR CARDIAC REGENERATION

Abu-El-Rub E, Sequiera GL, Sareen N, Yan W, Moudgil M, Dhingra S

Institute of Cardiovascular Sciences, St. Boniface Hospital Research Centre, Regenerative Medicine Program, Department of Physiology and Pathophysiology, Faculty of Health Sciences, University of Manitoba, Winnipeg, Canada

SYMPOSIUM 12: BRAIN-HEART AXIS AND ADVANCES IN ADIPOBIOLOGY (Room F3)

11.00-13.00

Chairs: Beltowski J (Lublin, Poland), Lionetti V (Pisa, Italy)

PSYCHOSOCIAL STRESS INDUCES CARDIAC AND HIPPOCAMPAL DYSFUNCTION ASSOCIATED TO LOCAL BRAIN-DERIVED NEUROTROPHIC FACTOR DEPLETION IN OBESE MICE

Agrimi J^{1,2}, Spalletti C³, Baroni C¹, Keceli G², Caragnano A⁴, Bedja D², Matteucci M¹, Beltrami AP⁴, Paolocci N², Caleo M³, Lionetti V^{1,5}

¹Unit of Translational Critical Care Medicine, Institute of Life Sciences, Scuola Superiore Sant'Anna, Pisa, ²Division of Cardiology, Johns Hopkins School of Medicine, Baltimore, USA, ³Neuroscience Institute, CNR, Pisa, ⁴Department of Medicine (DAME), University of Udine, Udine, ⁵UOS Anesthesiology and Intensive Care Medicine, Fondazione Toscana G, Monasterio, Pisa, Italy

THE PHARMACOLOGY OF THE BRAIN-HEART AXIS: POSSIBLE REGULATION BY NITRIC OXIDE (NO)

<u>Ray A</u>

Department of Pharmacology, Hamdard Institute of Medical Sciences and Research (HIMSR), Jamia Hamdard, New Delhi, India

THE MODULATION OF THE NON PUMPING FUNCTION OF THE NA,K-ATPASE: PHYSIOLOGICAL ROLE OF THE ADRENORECEPTORS

Lopatina E^{1,2}, Kipenko A¹, Pasatetckaia N^{2,3}, Lopatin A¹

¹Pavlov First St. Petersburg State Medical University, St. Petersburg, ²Pavlov Institute of Physiology, Russian Academy of Sciences, St. Petersburg, ³Almazov National Medical Research Centre, St. Petersburg, Russian Federation

PERINEURAL MIGRATION OF STEM CELLS IN THE MODEL OF DAMAGED HEART NODES

Kulchitsky VA

Brain Center, Laboratory of Neurophysiology, Institute of Physiology, National Academy of Sciences, Minsk, Belarus

HYDROGEN SULFIDE AND POLYSULFIDE SIGNALING IN THE ADIPOSE TISSUE: IMPLICATIONS FOR CARDIOVASCULAR DISEASES

Beltowski J¹, Rusek M¹, Wojtak A²

¹Department of Pathophysiology, Medical University, Lublin, ²Department of Vascular Surgery, Medical University, Lublin, Poland

CARDIOMETABOLIC ADIPOBIOLOGY: A TRANSLATIONAL PERSPECTIVE

<u>Chaldakov G¹</u>, Aloe L², Rancic G³, Tonchev A¹, Fiore M⁴, Hristova M⁵, Nikolova V⁶

¹Department of Anatomy and Cell Biology, Medical University, Varna, ²Fondazione Iret Tecnopolo R. Levi-Montalcini, Rome, ³Department of Histology and Embryology, Medical Faculty, Nis, Serbia, ⁴Institutue of Cell Biology and Neurobiology, CNR, Rome, Italy, ⁵Endocrinology Unit, Asparuhovo Polyclinic, ⁶Cardiology Unit, University St Marina Hospital, Varna, Bulgaria

13.00-14.30 Pause/Lunch

SYMPOSIUM 13: MECHANISMS CONTRIBUTING TO HEART FAILURE AND ISCHEMIC HEART DISEASE (Room F2)

14.30-16.15

Chairs: Seubert J (Edmonton, Canada), Tappia P (Winnipeg, Canada)

ROLE OF LYSOPHOSPHATIDIC ACID IN THE DEVELOPMENT OF HYPERTENSION

Dhalla NS

Institute of Cardiovascular Sciences, University of Manitoba and St. Boniface Hospital Albrechtsen Research Centre, Winnipeg, Canada

TOLL-LIKE RECEPTORS AND CYTOKINES IN HEART FAILURE <u>Singal P</u>

Institute of Cardiovascular Sciences, St. Boniface Hospital Albrechtsen Research Centre, Department of Physiology and Pathophysiology, Max Rady College of Medicine, Rady Faculty of Health Sciences, University of Manitoba, Winnipeg, Canada

DEPRESSION, BIOLOGICAL RHYTHM AND CHRONIC CARDIOVASCULAR DISEASES

<u>Wilson D¹</u>, Wilson V²

¹Western University of Health Sciences, Pomona, USA, ²Queen's University Belfast School of Medicine, Belfast, United Kingdom

THE RECEPTOR FOR ADVANCED GLYCATION END PRODUCTS (RAGE) AND DIAPH1: UNIQUE MECHANISMS AND HEALING THE ISCHEMIC HEART

Ramasamy R

Department of Medicine, New York University Langone Medical Center, New York, USA

SIRNA-MEDIATED REDUCTION OF GRK2 EXPRESSION IS ASSOCIATED WITH ALTERED VASCULAR ACTIVITY AND KIDNEY FUNCTION RESULTING IN HYPERTENSION IN TRANSGENIC MICE Ferguson S^{1,2}

¹Brain and Mind Research Institute, University of Ottawa, Ottawa, ²Department of Cellular and Molecular Medicine, University of Ottawa, Ottawa, Canada

SYMPOSIUM 14: ADVANCES IN CARDIOVASCULAR DIAGNOSTICS AND TREATMENT (Room F3)

14.30-16.30

Chairs: Blackman A (Belo Horizonte, Brazil), Makino N (Beppu, Japan)

TELOMERE SHORTENING IN CARDIOVASCULAR DISEASE – ROLE OF CALORIE RESTRICTION

Makino N¹, Maeda T²

¹Division of Molecular and Clinical Gerontology, Medical Institute of Bioregulation, Kyushu University, ²Department of Internal Medicine, Kyushu University Beppu Hospital, Beppu, Japan

QT INTERVAL, QT DISPERSION AND HEART RATE VARIABILITY IN PATIENTS WITH GRADE I DIASTOLIC DYSFUNCTION

<u>Blackman A</u>^{1,2,3}, Neto JS², Lima ML¹, Andrade Rodrigues TM⁴, Gomes OM¹ ¹Instituto Cardiovascular São Francisco de Assis, Belo Horizonte, ²Centrocard, Brasília, ³Faculdade de Medicina-Uniceub, Brasília, ⁴Universidade Federal de Sergipe, Sergipe, Brazil

AUTONOMIC DYSREGULATION IN HEART FAILURE PATIENTS

Barta J¹, Urbancsek R¹, Forgacs I¹, Boczan J², Edes I¹, Csanadi Z¹, Rudas L³

¹Institute of Cardiology, Faculty of Medicine, University of Debrecen, ²Department of Neurology, University of Debrecen, Debrecen, ³Department of Anesthesiology and Intensive Therapy, University of Szeged, Szeged, Hungary

BIOMARKERS IN CARDIOVASCULAR MEDICINE: MATRIX METALLOPROTEINASE POTENTIAL

Gopcevic K

Institute of Chemistry in Medicine "Prof. Dr. Petar Matavulj", Faculty of Medicine, University of Belgrade, Serbia

VALVULAR HEART DISEASE - SURGICAL TREATMENT UPDATE Furtado HB^{1,2}

¹Tocantins Federal University, Faculty of Medicine, Palmas, ²Heart Surgery Institute, Palmas, Brazil

EXTRACORPOREAL MEMBRANE OXYGENATION (ECMO) IN CARDIAC ARREST AND CARDIOGENIC SHOCK Ostadal P

Cardiovascular Center, Na Homolce Hospital, Prague, Czech Republic

16.30-16.45 Coffee Break

SYMPOSIUM 15: PATHOLOGY OF HEART FAILURE (Room F2)

16.45-18.30

Chairs: Kirchenbaum L (Winnipeg, Canada), Ussher J (Edmonton, Canada)

HEART FAILURE IN DUCHENNE AND BECKER MUSCULAR DYSTROPHIES: WHERE WE ARE AND WHERE WE ARE GOING Bkaily G

Department of Anatomy and Cell Biology, Faculty of Medicine and Health Sciences, University of Sherbrooke, Sherbrooke, Canada

SIRTUIN-1 AND REGULATION OF ANGIOTENSIN II-INDUCED EXPRESSION OF G-PROTEINS AND VASCULAR REMODELING Anand-Srivastava M

Department of Pharmacology and Physiology, University of Montreal, Montreal, Canada

ANGIOTENSIN-II-INDUCED PHOSPHORYLATION AND NUCLEAR EXPORT OF HISTONE DEACETYLASE 5 IS MEDIATED BY AKT-DEPENDENT PATHWAY IN VASCULAR SMOOTH MUSCLE CELLS Srivastava AK

Laboratory of Cell Signaling, Research Center, Centre Hospitalier de l'Universite de Montreal (CRCHUM), Department of Medicine, Universite de Montreal, Montreal, Canada

RESOLVING AND NON-RESOLVING INFLAMMATION IN HEART FAILURE

Halade GV

Division of Cardiovascular Disease, Comprehensive Cardiovascular Center, Department of Medicine, The University of Alabama at Birmingham, Birmingham, USA

PDE5 INHIBITION AND CARDIOPROTECTION: FROM BENCH TO CLINICAL TRIALS

Kukreja RC

Pauley Heart Center, Division of Cardiology, Department of Internal Medicine, Virginia Commonwealth University School of Medicine, Richmond, USA

SYMPOSIUM 16: ADVANCES IN CARDIOVASCULAR BIOLOGY, ATHEROSCLEROSIS AND HYPERTENSION II

16.45-18.30

Chairs: Agrawal D (Pomona, USA), Gallyas F (Pecs, Hungary)

AKT-MEDIATED CYTOPROTECTION VIA PATM-NEMO-AKT-MTOR SIGNALOSOME

Tapodi A, Hocsak E, Bognar Z, Sumegi B, <u>Gallyas F Jr</u>. Department of Biochemistry and Medical Chemistry, University of Pecs, Medical School, Pecs, Hungary

RAMIPRIL IMPROVES RABBIT HEART MITOCHONDRIAL BIOENERGETICS FUNCTION DURING THE COURSE OF EXPERIMENTAL HYPERCHOLESTEROLEMIA

Kojic Z

Institute of Medical Physiology, Faculty of Medicine, University of Belgrade, Belgrade, Serbia

MECHANISMS OF IMPAIRED VASCULAR REDOX HOMEOSTASIS IN UREMIA

Simic T

Institute of Medical and Clinical Biochemistry, Faculty of Medicine, University of Belgrade, Serbian Academy of Sciences and Arts, Belgrade, Serbia

REDOX-DEPENDENT MOLECULAR BASIS OF HUMAN HEART PRECONDITIONING

<u>Jankovic A¹</u>, Korac A², Jovic M³, Korac B^{1,2}

¹University of Belgrade, Institute for Biological Research "Sinisa Stankovic", Belgrade, ²Faculty of Biology, University of Belgrade, Belgrade, ³Clinical Department of Anesthesia and Intensive Care, University of Belgrade, Dedinje Cardiovascular Institute, Faculty of Medicine, Belgrade, Serbia

THE EFFECTS OF NATURAL AND SYNTHETIC ANTIOXIDANTS ON THE PROGRESSION OF FOCAL-SEGMENTAL GLOMERULOSCLEROSIS IN HYPERTENSIVE RATS

<u>Mihailovic Stanojevic N</u>¹, Karanovic D¹, Markovic Lipkovski J², Grujic Milanovic J¹, Miloradovic Z¹, Ivanov M¹, Vajic UJ¹, Dekanski D³, Jovovic Dj¹ ¹Institute for Medical Research, University of Belgrade, ²Institute of Pathology Faculty of Medicine, University of Belgrade, ³R & D Institute, Galenika a.d., Belgrade, Serbia

18.30-20.00 POSTER SESSION II

20.00 FREE EVENING/IACS NORTH AMERICAN AND EUROPEAN BOARDS MEETINGS

SATURDAY, SEPTEMBER 14th, 2019

SYMPOSIUM 17: MOLECULAR MECHANISMS INVOLVED IN STRESS (Room F2)

9.00-11.00

Chairs: Anand-Srivastava M (Montreal, Canada), Singal P (Winnipeg, Canada)

LUMINAL CALCIUM ION REGULATION OF SARCOPLASMIC RETICULUM MEMBRANE CALCIUM RELEASE

Gilchrist J

Department of Oral Biology, Dr. Gerald Niznick College of Dentistry, Rady Faculty of Health Sciences, University of Manitoba, Winnipeg, Canada

THE SLMAP/STRN COMPLEX IS DOWNREGULATED IN HUMAN FAILING HEARTS AND IT REGULATES THE ADRENERGIC-INDUCED CARDIOMYOCYTE CONTRACTION

<u>Nader M^{1, 2}</u>, Kattuah W¹, Alotaibi S^{1,2}, Alsolme E^{1,2}, Bakheet D² ¹Department of Physiological Sciences, Alfaisal University, ²Department of Genetics, King Faisal Specialist Hospital and Research Center, Riyadh, Kingdom of Saudi Arabia

MOLECULAR REGULATION OF CARDIAC CELL DEATH BY MODULATION OF CYCLOPHILIN D IN DOXORUBICIN CARDIOMOPATHY

Dhingra R^{1,2}, Guberman M^{1,2}, Margulets V^{1,2}, Aguilar F^{1,2}, <u>Kirshenbaum L</u>^{1,2} ¹Department of Physiology and Pathophysiology, The Institute of Cardiovascular Sciences, St. Boniface Hospital Albrechtsen Research Centre, ²Rady College of Medicine, Max Rady Faculty of Health Sciences, University of Manitoba, Manitoba, Canada

IMPLICATIONS OF THE NA⁺/H⁺ EXCHANGER ISOFORM 1 IN CARDIAC REMODELING: MECHANISMS AND THERAPEUTIC STRATEGIES

Abdulrahman N¹, Mohamed I¹, Riaz S¹, Jaballah M¹, Fliegel L², Gadeau AP³, Mraiche F¹

¹College of Pharmacy, Qatar University, Doha, Qatar, ²Department of Biochemistry, Faculty of Medicine and Dentistry, University of Alberta, Edmonton, Canada, ³Univ. Bordeaux, INSERM, Biology of Cardiovascular Disease, Pessac, France, ³Department of Biochemistry, Faculty of Medicine and Dentistry, University of Alberta, Edmonton, Canada

CARDIOMETABOLIC AND SENSORY ROLES FOR AKR6 SUBUNIT IN THE HEART

<u>Tipparaju S</u>, Tur J, Badole S, Chapalamadagu K Department of Pharmaceutical Sciences, College of Pharmacy, University of South Florida, Tampa, USA

ER STRESS COPING STRATEGIES IN THE HEART

Michalak M

Departments of Biochemistry, University of Alberta, Edmonton, Canada

SYMPOSIUM 18: ADVANCES IN CARDIOVASCULAR PROTECTION AND THERAPY II (Room F3)

9.00-10.40

Chairs: Kundu S (New Delhi, India), Ravingerova T (Bratislava, Slovak Republic)

NOVEL INHIBITORS OF DOPAMINE-BETA-HYDROXYLASE AS POTENTIAL ANTI-HYPERTENSIVES: DRUG DISCOVERY AND VALIDATION

Kundu S

Department of Biochemistry, University of Delhi South Campus, New Delhi, India

ENDOTHELIAL DYSFUNCTION MODULATION BY CALCIUM CHANNEL BLOCKERS

Radenkovic M, Stojanovic M, Prostran M

Department of Pharmacology, Clinical Pharmacology and Toxicology, Faculty of Medicine University of Belgrade, Belgrade, Serbia

MECHANISMS INVOLVED IN REMOTE ISCHEMIC PRECONDITIONING

Gelpi RJ

Department of Pathology, Cardiovascular Physiopathology Institute, University of Buenos Aires School of Medicine, Buenos Aires, Argentina

EXERCISE AS A FORM OF REMOTE PRECONDITIONING OF THE HEART. PREVENTIVE EFFICIENCY AND CLINICAL APPLICABILITY Ravingerova T¹, Lonek L¹, Kindernay L¹, Zohdi V², Duris Adameova A³

¹Centre of Experimental Medicine, Institute for Heart Research, Slovak Academy of Sciences, ²Institute of Anatomy, Faculty of Medicine, ³Department of Pharmacology and Toxicology, Faculty of Pharmacy, Comenius University, Bratislava, Slovak Republic

CARDIOPROTECTIVE EFFECTS OF HYDROGEN SULFIDE DONOR IN RATS WITH DIABETES MELLITUS

Jeremic N¹, Jeremic J¹, Zivkovic V², Srejovic I², Suresh T³, Jakovljevic V^{2,4}

 ¹Department of Pharmacy, Faculty of Medical Sciences, University of Kragujevac, Kragujevac,
 ²Department of Physiology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, Serbia,
 ³Department of Physiology, School of Medicine, University of Louisville, Louisville, USA,
 ⁴Department of Human Pathology, 1st Moscow State Medical, University IM Sechenov, Moscow, Russian Federation

SYMPOSIUM 19: MISCELLANEOUS

(Room F1)

9.00-10.30

Chairs: Hamet P (Montreal, Canada), Jakovljevic V (Kragujevac, Serbia)

PATHOGENIC ROLE OF AUTOANTIBODIES (AAB) AGAINST THE B1-ADRENOCEPTOR IN IDIOPATHIC DILATED CARDIOMYOPATHY (DCM): THE USE OF APTAMERS AS A NEW THERAPEUTHIC OPTION Wallukat G, Wenzel K, Haberland A, Schimke I, Muller J

Berlin Cures GmbH, Berlin, Germany

HYDROXYMETHYLGLUTARYL COENZYME A REDUCTASE INHIBITORS DIFFERENTIALLY MODULATE PLASMA FATTY ACIDS IN RATS WITH DIET-INDUCED-HYPERHOMOCYSTEINEMIA: IS 6-3 FATTY ACIDS SUPPLEMENTATION NECESSARY?

<u>Nikolic Turnic T¹</u>, Arsic A², Vucic V², Petrovic S², Ristic Medic D², Zivkovic V³, Srejovic I³, Jeremic J¹, Radonjic T⁴, Milosavljevic I¹, Bolevich S⁵, Bolevich S⁶, Djuric D⁷, Jakovljevic V^{3,5}

¹Department of Pharmacy, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, ²Centre of Research Excellence in Nutrition and Metabolism, Institute for Medical Research, University of Belgrade, Belgrade, ³Department of Physiology, Faculty od Medical Sciences, University of Kragujevac, Kragujevac, ⁴Health Center "Dr Milutin Ivkovic", Belgrade, ⁵Department of Human Pathology, Ist Moscow State Medical University IM Sechenov, ⁶Department of Pathophysiology, Ist Moscow State Medical University IM Sechenov, Moscow, Russian Federation, ⁷Institute of Medical Physiology "Richard Burian", Faculty of Medicine, University of Belgrade, Belgrade, Serbia

BENEFICIAL EFFECTS OF ANTIOXIDANT SUPPLEMENTATION WITH SULFUR-CONTAINING AMINO ACIDS IN CARDIOVASCULAR AND NEURAL PROTECTION AGAINST CISPLATIN-INDUCED TOXICITIES

<u>Rosic G</u>¹, Joksimovic J¹, Jovicic N², Katanic Stankovic J³, Juric T⁴, Mihailovic V³, Kumburovic I¹, Kumburovic D¹, Selakovic D¹

¹Department of Physiology, Faculty of Medical Sciences, University of Kragujevac,

²Department of Histology and Embryology, Faculty of Medical Sciences, University of Kragujevac,

³Department of Chemistry, Faculty of Science, University of Kragujevac, Kragujevac,

⁴Faculty of Agriculture, University of Novi Sad, Novi Sad, Serbia

DIFFERENT ALTERATIONS IN PLASMA LIPID FATTY ACID PROFILES IN PATIENTS WITH DIABETES MELLITUS TYPE 1 VS TYPE 2

Vucic V¹, Paunovic M¹, Arsic A¹, Gluvic Z², Petrovic S¹, Ristic Medic D¹,

Resanovic I³, Zaric B³, Isenovic ER³

¹Centre of Research Excellence in Nutrition and Metabolism, Institute for Medical Research, University of Belgrade, Belgrade, ²Clinic for Internal Medicine, Zemun Clinical Hospital, Faculty of Medicine, University of Belgrade, Zemun, ³Institute of Nuclear Sciences "Vinca", University of Belgrade, Laboratory of Radiobiology and Molecular Genetics, Belgrade, Serbia

11.00-11.15 Coffee Break

COMPETITION 1: CANADIAN JOURNAL OF PHYSIOLOGY AND PHARMACOLOGY YOUNG INVESTIGATOR AWARD (Room F1)

11.15-12.45

Chairs: Gelpi R (Buenos Aires, Argentina), McKinsey T (Denver, USA), Ray A (New Delhi, India)

KETONES CAN BECOME THE MAJOR FUEL FOR THE HEART

<u>Ho K</u>¹, Wagg C¹, Zhang L¹, Altamimi T², Vo K¹, Leone T³, Muoio D⁴, Kelly D³, Ussher J⁵, Lopaschuk G¹

¹Faculty of Medicine and Dentistry, University of Alberta, Edmonton, ²Diabetes and Obesity Center, University of Louisville, Louisville, ³Penn Cardiovascular Institute, Perelman School of Medicine, University of Pennsylvania, Philadelphia, ⁴Duke Molecular Physiology Institute and Sarah W. Stedman Nutrition and Metabolism Center, Durham, USA, ⁵Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, Edmonton, Canada

CARDIOMYOCYTE CELL DEATH DURING ISCHEMIA/REPERFUSION (I/R) INJURY IS MEDIATED BY OXIDIZED PHOSPHATIDYLCHOLINE

<u>Stamenkovic A</u>¹, O'Hara K¹, Nelson D¹, Maddaford T¹, Edel A¹, Maddaford G¹, Dibrov E¹, Aghanoori M^{1,2}, Kirshenbaum L¹, Fernyhough P¹, Aliani M^{4,5}, Pierce G^{1,5}, Ravandi A^{1,3}

¹Institute of Cardiovascular Sciences, St. Boniface Hospital, and the Departments of Physiology and Pathophysiology, ²Pharmacology and Experimental Therapeutics, and ³Internal Medicine, Rady Faculty of Health Sciences, University of Manitoba, ⁴Department of Food and Human Nutritional Sciences, University of Manitoba, ⁵The Canadian Centre for Agri-Food Research in Health and Medicine (CCARM), St. Boniface Hospital Albrechtsen Research Centre, Winnipeg, Canada

CHRONIC STIMULATION OF THE NO/SGC/CGMP/PKG SIGNALLING PATHWAY IMPROVES DIASTOLIC FUNCTION IN HEART FAILURE WITH PRESERVED EJECTION FRACTION

<u>Kovacs A</u>^{1,3}, Gevaert A², Herwig M¹, Kolijn D¹, Leloup A², Fransen P², Fulop G^{1,3}, Lodi M³, Czuriga D³, Kisvarday Z⁴, Sandner P⁵, van Linthout S⁶, Tschope C⁶,

Papp Z³, De Keulenaer G², Linke W⁷, Hamdani N¹

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COMPARATIVE EFFECTS OF RU(II) COMPLEX AND CISPLATIN ON CARDIAC FUNCTION AND PRO-OXIDATIVE BIOMARKERS IN ISOLATED RAT HEART

<u>Radonjic K</u>¹, Jakovljevic V^{2,3}, Zivkovic V², Srejovic I², Nikolic Turnic T¹, Milosavljevic I¹, Jeremic J¹, Savic M¹, Sretenovic J², Bradic J¹, Novokmet S¹

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COMPETITION 2:

ROBERTO BOLLI YOUNG INVESTIGATOR AWARD (Room F2)

11.15-12.45

Chairs: Gulati K (Delhi, India), Halade G (Birmingham, USA), Marks A (New York, USA)

BRADYCARDIC AND NEGATIVE INOTROPIC EFFECTS OF CISPLATIN ON ISOLATED RAT ATRIA

<u>Stojanovic N</u>¹, Stojiljkovic N², Ilic S², Randjelovic P², Radulovic N³ ¹Faculty of Medicine, University of Nis, ²Department of Physiology, Faculty of Medicine, University of Nis, ³Department of Chemistry, Faculty of Science and Mathematics, University of Nis, Nis, Serbia

INSULIN DIRECTLY STIMULATES CARDIAC GLUCOSE OXIDATION VIA AKT TRANSLOCATION TO THE MITOCHONDRIA

Karwi Q, Wagg C, Altamimi T, Uddin G, Lopaschuk G Faculty of Medicine and Dentistry, University of Alberta, Edmonton, Canada

ELUCIDATION OF THE INTERPLAY BETWEEN A HISTONE DEACETYLASE, ADIPOSE TISSUE AND THE MYOCARDIUM IN CARDIOMETABOLIC DISEASE

<u>Bagchi RA^{1,2}</u>, Hu T^{1,2}, Major JL^{1,2}, Cao J³, Pecorari I¹, Cavasin MA^{1,2}, Mestroni L¹, Lam MPY^{1,2}, Lin H³, McKinsey TA^{1,2}

¹University of Colorado Anschutz Medical Campus, ²Consortium for Fibrosis Research & Translation, University of Colorado Anschutz Medical Campus, Aurora, ³Cornell University, Ithaca, USA

FOXO1 INHIBITION MITIGATES TYPE 2 DIABETES-RELATED DIASTOLIC DYSFUNCTION VIA STIMULATING MYOCARDIAL PYRUVATE DEHYDROGENASE ACTIVITY AND GLUCOSE OXIDATION

<u>Gopal K</u>, Batran R, Altamimi T, Greenwell A, Dimaano M, Eaton F, Ussher J Faculty of Pharmacy and Pharmaceutical Sciences, Diabetes Institute, University of Alberta, Edmonton, Canada

COMPETITION 3:

11.15-12.45

Chairs: Duan D (Reno, USA), Ramasamy R (New York, USA), Srivastava A (Montreal, Canada)

OVERALL HEMOSTATIC POTENTIAL AND THROMBIN GENERATION IN PATIENTS WITH ATRIAL FIBRILATION RECEIVING DABIGATRAN

Petkovic A¹, Jakovljevic V^{2,3}, Pruner I⁴, Vranic A¹, Antovic A^{5,6}, Antovic J^{4,7}

¹Department of Pharmacy, Faculty of Medical Sciences, University of Kragujevac, ²Department of Physiology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, Serbia, ³Department of Human Pathology, 1st Moscow State Medical University IM Sechenov, Moscow, Russian Federation, ⁴Department of Molecular Medicine and Surgery, Karolinska Institutet, ⁵Department of Medicine, Rheumatology Unit, Karolinska Institutet, ⁶Academic Specialist Center, Center for Rheumatology, Stockholm Health Services, ⁷Karolinska University Hospital, Clinical Chemistry, Stockholm, Sweden

CARDIOPROTECTIVE EFFECTS OF HYDROGEN SULFIDE DONOR IN AN ISOLATED HEART MODEL OF RAT WITH METABOLIC SYNDROME

Jeremic J¹, Jakovljevic V^{2,3}, Milosavljevic I¹, Zivkovic V², Srejovic I², Bradic J¹, Tvagi S⁴, Jeremic N¹

¹Department of Pharmacy, Faculty of Medical Sciences, University of Kragujevac, ²Department of Physiology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, Serbia, ³Department of Human Pathology, 1st Moscow State Medical, University IM Sechenov, Russian Federation, ⁴Department of Physiology, School of Medicine, University of Louisville, Louisville, USA

SCLERAXIS – A KEY REGULATOR OF CARDIAC FIBROSIS IN THE PRESSURE OVERLOADED MYOCARDIUM

Nagalingam R^{1,2}, Cheung D¹, Aroutiounova N¹, Jassal D^{1,3}, Czubryt M^{1,2}

¹Institute of Cardiovascular Sciences, St. Boniface Hospital Albrechtsen Research Centre, ²Department of Physiology and Pathophysiology, ³Department of Internal Medicine, University of Manitoba, Winnipeg, Canada

FLAXSEED PROTECTS AGAINST CARDIAC REMODELING AND ARRHYTHMIAS VIA ATTENUATION OF MYOCARDIAL FIBROSIS AND INFLAMMATION

Parikh M¹⁻³, Raj P^{1,2}, Austria A¹⁻³, Yu L², Garg B^{2,3}, Netticadan T^{1,2,4}, Pierce G¹⁻³ ¹Department of Physiology and Pathophysiology, Faculty of Health Sciences, University of Manitoba, ²Canadian Centre for Agri-food Research in Health and Medicine (CCARM), ³The Institute of Cardiovascular Sciences, ⁴Agriculture and Agri-Food Canada, St. Boniface Hospital Albrechtsen Research Centre, Winnipeg, Canada 12.45-13.00

CONCLUDING REMARKS & TAKE HOME MESSAGE (Room F2)

Chairs: Lopaschuk G (Edmonton, Canada), Varro A (Szeged, Hungary)

13.30-19.30 COUNTRYSIDE EXCURSION

20.30 IACS AWARDS CEREMONY/GALA DINNER (Hotel Fontana)

THURSDAY, SEPTEMBER 12th, 2019

POSTER SESSION I

(The presence of poster authors is required from 18.00-19.30)

Chairs (P01-P27): Barta J (Debrecen, Hungary), Nader M (Riyadh, Saudi Arabia), Pierce G (Winnipeg, Canada)

Chairs (P28-P55): Abdellatif M (Newark, USA), Feldman R (Winnipeg, Canada), Srejovic I (Kragujevac, Serbia)

P01 ASSESSMENT OF ADIPOSE TISSUE DYSFUNCTION IN OBESE CHILDREN AND ADULTS UNDERGOING ABDOMINAL SURGERY

Ionica M¹, <u>Aburel OM</u>^{1,*}, Vaduva AO², Popoiu C³, Boia E³, Rațiu S⁴, Olariu S⁴, Noveanu L^{1,*}, Sturza A^{1,*}, Muntean DM^{1,*}

¹Department of Functional Sciences - Pathophysiology, *Centre for Translational Research and Systems Medicine, ²Department of Microscopic Morphology – Morphopathology, ³Department of Pediatrics –Pediatric and Orthopedic Surgery, ⁴Department of Surgery II -1st Clinic of Surgery, Faculty of Medicine, "Victor Babes" University of Medicine and Pharmacy, Timisoara, Romania

P02 EFFECTS OF CHRONIC EVENING PRIMROSE OIL TREATMENT ON THE REDOX STATUS OF MALE AND FEMALE RATS

<u>Andjic M</u>¹, Draginic N¹, Radoman K², Jeremic J¹, Nikolic Turnic T¹, Srejovic I³, Zivkovic V³, Bolevich S⁴, Jakovljevic V³,⁴ ¹Department of Pharmacy, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, ²College of Health Studies, Podgorica, Montenegro, ³Department of Physiology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, Serbia, ⁴Department of Human Pathology, 1st Moscow State Medical University IM Sechenov, Moscow, Russian Federation

P03 COMPARISON OF EFFECT OF DOFETILIDE AND CHRONIC AMIODARONE TREATMENT ON THE DISPERSION BETWEEN THE SUBENDOCARDIUM AND PURKINJE FIBERS IN LEFT VENTRICULAR CARDIAC PREPARATION

Arpadffy-Lovas T¹, Gazdag P¹, Jost N^{1,2}, Virag L.¹, Baczko I¹, Varro A^{1,2}

¹Department of Pharmacology and Pharmacotherapy University of Szeged, ²MTA-SZTE Cardiovascular Pharmacology Research Group, Szeged, Hungary

P04 MODIFIED FATTY ACIDS PROFILE IN ERITHROCYTES IN SUBJECTS WITH METABOLIC SYNDROME

Arsic A¹, Ristic Medic D¹, Petrovic S¹, Stojanovic A², Vucic V¹

¹Center of Research Excellence in Nutrition and Metabolism, Institute for Medical Research, University of Belgrade, ²Clinical Hospital Center "Bezanijska Kosa" Belgrade, Serbia

P05 BLOOD PLASMA FATTY ACID ANALYSIS OF JCR-LA:CP RATS ON FLAXSEED SUPPLEMENTED DIET

Austria A¹⁻³, Parikh M¹⁻³, Kura B⁴, Garg B^{2,3}, Pierce G¹⁻³

¹Department of Physiology and Pathophysiology, Faculty of Health Sciences, University of Manitoba, ²Canadian Centre for Agri-food Research in Health and Medicine (CCARM), ³The Institute of Cardiovascular Sciences, St. Boniface Hospital Albrechtsen Research Centre, Winnipeg, Canada, ⁴Institute for Heart Research, Centre of Experimental Medicine, Slovak Academy of Sciences, Bratislava, Slovak Republic

P06 OMECAMTIV MECARBIL CAUSES THE ALTERNATION OF MYOCARDIAL EXCITATION-CONTRACTION COUPLING AT HIGH PACING FREQUENCIES

<u>Baranyai D</u>¹, Horvath B¹, Veress R¹, Nanasi PP¹, Fulop GA², Kovacs A², Csipo T², Papp Z², Olah A³, Radovits T³, Toth A²

¹Department of Physiology, Faculty of Medicine, University of Debrecen, ²Division of Clinical Physiology, Department of Cardiology, Faculty of Medicine, University of Debrecen, Debrecen, ³Semmelweis University, Heart and Vascular Centre, Budapest, Hungary

P07 NOVEL MATRIX METALLOPROTEINASE-2 INHIBITORS DECREASE THE INFARCT SIZE IN AN IN VIVO MODEL OF ACUTE MYOCARDIAL INFARCTION

<u>Bencsik P</u>^{1,2}, Gomori K^{1,2}, Kenyeres E¹, Szabados T¹, Pipis J², Dorman G³, Ferdinandy P^{2,4}, Gorbe A^{1,2,4}

¹Cardiovascular Research Group, Department of Pharmacology and Pharmacotherapy, Faculty of Medicine, University of Szeged, ²Pharmahungary Group, Szeged, ³Targetex Biosciences, Dunakeszi, ⁴Department of Pharmacology and Pharmacotherapy, Faculty of Medicine, Semmelweis University, Budapest, Hungary P08 CALCIUM/CALMODULIN-DEPENDENT PROTEIN KINASE II STIMULATES THE INWARD RECTIFIER POTASSIUM CURRENT IN BETA-ADRENERGIC ADAPTATION OF VENTRICULAR CARDIOMYOCYTES

<u>Bereczki M</u>¹, Kurtan B¹, Veress R¹, Baranyai D¹, Dienes C¹, Kiss D¹, Kovacs Z¹, Kistamas K¹, Banyasz T¹, Nanasi P^{1,2}, Szentandrassy N^{1,2}, Horvath B^{1,3}

¹Department of Physiology, Faculty of Medicine, University of Debrecen, ²Department of Dental Physiology, Faculty of Dentistry, University of Debrecen, ³Faculty of Pharmacy, University of Debrecen, Debrecen, Hungary

P09 ASSESSMENT OF PLATELET RESPIRATORY FUNCTION IN PREECLAMPSIA

<u>Bina AM</u>¹, Lelcu T¹, Avram VF¹, Aburel OM^{1,*}, Popa Z², Craina M², Muntean DM^{1,*}

¹Department of Functional Sciences - Pathophysiology, *Center for Translational Research and Systems Medicine, "Victor Babes" University and Medicine Pharmacy, ²Department of Obstetrics-Gynecology, University of Medicine and Pharmacy "Victor Babes", Timisoara, Romania

P10 ASSESSMENT OF SYSTEMIC OXIDATIVE STRESS IN PATIENTS WITH CARDIOMETABOLIC DISEASE: A PILOT STUDY

<u>Borza C</u>^{1,*} Anechitei A¹, Aburel OM^{1,*}, Sturza A^{1,*}, Noveanu L^{1,*}, Ionac A², Feier H³, Gaspar M³, Muntean DM^{1,*}, Mornos C²

¹Department of Functional Sciences - Pathophysiology, ²Department of Cardiology – 2nd Cardiology Clinic, ³Department of Cardiovascular Surgery, *Center for Translational Research and Systems Medicine, "Victor Babes" University of Medicine and Pharmacy, Timisoara, Romania

P11 SERUM CARTILAGE OLIGOMETRIC MATRIX PROTEIN-BIOMARKER OF EARLY RHEUMATOID ARTHRITIS ACTIVITY. A PILOT STUDY

Caraba A¹, Babalic FC¹, Toth E², Tudor A³, Borza C²

¹Department of Internal Medicine, Division of Rheumatology, "Victor Babes" University of Medicine and Pharmacy, ²Department of Pathophysiology, "Victor Babes" University of Medicine and Pharmacy, ³Department of Informatics and Biostatistics, "Victor Babes" University of Medicine and Pharmacy, Timisoara, Romania

P12 PRECONDITIONING WITH GALIUM VERUM L. EXTRACT PROTECTS THE RAT HEART AGAINST ISCHEMIA-REPERFUSION INJURY

<u>Bradic J¹</u>, Zivkovic V², Srejovic I², Jeremic J¹, Andjic M¹, Tomovic M¹, Bolevich S³, Petkovic A¹, Bolevich S⁴, Jakovljevic V^{2,4}

¹Department of Pharmacy, Faculty of Medical Sciences, University of Kragujevac, ²Department of Physiology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, Serbia, ³Department of Human Pathophysiology, 1st Moscow State Medical University IM Sechenov, ⁴Department of Human Pathology, 1st Moscow State Medical University IM Sechenov, Moscow, Russian Federation

P13 EFFECTS OF AN ETHANOLIC EXTRACT OF CHOKEBERRY (ARONIA MELANOCARPA (MICHX.) ELLIOTT) FRUIT ON BLOOD PRESSURE AND HEART RATE IN ANAESTHETIZED RABBITS

<u>Brankovic S¹</u>, Goemanac Ignjatovic M¹, Kostic M², Milutinovic M², Kitic N³, Miladinovic B², Kitic D²

¹Department of Physiology, Faculty of Medicine, University of Nis, ²Department of Pharmacy, Faculty of Medicine, University of Nis, ³Faculty of Medicine, University of Nis, Nis, Serbia

P14 WALNUTS PROTECT MALE RAT HEART AGAINST FRUCTOSE-RICH DIET INDUCED OXIDATIVE STRESS AND BLOOD PRESSURE INCREASE

Bubic M¹, Zivkovic M¹, Stanisic J², Koricanac G², Stankovic A¹

¹Laboratory for Radiobiology and Molecular Genetics, Vinca Institute of Nuclear Sciences, University of Belgrade, ²Laboratory for Molecular Biology and Endocrinology, Vinca Institute of Nuclear Sciences, University of Belgrade, Belgrade, Serbia

P15 THE ROLE OF BLOOD CELLS IN ATHEROSCLEROSIS: THE INFLUENCES OF SIMVASTATIN ON HEMATOLOGICAL PARAMETERS IN NEONATAL RATS TREATED WITH MONOSODIUM GLUTAMATE

<u>Ciric M¹</u>, Najman S², Nesic M¹, Puskas N³, Pavlovic V¹, Jankovic Velickovic Lj⁴, Ciric V⁵

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P16 EXERCISE-INDUCED REMODELING OF THE ATRIA IN STANDARDBRED RACEHORSES

<u>Dalgas Nissen S</u>¹, Carstensen H¹, Zander Hesselkilde E², Saljic A², Loft-Andersen A¹, Frederiksen S¹, Jespersen T², Buhl R¹

¹Department of Veterinary Clinical Sciences, Faculty of Health and Medical Sciences, University of Copenhagen, ²Department of Biomedical Sciences, Faculty of Health and Medical Sciences, University of Copenhagen, Copenhagen, Denmark

P17 ACUTE INHIBITION OF MONOAMINE OXIDASE MITIGATES THE PROTECTIVE EFFECTS OF RENAL PRECONDITIONING IN RATS

Danila MD¹, Aburel OM^{1,2}, Muntean DM^{1,2}

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P18 ADMINISTRATION OF SACUBITRIL PLUS VALSARTAN IN PATIENTS WITH HEART FAILURE Leal RS¹, Blackman AO², Rodrigues TM¹

¹Morphology Department, Federal University of Sergipe, Sergipe, ²Faculty of Education and

Health Sciences, Universitary Center of Brasília, Brasilia, Brazil

P19 LC PUFA IN PREVENTION OF INTENSIVE AND PROLONGED EXERCISE INDUCED CHANGES IN DOG'S HEALTH Debeljak Martacic J, Popovic T, Ravic B, Pokimica B, Rankovic S, Petrovic Oggiano G, Kardum N, Glibetic M

Institute for Medical Research, University of Belgrade, Belgrade, Serbia

P20 THE EFFECTS OF SODIUM NITRITE ON THE CALCIUM HOMEOSTASIS OF THE CARDIOMYOCYTES AND MITOCHONDRIA

Demeter-Haludka V¹, Kovacs M², Prorok J¹, Nagy N¹, Varro A¹, Vegh A¹

¹Department of Pharmacology and Pharmacotherapy, University of Szeged, ²Hungarian Academy of Sciences, Biological Research Centre, Szeged, Hungary

P21 THE EFFECT OF L-2286 TREATMENT IN OXIDATIVE STRESS ON MITOCHONDRIAL DYNAMICS AND FUNCTION IN AN IN VITRO CARDIOMYOBLAST MODEL

<u>Deres L</u>^{1,2}, Ordog K^{1,2}, Horvath O^{1,2}, Bruszt K^{1,2}, Sumegi B^{2,3,4}, Gallyas F^{2,3,4}, Toth K^{1,2}, Halmosi R^{1,2}

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P22 A NOVEL ANDERSEN-TAWIL SYNDROME MUTATION LEADS TO LOSS OF FUNCTION DUE TO IMPAIRED CYTOPLASMIC DOMAIN INTERACTIONS

<u>Deri S</u>¹, Borbas J², Hartai T¹, Hategan L², Csanyi B², Visnyovszky A¹, Madacsy T³, Maleth J³, Hegedus Z⁴, Nagy I⁵, Labro A⁶, Forster T², Varro A¹, Sepp R², Ordog B¹

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P23 HEAT SHOCK PROTEIN-60 MODULATES VASCULAR SMOOTH MUSCLE CELL PROLIFERATION

Deniset J^1 , Hedley T^1 , Hlavackova M^2 , Maddaford G^1 , <u>Dibrov E</u>¹, Pierce G^1

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P24 TRPM4 INHIBITOR 9-PHENANTHROL BLOCKS NA⁺ AND K⁺ BUT NOT CA²⁺ CURRENTS IN CANINE VENTRICULAR MYOCYTES

<u>Dienes C¹</u>, Veress R¹, Baranyai D¹, Hezso T¹, Hegyi B², Kistamas K¹, Magyar J³, Banyasz T¹, Nanasi P⁴, Szentandrassy N⁴, Horvath B¹

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P25 ASSOCIATION BETWEEN HYPERHOMOCYSTEINEMIA AND THE SEVERITY OF CORONARY ARTERY DISEASE ACCORDING TO SYNTAX SCORE

<u>Djuric P</u>¹, Obradovic S¹, Mladenovic Z¹, Spasic M¹, Jovic Z¹, Prokic D², Lecic Krstic I³, Radojicic Z⁴, Djuric D⁵

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P26THE EFFECTS OF CHRONIC FLAXSEED OIL AND α-
LINOLENIC ACID ADMINISTRATION ON REDOX STATUS OF
MALE AND FEMALE RATS:A COMPARATIVE STUDY

<u>Draginic N</u>¹, Andjic M¹, Radoman K², Jeremic J¹, Bradic J¹, Nikolic Turnic T¹, Srejovic I³, Zivkovic V³, Bolevich S⁴, Jakovljevic V^{3,4}

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P27 TREATMENT OF ACUTE MYOCARDIAL INFARCTION WITH RECANALIZATION ACCOMPANIED WITH ISCHEMIC POSTCONDITIONING: STUDY ON CARDIOPROTECTION AND BIOMARKERS

<u>Ernst M</u>¹, Sasi V², Kenyeres E¹, Szabados T¹, Gavaller H², Ungi I², Fodor E³, Barczi G⁴, Vago H⁴, Merkely B⁴, Ferdinandy P^{3,5}, Bencsik P^{1,3}

¹Department of Pharmacology and Pharmacotherapy, Faculty of Medicine, University of Szeged, ²Department of Invasive Cardiology, 2nd Department of Internal Medicine and Cardiology Center, Faculty of Medicine, University of Szeged, ³Pharmahungary Group, Szeged, ⁴Heart and Vascular Center, Semmelweis University, Budapest, ⁵Department of Pharmacology and Pharmacotherapy, Faculty of Medicine, Semmelweis University, Budapest, Hungary

P28 EFFECTS OF POLYUNSATURATED FATTY ACID-RICH DIET AND CHRONIC FIBRATE PRETREATMENT IN A RAT HEART FAILURE MODEL

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P29 IDENTIFICATION OF POTENTIAL EXERCISE INITIATED SMALL MOLECULES TO SUPPORT ORGAN REGENERATION AND REPAIR IN HUMANS

<u>Faskerti G</u>^{1,5}, Czuni LA^{3,5}, Takatsy A¹, Ronai D¹, Nagy Z², Rendeki S³, Rendeki M³, Koltai A³, Maar K^{1,5}, Gallyas F^{1,5}, Bock-Marquette I^{1,5}

¹Departments of Biochemistry and Medical Chemistry, ²Laboratory Medicine, ³Military Medicine, Disaster Medicine, And Law Enforcement Medicine, University of Pecs Medical School, ⁴Institute of Biology, Faculty of Sciences, ⁵Szentagothai Research Centre University of Pecs, Pecs, Hungary

P30 CARDIOVASCULAR AND METABOLIC EFFECTS OF QUERCETIN IN ZUCKER DIABETIC RATS

<u>Ferenczyova K</u>¹, Kalocayova B¹, Kindernay L¹, Sykora M¹, Frimmel K¹, Balis P², Zemancikova A², Torok J², Lory V³, Kubicova P³, Balogova E³, Krskova K³, Zorad S³, Bartekova M¹

¹Institute for Heart Research, Centre of Experimental Medicine, Slovak Academy of Sciences, ²Institute of Normal and Pathological Physiology, Centre of Experimental Medicine, Slovak Academy of Sciences,³Institute of Experimental Endocrinology, Biomedical Research Center, Slovak Academy of Sciences, Bratislava, Slovak Republic

P31 THE LEFT VENTRICLE IS LOADED AND EJECTS IN THE ISOLATED LANGENDORFF-PERFUSED RAT HEART

<u>Gazdag P</u>¹, Polyák A^{2,3}, Csík N⁴, Prorok J¹, Varró A^{1,3}, Baczkó I, Farkas AS², Farkas A²

¹Department of Pharmacology and Pharmacotherapy, Faculty of Medicine, University of Szeged, ²Second Department of Medicine and Cardiology Centre, Faculty of Medicine, University of Szeged, ³Working Group of Cardiovascular Pharmacology, Hungarian Academy of Sciences, Szeged, ⁴John von Neumann University, GAMF Faculty of Engineering and Computer Science, Computer Science Engineering, Kecskemet, Hungary

P32 VASODILATORY EFFECT OF THE UNRIPE FENNEL FRUIT AQUEOUS EXTRACT (*FOENICULUM VULGARE* MILLER) ON THE RAT AORTA

<u>Goemanac Ignjatovic M</u>¹, Brankovic S¹, Kitic D², Milutinovic M², Kostic M², Miladinovic B², Kitic N³

¹Department of Physiology, Faculty of Medicine, University of Nis, ²Department of Pharmacy, Faculty of Medicine, University of Nis, ³Faculty of Medicine, University of Nis, Nis, Serbia

P33 INVOLVEMENT OF VOLTAGE-GATED POTASSIUM CHANNELS (Kv) IN THE RELAXANT EFFECTS OF RESVERATROL ON ISOLATED SAPHENOUS VEIN FROM DIABETIC PATIENTS

<u>Gostimirovic M¹</u>, Peric M², Novakovic R¹, Rajkovic J¹, Djokic V¹, Terzic D³, Putnik S³, Bukarica A⁴, Gojkovic Bukarica Lj¹

¹Institute of Pharmacology, Clinical Pharmacology and Toxicology, Faculty of Medicine, University of Belgrade, ²Dedinje Cardiovascular Institute, ³Clinic for Cardiosurgery, Clinical Centre of Serbia, ⁴Faculty of Medicine, University of Belgrade, Belgrade, Serbia

P34 SARCOLEMMAL CALCIUM ENTRY THROUGH L-TYPE CALCIUM CHANNELS CONTROLS THE PROFILE OF CALCIUM ACTIVATED CHLORIDE CURRENT IN CANINE VENTRICULAR MYOCYTES

<u>Horvath B</u>^{1,2}, Szentandrassy N^{1,3}, Hegyi B¹, Vaczi K¹, Gonczi M¹, Dienes B¹, Kistamas K¹, Veress R¹, Ruzsnavszky F¹, Banyasz T¹, Magyar J^{1,4}, Baczko I⁵, Varro A^{6,7}, Seprenyi G⁸, Csernoch L¹, Nanasi PP^{1,2}

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P35 PLEIOTROPIC ACTION OF RIP1: A COMPARATIVE STUDY OF VARIOUS RIP1 INHIBITORS

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P36 THE EFFECT OF BGP-15 TREATMENT ON MITOCHONDRIAL DYNAMICS AND FUNCTION IN IN VIVO ANIMAL MODEL AND IN CELL CULTURE

<u>Horvath O</u>^{1,2}, Ordog K^{1,2}, Bruszt K^{1,2}, Sumegi B^{3,4}, Toth K^{1,2,4}, Halmosi R^{1,2}, Deres L^{1,2,4}

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P37 EFFECT OF METFORMIN ON THE PROGRESSION OF POST-ISCHEMIC HEART FAILURE IN TRANSGENIC SPONTANEOUSLY HYPERTENSIVE RATS EXPRESSING HUMAN C-REACTIVE PROTEIN Hrdlicka J, Papousek F, Silhavy J, Akat F, Pravenec M, Kolar F, Neckar J

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P38 ISCHAEMIC PRECONDITIONING PREVENTS THE HIDDEN ELECTROPHYSIOLOGICAL CARDIOTOXIC EFFECTS OF ROFECOXIB

<u>Husti Z</u>¹, Varga RS¹, Brenner G², Bencsik P¹, Giricz Z^{2,3}, Gorbe A^{1,2,3}, Shulz R⁴, Varro A¹, Ferdinandy P^{2,3}, Baczko I¹

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P39 PHARMACY STUDENTS' ATTITUDES ON ELECTRONIC CIGARETTES USE: A CROSS-SECTIONAL STUDY

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P40 ESSENTIAL HYPERTENSION MORTALITY IN SERBIA, 1991-2016: A JOINPOINT REGRESSION ANALYSIS Ilic I¹, Sipetic S², Grujicic J³, Ilic M⁴

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P41 RISK FACTORS OF MYOCARDIAL INFARCTION IN ELDERLY AND NON-ELDERLY: A CASE-CONTROL STUDY Ilic I¹, Sipetic S², Grujicic J³, Ilic M⁴

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P42 OLIVE LEAF COMPOUND OLEUROPIEN EXERTS NEGATIVE INOTROPIC AND CHRONOTROPIC EFFECTS ON ISOLATED RAT ATRIA

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P43 THE INFLUENCE OF FOLIC ACID APPLICATION ON CARDIAC OXIDATIVE STRESS PARAMETERS AND CARDIOMETABOLIC MARKERS IN MONOCROTALINE-INDUCED HEART FAILURE IN WISTAR MALE RATS

<u>Jakovljevic Uzelac J</u>¹, Mutavdzin S¹, Todorovic D¹, Stankovic S², Labudovic Borovic M³, Milic N⁴, Vasic M⁵, Japundzic Zigon N⁵, Simic T⁶, Djuric D¹

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P44 ALTERATIONS OF OXIDATIVE STRESS PARAMETERS IN CORONARY VENOUS EFFLUENT OF ISOLATED RAT HEART BY MODULATING N-METHYIL-D-ASPARTATE RECEPTORS Lokaimovia Lovia I¹ Strajovia I¹ Zivkovia V¹ Loromia N² Milosovliavia I

Joksimovic Jovic J¹, Srejovic I¹, Zivkovic V¹, Jeremic N², Milosavljevic I², Nikolic Turnic T², Bolevich S³, Djuric D⁴, Jakovljevic V^{2,3}

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P45 SUPEROXIDE DISMUTASE-1 AND CATALASE EXPRESSIONS IN THE KIDNEY OF HYPERTENSIVE RATS WITH ADRIAMYCIN NEPHROPATHY: EFFECTS OF OLIVE LEAF EXTRACT

<u>Karanovic D</u>¹, Mihailovic Stanojevic N¹, Miloradovic Z¹, Ivanov M¹, Vajic UJ¹, Grujic Milanovic J¹, Cirovic S², Dekanski D³, Jovovic Dj¹

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P46 UBIQUINONE PLASMA LEVELS CORRELATED WITH BRAIN NATRIURETIC PEPTIDE PLASMA LEVELS IN PATIENTS WITH CHRONIC HEART FAILURE: THE POTENTIAL OF COENZYME Q10 COMBINED THERAPY

Kartasheva M, Bolevich SB, Bolevich SS, Sizova ZhM, Shikh EV

I.M. Sechenov First Moscow State Medical University (Sechenov University), Moscow, Russian Federation

P47 REGULATION OF THE DELAYED RECTIFIER POTASSIUM CURRENT DURING THE ADRENERGIC ADAPTATION OF CARDIOMYOCYTES

<u>Kiss D</u>¹, Hezso T¹, Kurtan B¹, Veress R¹, Baranyai D¹, Kovacs Z¹, Dienes C¹, Szentandrassy N², Banyasz T¹, Magyar J³, Nanasi P², Horvath B¹

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P48 COMPARISON OF THE EFFECTS OF PROPOFOL, KETAMINE AND ETOMIDATE ON CARDIODYNAMICS AND OXIDATIVE STRESS PARAMETERS IN WISTAR MALE RATS

<u>Kostic S</u>¹, Djuric M², Nikolic Turnic T³, Srejovic I⁴, Zivkovic V⁴, Stevanovic P², Jakovljevic V^{4,5}, Djuric D¹

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P49 MYOCARDIAL AGING: EFFECTS OF LONG-TERM SILDENAFIL TREATMENT ON EXPRESSION OF GENES THAT REGULATE MITOCHONDRIAL DYNAMICS Andrejic M, Medar MM, Andric SA, Kostic TS

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P50 THE IMPACT OF SELECTED DIETARY ANTHOCYANINS AND THEIR MIXTURE ON PLATELET ACTIVATION AND AGGREGATION WITH LEUKOCYTES

<u>Krga I^{1,2}</u>, Vidovic N¹, Milenkovic D², Konic Ristic A¹, Morand C², Glibetic M¹

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P51 EUGENOL MITIGATES AS(III)-INDUCED HYPERCONTRACTION IN RAT AORTA THROUGH QUENCHING OF ROS AND INCREASE OF NITRIC OXIDE BIOAVAILABILITY

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P52 MOLECULAR HYDROGEN ATTENUATES OXIDATIVE STRESS IN HEART INJURY

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P53 TWO NOVEL CSRP3 VARIANTS IDENTIFIED IN PATIENTS WITH HYPERTROPHIC CARDIOMYOPATHY

Kusic Tisma J¹, <u>Rakicevic L</u>j¹, Ptakova N², Tesic M³, Macek M Jr², Radojkovic D¹

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P54 MMPs HAPLOTYPES IN ASSOCIATION WITH MYOCARDIAL INFARCTION AND ECHOCARDIOGRAFIC PARAMETERS OF LEFT VENTRICULAR REMODELING

<u>Kuveljic J¹</u>, Djordjevic A¹, Zivkovic M¹, Popic K¹, Dekleva M², Markovic Nikolic N², Alavantic D¹, Stankovic A¹, Djuric T¹

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P55 IMPAIRMENT OF PLATELET RESPIRATION AS EARLY BIOMARKER OF HEMATOLOGIC MALIGNANCIES Lelcu T¹, Bina AM¹, Avram VF¹, Aburel OM^{1,*}, Borza C^{1,*}, Arghirescu S², Muntean DM^{1,*}

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FRIDAY, SEPTEMBER 13th, 2019

POSTER SESSION II

(The presence of poster authors is required from 18.30-20.00)

Chairs (P56-P83): Gilchrist J (Winnipeg, Canada), Miloradovic Z (Belgrade, Serbia), Tremblay J (Montreal, Canada) Chairs (P84-P110): Maurice D (Kingston, Canada), Tappia P (Winnipeg, Canada), Virag L (Szeged, Hungary)

P56 QUANTITATIVE ASSESSMENT OF MICROVASCULAR NETWORK MORPHOLOGY AND CARDIOVASCULAR RISK IN DIABETIC RETINOPATHY

Lipovac M, Popovic N

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P57 VOLUNTARY EXERCISE AND DELAYED "REMOTE" PRECONDITIONING AS NONINVASIVE AND CLINICALLY RELEVANT FORMS OF "CONDITIONING" OF THE HEART Lonek L¹, Kindernay L¹, Puhova A², Zahradnikova A, Jr², Kovacova D³, Zohdi V⁴, Jezova D², Ferko M¹, Ravingerova T¹

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P58 THE LEVEL OF EXPRESSION OF V1b RECEPTORS IN HYPOTHALAMIC PVN DEFINES REACTIVITY TO EMOTIONAL STRESS

Lozic M¹, Greenwood M², Murphy D², Japundzic Zigon N¹

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P59 THYMOSIN BETA-4 INFLUENCES MIR1196 EXPRESSION FOLLOWING CARDIAC INFARCTION IN ADULT MICE <u>Maar K¹</u>, Thatcher J³, Shivastava S³, DiMaio JM³, Olson EN², Gallyas F¹, Bock Marquette I^{1,2,3}

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P60 THE EFFECT OF FERROSTATIN-1 ON ISCHEMIA REPERFUSION INJURY IN ADULT RAT CARDIOMYOCYTES Stamenkovic A¹⁻³, Maddaford TG¹⁻³, Ravandi A^{1,4}, Pierce GN¹⁻³

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P61 ROLE OF OXIDIZED-PHOSPHOLIPIDS IN ISCHEMIA-REPERFUSION INJURY AND ITS MITIGATION BY IL-10 Bagchi AK^{1,2}, Surendran A^{1,2}, Malik A^{1,2}, Jassal DS^{1,3}, Ravandi A^{1,3}, Singal PK^{1,2}

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P62 MARKERS OF MITOCHONDRIAL BIOGENESIS, FUSION AND ARCHITECTURE ARE DISTURBED IN PBMC FROM WAR VETERANS WITH POSTTRAUMATIC STRESS DISORDER Markovic AZ^{1*}, Milosevic MM^{1*}, Radovic SM¹, Starovlah IM¹, Brkljacic J², Vojnovic Milutinovic D², Matic G², Kostic TS¹, <u>Andric SA¹</u>

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P63 PIOGLIAZONE ATTENUATES KIDNEY INJURY IN AN EXPERIMENTAL MODEL OF GENTAMICIN-INDUCED NEPHROTOXICITY IN RATS

<u>Medic Brkic B¹</u>, Stojanovic M¹, Savic Vujovic K¹, Rovcanin B², Kekic D³, Radojevic Skodric S⁴, Basta Jovanovic G⁴, Prostran M¹

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P64 TIME-DEPENDENT EFFECT OF HIGH SALT ON HYPERTROPHY AND GLYCOCALYX OF HUMAN VASCULAR SMOOTH MUSCLE CELLS

Menkovic I, Simon Y, Bkaily C, Jacques D, Bkaily G

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P65 THE EFFECT OF THE CHRONIC ADMINISTRATION OF DPP4-INHIBITORS ON SYSTEMIC OXIDATIVE STRESS IN RATS WITH DIABETES TYPE 2

<u>Milosavljevic I</u>¹, Bolevich S², Jeremic N¹, Zivkovic V³, Srejovic I³, Jeremic J¹, Draginic N¹, Andjic M¹, Bolevich S³, Jakovljevic V^{3,4}

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P66 PROTECTIVE EFFECTS OF *VISCUM ALBUM* L. LEAF EXTRACT IN BLOOD AND HEART OF RATS INTOXICATED BY CHLORPYRIFOS

<u>Milosevic M¹</u>, Paunovic M¹, Matic M¹, Maskovic P², Obradovic A¹, Ognjanovic B¹

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P67 BODY FAT ASSESSMENT BY AIR DISPLACEMENT PLETHYSMOGRAPHY AND ABDOMINAL ULTRASOUND: CORRELATIONS WITH THE BODY MASS INDEX

Muntean P, Miclos-Balica M, Pupazan V, Neagu M, Neagu A

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P68 CARDIAC AND LIVER RISK IN DIABETIC RATS – THE EFFECTS OF PYRIDOXINE

<u>Mutavdzin S</u>¹, Gopcevic K², Jakovljevic Uzelac J¹, Todorovic D¹, Stankovic S³, Labudovic Borovic M⁴, Djuric D¹

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P69 ACTION POTENTIAL RESTITUTION DOES NOT PREDICT ALTERNANS DEVELOPMENT IN CANINE VENTRICULAR TISSUE

Nagy N^{1,2}, Szlovak J¹, Toth N¹, Papp JG^{1,2}, Varro A^{1,2}

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P70 THE EFFECTS OF THIAMINE HYDROCHLORIDE ON CARDIAC FUNCTION, REDOX STATUS AND MORPHOMETRIC ALTERATIONS IN DOXORUBICIN-TREATED RATS

<u>Nikolic Turnic T</u>¹, Radonjic T², Rankovic M¹, Ravic M¹, Zivkovic V³, Srejovic I³, Jeremic J¹, Jeremic N¹, Sretenovic J³, Matic S⁴, Jakovljevic V^{3,5}

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P71 EVALUATION OF ECG REPOLARIZATION PARAMETERS IN YOUNG COMPETITIVE ATHLETES

<u>Orosz A</u>¹, Nikolic I², Vagvolgyi A⁶, Stojmenovic T², Dikic N², Nedeljkovic I³, Jakovljevic V⁴, Nemes A⁵, Lengyel C⁶, Baczko I¹, Varro A¹

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P72 DOXORUBICIN-INDUCED CARDIOMYOPATHY: IS THERE MORE THAN ONE PHENOTYPE?

Pajovic V¹, Matic M¹, Vasic M¹, Sarenac O¹, Bajic D², Japundzic Zigon N¹

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P73 UNFORABLE CHANGES IN FATTY ACID STATUS AND ENZIMATIC ACTIVITIES IN PATIENTS WITH METABOLIC SYNDROME

Petrovic S, Kojadinovic M, Vucic V, Ristic Medic D, Glibetic M, Arsic A

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P74 INVESTIGATION OF THE MECHANISM OF HEART RATE-DEPENDENT CORONARY FLOW INCREASE IN ISOLATED LANGENDORFF-PERFUSED RAT HEARTS

Polyak A^{1,2}, Gazdag P³, Csik N⁴, Prorok J³, Varro A^{2,3}, Baczko I³, Farkas AS¹, Farkas A¹

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P75 IMPROVING CARDIVASCULAR RISK AND ATHEROPROTECTION IN AGING

<u>Popovic T¹</u>, Debeljak Martacic J¹, Arsic A¹, de Luka S², Trbovic A², Glibetic M¹

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P76 CONDITIONAL DELETION OF INSULIN AND IGF1 RECEPTORS IN STEROIDOGENIC CELLS CHANGE PROFILE OF MOLECULAR MARKERS OF MITOCHONDRIAL DYNAMICS IN HEARTS OF PREPUBERTAL MALE, BUT NOT FEMALE MICE Radovic SM, Starovlah IM, Nef S, Kostic TS, Andric SA

Laboratory for Reproductive Endocrinology and Signaling, Laboratory for Chronobiology and Aging, Centre of Excellence CeRES, Faculty of Sciences, University of Novi Sad, Novi Sad, Serbia P77 CYP2C19*2 VARIANT IS A PREDICTOR OF POOR CLOPIDOGREL RESPONSE AND CAN BE BASE FOR THE ECONOMICALLY RATIONALIZED ANTIAGREGATION THERAPY PROTOCOL IN SERBIAN POPULATION <u>Rakicevic Lj¹</u>, Novkovic M¹, Kusic Tisma J¹, Matic D², Antonijevic A², Backovic D³, Calija B⁴, Strugarevic E⁴, Radak D^{4,5}, Kovac M^{5,6}, Mitropoulou C⁷, van Schaik R⁷, Fragoulakis V^{8,9}, Vozikis A¹⁰, Patrionos G⁸, Radojkovic D¹

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P78 THE IMPACT OF SEX-DIMORPHISM ON DOXORUBICIN INDUCED CARDIOTOXICITY ON MYOCARDIAL FUNCTION AND REDOX STATUS OF ISOLATED RAT HEART

<u>Rankovic M¹</u>, Bradic J¹, Radonjic K¹, Srejovic I², Zivkovic V², Vucicevic K¹, Jeremic N¹, Bolevich S³, Jakovljevic V^{2,3}

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P79 EFFECTS OF DIFFERENT DIETS ON PLASMA BIOCHEMICAL PARAMETERS

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P80 SWIMMING ATTENUATES BLOOD PRESSURE AND OXIDATIVE STRESS IN HIGH SALT-INDUCED HYPERTENSIVE RATS

<u>Ravic M¹</u>, Plecevic S², Bolevich S³, Jeremic J¹, Bolevich S⁴, Nikolic Turnic T¹, Jakovljevic V^{4,5}, Jeremic N¹

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P81 DIETARY FATS INTAKE AND OMEGA-3 INDEX IN HYPERTENSIVE AND DIABETIC PATIENTS WITH CHRONIC KIDNEY DISEASE - A PILOT STUDY

<u>Ristic Medic D</u>¹, Takic M¹, Zekovic M¹, Vucic V¹, Petrovic S¹, Arsic A¹, Radjen S²

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P82 EFFECTS OF FRUCTOSE-RICH DIET AND CHRONIC STRESS ON INSULIN SIGNALING IN THE HEART OF MALE RATS

<u>Romic S</u>¹, Djordjevic A², Tepavcevic S¹, Culafic T¹, Stojiljkovic M¹, Bursac B², Stanisic J¹, Kostic M¹, Gligorovska Lj², Koricanac G¹

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P83 IN VIVO KNOCKDOWN OF SK3 CHANNELS USING LNA GAPMERS PROTECTS AGAINST ATRIAL FIBRILLATION IN RATS: A NOVEL APPROACH FOR STUDYING CARDIAC ELECTROPHYSIOLOGY

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P84 MODULATION OF SALT APPETITE THROUGH CENTRAL KAPPA OPIOID SYSTEM

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P85 ELECTRICAL MAPPING OF SPONTANEOUS VENTRICULAR FIBRILLATION DURING ACUTE MYOCARDIAL INFARCTION IN A PORCINE MODEL

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P86 INVOLVEMENT OF SEROTONERGIC AND OPIOIDERGIC SYSTEMS IN THE ANTINOCICEPTIVE EFFECT OF KETAMINE-MAGNESIUM SULPHATE COMBINATION IN FORMALIN TEST IN RATS

Savic Vujovic K, Vuckovic S, Medic B, Srebro D, Prostran M

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P87 BORDERLINE HYPERTENSIVE RATS OVER-EXPRESS VASSOPRESIN AND V1b RECEPTORS IN THE HYPOTHALAMIC PVN

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P88 OXIDATIVE STATUS IN PATIENTS WITH NSTEMI MYOCARDIAL INFARCTION

Savovic Z¹, Jakovljevic V^{2,3}, Jeremic J⁴, Petkovic A⁴, Iric Cupic V^{1,5}

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P89 THE CONNECTION BETWEEN SLEEP QUALITY AND CIGARETTE SMOKING HABIT WITH A BODY MASS INDEX Smiljic S, Milanovic Z, Nestorovic V, Miletic M, Dejanovic M

Department of Physiology, Faculty of Medicine, University of Pristina Kosovska Mitrovica, Kosovska Mitrovica, Serbia

P90 EFFECTS OF TWO DIFFERENT TYPES OF TRAINING ON MORPHOMETRIC PARAMETERS AND COLLAGEN CONTENT OF THE LEFT VENTRICLE MYOCARDIUM

<u>Sretenovic J</u>¹, Jakovljevic B², Zivkovic V¹, Srejovic I¹, Milosavljevic Z³, Milosevic V⁴, Jakovljevic V^{1,5}

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P91 BIOLOGICAL EFFECTS OF CHRONIC LOW-DOSE EXPOSURE OF HUMAN ENDOTHELIAL CELL LINE EA.hy926 TO BISPHENOL A

Stanic B, Kokai D, Andric N

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P92 PSYCHOPHYSIOLOGICAL STRESS CHANGES TRANSCIPTIONAL PROFILE OF MOLECULAR MARKERS OF MITOCHONDRIAL DYNAMICS IN HEARTS OF ADULT MALE RATS

Starovlah IM, Radovic SM, Kostic TS, Andric SA

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P93 OLEUROPEIN MODERATELY AFFECTS PHENILEPHRINE-INDUCED RAT AORTA CONTRACTIONS

Stojiljkovic N¹, Ilic S¹, Stojanovic N², Stoiljkovic M³

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P94 TROPONIN AND THE ONSET OF CARDIOVASCULAR DISEASES IN PATIENTS WITH CHRONIC KIDNEY DISEASE <u>Stopic B¹</u>, Medic Brkic B², Stojanovic M², Todorovic J³, Savic Vujovic K²,

Davidovic Z¹, Dimkovic N¹

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P95 NOVEL INSIGHTS INTO VASCULAR PROTECTION OF METFORMIN IN EXPERIMENTAL SETTING OF ENDOTHELIAL DYSFUNCTION

Sturza A^{1,*}, Ionică LN¹, Aburel OM^{1,*}, Noveanu L^{1,*}, Muntean DM^{1,*}

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P96 ASSESSMENT OF VITAMIN D EFFECTS ON OXIDATIVE STRESS IN VARICOSE VEINS HARVESTED FROM OBESE AND NON-OBESE PATIENTS

Sturza A^{1,*}, Ratiu S², Olariu S², Muntean DM^{1,*}

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P97 THE ROLE OF Na⁺/Ca²⁺ EXCHANGER IN THE Ca²⁺-GOVERNED ALTERNANS IN CANINE AND HUMAN MYOCARDIUM

Szlovak J¹, Toth N¹, Gazdag P¹, Tomek J², Pollesello P³, Virag L¹, Papp JG¹, Varro A¹, Nagy N¹

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P98 THE OMEGA-3 INDEX IN RECREATIONAL RUNNERS-PILOT STUDY

Takic M, Pantovic A, Stevanovic V, Kardum N, Zekovic M, Glibetic M

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P99 STATIC MAGNETIC FIELD REDUCES BP VARIABILITY AND ENHANCES BARO-RECEPTOR REFLEX SENSITIVITY IN SH RATS

Tasic T¹, Djordjevic D², De Luka SR², Trbovic A², Japundzic Zigon N³

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P100 ACTUAL LEVEL OF [Ca²⁺]_i CRITICALLY INFLUENCES THE EFFECT OF Na⁺/Ca²⁺ EXCHANGER INHIBITION IN THE SINUS NODE PACEMAKING

<u>Toth N</u>¹, Szlovak J¹, Loewe A³, Bitay G¹, Gazdag P¹, Pollesello P⁴, Papp JG^{1,2}, Varro A^{1,2}, Nagy N^{1,2}

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Ussher J, Lopaschuk G

Cardiovascular Research Centre, University of Alberta, Edmonton, Canada

P102 ANTIARRHYTHMIC AND CARDIAC ELECTROPHYSIOLOGICAL EFFECTS OF SZV-270, A NOVEL COMPOUND WITH COMBINED CLASS I/B AND CLASS III EFFECTS, IN RABBITS AND DOGS Varga R¹, Hornyik T¹, Husti Z¹, Juhasz V¹, Matyus P¹, Varro A^{1,2},

Baczko I¹

¹Department of Pharmacology and Pharmacotherapy, University of Szeged, ²MTA-SZTE Research Group of Cardiovascular Pharmacology, Hungarian Academy of Sciences, Szeged, Hungary

P103 CALCIUM-ACTIVATED CHLORIDE CURRENT IS ANTIARRHYTHMIC BY REDUCING BOTH SPATIAL AND TEMPORAL HETEROGENEITY OF CARDIAC REPOLARIZATION

<u>Veress R</u>¹, Hegyi B^{1,2}, Horvath B¹, Vaczi K^{1,3}, Gonczi M¹, Kistamas K¹, Ruzsnavszky F^{1,3}, Izu LT³, Chen-Izu Y^{3,4,5}, Banyasz T¹, Magyar J^{1,6}, Csernoch L¹, Nanasi PP^{1,7}, Szentandrassy N^{1,7}

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P104 ALTERATIONS OF FIBRINOLYSIS IN WOMEN WITH RHEUMATOID ARTHRITIS: CORRELATION TO CLOT LYSIS TIME

<u>Vranic A¹</u>, Antovic J^{2,3}, Veselinovic M⁴, Pruner I², Petkovic A¹, Jakovljevic V^{5,6}, Antovic A⁷

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P105 RATE PRESSURE AND OBSTRUCTIVE APNEA

<u>Vuckovic Filipovic J</u>¹, Jakovljevic V², Davidovic G^{1,3}, Djokic B⁴, Iric Cupic V^{1,3}

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P106 CARDIOPROTECTIVE MECHANISMS OF A SYNTHETIC EPOXYEICOSANOID MIMETIC DEVELOPED FOR THE TREATMENT OF ATRIAL FIBRILLATION

Wesser T¹, Konkel A¹, Lossie J¹, Dobrev D², Seubert J³, Fischer R¹, Schunck WH⁴

¹OMEICOS Therapeutics GmbH, Berlin, ²Institute of Pharmacology, University Duisburg-Essen, ³Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, Edmonton, Canada, ⁴Max Delbrueck Center for Molecular Medicine, Berlin, Germany

P107 SOCS3 GENE THERAPY PREVENTS INTIMAL HYPERPLASIA AND RESTENOSIS FOLLOWING BALLOON ANGIOPLASTY IN CORONARY ARTERY DISEASE Wilson V

Queen's University Belfast School of Medicine, Belfast, United Kingdom

P108 PERINEURAL MIGRATION OF STEM CELLS ALONG CRANIAL NERVES FOR CORRECTION OF IMPAIRED FUNCTIONS OF BRAIN AND VISCERAL ORGANS Zamaro AS

Brain Center, Institute of Physiology, National Academy of Sciences, Minsk, Belarus

P109 ARE INDIVIDUAL CIRCULATING FATTY ACIDS PROMISING CARDIOMETABOLIC BIOMARKERS? FINDINGS FROM A COHORT STUDY AND A RANDOMIZED INTERVENTION STUDY TOWARDS PERSONALIZED NUTRITION STRATEGIES BASED ON NUTRIGENETICS

Zec M¹, Smuts CM², Schutte AE^{3,4}, Kruger HS², Stojkovic Lj⁵, Ojwang AA², Zivkovic M⁵, Stankovic A⁵, Glibetic M¹

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P110 CARDIOPROTECTIVE EFFECTS OF SIMVASTATIN AGAINST ENDOTOXIN-INDUCED APOPTOSIS OF CARDIOMYOCYTES

Nezic L^{1,2}, Skrbic R^{1,2}, Amidzic LJ^{1,3}, Stojiljkovic MP^{1,4}, Jacevic V^{5,6,7}

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NOTICE FOR POSTER AWARDS COMPETITION:

Posters will be evaluated by 4 different committees (3 judges in each committee) for the following 12 Posters Awards: Morris Karmazyn Poster Awards – 4 Margaret Moffat Poster Awards – 4 Karl Werdan Poster Awards – 2 Keld Kjeldsen Poster Awards – 2

IMPORTANT INFORMATION

MEETING DATE - September 11th-14th, 2019

MEETING VENUE

Venue for Main Meeting: Hotel Fontana, Vrnjacka Banja, Serbia (Date: September 11th-14th, 2019) <u>(participation upon registration only)</u> Venue for Cardiology Pre-Meeting: Hotel Sumarice, Kragujevac, Serbia (Date: September 10th, 2019)

REGISTRATION DESK

The pre-meeting and meeting desk will be open on:

September 10th 13.00 – 18.15 September 11th 15.00 – 19.30 September 12th 08.30 – 19.30 September 13th 08.30 – 20.00 September 14th 08.30 – 13.00

REGISTRATION FEE

PARTICIPANTS	150 €
STUDENTS	100€
*Certificate/Confirmation required	
CME Participants	100€

Full registration fee includes one reception, 3 lunches, two dinners, coffee breaks and local transport in addition to conference material. Registration fee for all participants should be 150 Euros except for invited speakers, students and CME registrants.

NOTICE:

For attendees from abroad - payment in Euro to account of the Serbian Physiological Society:

Intermediary Bank / Correspondent Bank SWIFT - BIC: DEUTDEFF Name: DEUTSCHE BANK AG City, Country: FRANKFURT AM MAIN, GERMANY Account with institution / Beneficiary's Bank SWIFT - BIC: KOBBRSBG Name: KOMERCIJALNA BANKA AD BEOGRAD Street: Svetog Save 14 City, Country: 11000 Belgrade, Republic of Serbia

Beneficiary IBAN/Account Number: RS35205007080003380087 Company name: DFS BEOGRAD Street: Dr. Subotica 8 City, Country: Beograd - Savski venac, REPUBLIC OF SERBIA

For attendees from Serbia ONLY - payment in Dinars (according to the official currency rate on the day of payment) to Komercijalna Banka A. D. account of the Serbian Physiological Society number: 205-40932-94 KOMERCIJALNA BANKA A.D.

CME ACCREDITED PROGRAM FOR HEALTH PROFESSIONALS

6th Meeting of European Section and 7th Meeting of North American Section of the International Academy of Cardiovascular Sciences with general topic entitled "Cardiometabolic diseases: how new research may lead to new cardioprotective therapy (evidence No. A-1-1917/19)" has been accredited for continuing education program (physicians, dentists, pharmacists, biochemists) by the Health Council of Serbia (accreditation No. 153-02-01685/2019-01, date 19.08.2019.) with a number of credits for speaker 10, oral presenter 9, poster presenter 7, and participant 6.

In addition three accredited courses for health practitioners will be provided too, ie:

- ANTIPLATELET THERAPY – THIENOPYRIDINE DERIVATIVES

- Accreditation No. D-1-1096/18 (participants are physicians, pharmacists, pharmaceutical technicians)
- Continuing education program accredited by the Health Council of Serbia No. 153-02-3135/2018-01
- Number of credits: 5

- ORAL ANTICOAGULANTS - NON VITAMIN K ANTAGONIST

- Accreditation No. D-1-1097/18 (participants are physicians, pharmacists, pharmaceutical technicians)
- Continuing education program accredited by the Health Council of Serbia No. 153-02-3135/2018-01
- Number of credits: 5

- GUIDELINES FOR THE TREATMENT OF HYPERTENSION IN ADULTS: SIMILARITIES AND DIFFERENCES

[2017 ACC/2018 ESH/ESC (2017 American College of Cardiology Guidelines vs. 2018 European Society of Hypertension/European Society of Cardiology Guidelines)]

- Accreditation No. A-1-2524/18 (participants are physicians, pharmacists, pharmaceutical technicians)
- Continuing education program accredited by the Health Council of Serbia No. 153-02-3135/2018-01
- Number of credits: 5

OFFICIAL LANGUAGE

Official language of the meeting will be English, however for the accredited CME three day-courses for health practitioners Serbian language will be used as well. No simultaneous translation will be provided. All accepted abstracts will be published in English.

ORAL PRESENTATION

Keynote speakers are allocated 30 minutes for their talks. All other speakers are allocated 20 minutes for the presentation with a discussion time according to the final program.

POSTER PRESENTATION

Interactive poster session will be held during the meeting. Authors are requested to mount their posters from 09.00 to 20.00 on the day of the poster presentation. Poster size should be 120 (height) cm x 80 (width) cm. Poster figures should be designed to be viewed from a distance and the authors should use clear, visible graphics and large text fonts. Material for mounting posters will be provided in the poster area. Authors are requested to be present by their posters during the poster session for which their poster has been scheduled.

LUNCH, DINNER OR REFRESHMENT

Full hospitality will be provided to all invited speakers (according to the letters of invitations), and for regularly registered participants with paid registration fee. Refreshment will be also provided on a commercial basis in a restaurant of the meeting venue.

AUDIOVISUAL FACILITIES

For oral presentations, video beam projection will be available in a conference room. Presentations should be prepared in "Power Point"(*.ppt file). For special audiovisual facilities, please send in advance a special request to the Organizing Committee.

SOCIAL PROGRAM

The social program will include excursion to countryside and/or intercity tour. Please contact meeting desk for special inquiries.

ACCOMMODATION

Hotel accommodation and arrival/departure service will be organized mainly at special rates. Please contact drvladakgbg@yahoo.com

In order to receive an e-mail invitation and/or confirmation, please indicate your e-mail address.

CANCELLATION AND REFUNDS

Notification of cancellation should be sent in writing to the Local Organizing Committee. If a cancellation is received before August 25th 2019, 70% of the total amount will be refunded to the participant. We regret that no refunds can be given for cancellations received on or after that date. Please note that for administrative reasons, refunds will be dealt with after the meeting.

INVITATION FOR FULL-LENGTH PAPERS TO BE PUBLISHED IN AN INTERNATIONAL RECOGNIZED JOURNAL

Certain number of presentations will be selected and invited to be published as a full-length papers in a special issue of an international recognized journal. For this option it will be possible upon invitation and following peer-review procedure only.

ORGANIZING & PROGRAM COMMITTEE CONTACTS

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THE MEETING HAS BEEN SUPPORTED BY:

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