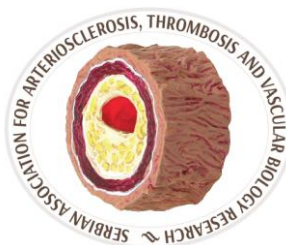


**6<sup>th</sup> Meeting of European Section and 7<sup>th</sup> Meeting of North American Section  
of the International Academy of Cardiovascular Sciences (IACS)**

**"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)

<https://iacsna.com/>, <http://www.iacs.sav.sk>, <http://www.physiology.org.rs>

## FOREWORD

Dear Colleagues,

We are very pleased to inform you that the 6<sup>th</sup> Meeting of European Section and 7<sup>th</sup> Meeting of North American Section of the International Academy of Cardiovascular Sciences will be jointly held during September 11-14, 2019 in Vrnjacka Banja (Vrnjacka Spa, Vrnici 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***

**Jakovljevic Vladimir (Kragujevac, Serbia)**

**Djuric Dragan (Belgrade, Serbia)**

### ***Honorary Co-Chairs***

**Bolli Roberto, President, IACS (Louisville, USA)**

**Dhalla Naranjan, CEO, IACS (Winnipeg, Canada)**

**Lopaschuk Gary, President, IACS-North America (Edmonton, Canada)**

**Ostadal Bohuslav, Past President, IACS (Prague, Czech Republic)**

**Pierce Grant, President-Elect, IACS (Winnipeg, Canada)**

**Varro Andras, President, IACS-Europe (Szeged, Hungary)**

### ***International Program Committee***

**Abdellatif Maha (Newark, USA)**

**Agrawal Devendra (Pomona, USA)**

**Anand-Srivastava Madhu (Montreal, Canada)**

**Baczko Istvan (Szeged, Hungary)**

**Barta Judit (Debrecen, Hungary)**

**Bkaily Ghassan (Sherbrooke, Canada)**

**Bartekova Monika (Bratislava, Slovakia)**

**Beltowski Jerzy (Lublin, Poland)**

**Blackman Antoinette (Belo Horizonte, Brazil)**

**Bock-Marquette Ildiko (Pecs, Hungary)**

**Bolevich Sergey (Moscow, Russia)**

**Buttar Harpal (Ottawa, Canada)**

**Chaldakov George (Varna, Bulgaria)**

**Czubryt Michael (Winnipeg, Canada)**

**Dewenter Matthias (Heidelberg, Germany)**

**Dhingra Sanjiv (Winnipeg, Canada)**

**Dobrev Dobromir (Essen, Germany)**

**Duan Darrel Dayue (Reno, USA)**

**Feldman Ross (Winnipeg, Canada)**

**Ferdinandy Peter (Budapest, Hungary)**

**Ferguson Stephen (Ottawa, Canada)**

**Furtado Henrique (Palmas, Brazil)**

**Gallyas Ferenc (Pecs, Hungary)**

**Gelpi Ricardo (Buenos Aires, Argentina)**

**Gilchrist James (Winnipeg, Canada)**

**Gomez Ana Marie (Paris, France)**

**Gulati Kavita (Delhi, India)**

**Halade Ganesh (Birmingham, USA)**

**Hamet Pavel (Montreal, Canada)**

**Jespersen Thomas (Copenhagen, Denmark)**

**Kirshenbaum Lorrie (Winnipeg, Canada)**

**Kulchitsky Vladimir (Minsk, Belarus)**

**Kukreja Rakesh (Richmond, USA)**

**Kundu Suman (New Delhi, India)**

**Lionetti Vincenzo (Pisa, Italy)**

**Lopatina Ekaterina (St. Petersburg, Russia)**

**Marks Andrew (New York, USA)**

**Makino Naoki (Beppu, Japan)**

**Maurice Don (Kingston, Canada)**

**McKinsey Timothy (Denver, USA)**

**Mehta Jawahar (Little Rock, USA)**

**Morad Martin (Charleston, USA)**

**Mraiche Fatima (Doha, Qatar)**

**Muntean Danina (Timisoara, Romania)**

**Nader Moni (Riyadh, Saudi Arabia)**

**Ostadal Petr (Prague, Czech Republic)**

**Papp Zoltan (Debrecen, Hungary)**

**Ramasamy Ravichandran (New York, USA)**

**Ray Arunabha (New Delhi, India)**

**Ravingerova Tatiana (Bratislava, Slovakia)**

**Schunck Wolf (Berlin, Germany)**

**Seubert John (Edmonton, Canada)**

**Singal Pawan (Winnipeg, Canada)**

**Singla Dinender (Orlando, USA)**

**Slezak Jan (Bratislava, Slovakia)**

**Srivastava Ashok (Montreal, Canada)**

**Tappia Paramjit (Winnipeg, Canada)**

**Tremblay Johanne (Montreal, Canada)**

**Tipparaju Srinivas (Tampa, USA)**

**Tuana Balwant (Ottawa, Canada)**

**Tyagi Suresh (Louisville, USA)**

**Ussher John (Edmonton, Canada)**

**Valdivia Hector (Madison, USA)**

**Virag Laszlo (Szeged, Hungary)**

**Vondrisk Thomas (Los Angeles, USA)**

**Wallukat Gerd (Berlin, Germany)**

**Wilson Daniel (Pomona, USA)**

***Local Program Committee***

**Djukic Aleksandar (Kragujevac)**  
**Djuric Dragan (Belgrade)**  
**Djuric Tamara (Vinca)**  
**Gopcevic Kristina (Belgrade)**  
**Ivanov Milan (Belgrade)**  
**Jakovljevic Vladimir (Kragujevac)**  
**Jankovic Aleksandra (Belgrade)**  
**Japunzic Zigon Nina (Belgrade)**  
**Jeremic Nevena (Kragujevac)**  
**Jotic Aleksandra (Belgrade)**  
**Kojic Zvezdana (Belgrade)**  
**Krga Irena (Belgrade)**

**Lalic Nebojsa (Belgrade)**  
**Lalic Katarina (Belgrade)**  
**Mihailovic Stanojevic Nevena (Belgrade)**  
**Miloradovic Zoran (Belgrade)**  
**Nikolic Turnic Tamara (Kragujevac)**  
**Radenkovic Miroslav (Belgrade)**  
**Rosic Gvozden (Kragujevac)**  
**Simic Tatjana (Belgrade)**  
**Srejovic Ivan (Kragujevac)**  
**Vucic Vesna (Belgrade)**  
**Zivkovic Vladimir (Kragujevac)**

***Local Organizing Committee***

**Andric Silvana (Novi Sad)**  
**Bradic Jovana (Kragujevac)**  
**Djuric Dusan (Kragujevac)**  
**Jeremic Jovana (Kragujevac)**  
**Kostic Tanja (Novi Sad)**

**Milosavljevic Isidora (Kragujevac)**  
**Petkovic Anica (Kragujevac)**  
**Srejovic Ivan (Kragujevac), Secretary**  
**Stanojevic Dejan (Vrnjacka Banja)**  
**Vranic Aleksandra (Kragujevac)**

## **PROGRAM AT GLANCE**

---

### **International Academy of Cardiovascular Sciences (IACS) 6th Meeting of European Section and 7th Meeting of North American Section**

---

#### **Tuesday, September 10th 2019 (Pre-Meeting Venue: Hotel Sumarice, Kragujevac)**

---

14.00-17.00 Pre-Meeting on Clinical Cardiology Topics

---

#### **Wednesday, September 11th 2019 (Meeting Venue: Hotel Fontana, Vrnjacka Banja)**

---

	Arrival and Registration
13.00-16.00	Pre-Symposium on Diabetes Mellitus (Medical and Spa Resort Merkur)
16.30-19.15	Welcome Messages
	Presidential Address
	Keynote Speakers (three, 30 min each talk)
	Presentations of the Serbian Physiological Society Awards
	Special Presentations by the IACS
19.15	CV Network Joint Photo
19.30	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 Board Meeting

---

#### **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 11<sup>TH</sup>**

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

**WELCOME MESSAGES/PRESIDENTIAL ADDRESS/KEYNOTE LECTURES/AWARDS**

16.30 -19.00

*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)**

Bolli R

*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**

**A JOURNEY FROM BASIC RESEARCH TO CLINICAL TRIALS ON THE EFFECTS OF DIETARY FLAXSEED ON CARDIOVASCULAR HEALTH (30 min)**

Pierce GN

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

### **Keynote Lecture**

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

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**<sup>1,2</sup>

<sup>1</sup>*Department of Pharmacology and Pharmacotherapy, Faculty of Medicine, University of Szeged, Szeged,* <sup>2</sup>*MTA-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)*

19.15

**CV NETWORK JOINT PHOTO** (in front of main entrance to hotel)

19.30

**WELCOME RECEPTION**



**THURSDAY, SEPTEMBER 12<sup>TH</sup>**

**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**

Dewenter M<sup>1</sup>, von der Lieth A<sup>1</sup>, He T<sup>1</sup>, Chen L<sup>1</sup>, Beckendorf J<sup>2</sup>, Lewis J<sup>3</sup>, de Angelis MH<sup>4</sup>, Zimmermann W<sup>5</sup>, Klebl B<sup>6</sup>, Katus HA<sup>2</sup>, Backs J<sup>1</sup>

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

**HDAC11 PROMOTES CARDIOMETABOLIC DISEASE THROUGH TRANSCRIPTIONAL AND NON-GENOMIC MECHANISMS**

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**

Virag L<sup>1</sup>, Hornyik T<sup>1</sup>, Kohajda Zs<sup>2</sup>, Szlovak J<sup>1</sup>, Gazdag P<sup>1</sup>, Koncz I<sup>1</sup>, Nagy N<sup>1,2</sup>, Juhász V<sup>1</sup>, Varga R<sup>1</sup>, Sztojkov A<sup>3</sup>, Jost N<sup>1,2</sup>, Baczko I<sup>1</sup>, Varro A<sup>1,2</sup>

<sup>1</sup>*Department of Pharmacology and Pharmacotherapy, Faculty of Medicine, University of Szeged,*

<sup>2</sup>*MTA-SZTE Research Group of Cardiovascular Pharmacology, Hungarian Academy of Sciences,*

<sup>3</sup>*Department 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<sup>1,2</sup>, Hohl M<sup>2</sup>, Nickel A<sup>3</sup>, Lang L<sup>2</sup>, Boor P<sup>4</sup>, Wong D<sup>4</sup>, Sanders P<sup>5</sup>, Böhm M<sup>2</sup>, Jespersen T<sup>1</sup>, Linz D<sup>5</sup>

<sup>1</sup>*Faculty of Health and Medical Sciences, Department of Biomedical Sciences, University of Copenhagen, Copenhagen, Denmark,* <sup>2</sup>*Klinik für Innere Medizin III, Kardiologie und Angiologie, Universitätsklinikum des Saarlandes, Homburg/Saar,* <sup>3</sup>*Universitätsklinikum Würzburg, Deutsches Zentrum für Herzinsuffizienz, Würzburg,* <sup>4</sup>*Institut für Pathologie & Medizinische Klinik II Universitätsklinikum Aachen, Aachen, Germany,* <sup>5</sup>*University 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 R<sup>1</sup>, Chorazyczewski J<sup>1</sup>, Pickering JG<sup>1</sup>, Ding Q<sup>2</sup>, Feldman RD<sup>1,2</sup>

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

**CARDIAC SPECIFIC CRE INDUCES DILATED CARDIOMYOPATHY IN POSTNATAL MYOCARDIUM**

Rehmani T, Tuana BS

*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, Université de Montréal 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, Slovakia)*

**A NEW APPROACH FOR THE PREVENTION AND TREATMENT OF  
CARDIOVASCULAR DISORDERS. MOLECULAR HYDROGEN SIGNIFICANTLY  
REDUCES THE EFFECTS OF OXIDATIVE STRESS**

Slezak J<sup>1</sup>, Buday J<sup>2</sup>, Surovy J<sup>2</sup>, Kura B<sup>1</sup>

<sup>1</sup>*Institute for Heart Research, Centre of Experimental Medicine, Slovak Academy of Sciences, Bratislava,* <sup>2</sup>*EVPU N. Dubnica, Slovakia*

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

Djuric DM<sup>1</sup>, Jakovljevic Uzelac J<sup>1</sup>, Mutavdzin S<sup>1</sup>, Kostic S<sup>1</sup>, Todorovic D<sup>1</sup>, Gopcevic K<sup>2</sup>,  
Labudovic Borovic M<sup>3</sup>, Obrenovic R<sup>4</sup>, Stankovic S<sup>4</sup>, Jakovljevic V<sup>5,6</sup>

<sup>1</sup>*Institute of Medical Physiology "Richard Burian", Faculty of Medicine, University of Belgrade,*

<sup>2</sup>*Institute of Chemistry in Medicine "Prof. Dr. Petar Matavulj", Faculty of Medicine, University of Belgrade,* <sup>3</sup>*Institute of Histology and Embryology "Aleksandar Dj. Kostic", Faculty of Medicine,*

*University of Belgrade,* <sup>4</sup>*Centre of Medical Biochemistry, Clinical Centre of Serbia, Belgrade,*

<sup>5</sup>*Department of Physiology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac,*

*Serbia,* <sup>6</sup>*Department of Human Pathology, 1<sup>st</sup> Moscow State Medical, University IM Sechenov, Moscow, Russian Federation*

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

Bartekova M<sup>1,2</sup>, Ferenczyova K<sup>1</sup>, Kalocayova B<sup>1</sup>, Kindernay L<sup>1</sup>, Tribulova N<sup>1</sup>, Okruhlicova L<sup>1</sup>,  
Dovinova I<sup>3</sup>, Ravingerova T<sup>1</sup>, Barancik M<sup>1</sup>

<sup>1</sup>*Institute for Heart Research, Centre of Experimental Medicine, Slovak Academy of Sciences,*

<sup>2</sup>*Institute of Physiology, Faculty of Medicine, Comenius University,* <sup>3</sup>*Institute of Normal and Pathological Physiology, Centre of Experimental Medicine, Slovak Academy of Sciences,*

*Bratislava, Slovakia*

## **POLYPHENOLS: FROM BASIC TO APPLIED INVESTIGATIONS**

Jakovljevic V<sup>1,2</sup>, Zivkovic V<sup>1</sup>, Srejovic I<sup>1</sup>, Jakovljevic B<sup>3</sup>, Bolevich S<sup>4</sup>, Jeremic N<sup>5</sup>, Jeremic J<sup>5</sup>, Milosavljevic I<sup>5</sup>, Nikolic Turnic T<sup>5</sup>, Cikriz N<sup>6</sup>, Mitrovic M<sup>7</sup>, Bolevich S<sup>2</sup>

<sup>1</sup>Department of Physiology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac,

<sup>2</sup>Department of Human Pathology, 1<sup>st</sup> Moscow State Medical University IM Sechenov, Moscow,

<sup>3</sup>High Medical College of Professional Studies in Belgrade, Belgrade, <sup>4</sup>Department of Human Pathophysiology, 1<sup>st</sup> Moscow State Medical University IM Sechenov, Moscow, Russian Federation,

<sup>5</sup>Department of Pharmacy, Faculty of Medical Sciences, University of Kragujevac, Kragujevac,

<sup>6</sup>Department of Exercise Physiology, Institute of Hygiene, Military Medical Academy, Belgrade,

<sup>7</sup>Pharmanova, Belgrade, Serbia

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

Krga I<sup>1,2</sup>, Tamaian R<sup>3</sup>, Morand C<sup>2</sup>, Vidovic N<sup>1</sup>, Glibetic M<sup>1</sup>, Milenkovic D<sup>2</sup>

<sup>1</sup>Centre of Research Excellence in Nutrition and Metabolism, Institute for Medical Research, University of Belgrade, Belgrade, Serbia, <sup>2</sup>University Clermont Auvergne, INRA, UNH, CRNH

Auvergne, Clermont-Ferrand, France, <sup>3</sup>National 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**

Morad M, 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 LH<sup>1</sup>, Joanne P<sup>1,2</sup>, Perrier R<sup>1</sup>, Gerbaud P<sup>1</sup>, Nicolas V<sup>3</sup>, Zorio E<sup>4</sup>, Benitah JP<sup>1</sup>, Gomez AM<sup>1</sup>

<sup>1</sup>UMR-S 1180, INSERM, Université Paris-Sud, Université Paris-Saclay, Châtenay-Malabry,

<sup>2</sup>Sorbonne Université, UMR 8256, Paris, <sup>3</sup>UMS IPSIT, Univ Paris-Sud, US 31 INSERM, UMS 3679 CNRS, Châtenay-Malabry, France, <sup>4</sup>Hospital Universitario la Fe, Valencia, Spain

## **RYR2 MUTATIONS OUTSIDE THE CANONICAL CPVT DOMAINS: ARRHYTHMIAS INVOLVING A STRUCTURAL SUBSTRATE**

Alvarado FJ,<sup>1</sup> Valdivia HH<sup>1,2</sup>

<sup>1</sup>Department of Medicine, University of Wisconsin School of Medicine & Public Health,

<sup>2</sup>Cardiovascular 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 B<sup>1</sup>, Martha L<sup>1</sup>, Toth A<sup>1,2</sup>, Papp Z<sup>1,2</sup>

<sup>1</sup>Division of Clinical Physiology, Faculty of Medicine, University of Debrecen, Debrecen, <sup>2</sup>HAS-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**

Bock-Marquette I<sup>1,4,5</sup>, Hinkel R<sup>2</sup>, Ball H<sup>3</sup>, Thatcher J<sup>5</sup>, Faskerti G<sup>1</sup>, Maar K<sup>1</sup>, Olson EN<sup>4</sup>, Kupatt C<sup>2</sup>, Gallyas F<sup>1</sup>

<sup>1</sup>Department of Biochemistry and Medical Chemistry, Szentagothai Research Centre, University of Pecs Medical School, Pecs, Hungary, <sup>2</sup>Internal Medicine I, University Clinic Grosshadern, Munich, Germany, <sup>3</sup>Protein Chemistry Technology Center, <sup>4</sup>Molecular Biology and <sup>5</sup>Cardiovascular 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**

Tappia PS

*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, Tyagi SC

*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<sup>1,2</sup>, Chalmers J<sup>3</sup>, Awadalla P<sup>4</sup>, Woodward M<sup>3</sup>, Hamet P<sup>1,2</sup>

<sup>1</sup>Department of Medicine, CRCHUM, University of Montreal, Montreal, <sup>2</sup>OPTITHERA, Montreal,

<sup>3</sup>The George Institute for Global Health, University of New South Wales, Sydney, Australia,

<sup>4</sup>Ontario 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 M<sup>1</sup>, Kovacevic S<sup>2</sup>, Miloradovic Z<sup>1</sup>, Brkic P<sup>3</sup>, Jovovic D<sup>1</sup>, Mihailovic Stanojevic N<sup>1</sup>, Vajic JU<sup>1</sup>, Karanovic D<sup>1</sup>, Jeremic R<sup>3</sup>, Zivkovic M<sup>4</sup>, Nesovic Ostojic J<sup>2</sup>

<sup>1</sup>University of Belgrade, Institute for Medical Research, National Institute of Republic of Serbia, Belgrade, <sup>2</sup>University of Belgrade, Institute of Pathophysiology, Faculty of Medicine, Belgrade,

<sup>3</sup>University of Belgrade, Institute of Medical Physiology, Faculty of Medicine, Belgrade,

<sup>4</sup>University 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**

Zivkovic V<sup>1</sup>, Petkovic A<sup>2</sup>, Bradic J<sup>2</sup>, Srejovic I<sup>1</sup>, Jeremic J<sup>2</sup>, Draginic N<sup>2</sup>, Andjic M<sup>2</sup>, Samanovic Milojevic A<sup>1</sup>, Stanisic D<sup>3</sup>, Simonovic N<sup>4</sup>, Bolevich S<sup>5</sup>, Jakovljevic V<sup>1,5</sup>

<sup>1</sup>Department of Physiology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac,

<sup>2</sup>Department of Pharmacy, Faculty of Medical Sciences, University of Kragujevac, Kragujevac,

<sup>3</sup>Department of Dentistry, Faculty of Medical Sciences, University of Kragujevac, Kragujevac,

<sup>4</sup>Health Center "Vozdovac", Belgrade, Serbia, <sup>5</sup>Department of Human Pathology, 1<sup>st</sup> Moscow State Medical University IM Sechenov, Moscow, Russian Federation

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

Srejovic I<sup>1</sup>, Tepic S<sup>2</sup>, Petkovic A<sup>3</sup>, Jeremic N<sup>3</sup>, Zivković V<sup>1</sup>, Bolevich S<sup>4</sup>, Bradic J<sup>3</sup>, Milosavljevic I<sup>3</sup>, Bolevich S<sup>5</sup>, Jakovljevic V<sup>1,5</sup>

<sup>1</sup>Department of Physiology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac,

<sup>2</sup>Department of Urgent Medicine, Clinical Center "Zvezdara", Belgrade, <sup>3</sup>Department of Pharmacy, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, Serbia,

<sup>4</sup>Department of Human Pathophysiology, 1<sup>st</sup> Moscow State Medical University IM Sechenov,

<sup>5</sup>Department of Human Pathology, 1<sup>st</sup> Moscow State Medical University IM Sechenov, Moscow, Russian Federation

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

Miloradovic Z<sup>1</sup>, Ivanov M<sup>1</sup>, Jovovic D<sup>1</sup>, Mihailovic Stanojevic N<sup>1</sup>, Vajic JU<sup>1</sup>, Karanovic D<sup>1</sup>, Marković Lipkovski J<sup>2</sup>

<sup>1</sup>University of Belgrade Institute for Medical Research, Belgrade, <sup>2</sup>Faculty of Medicine University of Belgrade, Belgrade, Serbia



18.00-19.30

**POSTER SESSION I**

19.30

**DINNER**

**FRIDAY, SEPTEMBER 13TH**

**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 KL<sup>1</sup>, Keshavarz-Bahaghighat H<sup>1</sup>, Shah S<sup>2</sup>, Sosnowski D<sup>1</sup>, Darwesh A<sup>1</sup>, Wang W<sup>2</sup>, Zhabyeyev P<sup>2</sup>, Edin M<sup>5</sup>, Zeldin D<sup>5</sup>, Kassiri Z<sup>2,4</sup>, Oudit G<sup>2,4</sup>, Seubert JM<sup>1,3,4</sup>

<sup>1</sup>Faculty of Pharmacy and Pharmaceutical Sciences, <sup>2</sup>Department of Physiology, <sup>3</sup>Department of Pharmacology, <sup>4</sup>Mazankowski Alberta Heart Institute, Faculty of Medicine and Dentistry, University of Alberta, Edmonton, Canada, <sup>5</sup>National 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 DD<sup>1</sup>, Ye LL<sup>2</sup>

<sup>1</sup>Department of Pharmacology, University of Nevada Reno School of Medicine, Reno, USA, <sup>2</sup>Center 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**

Abdellatif M

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

## **SYMPOSIUM 10: ADVANCES IN CARDIOVASCULAR 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 V<sup>1</sup>, Matic M<sup>1</sup>, Vasic M<sup>1</sup>, Sarenac O<sup>1</sup>, Bajic D<sup>2</sup>, Japundzic Zigon N<sup>1</sup>

*<sup>1</sup>Institute of Pharmacology, Clinical Pharmacology and Toxicology Faculty of Medicine University of Belgrade, Belgrade, <sup>2</sup>Faculty of Technical Sciences, University of Novi Sad, Novi Sad, Serbia*

### **THE SIGNIFICANCE OF TRANSGENIC LQT RABBIT MODELS FOR PREDICTION OF DRUG-INDUCED VENTRICULAR ARRHYTHMIAS**

Baczko I<sup>1</sup>, Hornyik T<sup>1,2</sup>, Castiglione A<sup>2</sup>, Franke G<sup>2</sup>, Major P<sup>3</sup>, Hiripi L<sup>3</sup>, Bosze Z<sup>3</sup>, Varro A<sup>1</sup>, Odening K<sup>2</sup>

*<sup>1</sup>Department of Pharmacology and Pharmacotherapy, Faculty of Medicine, University of Szeged, Szeged, <sup>2</sup>Institute of Experimental Cardiovascular Medicine, Heart Center University of Freiburg, Medical Faculty, Freiburg, Germany, <sup>3</sup>NARIC Agricultural Biotechnology Institute, Gödöllő, Hungary*

### **EVALUATION OF METHYLYXANTHINE 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**

Mehta JL, 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**

Singla DK

*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<sup>1,2</sup>, Spalletti C<sup>3</sup>, Baroni C<sup>1</sup>, Keceli G<sup>2</sup>, Caragnano A<sup>4</sup>, Bedja D<sup>2</sup>, Matteucci M<sup>1</sup>, Beltrami AP<sup>4</sup>, Paolocci N<sup>2</sup>, Caleo M<sup>3</sup>, Lionetti V<sup>1,5</sup>

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

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

Ray A

*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<sup>1,2</sup>, Kipenko A<sup>1</sup>, Pasatetskaia N<sup>2,3</sup>, Lopatin A<sup>1</sup>

<sup>1</sup>Pavlov First St. Petersburg State Medical University, St. Petersburg, <sup>2</sup>Pavlov Institute of Physiology, Russian Academy of Sciences, St. Petersburg, <sup>3</sup>Almazov National Medical Research Centre, St. Petersburg, Russia

**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 J<sup>1</sup>, Rusek M<sup>1</sup>, Wojtak A<sup>2</sup>

<sup>1</sup>Department of Pathophysiology, Medical University, Lublin, <sup>2</sup>Department of Vascular Surgery, Medical University, Lublin, Poland

## **CARDIOMETABOLIC ADIPOBIOLOGY: A TRANSLATIONAL PERSPECTIVE**

Chaldakov G<sup>1</sup>, Aloe L<sup>2</sup>, Rancic G<sup>3</sup>, Tonchev A<sup>1</sup>, Fiore M<sup>4</sup>, Hristova M<sup>5</sup>, Nikolova V<sup>6</sup>

<sup>1</sup>Department of Anatomy and Cell Biology, Medical University, Varna, <sup>2</sup>Fondazione Iret Tecnopolo R. Levi-Montalcini, Rome, <sup>3</sup>Department of Histology and Embryology, Medical Faculty, Nis, Serbia, <sup>4</sup>Institute of Cell Biology and Neurobiology, CNR, Rome, Italy, <sup>5</sup>Endocrinology Unit, Asparuhovo Polyclinic, <sup>6</sup>Cardiology 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**

Singal P

*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**

Wilson D<sup>1</sup>, Wilson V<sup>2</sup>

<sup>1</sup>Western University of Health Sciences, Pomona, USA, <sup>2</sup>Queen'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<sup>1,2</sup>

<sup>1</sup>Brain and Mind Research Institute, University of Ottawa, Ottawa, <sup>2</sup>Department 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 N<sup>1</sup>, Maeda T<sup>2</sup>

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

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

Blackman A<sup>1,2,3</sup>, Neto JS<sup>2</sup>, Lima ML<sup>1</sup>, Andrade Rodrigues TM<sup>4</sup>, Gomes OM<sup>1</sup>

<sup>1</sup>*Instituto Cardiovascular São Francisco de Assis, Belo Horizonte,* <sup>2</sup>*Centrocard, Brasília,* <sup>3</sup>*Faculdade de Medicina-Uniceub, Brasília,* <sup>4</sup>*Universidade Federal de Sergipe, Sergipe, Brazil*

### **AUTONOMIC DYSREGULATION IN HEART FAILURE PATIENTS**

Barta J<sup>1</sup>, Urbancsek R<sup>1</sup>, Forgacs I<sup>1</sup>, Boczan J<sup>2</sup>, Edes I<sup>1</sup>, Csanadi Z<sup>1</sup>, Rudas L<sup>3</sup>

<sup>1</sup>*Institute of Cardiology, Faculty of Medicine, University of Debrecen,* <sup>2</sup>*Department of Neurology, University of Debrecen, Debrecen, Hungary,* <sup>3</sup>*Department 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, Belgrade, Serbia*

### **VALVULAR HEART DISEASE - SURGICAL TREATMENT UPDATE**

Furtado HB<sup>1,2</sup>

<sup>1</sup>*Tocantins Federal University, Faculty of Medicine, Palmas,* <sup>2</sup>*Heart 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'Université de Montréal (CRCHUM), Department of Medicine, Université de Montréal, Montréal, 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, Virginia, 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, Bogнар Z, Sumegi B, Gallyas F Jr.

*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**

Jankovic A<sup>1</sup>, Korac A<sup>2</sup>, Jovic M<sup>3</sup>, Korac B<sup>1,2</sup>

*<sup>1</sup>University of Belgrade, Institute for Biological Research "Sinisa Stankovic", Belgrade, <sup>2</sup>Faculty of Biology, University of Belgrade, Belgrade, <sup>3</sup>Clinical 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**

Mihailovic Stanojevic N<sup>1</sup>, Karanovic D<sup>1</sup>, Markovic Lipkovski J<sup>2</sup>, Grujic Milanovic J<sup>1</sup>, Miloradovic Z<sup>1</sup>, Ivanov M<sup>1</sup>, Vajic UJ<sup>1</sup>, Dekanski D<sup>3</sup>, Jovovic Dj<sup>1</sup>

*<sup>1</sup>Institute for Medical Research, University of Belgrade, <sup>2</sup>Institute of Pathology Faculty of Medicine, University of Belgrade, <sup>3</sup>R & D Institute, Galenika a.d., Belgrade, Serbia*

18.30-20.00

**POSTER SESSION II**

20.00

**FREE EVENING/IACS BOARD MEETING**

**SATURDAY, SEPTEMBER 14TH**

**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**

Nader M<sup>1,2</sup>, Kattuah W<sup>1</sup>, Alotaibi S<sup>1,2</sup>, Alsolme E<sup>1,2</sup>, Bakheet D<sup>2</sup>

*<sup>1</sup>Department of Physiological Sciences, Alfaisal University, <sup>2</sup>Department 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 CARDIOMYOPATHY**

Dhingra R<sup>1,2</sup>, Guberman M<sup>1,2</sup>, Margulets V<sup>1,2</sup>, Aguilar F<sup>1,2</sup>, Kirshenbaum L<sup>1,2</sup>

*<sup>1</sup>Department of Physiology and Pathophysiology, The Institute of Cardiovascular Sciences, St. Boniface Hospital Albrechtsen Research Centre, <sup>2</sup>Rady College of Medicine, Max Rady Faculty of Health Sciences, University of Manitoba, Manitoba, Canada*

**IMPLICATIONS OF THE Na<sup>+</sup>/H<sup>+</sup> EXCHANGER ISOFORM 1 IN CARDIAC  
REMODELING: MECHANISMS AND THERAPEUTIC STRATEGIES**

Abdulrahman N<sup>1</sup>, Mohamed I<sup>1</sup>, Riaz S<sup>1</sup>, Jaballah M<sup>1</sup>, Fliegel L<sup>2</sup>, Gadeau AP<sup>3</sup>, Mraiche F<sup>1</sup>

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

**CARDIOMETABOLIC AND SENSORY ROLES FOR AKR6 SUBUNIT IN THE HEART**

Tipparaju S, 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, Slovakia)*

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

Kundu S

*Department of Biochemistry, University of Delhi South Campus, Benito Juarez Road, 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 T<sup>1</sup>, Lonek L<sup>1</sup>, Kindernay L<sup>1</sup>, Zohdi V<sup>2</sup>, Duris Adameova A<sup>3</sup>

<sup>1</sup>*Centre of Experimental Medicine, Institute for Heart Research, Slovak Academy of Sciences,*

<sup>2</sup>*Institute of Anatomy, Faculty of Medicine,* <sup>3</sup>*Department of Pharmacology and Toxicology, Faculty of Pharmacy, Comenius University, Bratislava, Slovakia*

### **CARDIOPROTECTIVE EFFECTS OF HYDROGEN SULFIDE DONOR IN RATS WITH DIABETES MELLITUS**

Jeremic N<sup>1</sup>, Jeremic J<sup>1</sup>, Zivkovic V<sup>2</sup>, Srejovic I<sup>2</sup>, Suresh T<sup>3</sup>, Jakovljevic V<sup>2,4</sup>

<sup>1</sup>*Department of Pharmacy, Faculty of Medical Sciences, University of Kragujevac, Kragujevac,*

<sup>2</sup>*Department of Physiology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, Serbia,* <sup>3</sup>*Department of Physiology, School of Medicine, University of Louisville, Louisville, USA,* <sup>4</sup>*Department of Human Pathology, 1<sup>st</sup> 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 $\beta$ 1-ADRENOCEPTOR IN IDIOPATHIC DILATED CARDIOMYOPATHY (DCM): THE USE OF APTAMERS AS A NEW THERAPEUTIC 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 $\omega$ -3 FATTY ACIDS SUPPLEMENTATION NECESSARY?**

Nikolic Turnic T<sup>1</sup>, Arsic A<sup>2</sup>, Vucic V<sup>2</sup>, Petrovic S<sup>2</sup>, Ristic Medic D<sup>2</sup>, Zivkovic V<sup>3</sup>, Srejovic I<sup>3</sup>, Jeremic J<sup>1</sup>, Radonjic T<sup>4</sup>, Milosavljevic I<sup>1</sup>, Bolevich S<sup>5</sup>, Bolevich S<sup>6</sup>, Djuric D<sup>7</sup>, Jakovljevic V<sup>3,5</sup>

<sup>1</sup>*Department of Pharmacy, Faculty of Medical Sciences, University of Kragujevac, Kragujevac,*

<sup>2</sup>*Centre of Research Excellence in Nutrition and Metabolism, Institute for Medical Research, University of Belgrade, Belgrade,* <sup>3</sup>*Department of Physiology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac,* <sup>4</sup>*Health Center "Dr Milutin Ivkovic", Belgrade,*

<sup>5</sup>*Department of Human Pathology, I<sup>st</sup> Moscow State Medical University IM Sechenov,* <sup>6</sup>*Department of Pathophysiology, I<sup>st</sup> Moscow State Medical University IM Sechenov, Moscow, Russian*

*Federation,* <sup>7</sup>*Institute 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**

Rosic G<sup>1</sup>, Joksimovic J<sup>1</sup>, Jovicic N<sup>2</sup>, Katanic Stankovic J<sup>3</sup>, Juric T<sup>4</sup>, Mihailovic V<sup>3</sup>, Kumburovic I<sup>1</sup>, Kumburovic D<sup>1</sup>, Selakovic D<sup>1</sup>

<sup>1</sup>*Department of Physiology, Faculty of Medical Sciences, University of Kragujevac,* <sup>2</sup>*Department of Histology and Embryology, Faculty of Medical Sciences, University of Kragujevac,* <sup>3</sup>*Department of Chemistry, Faculty of Science, University of Kragujevac, Kragujevac,* <sup>4</sup>*Faculty 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 V<sup>1</sup>, Paunovic M<sup>1</sup>, Arsic A<sup>1</sup>, Gluvic Z<sup>2</sup>, Petrovic S<sup>1</sup>, Ristic Medic D<sup>1</sup>, Resanovic I<sup>3</sup>, Zaric B<sup>3</sup>, Isenovic ER<sup>3</sup>

<sup>1</sup>*Centre of Research Excellence in Nutrition and Metabolism, Institute for Medical Research, University of Belgrade, Belgrade,* <sup>2</sup>*Clinic for Internal Medicine, Zemun Clinical Hospital, Faculty of Medicine, University of Belgrade, Zemun,* <sup>3</sup>*Institute 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**

Ho K<sup>1</sup>, Wagg C<sup>1</sup>, Zhang L<sup>1</sup>, Altamimi T<sup>2</sup>, Vo K<sup>1</sup>, Leone T<sup>3</sup>, Muoio D<sup>4</sup>, Kelly D<sup>3</sup>, Ussher J<sup>5</sup>, Lopaschuk G<sup>1</sup>

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

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

Stamenkovic A<sup>1</sup>, O'Hara K<sup>1</sup>, Nelson D<sup>1</sup>, Maddaford T<sup>1</sup>, Edel A<sup>1</sup>, Maddaford G<sup>1</sup>, Dibrov E<sup>1</sup>, Aghanoori M<sup>1,2</sup>, Kirshenbaum L<sup>1</sup>, Fernyhough P<sup>1</sup>, Aliani M<sup>4,5</sup>, Pierce G<sup>1,5</sup>, Ravandi A<sup>1,3</sup>

<sup>1</sup>*Institute of Cardiovascular Sciences, St. Boniface Hospital, and the Departments of Physiology and Pathophysiology,* <sup>2</sup>*Pharmacology and Experimental Therapeutics, and* <sup>3</sup>*Internal Medicine, Rady Faculty of Health Sciences, University of Manitoba,* <sup>4</sup>*Department of Food and Human Nutritional Sciences, University of Manitoba,* <sup>5</sup>*The 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**

Kovacs A<sup>1,3</sup>, Gevaert A<sup>2</sup>, Herwig M<sup>1</sup>, Kolijn D<sup>1</sup>, Leloup A<sup>2</sup>, Fransen P<sup>2</sup>, Fulop G<sup>1,3</sup>, Lodi M<sup>3</sup>, Czuriga D<sup>3</sup>, Kisvarday Z<sup>4</sup>, Sandner P<sup>5</sup>, van Linthout S<sup>6</sup>, Tschöpe C<sup>6</sup>, Papp Z<sup>3</sup>, De Keulenaer G<sup>2</sup>, Linke W<sup>7</sup>, Hamdani N<sup>1</sup>

<sup>1</sup>Department of Cardiovascular Physiology, Ruhr University Bochum, Bochum, Germany,

<sup>2</sup>Department of Pharmaceutical Sciences, Laboratory of Physiopharmacology, University of Antwerp, Antwerp, Belgium, <sup>3</sup>Division of Clinical Physiology, Department of Cardiology, Faculty of Medicine, University of Debrecen, <sup>4</sup>Laboratory for Cortical Systems Neuroscience, Department of Anatomy, Histology and Embryology, University of Debrecen, Debrecen, Hungary, <sup>5</sup>Bayer AG, Drug Discovery Cardiology, Wuppertal, Germany, <sup>6</sup>Department of Internal Medicine and Cardiology, Charite-Universitätsmedizin Berlin, Centre for Regenerative Therapies and DZHK, partner site Berlin, <sup>7</sup>Institute of Physiology II, University Hospital Munster, University of Munster, Munster, Germany

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

Radonjic K<sup>1</sup>, Jakovljevic V<sup>2,3</sup>, Zivkovic V<sup>2</sup>, Srejovic I<sup>2</sup>, Nikolic Turnic T<sup>1</sup>, Milosavljevic I<sup>1</sup>, Jeremic J<sup>1</sup>, Savic M<sup>1</sup>, Sretenovic J<sup>2</sup>, Bradic J<sup>1</sup>, Novokmet S<sup>1</sup>

<sup>1</sup>Department of Pharmacy, Faculty of Medical Sciences, University of Kragujevac, <sup>2</sup>Department of Physiology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, Serbia, <sup>3</sup>Department of Human Pathology, 1<sup>st</sup> Moscow State Medical, University IM Sechenov, Moscow, Russian Federation

### **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**

Stojanovic N<sup>1</sup>, Stojiljkovic N<sup>2</sup>, Ilic S<sup>2</sup>, Randjelovic P<sup>2</sup>, Radulovic N<sup>3</sup>

<sup>1</sup>Faculty of Medicine, University of Nis, <sup>2</sup>Department of Physiology, Faculty of Medicine, University of Nis, <sup>3</sup>Department 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**

Bagchi RA<sup>1,2</sup>, Hu T<sup>1,2</sup>, Major JL<sup>1,2</sup>, Cao J<sup>3</sup>, Pecorari I<sup>1</sup>, Cava sin MA<sup>1,2</sup>, Mestroni L<sup>1</sup>, Lam MPY<sup>1,2</sup>, Lin H<sup>3</sup>, McKinsey TA<sup>1,2</sup>

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

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

Gopal K, 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: GARY LOPASCHUK STUDENT AWARD (Room F3)**

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 FIBRILLATION RECEIVING DABIGATRAN**

Petkovic A<sup>1</sup>, Jakovljevic V<sup>2,3</sup>, Pruner I<sup>4</sup>, Vranic A<sup>1</sup>, Antovic A<sup>5,6</sup>, Antovic J<sup>4,7</sup>

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

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

Jeremic J<sup>1</sup>, Jakovljevic V<sup>2,3</sup>, Milosavljevic I<sup>1</sup>, Zivkovic V<sup>2</sup>, Srejovic I<sup>2</sup>, Bradic J<sup>1</sup>, Tyagi S<sup>4</sup>, Jeremic N<sup>1</sup>

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



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

Nagalingam R<sup>1,2</sup>, Cheung D<sup>1</sup>, Aroutiounova N<sup>1</sup>, Jassal D<sup>1,3</sup>, Czubryt M<sup>1,2</sup>

<sup>1</sup>*Institute of Cardiovascular Sciences, St. Boniface Hospital Albrechtsen Research Centre,*

<sup>2</sup>*Department of Physiology and Pathophysiology,* <sup>3</sup>*Department of Internal Medicine, University of Manitoba, Winnipeg, Canada*

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

Parikh M<sup>1-3</sup>, Raj P<sup>1,2</sup>, Austria A<sup>1-3</sup>, Yu L<sup>2</sup>, Garg B<sup>2,3</sup>, Netticadan T<sup>1,2,4</sup>, Pierce G<sup>1-3</sup>

<sup>1</sup>*Department of Physiology and Pathophysiology, Faculty of Health Sciences, University of Manitoba,* <sup>2</sup>*Canadian Centre for Agri-food Research in Health and Medicine (CCARM),* <sup>3</sup>*The Institute of Cardiovascular Sciences,* <sup>4</sup>*Agriculture and Agri-Food Canada, St. Boniface Hospital Albrechtsen Research Centre, Winnipeg, Canada*

## **CONCLUDING REMARKS & TAKE HOME MESSAGE (Room F2)**

12.45-13.00

*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)

*Panel of Judges: TBA*

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

Ionica M<sup>1</sup>, Aburel OM<sup>1,\*</sup>, Vaduva AO<sup>2</sup>, Popoiu C<sup>3</sup>, Boia E<sup>3</sup>, Rațiu S<sup>4</sup>, Olariu S<sup>4</sup>, Noveanu L<sup>1,\*</sup>, Sturza A<sup>1,\*</sup>, Muntean DM<sup>1,\*</sup>

<sup>1</sup>*Department of Functional Sciences - Pathophysiology,* <sup>\*</sup>*Centre for Translational Research and Systems Medicine,* <sup>2</sup>*Department of Microscopic Morphology – Morphopathology,* <sup>3</sup>*Department of Pediatrics –Pediatric and Orthopedic Surgery,* <sup>4</sup>*Department of Surgery II - 1<sup>st</sup> 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**  
Andjic M<sup>1</sup>, Draginic N<sup>1</sup>, Radoman K<sup>2</sup>, Jeremic J<sup>1</sup>, Nikolic Turnic T<sup>1</sup>, Srejovic I<sup>3</sup>,  
Zivkovic V<sup>3</sup>, Bolevich S<sup>4</sup>, Jakovljevic V<sup>3,4</sup>  
<sup>1</sup>*Department of Pharmacy, Faculty of Medical Sciences, University of Kragujevac, Kragujevac,* <sup>2</sup>*College of Health Studies, Podgorica, Montenegro,* <sup>3</sup>*Department of Physiology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, Serbia,* <sup>4</sup>*Department of Human Pathology, 1<sup>st</sup> 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 T<sup>1</sup>, Gazdag P<sup>1</sup>, Jost N<sup>1,2</sup>, Virag L<sup>1</sup>, Baczko I<sup>1</sup>, Varro A<sup>1,2</sup>  
<sup>1</sup>*Department of Pharmacology and Pharmacotherapy University of Szeged,* <sup>2</sup>*MTA-SZTE Cardiovascular Pharmacology Research Group, Szeged, Hungary*
- P04 MODIFIED FATTY ACIDS PROFILE IN ERITHROCYTES IN SUBJECTS WITH METABOLIC SYNDROME**  
Arsic A<sup>1</sup>, Ristic Medic D<sup>1</sup>, Petrovic S<sup>1</sup>, Stojanovic A<sup>2</sup>, Vucic V<sup>1</sup>  
<sup>1</sup>*Center of Research Excellence in Nutrition and Metabolism, Institute for Medical Research, University of Belgrade,* <sup>2</sup>*Clinical Hospital Center "Bezanijska Kosa" Belgrade, Serbia*
- P05 BLOOD PLASMA FATTY ACID ANALYSIS OF JCR-LA:CP RATS ON FLAXSEED SUPPLEMENTED DIET**  
Austria A<sup>1-3</sup>, Parikh M<sup>1-3</sup>, Kura B<sup>4</sup>, Garg B<sup>2,3</sup>, Pierce G<sup>1-3</sup>  
<sup>1</sup>*Department of Physiology and Pathophysiology, Faculty of Health Sciences, University of Manitoba,* <sup>2</sup>*Canadian Centre for Agri-food Research in Health and Medicine (CCARM),* <sup>3</sup>*The Institute of Cardiovascular Sciences, St. Boniface Hospital Albrechtsen Research Centre, Winnipeg, Canada,* <sup>4</sup>*Institute 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**  
Baranyai D<sup>1</sup>, Horvath B<sup>1</sup>, Veress R<sup>1</sup>, Nanasi PP<sup>1</sup>, Fulop GA<sup>2</sup>, Kovacs A<sup>2</sup>, Csipo T<sup>2</sup>,  
Papp Z<sup>2</sup>, Olah A<sup>3</sup>, Radovits T<sup>3</sup>, Toth A<sup>2</sup>  
<sup>1</sup>*Department of Physiology, Faculty of Medicine, University of Debrecen,* <sup>2</sup>*Division of Clinical Physiology, Department of Cardiology, Faculty of Medicine, University of Debrecen, Debrecen,* <sup>3</sup>*Semmelweis 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**  
Bencsik P<sup>1,2</sup>, Gomori K<sup>1,2</sup>, Kenyeres E<sup>1</sup>, Szabados T<sup>1</sup>, Pipis J<sup>2</sup>, Dorman G<sup>3</sup>,  
 Ferdinandy P<sup>2,4</sup>, Gorbe A<sup>1,2,4</sup>  
<sup>1</sup>Cardiovascular Research Group, Department of Pharmacology and Pharmacotherapy, Faculty of Medicine, University of Szeged, <sup>2</sup>Pharmahungary Group, Szeged, <sup>3</sup>Targetex Biosciences, Dunakeszi, <sup>4</sup>Department 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**  
Bereczki M<sup>1</sup>, Kurtan B<sup>1</sup>, Veress R<sup>1</sup>, Baranyai D<sup>1</sup>, Dienes C<sup>1</sup>, Kiss D<sup>1</sup>, Kovacs Z<sup>1</sup>, Kistamas K<sup>1</sup>, Banyasz T<sup>1</sup>, Nanasi P<sup>1,2</sup>, Szentandrassy N<sup>1,2</sup>, Horvath B<sup>1,3</sup>  
<sup>1</sup>Department of Physiology, Faculty of Medicine, University of Debrecen, <sup>2</sup>Department of Dental Physiology, Faculty of Dentistry, University of Debrecen, <sup>3</sup>Faculty of Pharmacy, University of Debrecen, Debrecen, Hungary
- P09 ASSESSMENT OF PLATELET RESPIRATORY FUNCTION IN PREECLAMPSIA**  
Bina AM<sup>1</sup>, Lelcu T<sup>1</sup>, Avram VF<sup>1</sup>, Aburel OM<sup>1,\*</sup>, Popa Z<sup>2</sup>, Craina M<sup>2</sup>, Muntean DM<sup>1,\*</sup>  
<sup>1</sup>Department of Functional Sciences - Pathophysiology, <sup>\*</sup>Center for Translational Research and Systems Medicine, "Victor Babes" University and Medicine Pharmacy, <sup>2</sup>Department 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**  
Borza C<sup>1,\*</sup>, Anechitei A<sup>1</sup>, Aburel OM<sup>1,\*</sup>, Sturza A<sup>1,\*</sup>, Noveanu L<sup>1,\*</sup>, Ionac A<sup>2</sup>, Feier H<sup>3</sup>, Gaspar M<sup>3</sup>, Muntean DM<sup>1,\*</sup>, Mornos C<sup>2</sup>  
<sup>1</sup>Department of Functional Sciences - Pathophysiology, <sup>2</sup>Department of Cardiology – <sup>2nd</sup> Cardiology Clinic, <sup>3</sup>Department of Cardiovascular Surgery, <sup>\*</sup>Center for Translational Research and Systems Medicine, "Victor Babes" University of Medicine and Pharmacy of Timisoara, Romania
- P11 SERUM CARTILAGE OLIGOMETRIC MATRIX PROTEIN-BIOMARKER OF EARLY RHEUMATOID ARTHRITIS ACTIVITY. A PILOT STUDY**  
 Caraba A<sup>1</sup>, Babalic FC<sup>1</sup>, Toth E<sup>2</sup>, Tudor A<sup>3</sup>, Borza C<sup>2</sup>  
<sup>1</sup>Department of Internal Medicine, Division of Rheumatology, "Victor Babes" University of Medicine and Pharmacy, <sup>2</sup>Department of Pathophysiology, "Victor Babes" University of Medicine and Pharmacy, <sup>3</sup>Department of Informatics and Biostatistics, "Victor Babes" University of Medicine and Pharmacy Timisoara, Timisoara, Romania

- P12 PRECONDITIONING WITH *GALIUM VERUM* L. EXTRACT PROTECTS THE RAT HEART AGAINST ISCHEMIA-REPERFUSION INJURY**  
Bradic J<sup>1</sup>, Zivkovic V<sup>2</sup>, Srejovic I<sup>2</sup>, Jeremic J<sup>1</sup>, Andjic M<sup>1</sup>, Tomovic M<sup>1</sup>, Bolevich S<sup>3</sup>, Petkovic A<sup>1</sup>, Bolevich S<sup>4</sup>, Jakovljevic V<sup>2,4</sup>  
<sup>1</sup>*Department of Pharmacy, Faculty of Medical Sciences, University of Kragujevac,* <sup>2</sup>*Department of Physiology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, Serbia,* <sup>3</sup>*Department of Human Pathophysiology, 1<sup>st</sup> Moscow State Medical University IM Sechenov,* <sup>4</sup>*Department of Human Pathology, 1<sup>st</sup> 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**  
Brankovic S<sup>1</sup>, Gocmanac Ignjatovic M<sup>1</sup>, Kostic M<sup>2</sup>, Milutinovic M<sup>2</sup>, Kitic N<sup>3</sup>, Miladinovic B<sup>2</sup>, Kitic D<sup>2</sup>  
<sup>1</sup>*Department of Physiology, Faculty of Medicine, University of Nis,* <sup>2</sup>*Department of Pharmacy, Faculty of Medicine, University of Nis,* <sup>3</sup>*Faculty 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 M<sup>1</sup>, Zivkovic M<sup>1</sup>, Stanisic J<sup>2</sup>, Koricanac G<sup>2</sup>, Stankovic A<sup>1</sup>  
<sup>1</sup>*Laboratory for Radiobiology and Molecular Genetics, Vinca Institute of Nuclear Sciences, University of Belgrade,* <sup>2</sup>*Laboratory 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**  
Ciric M<sup>1</sup>, Najman S<sup>2</sup>, Nesic M<sup>1</sup>, Puskas N<sup>3</sup>, Pavlovic V<sup>1</sup>, Jankovic Velickovic Lj<sup>4</sup>, Ciric V<sup>5</sup>  
<sup>1</sup>*Institute of Physiology, Faculty of Medicine, University of Nis,* <sup>2</sup>*Institute of Biology and Human Genetics, Faculty of Medicine, University of Nis, Nis, Serbia,* <sup>3</sup>*Institute of Histology and Embryology "Aleksandar Dj. Kostic", Faculty of Medicine, University of Belgrade, Belgrade, Serbia,* <sup>4</sup>*Institute of Pathology, Faculty of Medicine, University of Nis,* <sup>5</sup>*Clinic for Endocrinology, Clinical Center Nis, Nis, Serbia*
- P16 EXERCISE-INDUCED REMODELING OF THE ATRIA IN STANDARD BRED RACEHORSES**  
Dalgas Nissen S<sup>1</sup>, Carstensen H<sup>1</sup>, Zander Hesselkilde E<sup>2</sup>, Saljic A<sup>2</sup>, Loft-Andersen A<sup>1</sup>, Frederiksen S<sup>1</sup>, Jespersen T<sup>2</sup>, Buhl R<sup>1</sup>  
<sup>1</sup>*Department of Veterinary Clinical Sciences, Faculty of Health and Medical Sciences, University of Copenhagen,* <sup>2</sup>*Department 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 MD<sup>1</sup>, Aburel OM<sup>1,2</sup>, Muntean DM<sup>1,2</sup>  
<sup>1</sup>*Department of Functional Sciences – Pathophysiology, <sup>2</sup>Center for Translational Research and Systems Medicine, “Victor Babes” University of Medicine and Pharmacy of Timisoara, Timisoara, Romania*
- P18 ADMINISTRATION OF SACUBITRIL PLUS VALSARTAN IN PATIENTS WITH HEART FAILURE**  
Leal RS<sup>1</sup>, Blackman AO<sup>2</sup>, Rodrigues TM<sup>1</sup>  
<sup>1</sup>*Morphology Department, Federal University of Sergipe, Sergipe, <sup>2</sup> Faculty of Education and Health Sciences, University Center of Brasília, Brasília, 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 V<sup>1</sup>, Kovacs M<sup>2</sup>, Prorok J<sup>1</sup>, Nagy N<sup>1</sup>, Varro A<sup>1</sup>, Vegh A<sup>1</sup>  
<sup>1</sup>*Department of Pharmacology and Pharmacotherapy, University of Szeged, <sup>2</sup>Hungarian 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**  
Deres L<sup>1,2</sup>, Ordog K<sup>1,2</sup>, Horvath O<sup>1,2</sup>, Bruszt K<sup>1,2</sup>, Sumegi B<sup>2,3,4</sup>, Gallyas F<sup>2,3,4</sup>, Toth K<sup>1,2</sup>, Halmosi R<sup>1,2</sup>  
<sup>1</sup>*University of Pecs, Medical School, 1st Department of Medicine, <sup>2</sup>University of Pecs, Szentagothai Research Center, <sup>3</sup>University of Pecs, Department of Biochemistry and Medical Chemistry, <sup>4</sup>MTA-PTE Nuclear-Mitochondrial Interactions Research Group, Pecs, Hungary*

- P22 A NOVEL ANDERSEN-TAWIL SYNDROME MUTATION LEADS TO LOSS OF FUNCTION DUE TO IMPAIRED CYTOPLASMIC DOMAIN INTERACTIONS**  
Deri S<sup>1</sup>, Borbas J<sup>2</sup>, Hartai T<sup>1</sup>, Hategan L<sup>2</sup>, Csanyi B<sup>2</sup>, Visnyovszky A<sup>1</sup>, Madacsy T<sup>3</sup>, Maleth J<sup>3</sup>, Hegedus Z<sup>4</sup>, Nagy I<sup>5</sup>, Labro A<sup>6</sup>, Forster T<sup>2</sup>, Varro A<sup>1</sup>, Sepp R<sup>2</sup>, Ordog B<sup>1</sup>  
<sup>1</sup>Department of Pharmacology and Pharmacotherapy, University of Szeged, <sup>2</sup>2<sup>nd</sup> Department of Internal Medicine and Cardiology Centre, University of Szeged, <sup>3</sup>1<sup>st</sup> Department of Internal Medicine, University of Szeged, <sup>4</sup>Institute of Biophysics, Biological Research Centre of the Hungarian Academy of Sciences, Szeged, Department of Biochemistry and Medical Chemistry, University of Pécs, Pécs, <sup>5</sup>Institute of Biochemistry, Biological Research Centre the Hungarian Academy of Sciences, Szeged, Seqomics Biotechnology Ltd., Morahalom, Hungary, <sup>6</sup>Department of Biomedical Sciences, University of Antwerp, Antwerp, Belgium
- P23 HEAT SHOCK PROTEIN-60 MODULATES VASCULAR SMOOTH MUSCLE CELL PROLIFERATION**  
 Deniset J<sup>1</sup>, Hedley T<sup>1</sup>, Hlavackova M<sup>2</sup>, Maddaford G<sup>1</sup>, Dibrov E<sup>1</sup>, Pierce G<sup>1</sup>  
<sup>1</sup>Institute of Cardiovascular Sciences, Albrechtsen Research Centre, St. Boniface Hospital and Department of Physiology and Pathophysiology, Rady Faculty of Health Sciences, University of Manitoba, Winnipeg, Canada, <sup>2</sup>Institute of Physiology, Czech Academy of Sciences, Prague, Czech Republic
- P24 TRPM4 INHIBITOR 9-PHENANTHROL BLOCKS NA<sup>+</sup> AND K<sup>+</sup> BUT NOT CA<sup>2+</sup> CURRENTS IN CANINE VENTRICULAR MYOCYTES**  
Dienes C<sup>1</sup>, Veress R<sup>1</sup>, Baranyai D<sup>1</sup>, Hezso T<sup>1</sup>, Hegyi B<sup>2</sup>, Kistamas K<sup>1</sup>, Magyar J<sup>3</sup>, Banyasz T<sup>1</sup>, Nanasi P<sup>4</sup>, Szentandrassy N<sup>4</sup>, Horvath B<sup>1</sup>  
<sup>1</sup>Department of Physiology, Faculty of Medicine, University of Debrecen, <sup>2</sup>Department of Pharmacology, University of California, Davis, USA, <sup>3</sup>Department of Physiology, Division of Sport Physiology, Faculty of Medicine, University of Debrecen, <sup>4</sup>Department of Dental Physiology and Pharmacology, Faculty of Dentistry, University of Debrecen, Debrecen, Hungary
- P25 ASSOCIATION BETWEEN HYPERHOMOCYSTEINEMIA AND THE SEVERITY OF CORONARY ARTERY DISEASE ACCORDING TO SYNTAX SCORE**  
Djuric P<sup>1</sup>, Obradovic S<sup>1</sup>, Mladenovic Z<sup>1</sup>, Spasic M<sup>1</sup>, Jovic Z<sup>1</sup>, Prokic D<sup>2</sup>, Lecic Krstic I<sup>3</sup>, Radojicic Z<sup>4</sup>, Djuric D<sup>5</sup>  
<sup>1</sup>Clinic of Cardiology and Urgent Internal Medicine, Military Medical Academy, <sup>2</sup>Institute for Radiology, Military Medical Academy, <sup>3</sup>Clinic for Anesthesiology and Intensive Care, Military Medical Academy, <sup>4</sup>Faculty of Organizational Sciences, University of Belgrade, <sup>5</sup>Institute of Medical Physiology "Richard Burian", Faculty of Medicine, University of Belgrade, Belgrade, Serbia

- P26 THE EFFECTS OF CHRONIC FLAXSEED OIL AND  $\alpha$ -LINOLENIC ACID ADMINISTRATION ON REDOX STATUS OF MALE AND FEMALE RATS: A COMPARATIVE STUDY**  
Draginic N<sup>1</sup>, Andjic M<sup>1</sup>, Radoman K<sup>2</sup>, Jeremic J<sup>1</sup>, Bradic J<sup>1</sup>, Nikolic Turnic T<sup>1</sup>, Srejavic I<sup>3</sup>, Zivkovic V<sup>3</sup>, Bolevich S<sup>4</sup>, Jakovljevic V<sup>3,4</sup>  
<sup>1</sup>Department of Pharmacy, Faculty of Medical Sciences, University of Kragujevac, <sup>2</sup>College of Health Studies, Podgorica, Montenegro, <sup>3</sup>Department of Physiology, Faculty of Medical Sciences, Kragujevac, Serbia, <sup>4</sup>Department of Human Pathology 1<sup>st</sup> Moscow State Medical University IM Sechenov, Moscow, Russian Federation
- P27 TREATMENT OF ACUTE MYOCARDIAL INFARCTION WITH RECANALIZATION ACCOMPANIED WITH ISCHEMIC POSTCONDITIONING: STUDY ON CARDIOPROTECTION AND BIOMARKERS**  
Ernst M<sup>1</sup>, Sasi V<sup>2</sup>, Kenyeres E<sup>1</sup>, Szabados T<sup>1</sup>, Gavaller H<sup>2</sup>, Ungi I<sup>2</sup>, Fodor E<sup>3</sup>, Barczy G<sup>4</sup>, Vago H<sup>4</sup>, Merkely B<sup>4</sup>, Ferdinandy P<sup>3,5</sup>, Bencsik P<sup>1,3</sup>  
<sup>1</sup>Department of Pharmacology and Pharmacotherapy, Faculty of Medicine, University of Szeged, <sup>2</sup>Department of Invasive Cardiology, <sup>2<sup>nd</sup></sup> Department of Internal Medicine and Cardiology Center, Faculty of Medicine, University of Szeged, <sup>3</sup>Pharmahungary Group, Szeged, <sup>4</sup>Heart and Vascular Center, Semmelweis University, Budapest, <sup>5</sup>Department 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**  
Farkas-Morvay N<sup>1</sup>, Varro A<sup>1,2</sup>, Baczko I<sup>1</sup>, Lepran I<sup>1</sup>  
<sup>1</sup>Department Pharmacology and Pharmacotherapy, University of Szeged, <sup>2</sup>MTA-SZTE Research Group of Cardiovascular Pharmacology, Hungarian Academy of Sciences, Szeged, Hungary
- P29 IDENTIFICATION OF POTENTIAL EXERCISE INITIATED SMALL MOLECULES TO SUPPORT ORGAN REGENERATION AND REPAIR IN HUMANS**  
Faskerti G<sup>1,5</sup>, Czuni LA<sup>3,5</sup>, Takatsy A<sup>1</sup>, Ronai D<sup>1</sup>, Nagy Z<sup>2</sup>, Rendeki S<sup>3</sup>, Rendeki M<sup>3</sup>, Koltai A<sup>3</sup>, Maar K<sup>1,5</sup>, Gallyas F<sup>1,5</sup>, Bock-Marquette I<sup>1,5</sup>  
<sup>1</sup>Departments of Biochemistry and Medical Chemistry, <sup>2</sup>Laboratory Medicine, <sup>3</sup>Military Medicine, Disaster Medicine, And Law Enforcement Medicine, University of Pecs Medical School, <sup>4</sup>Institute of Biology, Faculty of Sciences, <sup>5</sup>Szentagothai Research Centre University of Pecs, Pecs, Hungary



**P30    CARDIOVASCULAR AND METABOLIC EFFECTS OF QUERCETIN IN ZUCKER DIABETIC RATS**

Ferenczyova K<sup>1</sup>, Kalocayova B<sup>1</sup>, Kindernay L<sup>1</sup>, Sykora M<sup>1</sup>, Frimmel K<sup>1</sup>, Balis P<sup>2</sup>, Zemancikova A<sup>2</sup>, Torok J<sup>2</sup>, Lory V<sup>3</sup>, Kubicova P<sup>3</sup>, Balogova E<sup>3</sup>, Krskova K<sup>3</sup>, Zorad S<sup>3</sup>, Bartekova M<sup>1</sup>

<sup>1</sup>*Institute for Heart Research, Centre of Experimental Medicine, Slovak Academy of Sciences,* <sup>2</sup>*Institute of Normal and Pathological Physiology, Centre of Experimental Medicine, Slovak Academy of Sciences,* <sup>3</sup>*Institute of Experimental Endocrinology, Biomedical Research Center, Slovak Academy of Sciences, Bratislava, Slovakia*

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

Gazdag P<sup>1</sup>, Polyák A<sup>2,3</sup>, Csík N<sup>4</sup>, Prorok J<sup>1</sup>, Varró A<sup>1,3</sup>, Baczkó I, Farkas AS<sup>2</sup>, Farkas A<sup>2</sup>

<sup>1</sup>*Department of Pharmacology and Pharmacotherapy, Faculty of Medicine, University of Szeged,* <sup>2</sup>*Second Department of Medicine and Cardiology Centre, Faculty of Medicine, University of Szeged,* <sup>3</sup>*Working Group of Cardiovascular Pharmacology, Hungarian Academy of Sciences, Szeged,* <sup>4</sup>*John 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**

Gocmanac Ignjatovic M<sup>1</sup>, Brankovic S<sup>1</sup>, Kitic D<sup>2</sup>, Milutinovic M<sup>2</sup>, Kostic M<sup>2</sup>, Miladinovic B<sup>2</sup>, Kitic N<sup>3</sup>

<sup>1</sup>*Department of Physiology, Faculty of Medicine, University of Nis,* <sup>2</sup>*Department of Pharmacy, Faculty of Medicine, University of Nis,* <sup>3</sup>*Faculty of Medicine, University of Nis, Nis, Serbia*

**P33    INVOLVEMENT OF VOLTAGE-GATED POTASSIUM CHANNELS (K<sub>v</sub>) IN THE RELAXANT EFFECTS OF RESVERATROL ON ISOLATED SAPHENOUS VEIN FROM DIABETIC PATIENTS**

Gostimirovic M<sup>1</sup>, Peric M<sup>2</sup>, Novakovic R<sup>1</sup>, Rajkovic J<sup>1</sup>, Djokic V<sup>1</sup>, Terzic D<sup>3</sup>, Putnik S<sup>3</sup>, Bukarica A<sup>4</sup>, Gojkovic Bukarica Lj<sup>1</sup>

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

- P34 SARCOLEMMA CALCIUM ENTRY THROUGH L-TYPE CALCIUM CHANNELS CONTROLS THE PROFILE OF CALCIUM ACTIVATED CHLORIDE CURRENT IN CANINE VENTRICULAR MYOCYTES**  
Horvath B<sup>1,2</sup>, Szentandrassy N<sup>1,3</sup>, Hegyi B<sup>1</sup>, Vaczi K<sup>1</sup>, Gonczi M<sup>1</sup>, Dienes B<sup>1</sup>, Kistamas K<sup>1</sup>, Veress R<sup>1</sup>, Ruzsnavszky F<sup>1</sup>, Banyasz T<sup>1</sup>, Magyar J<sup>1,4</sup>, Bacsko I<sup>5</sup>, Varro A<sup>6,7</sup>, Seprenyi G<sup>8</sup>, Csernoch L<sup>1</sup>, Nanasi PP<sup>1,2</sup>  
<sup>1</sup>Department of Physiology, Faculty of Medicine, University of Debrecen, <sup>2</sup>Faculty of Pharmacy, University of Debrecen, <sup>3</sup>Department of Dental Physiology, Faculty of Dentistry, University of Debrecen, <sup>4</sup>Department of Cardiology, Clinical Center, University of Debrecen, <sup>5</sup>Division of Sport Physiology, Department of Physiology, Faculty of Medicine, University of Debrecen, Debrecen, <sup>6</sup>Department of Pharmacology and Pharmacotherapy, Faculty of Medicine, University of Szeged, <sup>7</sup>MTA-SZTE Research Group of Cardiovascular Pharmacology, Hungarian Academy of Sciences, <sup>8</sup>Department of Medical Biology, Faculty of Medicine, University of Szeged, Szeged, Hungary
- P35 PLEIOTROPIC ACTION OF RIP1: A COMPARATIVE STUDY OF VARIOUS RIP1 INHIBITORS**  
Horvath C<sup>1</sup>, Szobi A<sup>1</sup>, Kindernay L<sup>2</sup>, Ledvenyiova V<sup>2</sup>, Ravingerova T<sup>2</sup>, Adameova A<sup>1</sup>  
<sup>1</sup>Department of Pharmacology and Toxicology, Faculty of Pharmacy, Comenius University, <sup>2</sup>Institute for Heart Research, Slovak Academy of Sciences, Bratislava, Slovak Republic
- P36 THE EFFECT OF BGP-15 TREATMENT ON MITOCHONDRIAL DYNAMICS AND FUNCTION IN IN VIVO ANIMAL MODEL AND IN CELL CULTURE**  
Horvath O<sup>1,2</sup>, Ordog K<sup>1,2</sup>, Bruszt K<sup>1,2</sup>, Sumegi B<sup>3,4</sup>, Toth K<sup>1,2,4</sup>, Halmosi R<sup>1,2</sup>, Deres L<sup>1,2,4</sup>  
<sup>1</sup>University of Pecs, Medical School, <sup>1<sup>st</sup></sup>Department of Medicine, <sup>2</sup>University of Pecs, Szentagothai Research Center, <sup>3</sup>University of Pecs, Department of Biochemistry and Medical Chemistry, <sup>4</sup>MTA-PTE Nuclear-Mitochondrial Interactions Research Group, Pecs, Hungary
- 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  
 Institute of Physiology of the Czech Academy of Sciences, Prague, Czech Republic
- P38 ISCHAEMIC PRECONDITIONING PREVENTS THE HIDDEN ELECTROPHYSIOLOGICAL CARDIOTOXIC EFFECTS OF ROFECOXIB**  
Husti Z<sup>1</sup>, Varga RS<sup>1</sup>, Brenner G<sup>2</sup>, Bencsik P<sup>1</sup>, Giricz Z<sup>2,3</sup>, Gorbe A<sup>1,2,3</sup>, Shulz R<sup>4</sup>, Varro A<sup>1</sup>, Ferdinandy P<sup>2,3</sup>, Bacsko I<sup>1</sup>  
<sup>1</sup>Department of Pharmacology and Pharmacotherapy, University of Szeged, Szeged, <sup>2</sup>Department of Pharmacology and Pharmacotherapy, Semmelweis University, Budapest, <sup>3</sup>Pharmahungary Group, Szeged, Hungary

- P39 PHARMACY STUDENTS' ATTITUDES ON ELECTRONIC CIGARETTES USE: A CROSS-SECTIONAL STUDY**  
Ilic I<sup>1</sup>, Sipetic S<sup>2</sup>, Grujicic J<sup>3</sup>, Ilic M<sup>4</sup>  
<sup>1</sup>Faculty of Medicine, University of Belgrade, <sup>2</sup>Faculty of Medicine, Institute of Epidemiology, University of Belgrade, Belgrade, <sup>3</sup>Ave Maria University, Ave Maria, USA, <sup>4</sup>Department of Epidemiology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, Serbia
- P40 ESSENTIAL HYPERTENSION MORTALITY IN SERBIA, 1991-2016: A JOINPOINT REGRESSION ANALYSIS**  
Ilic I<sup>1</sup>, Sipetic S<sup>2</sup>, Grujicic J<sup>3</sup>, Ilic M<sup>4</sup>  
<sup>1</sup>Faculty of Medicine, University of Belgrade, <sup>2</sup>Faculty of Medicine, Institute of Epidemiology, University of Belgrade, Belgrade, <sup>3</sup>Ave Maria University, Ave Maria, USA, <sup>4</sup>Department of Epidemiology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, Serbia
- P41 RISK FACTORS OF MYOCARDIAL INFARCTION IN ELDERLY AND NON-ELDERLY: A CASE-CONTROL STUDY**  
Ilic I<sup>1</sup>, Sipetic S<sup>2</sup>, Grujicic J<sup>3</sup>, Ilic M<sup>4</sup>  
<sup>1</sup>Faculty of Medicine, University of Belgrade, <sup>2</sup>Faculty of Medicine, Institute of Epidemiology, University of Belgrade, Belgrade, Serbia, <sup>3</sup>Ave Maria University, Ave Maria, USA, <sup>4</sup>Department of Epidemiology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, Serbia
- P42 OLIVE LEAF COMPOUND OLEUROPIEN EXERTS NEGATIVE INOTROPIC AND CHRONOTROPIC EFFECTS ON ISOLATED RAT ATRIA**  
Ilic S<sup>1</sup>, Stojiljkovic N<sup>1</sup>, Stojanovic N<sup>2</sup>  
<sup>1</sup>Department of Physiology, University of Nis, Faculty of Medicine, <sup>2</sup>Faculty of Medicine, University of Nis, Nis, Serbia
- P43 THE INFLUENCE OF FOLIC ACID APPLICATION ON CARDIAC OXIDATIVE STRESS PARAMETERS AND CARDIOMETABOLIC MARKERS IN MONOCROTALINE-INDUCED HEART FAILURE IN WISTAR MALE RATS**  
Jakovljevic Uzelac J<sup>1</sup>, Mutavdzin S<sup>1</sup>, Todorovic D<sup>1</sup>, Stankovic S<sup>2</sup>, Labudovic Borovic M<sup>3</sup>, Milic N<sup>4</sup>, Vasic M<sup>5</sup>, Japundzic Zigon N<sup>5</sup>, Simic T<sup>6</sup>, Djuric D<sup>1</sup>  
<sup>1</sup>Institute of Medical Physiology "Richard Burian", Faculty of Medicine, University of Belgrade, <sup>2</sup>Centre of Medical Biochemistry, Clinical Centre of Serbia, Belgrade, <sup>3</sup>Institute of Histology and Embryology "Aleksandar Dj. Kostic", Faculty of Medicine, University of Belgrade, <sup>4</sup>Institute of Medical Statistics and Informatics, Faculty of Medicine, University of Belgrade, <sup>5</sup>Institute of Pharmacology, Clinical Pharmacology and Toxicology, Faculty of Medicine, University of Belgrade, <sup>6</sup>Institute of Medical and Clinical Biochemistry, Faculty of Medicine, University of Belgrade, Belgrade, Serbia

- P44 ALTERATIONS OF OXIDATIVE STRESS PARAMETERS IN CORONARY VENOUS EFFLUENT OF ISOLATED RAT HEART BY MODULATING N-METHYL-D-ASPARTATE RECEPTORS**  
 Joksimovic Jovic J<sup>1</sup>, Srejavic I<sup>1</sup>, Zivkovic V<sup>1</sup>, Jeremic N<sup>2</sup>, Milosavljevic I<sup>2</sup>,  
 Nikolic Turnic T<sup>2</sup>, Bolevich S<sup>3</sup>, Djuric D<sup>4</sup>, Jakovljevic V<sup>2,3</sup>  
<sup>1</sup>*Department of Physiology, Faculty of Medical Sciences, University of Kragujevac,*  
<sup>2</sup>*Department of Pharmacy, Faculty of Medical Sciences, University of Kragujevac,*  
<sup>3</sup>*Kragujevac, Department of Human Pathology, 1<sup>st</sup> Moscow State Medical University IM*  
<sup>4</sup>*Sechenov, Moscow, Russian Federation, Institute of Medical Physiology "Richard Burian"*  
<sup>5</sup>*Faculty of Medicine, University of Belgrade, Belgrade, Serbia*
- P45 SUPEROXIDE DISMUTASE-1 AND CATALASE EXPRESSIONS IN THE KIDNEY OF HYPERTENSIVE RATS WITH ADRIAMYCIN NEPHROPATHY: EFFECTS OF OLIVE LEAF EXTRACT**  
 Karanovic D<sup>1</sup>, Mihailovic Stanojevic N<sup>1</sup>, Miloradovic Z<sup>1</sup>, Ivanov M<sup>1</sup>, Vajic UJ<sup>1</sup>,  
 Grujic Milanovic J<sup>1</sup>, Cirovic S<sup>2</sup>, Dekanski D<sup>3</sup>, Jovovic Dj<sup>1</sup>  
<sup>1</sup>*Institute for Medical Research, University of Belgrade, Institute of Pathology, Faculty of*  
<sup>2</sup>*Medicine, University of Belgrade, R&D Institute, Galenika a.d., Belgrade, Serbia*
- 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**  
 Kiss D<sup>1</sup>, Hezso T<sup>1</sup>, Kurtan B<sup>1</sup>, Veress R<sup>1</sup>, Baranyai D<sup>1</sup>, Kovacs Z<sup>1</sup>, Dienes C<sup>1</sup>,  
 Szentandrassy N<sup>2</sup>, Banyasz T<sup>1</sup>, Magyar J<sup>3</sup>, Nanasi P<sup>2</sup>, Horvath B<sup>1</sup>  
<sup>1</sup>*Department of Physiology, Faculty of Medicine, University of Debrecen, Department of*  
<sup>2</sup>*Dental Physiology and Pharmacology, University of Debrecen, Department of Physiology,*  
<sup>3</sup>*Division of Sport Physiology, Faculty of Medicine, University of Debrecen, Debrecen,*  
<sup>4</sup>*Hungary*

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

Kostic S<sup>1</sup>, Djuric M<sup>2</sup>, Nikolic Turnic T<sup>3</sup>, Srejovic I<sup>4</sup>, Zivkovic V<sup>4</sup>, Stevanovic P<sup>2</sup>, Jakovljevic V<sup>4,5</sup>, Djuric D<sup>1</sup>

<sup>1</sup>*Institute of Medical Physiology "Richard Burian", Faculty of Medicine, University of Belgrade,* <sup>2</sup>*Department of Anesthesiology, Reanimatology and Intensive Care Medicine, University Clinical Hospital Center "Dr. Dragisa Misovic - Dedinje", Belgrade,* <sup>3</sup>*Department of Pharmacy, Faculty of Medical Sciences, University of Kragujevac, Kragujevac,* <sup>4</sup>*Department of Physiology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, Serbia,* <sup>5</sup>*Department of Human Pathology, 1<sup>st</sup> Moscow State Medical, University IM Sechenov, Moscow, Russian Federation*

**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

*Laboratory for Chronobiology and Aging, Laboratory for Reproductive Endocrinology and Signaling, Centre of Excellence CeRES, Faculty of Sciences, University of Novi Sad, Novi Sad, Serbia*

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

Krga I<sup>1,2</sup>, Vidovic N<sup>1</sup>, Milenkovic D<sup>2</sup>, Konic Ristic A<sup>1</sup>, Morand C<sup>2</sup>, Glibetic M<sup>1</sup>

<sup>1</sup>*Centre of Research Excellence in Nutrition and Metabolism, Institute for Medical Research, University of Belgrade, Serbia,* <sup>2</sup>*University Clermont Auvergne, INRA, UNH, CRNH Auvergne, Clermont-Ferrand, France*

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

Kundu S<sup>1</sup>, Khan L<sup>2</sup>

<sup>1</sup>*Department of Biochemistry, University of Delhi South Campus,* <sup>2</sup>*Department of Biosciences, Faculty of Natural Sciences, Jamia Millia Islamia, New Delhi, India*

**P52 MOLECULAR HYDROGEN ATTENUATES OXIDATIVE STRESS IN HEART INJURY**

Kura B<sup>1</sup>, Sagatova A<sup>2</sup>, Fulop M<sup>2</sup>, Slezak J<sup>1</sup>

<sup>1</sup>*Institute for Heart Research, Centre of Experimental Medicine, SAS, Bratislava,* <sup>2</sup>*University Centre for Electron Accelerators, Slovak Medical University, Trencin, Slovakia*

**P53 TWO NOVEL CSRP3 VARIANTS IDENTIFIED IN PATIENTS WITH HYPERTROPHIC CARDIOMYOPATHY**

Kusic Tisma J<sup>1</sup>, Rakicevic Lj<sup>1</sup>, Ptakova N<sup>2</sup>, Tesic M<sup>3</sup>, Macek M Jr<sup>2</sup>, Radojkovic D<sup>1</sup>

<sup>1</sup>*Institute of Molecular Genetics and Genetic Engineering, University of Belgrade,* <sup>2</sup>*nd*

*Faculty of Medicine and Faculty Hospital Motol, Charles University, Czech Republic,*

<sup>3</sup>*Cardiology Clinic, Clinical Center of Serbia, Belgrade, Serbia*

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

Kuveljic J<sup>1</sup>, Djordjevic A<sup>1</sup>, Zivkovic M<sup>1</sup>, Popic K<sup>1</sup>, Dekleva M<sup>2</sup>, Markovic Nikolic N<sup>2</sup>, Alavantic D<sup>1</sup>, Stankovic A<sup>1</sup>, Djuric T<sup>1</sup>

<sup>1</sup>*Vinca Institute of Nuclear Sciences, Laboratory for Radiobiology and Molecular Genetics,*

*University of Belgrade,* <sup>2</sup>*Department of Cardiology, University Clinical Center "Zvezdara",*

*Faculty of Medicine, University of Belgrade, Belgrade, Serbia*

**P55 IMPAIRMENT OF PLATELET RESPIRATION AS EARLY BIOMARKER OF HEMATOLOGIC MALIGNANCIES**

Lelcu T<sup>1</sup>, Bina AM<sup>1</sup>, Avram VF<sup>1</sup>, Aburel OM<sup>1,\*</sup>, Borza C<sup>1,\*</sup>, Arghirescu S<sup>2</sup>, Muntean DM<sup>1,\*</sup>

<sup>1</sup>*Department of Functional Sciences- Pathophysiology, \*Center for Translational Research and Systems Medicine, "Victor Babes" University and Medicine Pharmacy,* <sup>2</sup>*Department of Pediatrics - The 3<sup>rd</sup> Clinic of Pediatrics, "Victor Babes" University and Medicine Pharmacy, Timisoara, Romania*

**FRIDAY, SEPTEMBER 13TH 2019**

**POSTER SESSION II**

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

*Panel of Judges: TBA*

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

Lipovac M, Popovic N

*Faculty of Medicine, University of Montenegro, Podgorica, Montenegro*

- P57 VOLUNTARY EXERCISE AND DELAYED “REMOTE” PRECONDITIONING AS NONINVASIVE AND CLINICALLY RELEVANT FORMS OF “CONDITIONING” OF THE HEART**  
Lonek L<sup>1</sup>, Kindernay L<sup>1</sup>, Puhova A<sup>2</sup>, Zahradnikova A, Jr<sup>2</sup>, Kovacova D<sup>3</sup>, Zohdi V<sup>4</sup>, Jezova D<sup>2</sup>, Ferko M<sup>1</sup>, Ravingerova T<sup>1</sup>  
<sup>1</sup>Centre of Experimental Medicine, Institute for Heart Research, Slovak Academy of Sciences, <sup>2</sup>Biomedical Research Center, Institute of Experimental Endocrinology, Slovak Academy of Sciences, <sup>3</sup>Institute of Patophysiology, <sup>4</sup>Institute of Anatomy, Faculty of Medicine, Comenius University, Bratislava, Slovakia
- P58 THE LEVEL OF EXPRESSION OF V1b RECEPTORS IN HYPOTHALAMIC PVN DEFINES REACTIVITY TO EMOTIONAL STRESS**  
Lozic M<sup>1</sup>, Greenwood M<sup>2</sup>, Murphy D<sup>2</sup>, Japundzic Zigon N<sup>1</sup>  
<sup>1</sup>Institute of Pharmacology, Clinical Pharmacology and Toxicology, Faculty of Medicine University of Belgrade, Belgrade, Serbia, <sup>2</sup>Molecular Neuroendocrinology Research Group, Bristol Medical School, Translational Health Sciences, University of Bristol, Bristol, United Kingdom
- P59 THYMOSIN BETA-4 INFLUENCES MIR1196 EXPRESSION FOLLOWING CARDIAC INFARCTION IN ADULT MICE**  
Maar K<sup>1</sup>, Thatcher J<sup>3</sup>, Shivastava S<sup>3</sup>, DiMaio JM<sup>3</sup>, Olson EN<sup>2</sup>, Gallyas F<sup>1</sup>, Bock Marquette I<sup>1,2,3</sup>  
<sup>1</sup>Department of Biochemistry and Medical Chemistry, Szentagothai Research Centre, University of Pecs Medical School, Pecs, Hungary, Departments of <sup>2</sup>Molecular Biology and <sup>3</sup>Cardiovascular and Thoracic Surgery, University of Texas Southwestern Medical Center, Dallas, USA
- P60 THE EFFECT OF FERROSTATIN-1 ON ISCHEMIA REPERFUSION INJURY IN ADULT RAT CARDIOMYOCYTES**  
Stamenkovic A<sup>1-3</sup>, Maddaford TG<sup>1-3</sup>, Ravandi A<sup>1,4</sup>, Pierce GN<sup>1-3</sup>  
<sup>1</sup>Institute of Cardiovascular Science, <sup>2</sup>Canadian Center for Agri-food Research in Health and Medicine (CCARM), St. Boniface Albrechtsen Research Centre, Departments of <sup>3</sup>Physiology and Pathophysiology and <sup>4</sup>Internal Medicine, Rady Faculty of Health Sciences, University of Manitoba, Winnipeg, Canada
- P61 ROLE OF OXIDIZED-PHOSPHOLIPIDS IN ISCHEMIA-REPERFUSION INJURY AND ITS MITIGATION BY IL-10**  
Bagchi AK<sup>1,2</sup>, Surendran A<sup>1,2</sup>, Malik A<sup>1,2</sup>, Jassal DS<sup>1,3</sup>, Ravandi A<sup>1,3</sup>, Singal PK<sup>1,2</sup>  
<sup>1</sup>Institute of Cardiovascular Sciences, St. Boniface Hospital Albrechtsen Research Centre, <sup>2</sup>Department of Physiology and Pathophysiology, <sup>3</sup>Section of Cardiology, Max Rady College of Medicine, Rady Faculty of Health Sciences, University of Manitoba, Winnipeg, Canada

- P62 MARKERS OF MITOCHONDRIAL BIOGENESIS, FUSION AND ARCHITECTURE ARE DISTURBED IN PBMC FROM WAR VETERANS WITH POSTTRAUMATIC STRESS DISORDER**  
 Markovic AZ<sup>1\*</sup>, Milosevic MM<sup>1\*</sup>, Radovic SM<sup>1</sup>, Starovlah IM<sup>1</sup>, Brkljacic J<sup>2</sup>, Vojnovic Milutinovic D<sup>2</sup>, Matic G<sup>2</sup>, Kostic TS<sup>1</sup>, Andric SA<sup>1</sup>  
<sup>1</sup>Laboratory for Reproductive Endocrinology and Signaling, Laboratory for Chronobiology and Aging, Centre of Excellence CeRES, Faculty of Sciences, University of Novi Sad, Novi Sad, <sup>2</sup>Department of Biochemistry, Institute for Biological Research "Siniša Stankovic", University of Belgrade, Belgrade, Serbia
- P63 PIOGLIAZONE ATTENUATES KIDNEY INJURY IN AN EXPERIMENTAL MODEL OF GENTAMICIN-INDUCED NEPHROTOXICITY IN RATS**  
Medic Brkic B<sup>1</sup>, Stojanovic M<sup>1</sup>, Savic Vujovic K<sup>1</sup>, Rovcanin B<sup>2</sup>, Kekic D<sup>3</sup>, Radojevic Skodric S<sup>4</sup>, Basta Jovanovic G<sup>4</sup>, Prostran M<sup>1</sup>  
<sup>1</sup>Department of Pharmacology, Clinical Pharmacology and Toxicology, Faculty of Medicine, University of Belgrade, <sup>2</sup>Centre for Endocrine Surgery, Clinical Centre of Serbia, Faculty of Medicine, University of Belgrade, <sup>3</sup>Institute for Microbiology and Immunology, Faculty of Medicine, University of Belgrade, <sup>4</sup>Department of Pathology, Faculty of Medicine, University of Belgrade, Belgrade, Serbia
- 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  
 Department of Anatomy and Cell Biology, Faculty of Medicine and Health Sciences, University of Sherbrooke, Sherbrooke, Canada
- P65 THE EFFECT OF THE CHRONIC ADMINISTRATION OF DPP4-INHIBITORS ON SYSTEMIC OXIDATIVE STRESS IN RATS WITH DIABETES TYPE 2**  
Milosavljevic I<sup>1</sup>, Bolevich S<sup>2</sup>, Jeremic N<sup>1</sup>, Zivkovic V<sup>3</sup>, Srejovic I<sup>3</sup>, Jeremic J<sup>1</sup>, Dragicin N<sup>1</sup>, Andjic M<sup>1</sup>, Bolevich S<sup>3</sup>, Jakovljevic V<sup>3,4</sup>  
<sup>1</sup>Department of Pharmacy, Faculty of Medical Sciences, University of Kragujevac, <sup>2</sup>Department of Pathophysiology, 1<sup>st</sup> Moscow State Medical University IM Sechenov, <sup>3</sup>Department of Physiology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, Serbia, <sup>4</sup>1<sup>st</sup> Moscow State Medical University IM Sechenov, Department of Human Pathology, Moscow, Russian Federation
- P66 PROTECTIVE EFFECTS OF VISCUM ALBUM L. LEAF EXTRACT IN BLOOD AND HEART OF RATS INTOXICATED BY CHLORPYRIFOS**  
Milosevic M<sup>1</sup>, Paunovic M<sup>1</sup>, Matic M<sup>1</sup>, Maskovic P<sup>2</sup>, Obradovic A<sup>1</sup>, Ognjanovic B<sup>1</sup>  
<sup>1</sup>Department of Biology and Ecology, Faculty of Science, University of Kragujevac, Kragujevac, <sup>2</sup>Department of Chemistry and Chemical Engineering, Faculty of Agronomy, University of Kragujevac, Cacak, Serbia



- 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  
*Department of Functional Sciences, Faculty of Medicine, "Victor Babes" University of Medicine and Pharmacy Timisoara, Romania*
- P68 CARDIAC AND LIVER RISK IN DIABETIC RATS – THE EFFECTS OF PYRIDOXINE**  
Mutavdzin S<sup>1</sup>, Gopcevic K<sup>2</sup>, Jakovljevic Uzelac J<sup>1</sup>, Todorovic D<sup>1</sup>, Stankovic S<sup>3</sup>, Labudovic Borovic M<sup>4</sup>, Djuric D<sup>1</sup>  
<sup>1</sup>*Institute of Medical Physiology "Richard Burian", Faculty of Medicine, University of Belgrade,* <sup>2</sup>*Institute of Chemistry in Medicine "Prof. Dr. Petar Matavulj", Faculty of Medicine, University of Belgrade,* <sup>3</sup>*Centre of Medical Biochemistry, Clinical Centre of Serbia,* <sup>4</sup>*Institute of Histology and Embryology "Aleksandar Dj. Kostic", Faculty of Medicine, University of Belgrade, Belgrade, Serbia*
- P69 ACTION POTENTIAL RESTITUTION DOES NOT PREDICT ALTERNANS DEVELOPMENT IN CANINE VENTRICULAR TISSUE**  
Nagy N<sup>1,2</sup>, Szlovak J<sup>1</sup>, Toth N<sup>1</sup>, Papp JG<sup>1,2</sup>, Varro A<sup>1,2</sup>  
<sup>1</sup>*University of Szeged, Faculty of Medicine, Department of Pharmacology and Pharmacotherapy,* <sup>2</sup>*MTA-SZTE Research Group of Cardiovascular Pharmacology, Hungarian Academy of Sciences, Szeged, Hungary*
- P70 THE EFFECTS OF THIAMINE HYDROCHLORIDE ON CARDIAC FUNCTION, REDOX STATUS AND MORPHOMETRIC ALTERATIONS IN DOXORUBICIN-TREATED RATS**  
Nikolic Turnic T<sup>1</sup>, Radonjic T<sup>2</sup>, Rankovic M<sup>1</sup>, Ravic M<sup>1</sup>, Zivkovic V<sup>3</sup>, Srejovic I<sup>3</sup>, Jeremic J<sup>1</sup>, Jeremic N<sup>1</sup>, Sretenovic J<sup>3</sup>, Matic S<sup>4</sup>, Jakovljevic V<sup>3,5</sup>  
<sup>1</sup>*Department of Pharmacy, Faculty of Medical Sciences, University of Kragujevac, Kragujevac,* <sup>2</sup>*Health Center "Dr Milutin Ivkovic" Belgrade,* <sup>3</sup>*Department of Physiology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac,* <sup>4</sup>*Department of Pathology, Clinical Center Kragujevac, Kragujevac, Serbia,* <sup>5</sup>*Department of Human Pathology, 1<sup>st</sup> Moscow State Medical University IM Sechenov, Moscow, Russian Federation*
- P71 EVALUATION OF ECG REPOLARIZATION PARAMETERS IN YOUNG COMPETITIVE ATHLETES**  
Orosz A<sup>1</sup>, Nikolic I<sup>2</sup>, Vagvolgyi A<sup>6</sup>, Stojmenovic T<sup>2</sup>, Dikic N<sup>2</sup>, Nedeljkovic I<sup>3</sup>, Jakovljevic V<sup>4</sup>, Nemes A<sup>5</sup>, Lengyel C<sup>6</sup>, Baczko I<sup>1</sup>, Varro A<sup>1</sup>  
<sup>1</sup>*Department of Pharmacology and Pharmacotherapy, University of Szeged,* <sup>2</sup>*Special Hospital for Sports Medicine "Vita Maxima",* <sup>3</sup>*Clinic for Cardiology, Clinical Centre of Serbia, Faculty of Medicine, University of Belgrade, Belgrade,* <sup>4</sup>*Department of Physiology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, Serbia;* <sup>5</sup>*2<sup>nd</sup> Department of Internal Medicine and Cardiology Centre, University of Szeged,* <sup>6</sup>*1<sup>st</sup> Department of Internal Medicine, University of Szeged, Szeged, Hungary*

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

Pajovic V<sup>1</sup>, Matic M<sup>1</sup>, Vasic M<sup>1</sup>, Sarenac O<sup>1</sup>, Bajic D<sup>2</sup>, Japundzic Zigon N<sup>1</sup>

<sup>1</sup>*Institute of Pharmacology, Clinical Pharmacology and Toxicology, Faculty of Medicine University of Belgrade, Belgrade,* <sup>2</sup>*Faculty of Technical Sciences, University of Novi Sad, Novi Sad, Serbia*

**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

*Centre of Research Excellence in Nutrition and Metabolism, Institute for Medical Research, University of Belgrade, Belgrade, Serbia*

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

Polyak A<sup>1,2</sup>, Gazdag P<sup>3</sup>, Csik N<sup>4</sup>, Prorok J<sup>3</sup>, Varro A<sup>2,3</sup>, Bacsko I<sup>3</sup>, Farkas AS<sup>1</sup>, Farkas A<sup>1</sup>

<sup>1</sup>*2<sup>nd</sup> Department of Internal Medicine and Cardiology Centre, Faculty of Medicine, University of Szeged,* <sup>2</sup>*Working Group of Cardiovascular Pharmacology, Hungarian Academy of Sciences,* <sup>3</sup>*Department of Pharmacology and Pharmacotherapy, Faculty of Medicine, University of Szeged, Szeged,* <sup>4</sup>*John von Neumann University, GAMF Faculty of Engineering and Computer Science, Computer Science Engineering, Kecskemet, Hungary*

**P75 IMPROVING CARDIVASCULAR RISK AND ATHEROPROTECTION IN AGING**

Popovic T<sup>1</sup>, Debeljak Martacic J<sup>1</sup>, Arsic A<sup>1</sup>, de Luka S<sup>2</sup>, Trbovic A<sup>2</sup>, Glibetic M<sup>1</sup>

<sup>1</sup>*Institute for Medical Research, University of Belgrade,* <sup>2</sup>*Institute for Pathophysiology, Faculty of Medicine, University of Belgrade, Belgrade, Serbia*

**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**  
Rakicevic Lj<sup>1</sup>, Novkovic M<sup>1</sup>, Kusic-Tisma J<sup>1</sup>, Matic D<sup>2</sup>, Antonijevic A<sup>2</sup>, Backovic D<sup>3</sup>, Calija B<sup>4</sup>, Strugarevic E<sup>4</sup>, Radak D<sup>4,5</sup>, Kovac M<sup>5,6</sup>, Mitropoulou C<sup>7</sup>, van Schaik R<sup>7</sup>, Fragoulakis V<sup>8,9</sup>, Vozikis A<sup>10</sup>, Patrionos G<sup>8</sup>, Radojković D<sup>1</sup>  
<sup>1</sup>*Institute of Molecular Genetics and Genetic Engineering, University of Belgrade,* <sup>2</sup>*Cardiology Clinic, Clinical Center of Serbia,* <sup>3</sup>*Faculty of Pharmacy, University of Belgrade,* <sup>4</sup>*Institute for Cardiovascular Diseases Dedinje,* <sup>5</sup>*Faculty of Medicine, University of Belgrade,* <sup>6</sup>*Blood Transfusion Institute of Serbia, Hemostasis Department, Belgrade, Serbia,* <sup>7</sup>*Department of Clinical Chemistry, Erasmus University Medical Center, Rotterdam, The Netherlands,* <sup>8</sup>*Department of Pharmacy, School of Health Sciences, University of Patras, Patras,* <sup>9</sup>*National School of Public Health, Athens,* <sup>10</sup>*Economics Department, University of Piraeus, Piraeus, Greece*
- P78 THE IMPACT OF SEX-DIMORPHISM ON DOXORUBICIN INDUCED CARDIOTOXICITY ON MYOCARDIAL FUNCTION AND REDOX STATUS OF ISOLATED RAT HEART**  
Rankovic M<sup>1</sup>, Bradic J<sup>1</sup>, Radonjic K<sup>1</sup>, Srejsovic I<sup>2</sup>, Zivkovic V<sup>2</sup>, Vucicevic K<sup>1</sup>, Jeremic N<sup>1</sup>, Bolevich S<sup>3</sup>, Jakovljevic V<sup>2,3</sup>  
<sup>1</sup>*Department of Pharmacy, Faculty of Medical Sciences, University of Kragujevac,* <sup>2</sup>*Department of Physiology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, Serbia,* <sup>3</sup>*Department of Human Pathology, 1<sup>st</sup> Moscow State Medical, University IM Sechenov, Moscow, Russian Federation*
- P79 EFFECTS OF DIFFERENT DIETS ON PLASMA BIOCHEMICAL PARAMETERS**  
Rankovic S, Debeljak Martacic J, Popovic T, Pokimica B, Petrovic Oggiano G, Glibetic M  
*Centre of Research Excellence in Nutrition and Metabolism, Institute for Medical Research, University of Belgrade, Belgrade, Serbia*
- P80 SWIMMING ATTENUATES BLOOD PRESSURE AND OXIDATIVE STRESS IN HIGH SALT-INDUCED HYPERTENSIVE RATS**  
Ravic M<sup>1</sup>, Plecevic S<sup>2</sup>, Bolevich S<sup>3</sup>, Jeremic J<sup>1</sup>, Bolevich S<sup>4</sup>, Nikolic Turnic T<sup>1</sup>, Jakovljevic V<sup>4,5</sup>, Jeremic N<sup>1</sup>  
<sup>1</sup>*Department of Pharmacy, Faculty of Medical Sciences, University of Kragujevac,* <sup>2</sup>*Sports Medicine Association of Serbia, Belgrade,* <sup>3</sup>*Department of Pathophysiology, 1<sup>st</sup> Moscow State Medical, University IM Sechenov,* <sup>4</sup>*Department of Human Pathology, 1<sup>st</sup> Moscow State Medical, University IM Sechenov, Moscow, Russian Federation,* <sup>5</sup>*Department of Physiology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac, Serbia*

- P81 DIETARY FATS INTAKE AND OMEGA-3 INDEX IN HYPERTENSIVE AND DIABETIC PATIENTS WITH CHRONIC KIDNEY DISEASE - A PILOT STUDY**  
Ristic Medic D<sup>1</sup>, Takic M<sup>1</sup>, Zekovic M<sup>1</sup>, Vucic V<sup>1</sup>, Petrovic S<sup>1</sup>, Arsic A<sup>1</sup>, Radjen S<sup>2</sup>  
<sup>1</sup>*Centre of Research Excellence in Nutrition and Metabolism, Institute for Medical Research, University of Belgrade,* <sup>2</sup>*Faculty of Medicine, Military Medical Academy, University of Defense, Belgrade, Serbia*
- P82 EFFECTS OF FRUCTOSE-RICH DIET AND CHRONIC STRESS ON INSULIN SIGNALING IN THE HEART OF MALE RATS**  
Romic S<sup>1</sup>, Djordjevic A<sup>2</sup>, Tepavcevic S<sup>1</sup>, Culafic T<sup>1</sup>, Stojiljkovic M<sup>1</sup>, Bursac B<sup>2</sup>, Stanisic J<sup>1</sup>, Kostic M<sup>1</sup>, Gligorovska Lj<sup>2</sup>, Koricanac G<sup>1</sup>  
<sup>1</sup>*Laboratory for Molecular Biology and Endocrinology, Vinca Institute of Nuclear Sciences, University of Belgrade,* <sup>2</sup>*Department of Biochemistry, Institute for Biological Research "Sinisa Stankovic", University of Belgrade, Belgrade, Serbia*
- P83 IN VIVO KNOCKDOWN OF SK3 CHANNELS USING LNA GAPMERS PROTECTS AGAINST ATRIAL FIBRILLATION IN RATS: A NOVEL APPROACH FOR STUDYING CARDIAC ELECTROPHYSIOLOGY**  
Saljic A<sup>1</sup>, Soattin L, Tracchel D, Boddum K, Jespersen T  
*Department of Biomedical Sciences, Laboratory of Cardiac Physiology, Faculty of Health and Medical Sciences, University of Copenhagen, Copenhagen, Denmark*
- P84 MODULATION OF SALT APPETITE THROUGH CENTRAL KAPPA OPIOID SYSTEM**  
Sarenac O<sup>1,2</sup>, Savic B<sup>2</sup>, Japundzic Zigon N<sup>2</sup>, Murphy D<sup>1</sup>  
<sup>1</sup>*Molecular Neuroendocrinology Research Group, The Henry Wellcome Laboratories for Integrative Neuroscience and Endocrinology, University of Bristol, Bristol, United Kingdom,* <sup>2</sup>*Institute of Pharmacology, Clinical Pharmacology and Toxicology, Faculty of Medicine University of Belgrade, Belgrade, Serbia*
- P85 ELECTRICAL MAPPING OF SPONTANEOUS VENTRICULAR FIBRILLATION DURING ACUTE MYOCARDIAL INFARCTION IN A PORCINE MODEL**  
Sattler S<sup>1,2</sup>, Hesselkilde E<sup>3</sup>, Orini M<sup>4</sup>, Taggart P<sup>4</sup>, Pehrson S<sup>1</sup>, Jespersen T<sup>3</sup>, Tfelt-Hansen J<sup>1,5</sup>  
<sup>1</sup>*The Heart Centre, Department of Cardiology, Copenhagen University Hospital, Rigshospitalet,* <sup>2</sup>*Department of Medicine I, University Hospital Munich, Ludwig-Maximilians University Munich (LMU), Munich, Germany,* <sup>3</sup>*Department of Biomedical Sciences, University of Copenhagen,* <sup>4</sup>*Barts Heart Centre, Barts Health NHS Trust, Institute of Cardiovascular Science, University College London, London, United Kingdom,* <sup>5</sup>*Department of Forensic Medicine, Faculty of Medical Sciences, University of Copenhagen, Copenhagen, Denmark*

- 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  
*Institute of Pharmacology, Clinical Pharmacology and Toxicology, Faculty of Medicine, University of Belgrade, Belgrade, Serbia*
- P87 BORDERLINE HYPERTENSIVE RATS OVER-EXPRESS VASSOPRESIN AND V1b RECEPTORS IN THE HYPOTHALAMIC PVN**  
Savic B<sup>1</sup>, Martin A<sup>2</sup>, Murphy D<sup>2</sup>, Japundzic Zigon N<sup>1</sup>, Sarenac O<sup>1</sup>  
<sup>1</sup>*Laboratory for Cardiovascular Pharmacology, Institute of Pharmacology, Clinical Pharmacology and Toxicology, Faculty of Medicine University of Belgrade, Belgrade, Serbia,* <sup>2</sup>*Molecular Neuroendocrinology Research Group, Bristol Medical School: Translational Health Sciences, University of Bristol, Bristol, United Kingdom*
- P88 OXIDATIVE STATUS IN PATIENTS WITH NSTEMI MYOCARDIAL INFARCTION**  
Savovic Z<sup>1</sup>, Jakovljevic V<sup>2,3</sup>, Jeremic J<sup>4</sup>, Petkovic A<sup>4</sup>, Iric Cupic V<sup>1,5</sup>  
<sup>1</sup>*Clinic for Cardiology, Clinical Center Kragujevac,* <sup>2</sup>*Department of Physiology, Faculty of Medical Sciences, University of Kragujevac,* <sup>3</sup>*Department of Human Pathology, 1<sup>st</sup> Moscow State Medical University IM Sechenov, Moscow, Russian Federation,* <sup>4</sup>*Department of Pharmacy, Faculty of Medical Sciences, University of Kragujevac,* <sup>5</sup>*Faculty of Medical Sciences, University of Kragujevac, Kragujevac, Serbia*
- 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**  
Sretenovic J<sup>1</sup>, Jakovljevic B<sup>2</sup>, Zivkovic V<sup>1</sup>, Srejovic I<sup>1</sup>, Milosavljevic Z<sup>3</sup>, Milosevic V<sup>4</sup>, Jakovljevic V<sup>1,5</sup>  
<sup>1</sup>*Department of Physiology, Faculty of Medical Sciences, University of Kragujevac,* <sup>2</sup>*Medical College of Applied Sciences in Belgrade,* <sup>3</sup>*Department of Histology and Embriology, Faculty of Medical Sciences, University of Kragujevac, Kragujevac,* <sup>4</sup>*Department of Cytology, Institute for Biological Research "Sinisa Stankovic", University of Belgrade, Belgrade, Serbia,* <sup>5</sup>*Department of Human Pathology, 1<sup>st</sup> Moscow State Medical, University IM Sechenov, Moscow, Russian Federation*

- P91 BIOLOGICAL EFFECTS OF CHRONIC LOW-DOSE EXPOSURE OF HUMAN ENDOTHELIAL CELL LINE EA.hy926 TO BISPHENOL A**  
Stanic B, Kokai D, Andric N  
*Department of Biology and Ecology, Faculty of Sciences, University of Novi Sad, Novi Sad, Serbia*
- P92 PSYCHOPHYSIOLOGICAL STRESS CHANGES TRANSCRIPTIONAL PROFILE OF MOLECULAR MARKERS OF MITOCHONDRIAL DYNAMICS IN HEARTS OF ADULT MALE RATS**  
Starovlah IM, Radovic SM, 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*
- P93 OLEUROPEIN MODERATELY AFFECTS PHENILEPHRINE-INDUCED RAT AORTA CONTRACTIONS**  
Stojiljkovic N<sup>1</sup>, Ilic S<sup>1</sup>, Stojanovic N<sup>2</sup>, Stojiljkovic M<sup>3</sup>  
<sup>1</sup>*Department of Physiology, Faculty of Medicine, University of Nis*, <sup>2</sup>*Faculty of Medicine, University of Nis*, <sup>3</sup>*Department of Pharmacology, Faculty of Medicine, University of Nis, Nis, Serbia*
- P94 TROPONIN AND THE ONSET OF CARDIOVASCULAR DISEASES IN PATIENTS WITH CHRONIC KIDNEY DISEASE**  
Stopic B<sup>1</sup>, Medic Brkic B<sup>2</sup>, Stojanovic M<sup>2</sup>, Todorovic J<sup>3</sup>, Savic Vujovic K<sup>2</sup>, Davidovic Z<sup>1</sup>, Dimkovic N<sup>1</sup>  
<sup>1</sup>*Clinical Department for Renal Diseases, Zvezdara University Medical Center*, <sup>2</sup>*Department of Pharmacology, Clinical Pharmacology and Toxicology, Faculty of Medicine*, <sup>3</sup>*Institute of Social Medicine, Faculty of Medicine, University of Belgrade, Belgrade, Serbia*
- P95 NOVEL INSIGHTS INTO VASCULAR PROTECTION OF METFORMIN IN EXPERIMENTAL SETTING OF ENDOTHELIAL DYSFUNCTION**  
Sturza A<sup>1,\*</sup>, Ionică LN<sup>1</sup>, Aburel OM<sup>1,\*</sup>, Noveanu L<sup>1,\*</sup>, Muntean DM<sup>1,\*</sup>  
<sup>1</sup>*Department of Pathophysiology*, \**Center for Translational Research and Systems Medicine, "Victor Babes" University of Medicine and Pharmacy, Timisoara, Romania*
- P96 ASSESSMENT OF VITAMIN D EFFECTS ON OXIDATIVE STRESS IN VARICOSE VEINS HARVESTED FROM OBESE AND NON-OBESE PATIENTS**  
Sturza A<sup>1,\*</sup>, Ratiu S<sup>2</sup>, Olariu S<sup>2</sup>, Muntean DM<sup>1,\*</sup>  
<sup>1</sup>*Department of Functional Sciences - Pathophysiology*, \**Center for Translational Research and Systems Medicine*, <sup>2</sup>*Department of Surgery II - 1<sup>st</sup> Clinic of Surgery, Faculty of Medicine, "Victor Babes" University of Medicine and Pharmacy, Timisoara, Romania*

- P97 THE ROLE OF  $\text{Na}^+/\text{Ca}^{2+}$  EXCHANGER IN THE  $\text{Ca}^{2+}$ -GOVERNED ALTERNANS IN CANINE AND HUMAN MYOCARDIUM**  
Szlovak J<sup>1</sup>, Toth N<sup>1</sup>, Gazdag P<sup>1</sup>, Tomek J<sup>2</sup>, Pollesello P<sup>3</sup>, Virag L<sup>1</sup>, Papp JG<sup>1</sup>, Varro A<sup>1</sup>, Nagy N<sup>1</sup>  
<sup>1</sup>University of Szeged, Department of Pharmacology and Pharmacotherapy, Szeged, Hungary, <sup>2</sup>University of Oxford, Life Sciences Interface DTC, Oxford, United Kingdom, <sup>3</sup>Orion Pharma, Espoo, Finland
- P98 THE OMEGA-3 INDEX IN RECREATIONAL RUNNERS-PILOT STUDY**  
Takic M, Pantovic A, Stevanovic V, Kardum N, Zekovic M, Glibetic M  
 Institute for Medical Research, Center of Excellence in Research of Nutrition and Metabolism, University of Belgrade, Belgrade, Serbia
- P99 STATIC MAGNETIC FIELD REDUCES BP VARIABILITY AND ENHANCES BARO-RECEPTOR REFLEX SENSITIVITY IN SH RATS**  
Tasic T<sup>1</sup>, Djordjevic D<sup>2</sup>, De Luka SR<sup>2</sup>, Trbovic A<sup>2</sup>, Japundzic Zigon N<sup>3</sup>  
<sup>1</sup>Faculty of Dentistry, University of Belgrade, <sup>2</sup>Institute of Pathophysiology, Faculty of Medicine, University of Belgrade, <sup>3</sup>Institute of Pharmacology, Clinical Pharmacology and Toxicology, Faculty of Medicine, University of Belgrade, Belgrade, Serbia
- P100 ACTUAL LEVEL OF  $[\text{Ca}^{2+}]_i$  CRITICALLY INFLUENCES THE EFFECT OF  $\text{Na}^+/\text{Ca}^{2+}$  EXCHANGER INHIBITION IN THE SINUS NODE PACEMAKING**  
Toth N<sup>1</sup>, Szlovak J<sup>1</sup>, Loewe A<sup>3</sup>, Bitay G<sup>1</sup>, Gazdag P<sup>1</sup>, Pollesello P<sup>4</sup>, Papp JG<sup>1,2</sup>, Varro A<sup>1,2</sup>, Nagy N<sup>1,2</sup>  
<sup>1</sup>Department of Pharmacology and Pharmacotherapy, Faculty of Medicine, University of Szeged, <sup>2</sup>MTA-SZTE Research Group of Cardiovascular Pharmacology, Hungarian Academy of Sciences, Szeged, Hungary, <sup>3</sup>Karlsruhe Institut of Technology (IBT), Institute of Biomedical Engineering, Karlsruhe, Germany, <sup>4</sup>Orion Pharma, Espoo, Finland
- P101 CARDIAC SPECIFIC DELETION OF BRANCHED CHAIN AMINOTRANSFERASE INCREASES INSULIN SENSITIVITY IN THE MOUSE HEART**  
Uddin G, Pherwani S, Zhang L, Gopal K, Wagg C, Atnasious M, Karwi Q, 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 R<sup>1</sup>, Hornyik T<sup>1</sup>, Husti Z<sup>1</sup>, Juhasz V<sup>1</sup>, Matyus P<sup>1</sup>, Varro A<sup>1,2</sup>, Baczko I<sup>1</sup>  
<sup>1</sup>Department of Pharmacology and Pharmacotherapy, University of Szeged, <sup>2</sup>MTA-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**

Veress R<sup>1</sup>, Hegyi B<sup>1,2</sup>, Horvath B<sup>1</sup>, Vaczi K<sup>1,3</sup>, Gonczi M<sup>1</sup>, Kistamas K<sup>1</sup>, Ruzsnavszky F<sup>1,3</sup>, Izu LT<sup>3</sup>, Chen-Izu Y<sup>3,4,5</sup>, Banyasz T<sup>1</sup>, Magyar J<sup>1,6</sup>, Csernoch L<sup>1</sup>, Nanasi PP<sup>1,7</sup>, Szentandrassy N<sup>1,7</sup>

<sup>1</sup>Department of Physiology, Faculty of Medicine, University of Debrecen, <sup>2</sup>Department of Pharmacology, University of California, Davis, <sup>3</sup>Department of Cardiology, Clinical Center, University of Debrecen, <sup>4</sup>Department of Biomedical Engineering, Genome and Biomedical Science Facility, University of California, Davis, <sup>5</sup>Department of Internal Medicine, Division of Cardiology, Genome and Biomedical Science Facility, University of California, Davis, USA, <sup>6</sup>Division of Sport Physiology, Department of Physiology, Faculty of Medicine, University of Debrecen, <sup>7</sup>Department of Dental Physiology and Pharmacology, Faculty of Dentistry, University of Debrecen, Debrecen, Hungary

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

Vranic A<sup>1</sup>, Antovic J<sup>2,3</sup>, Veselinovic M<sup>4</sup>, Pruner I<sup>2</sup>, Petkovic A<sup>1</sup>, Jakovljevic V<sup>5,6</sup>, Antovic A<sup>7</sup>

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

**P105 RATE PRESSURE AND OBSTRUCTIVE APNEA**

Vuckovic Filipovic J<sup>1</sup>, Jakovljevic V<sup>2</sup>, Davidovic G<sup>1,3</sup>, Djokic B<sup>4</sup>, Iric Cupic V<sup>1,3</sup>

<sup>1</sup>Clinic of Cardiology, Clinical Center Kragujevac, <sup>2</sup>Department of Physiology, Faculty of Medical Sciences, University of Kragujevac, <sup>3</sup>Department of Internal Medicine, Faculty of Medical Sciences, University of Kragujevac, <sup>4</sup>Clinic of Pulmology, Clinical Center Kragujevac, Kragujevac, Serbia

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

Wesser T<sup>1</sup>, Konkel A<sup>1</sup>, Lossie J<sup>1</sup>, Dobrev D<sup>2</sup>, Seubert J<sup>3</sup>, Fischer R<sup>1</sup>, Schunck WH<sup>4</sup>

<sup>1</sup>OMEICOS Therapeutics GmbH, Berlin, <sup>2</sup>Institute of Pharmacology, University Duisburg-Essen, <sup>3</sup>Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, Edmonton, Canada, <sup>4</sup>Max 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 M<sup>1</sup>, Smuts CM<sup>2</sup>, Schutte AE<sup>3,4</sup>, Kruger HS<sup>2</sup>, Stojkovic Lj<sup>5</sup>, Ojwang AA<sup>2</sup>, Zivkovic M<sup>5</sup>, Stankovic A<sup>5</sup>, Glibetic M<sup>1</sup>

<sup>1</sup>Center of Research Excellence in Nutrition and Metabolism, Institute for Medical Research, University of Belgrade, <sup>2</sup>Center of Excellence in Nutrition, North-West University, Potchefstroom, <sup>3</sup>Hypertension in Africa Research Team (HART), North-West University, Potchefstroom, <sup>4</sup>Medical Research Council Unit: Hypertension and Cardiovascular Disease, North-West University, Potchefstroom, South Africa, <sup>5</sup>Laboratory for Radiobiology and Molecular Genetics, Vinca Institute for Nuclear Sciences, University of Belgrade, Belgrade, Serbia

**Notice for Poster Awards Competition:**

All posters will be evaluated by 4 different committees (3 judges in each committee) for the following 12 Poster 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 11-14, 2019

### MEETING VENUE

Venue for Main Meeting: Hotel Fontana, Vrnjacka Banja, Serbia

(Date: September 11th – 14th, 2019) (participation upon registration only)

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 10 <sup>th</sup>	14.00 – 18.00
September 11 <sup>th</sup>	15.00 – 19.00
September 12 <sup>th</sup>	08.30 – 19.30
September 13 <sup>th</sup>	08.30 – 20.00
September 14 <sup>th</sup>	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 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: KOBBSBG  
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. Subotića 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**

*6<sup>th</sup> Meeting of European Section and 7<sup>th</sup> 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 [drvkladakgbg@yahoo.com](mailto:drvkladakgbg@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 25<sup>th</sup> 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**

Vladimir Lj. Jakovljevic, MD, PhD, FIACS  
Professor of Physiology and Dean  
Department of Medical Physiology  
Faculty of Medical Sciences,  
University of Kragujevac  
str. Svetozara Markovica 69, P.O.Box 124  
34000 Kragujevac, Serbia  
tel. +381 34 34 29 44  
fax. +381 34 30 68 00 / ext. 112  
E-mail: [drvkladakgbg@yahoo.com](mailto:drvkladakgbg@yahoo.com)

Dragan M. Djuric, MD, PhD, FIACS  
Professor of Physiology  
Institute of Medical Physiology  
"Richard Burian", Faculty of Medicine,  
University of Belgrade  
str. Visegradska 26/II  
11000 Belgrade, Serbia  
tel. +381 11 36 07 112  
fax. +381 11 36 11 261  
E-mail: [drdjuric@eunet.rs](mailto:drdjuric@eunet.rs), [dr\\_djuric@yahoo.com](mailto:dr_djuric@yahoo.com)

**THE MEETING HAS BEEN SUPPORTED BY:**

International Academy of Cardiovascular Sciences  
Serbian Association for Arteriosclerosis, Thrombosis and Vascular Biology Research  
Faculty of Medical Sciences University of Kragujevac  
Faculty of Sciences University of Novi Sad  
Faculty of Medicine University of Belgrade  
Medical and Spa Resort Merkur (Vrnjacka Banja)

**ACKNOWLEDGEMENT OF CONTRIBUTIONS:**

Experimental Cardiology Laboratory, Winnipeg, Canada  
St. Boniface Hospital Albrechtsen Research Centre, Winnipeg, Canada  
Dr. Roberto Bolli, Louisville, USA  
Dr. Gary Lopaschuk, Edmonton, Canada  
Dr. Morris Karmazyn, London (Ontario), Canada  
Reviews in Cardiovascular Medicine  
Canadian Journal of Physiology and Pharmacology