2nd JOINT MEETING OF SLOVAK AND SERBIAN PHYSIOLOGICAL SOCIETIES

"PHYSIOLOGY WITHOUT FRONTIERS"

Organized by

Slovak Physiological Society, Serbian Physiological Society,
Institute of Normal and Pathological Physiology and Institute for Heart Research,
Slovak Academy of Sciences and NO club



PROGRAM

May 15-18, 2016

Smolenice Castle

Congress Center of the Slovak Academy of Sciences, Bratislava, Slovakia

Basic Information

Chair of the meeting: Oľga Pecháňová (<u>olga.pechanova@savba.sk</u>)
Scientific secretary: Táňa Ravingerová (<u>tatiana.ravingerova@savba.sk</u>)

Programme Commitee

Andrea Čalkovská, Vladimír Jakovljevič, Kamil Javorka, Dragan Djurič, Ján Slezák, Iveta Bernátová, Fedor Jagla, Táňa Ravingerová, Vladimír Štrbák, Oľga Pecháňová

Local Organizing Committee

Oľga Pecháňová, Martina Cebová, Monika Barteková, Veronika Farkašová, Zuzana Matúšková, Radoslava Reháková, Michaela Košútová

Information

Oľga Pecháňová

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Meeting Venue

Smolenice Castle, Zámocká, 919 04 Smolenice, GPS: N 48.51359 / E 17.43232

Important Dates

Registration and payment: by April 15, 2016

Abstract submission: by April 15, 2016

Meeting date: May 15-18, 2016

Program at Glance

May 15, 2016

17:00 – 18:00	Registration
18:00 - 18:30	Opening Ceremony/Welcome Messages
	O. Pechanova, A. Calkovska, V. Strbak, V. Jakovljevic, D. Djuric
18:30 – 19:50	Session 1: INFLAMMATION
	Chairpersons: Z. Miloradovic and O. Pechanova
20:00	Welcome Reception

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8:00	Breakfast
9:00 - 10:40	Session 2: OXIDATIVE STRESS
	Chairpersons: V. Jakovljevic and J. Slezak
10:40	Coffee break
11:00 – 12:30	Session 3: LIPID METABOLISM
	Chairpersons: S. Petrovic and M. Cebova
12:30	Lunch
14:00 – 15:50	Session 4: HEART FUNCTION
	Chairpersons: S. Novokmet and T. Ravingerova
15:40	Coffee break
16:10 – 17:20	Session 5: SOCIAL STRESS
	Chairpersons: I. Lakic and I. Bernatova
17:30 – 19:00	Poster Session with Discussion
19:00	Dinner

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8:00	Breakfast
9:00 – 10:50	Session 6: NEUROPHYSIOLOGY
	Chairpersons: O. Stanojlovic and F. Jagla
10:50	Coffee break
11:10 – 12:50	Session 7: NITRIC OXIDE AND S –COMPOUNDS
	Chairpersons: D. Djuric and S. Cacanyiova
13:00	Lunch
14:00	Trip to Red Rock Castle
19:00	Gala Dinner

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9:00	Breakfast
9:00 - 10:30	Session 8: LUNG AND OXYGENATION
	Chairpersons: D. Blagojevic and A. Calkovska
10:30	Closing Ceremony and Lunch

Scientific Program

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18:30 – 19:50	Session 1: INFLAMMATION
	Chairpersons: Z. Miloradovic and O. Pechanova
18:30	Z. Miloradovic et al: Losartan and tempol, but not their combination ameliorate renal inflammatory response at an early stage of experimental focal-segmental glomerulosclerosis.
18:55	O. Pechanova et al: Red wine extract decreases pro-inflammatory markers in experimental metabolic syndrome.
19:20	A. Petrovic et al: Melatonin attenuates streptozotocin induced inflammation and oxidative stress in the rat liver by modulation of NF-kB and Nrf2 signaling.
19:35	I. Zila et al: Lipopolysaccharide induced endotoxemia - effect on cardiorespiratory neural control.

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9:00 - 10:40	Session 2: OXIDATIVE STRESS
	Chairpersons: V. Jakovljevic and J. Slezak
9:00	V. Jakovljevic et al: Oxidative stress in health and disease: from basic science to applied clinical investigations.
9:25	S. Slezak et al: Molecular mechanisms of radiation induced heart disease. Effect of selected substances with potential to ameliorate its toxic effect.
9:50	J. Jeremic et al: Redox status in patients with femoral neck fractures.
10:05	J. Ristic et al: The impact of positive acceleration (+Gz) on antioxidant capacity and histopathological alterations in different organs and tissues in rats.
10:20	M. Kluknavsky et al: (–)-Epicatechin reduces high blood pressure development and locomotor activity in young spontaneously hypertensive rats.

11:00 - 12:30	Session 3: LIPID METABOLISM
	Chairpersons: S. Petrovic and M. Cebova
11:00	M. Cebova et al: The effect of palmitate exposure in utero on systolic and vascular function.
11:25	S. Petrovic et al: Fish oil supplementation improves fatty acid composition of liver phospholipids in mice model of Alzheimer's disease.
11:40	R. Rehakova et al: The effect of short-term fructose treatment on nitric oxide production and oxidative damage in rats.
11:55	B. Czippelova et al: The influence of obesity on endothelial function and arterial stiffness in children and adolescents.
12:10	M. Kosutova et al: The effect of cholesterol-lowering drug in rat mammary gland carcinoma model.

14:00 – 15:50	Session 4: HEART FUNCTION
	Chairpersons: S. Novokmet and T. Ravingerova
14:00	S. Novokmet et al: Effects of metal complexes as potentially anticancer agents on isolated perfused rat heart.
14:25	T. Ravingerova et al: Cardioprotection by non-invasive "remote" preconditioning in
	healthy and diseased heart: potential role of peroxisome proliferator-activated
	receptors.
14:50	I. Stojic et al: The effects of platinum complexes on cardiodynamic parameters in
	isolated rat heart.
15:05	V. Farkasova et al: Remote ischemic preconditioning in hearts of spontaneously
	hypertensive rats.
15:20	M. Zalesak et al: Molecular hydrogen facilitates antiinfarct protection conferred by
	hypoxic postconditioning in isolated rat hearts.
15:35	I. Srejovic et al: The effects of verapamil and its combinations with glutamate and
	glycine on cardiodynamics and coronary flow in isolated rat heart.

16:10 – 17:20	Session 5: SOCIAL STRESS
	Chairpersons: I. Lakic and I. Bernatova
16:10	I. Bernatova et al: Chronic stress induces delayed behavioral hyperactivity and
	vascular alterations in young prehypertensive rats.
16:35	I. Lakic et al: The effect of physical and psychosocial stressors on galanin content in
	the rat heart.
16:50	D. Selakovic et al: The effect of supraphysiological dose of testosterone-enanthate
	(TE) and exercise on exploratory activity in elevated plus maze (EPM) test - the
	advantage of using total exploratory activity (TEA) as a new parameter for
	exploratory activity estimation in EPM.
17:05	Z. Turianikova et al: Oxytocin receptor gene polymorphism is related to
	cardiovascular autonomic control.

17:30 – 19:00	Poster Session with 3 min. Discussion
	Chairpersons: D. Hrncic, V. Strbak, I. Srejovic and K. Javorka
1.	P. Balis et al: Involvement of reactive oxygen species in blood pressure regulation
	in rats exposed to acute stress.
2.	A. Barta et al: Structural changes in myocardium and aorta after aliskiren-induced
	inhibition of renin-angiotensin-aldosterone system.
3.	S. Brankovic et al: Effects of the aqueous, ethylacetate and ethanol extracts of
	Sideritisraeseri Spp. raeseriBoiss&Heldr on the isolated rat ileum contractions.
4.	A. Puzserova et al: The mechanisms of cocoa flavanol (-)-epicatechin action in the
	isolated femoral artery of spontaneously hypertensive rats.
5.	B. Kura et al: The effect of selected drugs on cardiac specific miRNAs expression in
	irradiated rat myocardium.
6.	M. Radenkovic et al: Impact of various extracts of corn (Zea mays) silk on
	cardiovascular system.
7.	L. Scepanovic et al: Protective impact of N-acetyl-L-cysteine on methionine load
	effects in colon rat.

8.	N. Tatalovic et al: Ibogaine affects the redox status in rat heart.
9.	N. Useinovic et al: Epileptiform EEG activity caused by high methionine content in
	diet: advanced-level biosignal analysis.
10.	M. Zalesak et al: Hyperosmotic environment improves ischemic tolerance of non-
	preconditioned isolated rat hearts and impairs cardioprotective efficacy of
	ischemic preconditioning.
11.	A. Zemancikova et al: Effect of perivascular adipose tissue on neurogenic
	contractions in rat conduit arteries.
12.	V. Zivkovic et al: The role of hydrogen sulphide in homocysteine-induced
	cardiodynamic effects and oxidative stress markers in the isolated rat heart.
13.	D. Mitrovic et al: Effects of methionine load, cysteine and N-acetyl-L-cysteine on
	superoxide dismutase (SOD) level in rat gastrointestinal system.
14.	D. Vasovic et al: Finasteride induces anxiety from bright-space, but not from open-
	space in rats.
15.	A. Hadzibegovic et al: The effects of homocysteine and inhibitor of heme-
	oxygenase type 1 on AChE activity in the rat cardiac tissue.
16.	S. Kostic et al: Effects of acutely applied methionine on plasma oxidative stress
	markers and AChE activity in rat cardiac and brain tissue.
17.	M. Stojanovic et al: Protective impact of L-cysteine on methionine load effects in
	the rat colonic mucosa.
18.	V. Vucic et al: Altered fatty acid metabolism in lung cancer tissue.
19.	M. Miler et al: Hesperetin affects some antioxidative enzymes activity in the liver
	of old-aged Wistar rats.
20.	S. Trifunovic et al: Daidzein-dependent changes on corticotrophs in adult rats:
	stereological and hormonal study.
21.	R. Rovny et al: Variability of nNOS gene is associated with prepulse inhibition of
	acoustic startle reflex in humans

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9:00 - 10:50	Session 6: NEUROPHYSIOLOGY
	Chairpersons: O. Stanojlovic and F. Jagla
9:00	O. Stanojlovic: Experimental models of epilepsies: translational value.
9:25	F. Jagla: Use of saccadic eye movement tasks in diagnostic tests of mental disorders.
9:50	D. Hrncic et al: Sleep in modulation of epileptic activity: translational viewpoint.
10:05	D. Mladenovic et al: Neuroprotective effects of finasteride in thoacetamide- induced hepatic encephalopathy in rats – new insights into the old drug.
10:20	Z. Matuskova et al: The failure of redox-oxidative balance in the pathophysiology of schizophrenia.
10:35	J. Joksimovic et al: Analysis of the influence of chronic treatment with testosterone-enanthate (TE) in supraphysiological dose on antidepressant effect of exercise in rats using tail suspension test parameters.

11:10 – 12:50	Session 7: NITRIC OXIDE AND S –COMPOUNDS
	Chairpersons: D. Djuric and S. Cacanyiova
11:10	D. Djuric et al: Cardiovascular effects of homocysteine and related thiolactone
	metabolites: what we learnt from extensive five year lasting research?
11:35	S. Cacanyiova et al: The role of NO-H2S interaction in the vascular tone regulation.
12:00	D. Blagojevic and Z. Orescanin-Dusic: Redox regulation: from redox congeners to
	ATP-mediated contractility.
12:15	A. Berenyiova et al: Effect of the long-term neuronal and endothelial NO-synthase
	inhibition in young spontaneously hypertensive rats.
12:30	K. Ondrias et al: Modulation of rat hemodynamic parameters by intravenous
	administration of L-NAME.

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9:00 – 10:30	Session 8: LUNG AND OXYGENATION
	Chairpersons: D. Blagojevic and A. Calkovska
9:00	A. Calkovska et al: Tidal volumes and alveolar stability are determined by
	phospholipid composition in synthetic surfactants.
9:25	M. Kolomaznik et al: Reversal of lipopolysaccharide-induced inactivation of
	pulmonary surfactant.
9:40	S. Mikolajcikova et al: Association of haplotype of surfactant protein B with
	susceptibility to respiratory disorders in premature and term infants.
9:55	M. Kozar et al: Changes of selected cardiovascular and oxygenation parameters
	according to mode of delivery.
10:10	M. Antosova et al: Detection of nasal nitric oxide in healthy adults – reference
	values and affecting factors.