



Editorial

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The 3. Congress of Croatian Physiological Society and 1. Regional Congress of the Physiological Societies, was held in Rijeka, Croatia from 20–22 September, 2013.

Meeting was organized by Croatian Physiological Society and co-organizers: Faculty of Medicine Rijeka, Faculty of Medicine Osijek, Faculty of Medicine Split and Faculty of Medicine Zagreb, Croatia, then Faculty of Medicine, Novi Sad, Serbia and University of Applied Sciences Lavoslav Ružička, Croatia. Guest-societies – Hungarian Physiological Society and Italian Physiological Society represented by their presidents and members also participated at the meeting. This meeting was the first opportunity to discuss regional collaboration in physiological education and research.

More than 100 scientists and students have attended this meeting; with 16 invited lecturers, approximately 40 oral presentations and 52 posters. Participants came from Croatia, Italy, Slovenia, Hungary (from all four medical faculties), Serbia, Bosnia and Herzegovina, USA, Denmark, Germany, Ukraine and Czech Republic. Topics presented at the congress included cell physiology, physiology of ageing, metabolism and differentiation, clinical physiology, environmental and exercise physiology and other topics including metabolic disorders, diabetes mellitus, and involvement of immune system in physiological regulatory mechanisms.

Current issue of *Periodicum Biologorum* presents a number of lectures held at the meeting. It presents a key note lecture held by professor Niels Secher from Denmark on cerebral blood flow and metabolism during exercise in paper “Three questions to the human brain.” The physiological effects of exercise were further discussed in papers “Vascular dysfunction and exercise” by Grizelj *et al.*; Peak cardiac power output and cardiac reserve in sedentary men and women (Klasnja *et al.*); “The response of skin microcirculation to physical exercise” (by Helena Lenasi), and “The impact of strength training on the changes in one’s physique and resting energy expenditure” (by Nešić *et al.*). Barak *et al.* presented gender differences in parasympathetic reactivation during recovery from wingate anaerobic test. Exercise and gestational diabetes mellitus were reviewed by Sklempe-Kokić. Some papers reviewed new research/diagnostic or therapeutic approaches to various conditions, including hyperbaric oxygenation in traumatic brain injury (in paper by Brkić *et al.*), and reproducibility of post-occlusion reactive hyperaemia assessment by laser Doppler flowmetry were discussed by Rašić *et al.*, while the usefulness of bioelectrical impedance analysis in assessment of osteoporosis was presented by Davidović-Cvetko *et al.* Few papers presented the effects of low temperature and/or ionizing irradiation on physical-mechanical properties and structures of fibrous pericardium



and aortic valve leaflets (Gorienko *et al.*) and skin fragments (Bespalova *et al.*). Interactions between bone fracture healing and immune systems were presented in paper by Kelava *et al.*, while Višnjić *et al.* reviewed signaling pathways that control proliferation, growth and metabolism are involved in differentiation of leukemia cells. Dyomin *et al.* presented alternative pharmacological model of retinal neovascularization – brinzolamide-induced

retinopathy. Influence of pH and ionic strength of a medium on the adhesion of *Streptococcus thermophilus* microorganisms to human erythrocytes is discussed in paper by Anikieieva *et al.* Overall, this meeting was considered very successful, because it brought together a number of physiologists from all over the world who maintained fervent and fruitful scientific and social interactions.