Introduction

In February 2013, the Czech and Slovak Physiological Societies met in Prague at the occasion of the 89th Physiological Days. The Physiological Days represent the highlight event in the life of both Societies where scientists of both countries annually report on their achievements and exchange their experience. Importantly, it is also an opportunity for their scientific and social networking. This year, the meeting was organized by the Institute of Physiology, Academy of Sciences of the Czech Republic (ASCR), v.v.i. and it took place in the ASCR campus in Krč. The Institute of Physiology, ASCR was founded on January 1st, 1954 and thus organization of the 89th Physiological Days was held in a ceremonial atmosphere of the approaching 60th anniversary of the Institute founding. The significance of the event was underlined by the fact that the conference was held under the auspices of the President of the Academy of Sciences of the Czech Republic, Professor Jiří Drahoš, and the Lord Mayor of Prague, Associate Professor Bohuslav Svoboda.

The conference was attended by 183 physiologists from both countries (115 from the Czech Republic and 68 from Slovakia). More than half of the participants were students and young scientists as traditionally the meeting represents a platform for them to present their results. Even more, the young scientists were actively involved in organizing the meeting because they co-chaired most of scientific sessions. There were 74 oral presentations and 84 posters. By tradition, the Board of the organizing Society nominates the speaker who presents the honorary Purkyně's lecture. This year, the lecture was given by Dr. Alena Sumová (Institute of Physiology, ASCR, Prague) on Temporal regulation of physiological functions. There were two educational lectures, both on history of physiology as a field. The first lecture, given by Professor Daniela Ostatníková (Institute of Physiology, Faculty of Medicine, Comenius University, Bratislava), was devoted to memory of the great Slovak physiologist, Professor J. Antal (1912-2012). The second lecture was presented by Dr. Zdeněk Drahota (Institute of Physiology, ASCR, Prague) who summarized the findings of "old Czech physiologists" (J.E. Purkyně, E. Babák, V. Laufberger) and discussed how their results and ideas inspired and impacted the entire physiological field.

The Board of the Czech Physiological Society together with the Organizing Committee of the conference decided to continue in the practice introduced at previous Physiological Days to provide participants of the conference the opportunity to publish their results in a special issue of Supplementum of Physiological Research. The Editorial Board of the journal kindly accepted the offer and the Editorial Committee for preparation of the special issue was established (members: Vladimír Riljak, Jakub Otáhal, Jaroslav Pokorný, Otomar Kittmar). For the review process, only papers presented as oral presentations were considered. All manuscripts underwent a two-step review; first, papers with topics out of the scope of the Physiological Research were excluded based on abstracts of oral presentations, and second, papers were evaluated by standard peer reviews. As a result of the process, 21 scientific papers (4 reviews and 17 original papers) were accepted. I would like to thank all contributors and especially all colleagues who participated in the review process, be they members of the Editorial Committee or reviewers. I believe that the special Supplementum will help to inform a broad scientific community interested in physiology and biomedicine about the latest scientific achievements of Czech and Slovak physiologists.

The 90th Physiological Days will be held in Bratislava in February 2014. The Slovak Physiological Society nominated the Institute of Physiology, Faculty of Medicine, Comenius University in Bratislava to organize the conference.

I wish the Czech and Slovak Physiological Societies many further successful meetings.

Alena Sumová, CSc., DSc.
Head of the Organizing Committee
of the 89th Physiological Days