

ITC CONFERENCE GRANT SCIENTIFIC REPORT

This report is submitted for approval by the grantee to the MC Chair.

Action number: CA15203

Conference title: 13th Conference on Mitochondrial Physiology and MitoEAGLE WG and MC Meeting, 2018, Jurmala, Latvia.

Conference start and end date: 18/09/2018 to 21/09/2018

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Grantee name: Ondrej Sobotka, MD, PhD

ACTIVITIES DURING YOUR ATTENDANCE AT THIS CONFERENCE:

I attended 13th Conference on Mitochondrial Physiology and MitoEAGLE WG and MC Meeting in Jurmala, Latvia from 18th to 21st September. The primary focus of this conference was mitochondrial physiology and pathophysiology in various scientific, environmental and clinical aspects. During MitoEAGLE WG and MC meeting we shared and discussed results of joint projects and research which has been made in MitoEAGLE network and future cooperation and next steps necessary to reach goals of this COTS action.

All presentation at this conference were elaborated with regards to the main motto of the MitoEAGLE action and made special emphasis on methodology and quality control. I attended many interesting lectures on the first day of this conference focused on basic research, lipids and fats in mitochondrial membranes and its influence on the mitochondrial functions. I found these very beneficial for me since I study the effect of high fat diet on liver mitochondria.

Second day were conference sections divided in thematic areas. For me was the most interesting session devoted to the effects of metabolism and physical activity on mitochondrial respiration. Furthermore, it was a very interesting neurological block and invited lecture about ischemia/reperfusion injury.

Third day was a very educative lecture by Erich Gnaiger, which explored what has been done in this COST action and the next point of focus for WG1. Afterwards I presented the results from our methodological work from international cooperation in WG1 (Czech rep. - Austria) on the production of reactive oxygen species: "ROS measurement under hypoxia and unexpected methodological pitfalls of Amplex Red assay". Other sessions were focused on topics according to their working group.

Fourth day was dedicated to MC meeting and to enhance and improve the international cooperation inside respective working groups.

In addition to the excellent scientific and educational benefits of this conference, I am glad to be able to visit a new European country that I have never seen before. I am also very pleased to meet kind people of Latvia, to taste local food and experience the culture and breathtaking nature and National Park. I had a chance to visit the capital city Riga and I also took part in an organised trip to Great Kemeris Bog. To guide us in this wonderful scenery we had an experienced tourist guide explaining and describing us the secrets of this National Park. We also

had a chance to discuss interesting scientific projects and theories with other participants during the tour.

IMPACT ON YOUR RESEARCH AND FUTURE COLLABORATIONS (if applicable)

At this conference I got a valuable feedback to my work. I learned new methodologies and ways to use them, I exchanged contacts with young researchers and I had a chance to meet invited speakers (Markus Keller, Adam Chicco, Alex Dyson). We also scheduled a common project in 2018/2019 and I am looking forward to future collaborations.