The European Society of Hypertension (ESH) organized the 2018 ESH Summer School in Switzerland from Friday 7 to Thursday 13 September, according to a tradition that had begun twenty-three years ago. The twenty-eight international speakers who were invited to the event, together with sixty-six participants coming from thirty-six countries were accommodated at Les Diablerets, a village with traditional mountain architecture located between Lake Geneva and Gstaad in the Vaud Alps. The Romanian delegation was composed of two medical doctors with clinical and also research interest in the field of hypertension.

The Course Directors were Prof. Renata Cifkova (Head, Department of Preventive Cardiology, Thomayer Teaching Hospital, Prague, Czech Republic) and Prof. Michael Burnier (Head, Division of Nephrology and Hypertension, University Hospital of Lausanne, Switzerland).

After the welcoming introduction lecture, Prof. Cifkova Renata (Czech) gave us the first presentation on the epidemiology of hypertension. A comprehensive analysis of the existing randomised trials evaluating antihypertensive medication and blood pressure targets was presented by Dr. Thomopoulos C. (Greece). The instruments, methods and conditions that should be used for a proper blood pressure measurement were detailed in an interactive lecture by Prof. Parati G. (Italy).

Dr. Bochud Murielle (Switzerland) illustrated the usefulness of genetics for the identification and risk stratification of cardiovascular and renal diseases, as well as their connection with hypertension. Prof. Kahan T. (Sweden) highlighted the consequences hypertension has on the heart. Prof. Vollenweider P. (Switzerland) described his team experience in building a long term research program.

On the second day of 2018 ESH Summer School, Prof. Cappuccio F. (England) described the role of sodium and potassium intake in modulating blood pressure, including from a public health perspective. Prof. Grassi G. (Italy) provided an overview of white coat and masked hypertension. The brain damage in hypertension, focusing on white matter integrity changes during blood pressure excursions, and criteria for brain imagistic examinations in patients with hypertension, were presented by Prof. Coca A. (Spain). Several presentations addressing resistant hyperten-
sion, starting with epidemiology, definition, causes and continuing with drug and renal denervation therapies were presented by Prof. Tsioufis C. (Greece), Prof. Azizi M. (France) and Prof. Persu A. (Belgium). The drug adherence and compliance with treatment in patients with hypertension were extensively addressed by Prof. Tomaszewski M. (UK), Prof. Burnier M. and Dr. Schneider Marie (Switzerland) on separate days.

On the third day of 2018 ESH Summer School, the effect of hypertension on renal function was debated by Prof. Watschinger B. (Austria), including in patients with diabetes that have been treated with the newest classes of anti-diabetic drugs. The methods recommended for measuring arterial stiffness in hypertension were described by Prof. Weber T. (Austria). Prof. Parati G. (Italy) described the effect mechanism of high altitude on blood pressure. Following this lecture, all participants ascended to 3000 m to perform an experiment. Ten healthy volunteers agreed to have their respiration rate, peripheral oxygen saturation and ambulatory blood pressure and heart rate monitored while ascending and resting at high altitude and while descending from the mountain.

The use of fixed dose combinations and one single pill in the hypertension treatment were emphasized by Prof. Waeber B. (Switzerland) in the presentation he delivered at the beginning of the fourth day of 2018 ESH Summer School. The relationship between obstructive sleep apnea syndrome and hypertension, as well as the effect of positive airway pressure on arterial stiffness were discussed by Prof. Heinzer R (Switzerland). Prof. Redon J. (Spain), the honorary president of ESH, described the importance of albuminuria and renal function monitoring in hypertension, while Prof. Rosei E. (Italy) gave a detailed talk on target organ damage in hypertension. An evaluation of secondary causes of hypertension was made by Prof. Lenders J. (Netherlands). Prof. Jelakovic B. (Croatia) presented an overview of future ESH activities.
Prof. Kjelden S. (Norway), the former president of ESH, started the last day of 2018 ESH Summer School by presenting the studies reporting the role of statins in primary prevention of cardiovascular disease in patients with hypertension. Prof. Borghi C. (Italy) described the role of serum uric acid in promoting cardiovascular disease through specific mechanisms and pointed to the inclusion of uric acid in the list of cardiovascular risk factors in the new 2018 ESC/ESH guidelines for the management of arterial hypertension. The common pathophysiological mechanisms of hypertension and diabetes, as well as the novel treatment aspects of hypertension in patients with diabetes were listed by Prof. Nilsson P. (Sweden). Prof. Bertschi Antoinette (Switzerland) provided an overview of hypertension diagnosis and treatment in pregnancy and breastfeeding. Obesity and its treatment influences on hypertension were presented by Dr. Wuerzner G. (Switzerland). Prof. Narkiewicz G. (Poland) discussed the influence of sympathetic nervous activity on blood pressure. The closing talk, given by Prof. Mancia G. (Italy), referred to what is new and different in the most recently published guidelines on hypertension: 2018 ESC/ESH and 2017 ACC/AHA guidelines.

The lectures were followed by oral and poster presentations on similar topics that have been prepared by the fellows attending the 2018 ESH Summer School. All presentations, be they theoretical or examples from research and clinical practice, aroused questions and interesting discussions coming from the audience.

The leisure part of the 2018 ESH Summer School was combined with the practical work in the afternoon dedicated to ascending to the Glacier 3000 m ski region in the heart of the Vaud Alps. On the last day of ESH Summer School, all participants attended a farewell Swiss dinner organised in their honour.

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Declarations of interest

The author declares no conflict of interest.