## Advancing Medical Education – A brief report by the ESC Working Group on Cardiovascular Pharmacotherapy

**Juan Carlos Kaski, DSc, MD, FRCP, FESC -** Professor of Cardiovascular Science (Emeritus), Molecular and clinical Sciences Research Institute, St. George's, University of London, UK

**Anne Grete Semb, BMedSci, MD, PhD, FESC –** Preventive Cardio-Rheuma clinic, Center for treatment of Rheumatic and Musculoskeletal Diseases (REMEDY), Diakonhjemmet Hospital, Oslo, Norway

**Gianluigi Savarese, MD, PhD, FESC –** Division of Cardiology, Department of Medicine, Karolinska Institutet, Stockholm, Sweden

Address for correspondence:

Prof. JC Kaski

Molecular and Clinical Sciences Research Institute,

St. George's, University of London.

Cranmer Terrace,

London SW17 0RE

UK

e-mail: [jkaski@sgul.ac.uk](mailto:jkaski@sgul.ac.uk)

Pharmacotherapy is at the heart of effective patient management. Advances in cardiovascular pharmacotherapy and large clinical trials in the past decades have helped improving the treatment of chronic and acute ischaemic heart disease, dyslipidaemia, systemic hypertension, heart failure, and other conditions. Evidence-based medicine has become a fundamental pillar of effective pharmacotherapy and other forms of treatment. With the advent of stringent regulations for the incorporation of new pharmacological agents into the clinical arena worldwide, there is a pressing need for educational programmes on clinical trial design, the use of new drugs which target specific mechanisms of disease, pharmacogenomics and gene therapy.

Excellence in trial design, improved quality of data and trial safety, as well as efficient pharmacovigilance and evidence-based guidelines for the management of cardiovascular patients, are essential to provide the healthcare community with safe and effective pharmacological agents.**1-3** Aware of these needs, the ESC Working Group on Cardiovascular Pharmacotherapy (WG-CVP) offers a successful annual course to help the younger generations of healthcare professionals to catch a glimpse of clinical trial design, data collection, statistical analysis, and interpretation of results. (“All About Clinical Trials”). (<https://www.escardio.org/Education/Courses/Organised/all-about-clinical-trials>). This course is now a module of a PhD on Cardiovascular Research Programme, Karolinska Institutet, Stockholm (SE). Moreover, the WG-CVP, in collaboration with the ESC Academy and Oxford University, in the UK offer a two-year MSc in Clinical Trials (<https://ndph.ox.ac.uk>) that provides in-depth training in the principles and practice of conducting large clinical trials. This utmost educational activity welcomes students from around the World.

Advances in cardiovascular pharmacotherapy have occurred at fast pace in the past decades due to research looking at mechanisms of disease, the identification of specific treatment targets, and advances in immunology, gene therapy, and pharmacogenomics.**4,5** Collaboration among universities, the pharmaceutical industry and clinical research groups has been vital to advance the field further. However, several unmet needs exist that make it problematic to apply evidence-based guidelines in certain patient groups i.e. women and older people, as these populations continue to be under-represented in clinical trials. In view of this limitation, that requires urgent resolution, the WG-CVP offers educational courses on *cardiovascular pharmacotherapy in older people*and *cardiovascular pharmacotherapy in women* (https://www.escardio.org/Working-groups/Working-Group-on-Cardiovascular-Pharmacotherapy/Education/cv-pharmaco-educational-training-programme).

Of utmost importance, the high impact factor EHJ-CPT, the official journal of the WG, is at the very forefront of pharmacotherapy journals, offering manuscripts focused on research and clinical practice. Moreover, the WG-CVP also produces the very well received ESC Handbook on Cardiovascular Therapy. The WG-CVP is continuously expanding its educational portfolio, to offer its members, cardiologists and health professionals the World over, a large range of educational programmes.

The data underlying this article are available in the article and in its online supplementary material.

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