

# Working Groups

## Working Group on Microcirculation

### Scientific Annual Report 1999-2000

#### Statement of WG objectives

The Working Group on Microcirculation aims at improving interdisciplinary cooperation and exchange of knowledge between clinical and basic researchers interested in the function of the terminal vascular bed. Scientific advancement in this area is of high importance as it becomes increasingly obvious that small vessels play a key role for a number of relevant physiological and pathological processes including, e.g., regulation of perfusion and tissue supply, inflammation, ischemia reperfusion damage, and angiogenesis.

#### Symposia at the ESC Conference

The Working Group on Microcirculation took part in the organization of 7 symposia for the conference of the ESC in Amsterdam:

- ▣ Nitric oxide in cardiovascular pathophysiology (Chairs: A.M. Shah, GB; H.H. Tillmanns, Gießen, DE)
- ▣ Peripheral vascular ischaemia (Chairs: S. Novo, Palermo, IT; A.R. Pries, Berlin, DE)
- ▣ Coronary collateral flow and microcirculation - new insights (Chairs: M.S. Marber, London, GB; H.H. Tillmanns, Gießen, DE)
- ▣ Defects of angiogenesis as causes of cardiovascular disease (Chairs: F. Ruschitzka, Zürich, CH; H.A.J. Struijker Boudier, Maastricht, NL)
- ▣ Myocardial stunning and hibernation: two entities or two facets of the same problem? (Chairs: P.G. Camici, London, GB; G. Ambrosio, Perugia, IT)
- ▣ Vascular changes and arterial hypertension: possible effects of treatment on the outcome (Chairs: G. Ambrosio, Perugia, IT; A.R. Pries, Berlin, DE)
- ▣ Nuclear hormone receptor directed therapy - an emerging concept in the treatment of cardiovascular disease (Chairs: M. Wehling, Mannheim, DE; P. Collins, London, GB)

#### Activities run outside the ESC Annual Congress

Satellite Symposium of the Working Group entitled "Inflammation and Microvascular Dysfunction in Ischemic Heart Disease" on occasion of the International Workshop "Integrated Control of Pressure and Blood Flow in Coronary Microcirculation", June 17, 2000, in Pisa, Italy. Organization of the Workshop: Dr. G. Sambuceti/Prof. A. L'Abbate, C.N.R., Clinical Physiology Institute, Pisa, Italy. Organization of the Satellite: Prof. J.C. Kaski, St. George's Hospital Medical School, Cardiological Sciences, London, U.K.

"Results of clinical studies do not always fit our current models of coronary circulation. In particular, the clinical possibility to obtain simultaneous evaluations of coronary blood flow velocity, pressure and anatomy has suggested the presence of unsuspected microvascular disorders whose mechanisms and importance have not been conclusively identified. On the other hand, while there is a large body of experimental information on the regulation of coronary microvascular tone by myocardial metabolism, arterial pressure and endothelial cells, an appropriate translation of such compelling evidence into clinical terms is still lacking. Thus, clinicians have to face the problem of understanding and interpreting their data and call for new models of coronary circulation."

The meeting stimulated the discussion between clinical and basic scientists on the relevance of microcirculatory disturbances and their pathogenetic mechanisms. Based on the high scientific relevance of the meeting, the American Journal of Physiology accepted to publish a selected group of papers related to this Workshop.

In the year 2001, the Working Group will have its annual meeting in Rome, Italy. Details and Information: Prof. Dr. Raffaele Bugiardini, Ospedale S Orsola, Istituto di Patologia Medica, Via Massarenti 9, 40138 Bologna Italy, phone +39/051/6 36 36 26, fax +39/051/34 72 90.

### **Membership**

Between the ESC Congress in Barcelona in 1999 and this year's meeting in Amsterdam, the Working Group on Microcirculation was proud to accept the application for membership by 6 colleagues:

Prof. Dr. Achille **Gaspardone**, European Hospital, Università Tor Vergata, Rome, Italy  
Dr. Mahadevappa **Manjunatha**, Biomedical Engineering Division, Indian Institute of Technology, Madras, India

Prof. Dr. Anna **Mattioli**, Policlinico Università, University of Modena, Modena, Italy

Dr. Giuseppe **Vassalli**, Division de Cardiologie, CHUV, Lausanne, Switzerland

Prof. Dr. Brigitte **Vollmar**, Dept. of Clinical & Experimental Surgery, Universität des Saarlandes, Homburg/Saar, Germany

Dr. Cor **de Wit**, Dept. of Physiology, University of Munich, Munich, Germany

Currently, the Working Group has 189 members.

### **Website**

In 1999, the Working Group on Microcirculation established a website of its own (<http://www.wgmic.de>). This website contains up-to-date information on the activities of the Working Group, especially on Working Group meetings. To improve communication among Working Group members, a searchable membership directory including information on the respective area of scientific interest has been installed. The website should also serve as a way to announce relevant information, e.g. on available positions or upcoming events to the interested public (please address your related requests to the (Past-)Chairman of the Working Group, A.R. Pries, Dept. of Physiology, Freie Universität Berlin, Arnimallee 22, 14195 Berlin, Germany, phone +49-30-84 45 16 32 or 31, fax +49-30-84 45 16 34, e-mail: [pries@zedat.fu-berlin.de](mailto:pries@zedat.fu-berlin.de) ).

### **Registries, Surveys**

The Working Group is planning to establish a "Multicentre registry for the characterisation of patients with angina pectoris and normal coronary arteriograms (ANCA) ('Syndrome X')". Information: Prof. Dr. J.C. Kaski, St. George's Hospital Medical School, Cardiological Sciences, Cranmer Terrace, London SW17 0RE, U.K., phone +44/208/725-5901 or -3963, fax +44/208/725-3328, e-mail: [jkaski@sghms.ac.uk](mailto:jkaski@sghms.ac.uk)

A.R. Pries  
Chairman

Berlin, August 14, 2000