

**32nd ANNUAL SCIENTIFIC MEETING OF THE EUBS
23-26 August 2006, BERGEN, NORWAY**

The 32nd Annual Scientific Meeting of the European Underwater and Baromedical Society (EUBS) on Diving and Hyperbaric Medicine was held between 23rd and 26th August 2006 in Bergen, Norway. It was organised by the EUBS in collaboration with the Norwegian Baromedical Society and the Centre for Hyperbaric Medical Research in Bergen. Dr. Arvid Hope was the Secretary General of the Organizing Committee and prof. Einar Thorsen was the Secretary of the Scientific Committee.

The National Center for Hyperbaric Medicine, Institute of Maritime and Tropical Medicine in Gdynia, Medical University of Gdańsk, participated in this meeting.

More than 200 registered representatives of 29 countries from Europe, as well as Canada, Japan, Russia, Israel and the USA, were participating in this event. There were 28 papers and 12 posters on diving topics and 10 papers and 19 posters on hyperbaric medicine topics presented at the EUBS meeting, including reports about diving equipment and environment, pressure and oxygen toxicity, decompression and VGE, diving medicine, hyperbaric oxygen therapy clinical studies, and hyperbaric oxygen therapy equipment and procedures.

All presentations were interesting and any trial to choose the most useful or the most significant one could be influenced by the subjective bias of the reviewer. From all posters, the Conference Jury chose one for being outstanding in scope and relevance of subject matter. The award was presented to S. St. Leger-Dowse from UK, the first author of the poster, entitled "Relationship Between the Menstrual Cycle and Decompression Illness: Is the Evidence Building ?" The importance of the subject was also confirmed by the other poster entitled "Decompressions Sickness – The Female Style? An Observational Study" presented by C. M. Muth *et al* from Germany. Large statistics about disability and morbidity of professional divers in the UK, as well as the relationship between time to recompression treatment and clinical outcome for decompression illness treated in Scotland were presented by J. Ross. The French military group presented results of an experiment on "long duration immersion" in cold

water. J. Robinet *et al* used a complicated set of sensors and instruments to collect as much clinical and physiological data as possible while exposing combat swimmers to extreme conditions. A new possibility to monitor anatomical and functional cardiac changes during scuba diving using an underwater echocardiograph was presented by international group from Italy and Belgium, represented by C. Marabotti. New computer techniques were also used for automatic detection of bubbles during decompression and were presented independently by M. A. Chapell from UK, who used wavelets for circulating bubbles quantification, and by B. Parlak from Turkey, who used image processing system for semi-automatic detection of bubbles crossing the PFO. The idea of preconditioning of hyperbaric oxygenation was raised by two papers. One was presented by Y. Arieli *et al* from Israel, who proved that in rats HBO preconditioning provides protection against central nervous system oxygen toxicity by increasing the time to convulsions. The other paper in the subject was presented by J. Z. Yogarathnam from UK, who described effect of vascular endothelial cellular protection in patients being subjected to coronary artery bypass graft surgery by limiting the expression of the neutrophil membrane cell adhesion molecule CD-18 induced by the HBO preconditioning. Other papers had also great scientific value and it was impressive to watch the variety of subject matter, especially at a time when diving and hyperbaric medicine suffers from a scarcity of research funding.

The next 33rd Annual Meeting of the EUBS will be held between 8th and 15th September 2007 in Sharm el-Sheikh, Egypt. More information about this forthcoming event can be found at <http://www.eubs2007.org>.

(Contributed by Jacek Kot)