

WORLD FEDERATION FOR ULTRASOUND IN MEDICINE AND BIOLOGY



EFSUMB • AFSUMB • AIUM • FLAUS • ASUM • MASU



WORLD FEDERATION FOR ULTRASOUND

Note from the Editor



Dear WFUMB members and other readers of ECHOES. The activities of WFUMB are still

increasing. In the present issue of the ECHOES you can read about the actual initiatives and actions taken by the most busy committee's, the WFUMB Education Committee and the WFUMB Safety Committee.

It is worthwhile to mention that all of the utmost dedicated WFUMB Council - and Committee members, who are working hard to fulfill the aims of WFUMB, are working on a complete voluntary basis. WFUMB is grateful for their enthusiasm and effort.

As with any other growing nonprofit organization there is an increasing need for secretarial assistance, a need to collaborate with a professional office being able to manage secretarial and financial aspects and to administer the duties and responsibilities of WFUMB.

During the last WFUMB
Administrative Council Meeting
in New York in May 2007 a
contract on a new WFUMB
Executive Secretariat under
the wings of AUIM, was signed.
The ceremony took place after
the council meeting, and the

contract was signed by the AIUM President Dr. Greenbaum and the WFUMB President Dr. Cerri. See details in the Secretary's report below.



Dr. Greenbaum, AIUM and Dr. Cerri, WFUMB with the newly signed contract on a new WFUMB Executive Secretariat.

WFUMB wants to increase its visibility and demonstrate its international activities and programs. Therefore WFUMB tries to plan Council Meetings to take place at major congresses and scientific meeting of its Affiliated Organizations. And at joint meetings WFUMB is working to support ventures with the Affiliated Organizations.

As such a most fruitful meeting took place during the latest AIUM Annual Congress in New York where the Administrative Council members of WFUMB and AIUM met and discussed common ideas, initiatives and actions mainly in the field of education and safety.



Administrative Council members of WFUMB and AIUM met during the annual AIUM congress to exchange ideas, initiatives, and actions mainly in the field of education and safety of medical ultrasound.

Søren Hancke, Editor ECHOES

Message from the President



The WFUMB is now counting on with a new administrative structure in order to give support to its actions as an

international organization, with special reference to the areas of education and divulging of ultrasound. The recent agreement signed with the AIUM created a permanent secretariat that will assist the directory until the end of the current Board's term. The intention is to enhance, through a more efficient organization, the educational actions of the WFUMB and to allow a larger visibility. The permanent secretariat will collaborate in the promotion of the events of the affiliated Societies, in the further activities

of the WFUMB and will give support to the treasury.

Concerning the educational activities of the WFUMB, it is intended to promote them jointly with other international organizations. This cooperation may expand the effect of our organization's efforts in fostering the best ultrasound practice worldwide.

The International Congress in Sydney is also coming closer. This event will denote the return of Australasia after staying distant for a long period. Certainly it will be a great success and covered with scientific magnitude. It is very important that this happening is properly announced among our members. Sydney is a too charming city for a visit to be missed and so is Australia and New Zealand as well.

The Board of the WFUMB will be present in all the important events organized by our affiliated societies in order to discuss joint projects and the best ways of cooperation between WFUMB/ Affiliated Societies.

Giovanni G. Cerri WFUMB President

Message from the Secretary



Since the WFUMB 11th World Congress, held in Seoul last June, the WFUMB is undergoing some

fundamental changes in its operations under the leadership of President Dr. Giovanni Cerri.

Reduced Term of Office for WFUMB Officers.

The meeting of the General Assembly in June 2006 approved changes to the Constitution and Bye-Laws that allowed for the term of office for President and Board Members to be reduced from three to two years, to commence at the time of the General Assembly, during the 12th WFUMB world congress to be held in September 2009 in Sydney, Australia. An important implication of this is that the period between congresses of the WFUMB will decrease from three to two years.

World Congress Succession Plan Together with these changes the WFUMB Council has begun to move towards a succession plan for host societies of future world congresses. Towards this end, WFUMB Council has awarded EFSUMB the opportunity to host the 13th WFUMB World Congress in Vienna, Austria in the year 2011. The 2013 world congress has been awarded to FLAUS, to be held in Latin America. The Executive Bureau is currently discussing options

for the 2015 world congress, and once approved, the outcome will be announced in the ECHOES. This new approach obviates the need for the expensive and timeconsuming competitive bidding process that has sometimes occurred in the past. Instead, it will allow greater opportunities to promote the WFUMB world congress amongst the wider medical imaging community. This is particularly important with the reduced time period between successive meetings of the world congress.

WFUMB Council to be Proactive

As a result of opportunities for WFUMB Executive Bureau to meet with Executive Boards of some Affiliated Societies, it has become clear that there is a need for the WFUMB to increase its level of visibility and to demonstrate its international programs and activities. To that end, the WFUMB has begun to align its Council meetings with congresses of its constituent Federations and Societies. There is a plan to help promote the world congresses through publicity booths at conferences of affiliated societies and to assist in high-level discussions in regard to sponsorship of such activities. The WFUMB plans to seek ways to support joint ventures with its affiliated societies. Initiatives that are regarded highly include building on the program of establishing WFUMB Centers



of Excellence, particularly in economically constrained societies. Education programs, such as those in Africa. Asia and Latin America are considered to be core activities, as is the development of practical safety guidelines. It is my privilege to be given the opportunity to represent WFUMB at the inaugural workshop of the Romanian Centre of Excellence in Craiova, May 2007. Current safety issues include the development of policy guidelines on Non-Medical Applications of Ultrasound. This is the theme of a joint project with the International Society of Ultrasound in Obstetrics and Gynecology (ISUOG).

WFUMB Executive Secretariat Following a series of meetings of both the WFUMB Executive Bureau and the Administrative Council it was agreed that it was in the best interests for the future development of the WFUMB organization that an Executive Secretariat office is contracted to undertake most of the more arduous and time-demanding operating processes of the Executive Officers, in particular the President, Secretary and Treasurer. The process leading up to the approval of such a proposal involved the opportunity to tender for the position, the broad requirements of which were distributed through WFUMB constituent Federations and Societies.

WFUMB Executive Working Party: After careful consideration of submitted proposals, the WFUMB Executive Bureau established a dedicated Executive Secretariat Working Party that met with members of the AIUM Executive Board and CEO in February 2007 to establish terms of agreement for presentation to the WFUMB Council in New York in March 2007. This group was given the responsibility of meeting, interviewing, renegotiating draft contractual arrangements and reporting to the WFUMB Executive Bureau. The composition of the Executive Working Party being; Drs. G Cerri (Chair/President), M Claudon (President-elect), S Barnett (Secretary), B Benacerraf (Treasurer), M Ziskin (Immed. Past-President), B Goldberg (Past-President). Formal minutes of the meeting were submitted to the WFUMB Council together with a separate report from the WFUMB Secretary. Following approval of a draft motion to appoint an Executive Secretariat, the matter was a major topic of discussion on the agenda for the meeting of the WFUMB Administrative Council in New York, Saturday 17th March 2007. This process ensured that the wide range of member society interests were considered as this Council includes representatives of all six Affiliated Federations/Societies. The following is the actual motion: "That the WFUMB

Council agrees to contract the

responsibility of a WFUMB Secretariat to the secretariat of the AIUM for an initial term of two years."

The motion before Council was unanimously approved.
The following highlights major issues in the agreement, e.g.: a two-year appointment with easy options to withdraw; term of appointment coincides with two-year term of WFUMB Council; cost was less and scope of support larger than alternative submissions; AIUM office has enduring staff and large infrastructure with a dedicated contact person.

Independent WFUMB Entity: Under the terms of the contract. the Executive Secretariat will operate within the infrastructure of the AIUM but will do so fully independently of the AIUM. This administrative function will be recognized as WFUMB and will operate under WFUMB protocol. Under no circumstances will the AIUM run the affairs of WFUMB. All operations and progress review to be conducted under direction of the WFUMB President. Secretary and Treasurer. **Dedicated Contact Staff: AIUM**

appoints a staff member to liaise directly with WFUMB Executive. Methods of contact include dedicated telephone number with voice-mail, dedicated WFUMB email address and revised letterhead template.

Regular Review Process: Assessment of progress and development of new directions through regular meetings with WFUMB working party. Meetings to coincide with AIUM Board meetings.

On behalf of the WFUMB Council, I offer my thanks to those involved in achieving this outcome and look forward to a productive working relationship with the new WFUMB Executive Secretariat.

Stan Barnett, WFUMB Secretary

Message from the Treasurer



WFUMB has a good, sound treasury and has always operated below budget.
We look forward to increasing the

number of programs being funded because we have the money to support them. With the expanded educational programs proposed for the future, the treasury has all the resources necessary to take on these new projects. This is in addition to the ongoing programs such as the Centers of Excellence, funding the safely committee meetings, several scholarships each year and the African, Asian and Latin American courses and traveling teachers.

Beryl Benacerraf, WFUMB Treasurer

WFUMB Education Committee Report



An Up-Date on WFUMB Education Committee Activities

In 2006 when Giovanni Cerri. M.D. assumed the responsibility of President of the World Federation of Ultrasound in Medicine and Biology (WFUMB), he asked me to become the Chair of the Education Committee. This was an area in which I had served previously and, since leaving, had worked actively on my own to pursue ultrasound educational activities with the goal of helping physicians and paramedical personnel in developing and emerging countries around the world. The goals of WFUMB and its Education Committee were identical to my own goals and, thus, this was an offer that I wholeheartedly accepted. Upon assuming this position I found that the Education Committee (EC) members all embraced this goal as did the entire council and its officers.

The present WFUMB Education Committee members are:

Barry Goldberg, M.D., AIUM, Chairman Stan Barnett, M.D., ASUM Elisabetta Buscarini, M.D., EFSUMB Byung Ihn Choi, M.D., AFSUMB Michel Claudon, M.D., EFSUMB Leandro Fernandez, M.D., FLAUS Hassen Gharbi, M.D., MASU

This article is intended to inform all of the member Societies and,

more importantly, their membership around the world, of what has been and continues to be done to improve ultrasound knowledge through education as well as the Education Committee's plans for expanding these opportunities.

Recently, WFUMB has elected to set up a permanent secretariat, allowing us to centralize our activities in terms of sending and receiving information as well as allowing for information to be more uniformly distributed around the world. This is particularly important for our numerous current and newly implemented educational endeavors, since it involves providing opportunities for physicians from developing and emerging countries to learn as well as opportunities for knowledgeable physicians to participate as expert lecturers in educational programs.

The ongoing education programs include the Centers of Excellence (COE), Educational Projects, WFUMB Scholarship Programs, and a new edition of the WHO/WFUMB Ultrasound Manual.

Centers of Excellence (COE)

The Centers of Excellence (COE) were established with the aim of providing education in medical ultrasound in developing or emerging countries. The concept is to provide opportunities for ultrasound societies within developing or emerging countries to increase their expertise in education. As a result, funds are provided by WFUMB to send expert lecturers



in ultrasound from around the world to a training program in a developing country on an annual basis. Centers are accredited by WFUMB with renewal required every three years.

Since the inception of this program the following Centers of Excellence have been recognized:

- Bangladesh Society of Ultrasonography in Dhaka, Bangladesh in 2004 (AFSUMB)
 Uganda Association of Sonography in Kampala, Uganda in 2004 (MASU)
 Society of Venezuela Ultrasound in Medicine Society in
- Caracas, Venezuela in 2005 (FLAUS) 4. Romanian Society of Ultrasound in Timisoara, Romania in 2006 (EFSUMB)

Each of these centers is currently conducting educational programs to train physicians in their regions of the world. On an annual basis WFUMB provides qualified expert lecturers to enhance these educational programs.

Education Project

The Education Project goals have been to organize courses in different regions of the world conducted by ultrasound lecturers selected by the WFUMB Education Committee in cooperation with local or regional societies in developing and emerging countries. The concept is to raise the level of ultrasound knowledge with particular emphasis on the educators of ultrasound in these regions.

There are ongoing education projects in Asia, Africa and Latin

America with WFUMB finding speakers for each of these programs.

Asian education programs have been held in Bangladesh, the Philippines, China and Indonesia, and future projects are planned for Thailand and Mongolia. African education programs have been held in Tanzania, Sierra Leone, Uganda and Tunisia. Latin American education programs have been held in Peru and Venezuela.

Scholarship Program

The Scholarship Program provides funding for individuals from developing and emerging countries to spend time in an established ultrasound center to increase their knowledge in a particular area of ultrasound imaging. The WFUMB provides funding for coach air transportation and the basic living costs of the selected individuals.

Application Forms have been developed for candidates as well as for host centers willing to accept these individuals into their programs. All Applications and Forms for various other programs will be available on-line.

A New WHO / WFUMB Ultrasound Manual

The final ongoing education project is the development of a new edition of the World Health Organization / WFUMB Ultrasound Manual. This manual, which was first issued more than a decade ago, has been completely revised and updated. Leadership for this project has been provided by Harald Lutz, M.D., who has assembled a world-wide group of authors to publish a manual

oriented towards physicians in developing and emerging countries of the world. The previous manual was translated into many languages and it is anticipated that this also will be the case with the new edition.

It is anticipated that this manual will become an important part of a number of WFUMB's other projects by providing up-to-date ultrasound educational information, not only for the visiting student programs but also for students learning in the WFUMB Centers of Excellence.

The new two-volume manual will be available in 2008.

It has been an established policy that for each of our WFUMB World meetings funding is provided for the attendance of selected physicians from developing and emerging countries. This program is accomplished in cooperation with the local host Society. Plans are being made to provide funding to selected physicians from developing and emerging countries to attend the WFUMB 2009, the WFUMB World Congress in Medicine to be held in Sydney, Australia.

Additional Educational Activities

The WFUMB has made a decision to expand the number of ultrasound educational opportunities around the world. As a result, four new programs have been approved as follows:

- 1) Donation of educational materials to ultrasound teaching centers in developing and emerging countries
- 2) Provision of free WFUMB journal subscriptions in electronic format to

needy centers in these countries 3) Development of an ultrasound educational curriculum that can be used to train residents and fellows in developing and emerging countries

4) Donation of ultrasound equipment to needy education centers in these countries

The provision of educational materials to ultrasound teaching centers in developing and emerging countries will be through the contributions from regional societies and established education centers around the world who routinely record lectures at their courses. The WFUMB is looking for opportunities to work with these organizations to acquire and distribute materials to needy education centers. At the past WFUMB Administrative Council Meeting in New York City, all of the representatives of our constituent membership organizations have agreed to support this effort and to encourage their member societies to contribute educational material to this effort.

The WFUMB also approved providing a free electronic subscription of our journal to needy centers in developing and emerging countries. The WFUMB Education Committee will also be working with regional societies to contribute their journals in order to establish an electronic journal library that will be useful for raising the level of ultrasound knowledge in developing and emerging areas of the world.

WFUMB has authorized the development of an ultrasound curriculum for the training of resi-

dents and fellows in developing and emerging countries. There is a need to provide adequate education in these regions of the world where there are a limited number of training opportunities. However, this is limited by the number of physicians available to provide adequate training. Physicians often are overwhelmed just taking care of the health needs of the population (this problem is not just unique to developing and emerging countries.) In many developed countries there is inconsistency in education due to increasing clinical demands on imagers. In the United Kingdom this has been recognized and a program has been developed in radiology using the internet as well as education materials on DVDs utilizing lectures prepared by leading authorities in ultrasound and other areas of imaging. It is in this respect that we have added to our committee Paul Dubbins, MD, a radiologist who has a special interest in ultrasound and who helped develop, with a group of other radiologists in the United Kingdom, a residency curriculum. Dr. Dubbins has an interest in cooperating with the WFUMB Education Committee to develop an ultrasound-specific training program. This activity is under initial development, and it is anticipated that a formal presentation for implementation of this project will be given at the WFUMB 2009 World Congress in Sydney, Australia.

The WFUMB Education Committee has recognized the need to provide ultrasound equipment to needy centers in developing and emerging countries in

order to provide hands-on training experiences that are so important for ultrasound education. This will be accomplished in cooperation with the non-profit Global Ultrasound Equipment Donation Foundation (GUEDF). The GUEDF has received and ultimately donated more than 350 ultrasound systems from several ultrasound equipment manufacturers to needy centers. The WFUMB has provided funding for several machines for selected educational centers in developing countries during this current year. Appropriate Application Forms have been developed and will be on the web for those centers that wish to apply for ultrasound equipment donations that would be utilized for training purposes.

The Education Committee has had discussions relating to the development of an international examination in cooperation with the non-profit International Certification and Educational Accreditation Foundation as well as exploring opportunities to disseminate ultrasound education materials via the web. WFUMB already has an affiliation with Sonoworld <www.sonoworld. com>, a website which is dedicated to worldwide ultrasound education, in which selected articles from each issue of the WFUMB journal are placed online. In the future, this could be expanded to add other educational materials for easy dissemination to ultrasound education centers and individuals throughout the world.

In summary. At our recent WFUMB Education Committee



Meeting a number of ideas were discussed including the maintenance and expansion of our ongoing programs as well as the development of new programs to help those in need in developing and emerging countries around the world. Working with our regional societies, other organizations and companies to implement these projects is an important goal in the coming years for the WFUMB Education Committee.

One of the most important goals of the Education Committee is to expand the opportunities for our membership throughout the world to participate in these ongoing and newly developed programs. This is intended both for those who seek to increase their knowledge in ultrasound imaging and for those who wish to contribute their expertise to improving the knowledge of physicians and other healthcare workers in developing and emerging countries. To this end, a complete set of updated and newly developed Application Forms for a variety of our Programs have been approved. With the help of our central office and the webmaster of our internet site they will be available on-line along with an in-depth explanation of the various Programs so that individuals who feel they meet the requirements of a specific Program can apply and be appropriately evaluated by the WFUMB Education Committee. The members of the WFUMB

The members of the WFUMB Education Committee and the WFUMB Administrative Council members look forward to working with the WFUMB Affiliated Societies and their members with a common goal to raise the level of patient care by raising the level of ultrasound education around the world.

Berry Goldberg, WFUMB Education Committee Chairman

WFUMB COE, Rumania

The agreement between the WFUMB and the Romanian Society of Ultrasound in Medicine and Biology (SRUMB) to establish a Centre of Excellence (COE) in Timisoara, Romania was officially signed during the inaugural WFUMB/SRUMB Workshop on 1st June 2007. The WFUMB Secretary S. Barnett signed the agreement on behalf of the WFUMB President G. Cerri.

The ceremony was performed at the time of the EUROSON School of Ultrasound in Craiova, Romania. The EUROSON School is a joint activity of the European Federation of Societies of Ultrasound in Medicine and Biology (EFSUMB), the SRUMB and the University of Medicine and Pharmacy (UMF) of Craiova. The agreement created an ideal academic environment, in keeping with the aims and objectives of WFUMB COE's, in the provision of local education and accreditation.

The EUROSON School was attended by approximately 330 medical doctors. The organising committee is to be congratulated for offering a varied and interesting program. I would like to express my sincere thanks to the

local organising committee, in particular, to Dr. V. Enachescu, SRUMB Secretary, for inviting me to participate as a keynote speaker.

The associated WFUMB Workshop was chaired by Dr. Elisabetta Buscarini, WFUMB Education Committee and invited lecturer.

An introductory presentation on SRUMB activities was given by Prof. Ioan Sporea, President of the SRUMB and Director of the Romanian COE, who advised that this was the 7th consecutive Euroson School organised by the Romanian Society of Ultrasound. Dr. S Barnett highlighted goals and current activities of the WFUMB and also presented a lecture on Guidelines for the Safe use of Ultrasound Echo-contrast Agents.

Stan Barnett, WFUMB Secretary



S. Barnett, E. Buscarini and I. Sporea at the EUROSON 2007 in Rumania

WFUMB Safety Commitee Report



WFUMB Symposium on Safe Use of Ultrasound Contrast Agents

The WFUMB Safety Committee work on the Safe Use of Ultrasound Contrast Agents is completed and a document is published in Ultrasound in Medicine and Biology, UMB, Vol. 33, No. 2, pp. 171-234, 2007.

The document contains the background work of topics. The topics covered include:

- Clinical Applications and Safety Concerns
- Nature and Types of Ultra sound Contrast Agents
- In Vitro Bioeffects
- In Vivo Bioeffects
- Exposure from Diagnostic Ultrasound Equipment Relat ing to Cavitation Risk
- Mechanisms of Interaction

The document led to the formation of Recommendations on the Safe Use of Ultrasound Contrast Agents, and these recommendations have been approved and endorsed by the WFUMB Administrative Council. An Executive Summary and a Lexicon of Terms There is included.

The subject of possible toxic effects of the Ultrasound Con-

trast Agents was not addressed in this project, but there are plans to address the issue in a future WFUMB Symposium.

I would like to thank all contributors and reviewers for the thorough and dedicated effort involved in bringing this work to completion.

WFUMB / ISUOG joint Symposium on Non-clinical use of Ultrasound

Following approval by WFUMB Council, a new project: "Use of Ultrasound for Non-Clinical Scanning" will be a major effort of the WFUMB Safety Committee for 2007. Giving the increasing use of the so-called "entertainment scanning" and its potential impact on the professional application of ultrasound in pregnancy, a joint workshop involving the WFUMB Safety Committees and the International Society of Ultrasound in Obstetrics and Gynecology (ISUOG) will be held during in Florence, Oct. 2007. The program has been developed to combine invited presentations with public debate and input to an open forum. This will be followed by preparation of a set of recommendations, as per previous WFUMB Safety Symposia.

Some of the topics for presentation and discussion are:

- Summary of published state ments
- · Bioeffects and Safety Risk
- Epidemiology and relevance of neural migration studies
- Keepsake images –benefits
- Ethical issues patients rights
- Potential misuse
- Live Scanning of pregnant models for equipment exhib itions
- Medico-Legal Implications
- Regulators Perspective
- Hot Topic Debate that "The Non-Clinical Use of Ultra sound is Safe and Beneficial"

Executive Committee members of WFUMB and ISUOG who are responsible for preparation of the program and the document is:

S. Barnett, WFUMB Safety Committee Chairman,

M. Claudon, WFUMB Safety Committee,

M. Ziskin, WFUMB Safety Committee,

J. Abramowicz, ISUOG Safety Committee Chairman, K. Marsal, ISUOG Safety Committee.

Stan Barnett, WFUMB Safety Committee Chairman





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President Giovanni G. Cerri, Brazil, FLAUS giovanni.cerri@netsim.fm.usp.br

Vice President 1 Masatoshi Kudo, Japan, AFSUMB m-kudo@med.kindai.ac.jp

Vice President 2 Leandro Fernandez, Venezuela, FLAUS leandrofer@telcel.net.ve

Secretary Stanley B. Barnett, Australia, ASUM sbarnett@usyd.edu.au Treasurer

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Co-opted Councillors Elisabetta Buscarini, Italy, MASU Byung Ihn Choi, Korea, AFSUMB Berry Goldberg, USA, AIUM

Editor-in-Chief, UMB Christy Holland hollanck@uc.edu

Editor, ECHOES Soren Hancke, hancke@dadlnet.dk

WFUMB's Affiliated Organizations

European Federation of Societies for Ultrasound in Medicine and Biology (EFSUMB) www.efsumb.org
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Mediterranean and African Society of Ultrasound (MASU) www.agonet.it/masu