



ECHOLIS

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Better World with Ultrasound

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Note from the Editor



Dear WFUMB members and other readers of ECHOES:

In the WFUMB Constitution it is said that WFUMB shall be scientific, literary, and educational. The aim, in a

shortened version, is to pro-

mote international cooperation, disseminate scientific information, sponsor meetings, cooperate with other societies, organize specific learning and promote improved communication in the world community using ultrasound in medicine. This might be translated into: "Education".

Over the past several years and currently, WFUMB has focused heavily on a very important item: safety of ultrasound.

However, through recent years education in medical ultrasound has gained increasing attention among WFUMB members. This interest has resulted in an increased demand and support for the WFUMB Education Committee.

The Chairman of the Education Committee, Dr. Elisabetta Buscarini, was therefore interviewed for the present issue of ECHOES. The interview includes information about the WFUMB educational activities and ideas for the near future based upon the Education Committee's experience 2003-2006.

Søren Hancke, editor ECHOES



The President (MZ) standing, the Secretary (SB) and the Chairman of the Education Committee Elisabetta Buscarini discuss the WFUMB policy on Education during the WFUMB Executive Council Meeting October 2005

Message from the President



Dear Colleagues.

My area of special interest is the safety of ultrasound. Throughout the world many guidelines have been developed to protect patients.

Of all these guidelines, the most important in my opinion is that the greatest safeguard for patient safety is the education and training of ultrasound practitioners.

The WFUMB has approached this concern by fostering ultrasound education in many forms

in all parts of the world. We have developed many training courses and have created four WFUMB Centers of Excellence.

We are fortunate to have Dr. Elisabetta Buscarini to lead this effort as the chairperson of the greatly expanded WFUMB Education Committee. This issue of ECHOES is dedicated to presenting the current activities of the Education Committee. The accomplishments of this committee give us much pride.

*Best wishes, Marvin C. Ziskin,
WFUMB President*

WFUMB EDUCATION COMMITTEE

Interview with the Chairman of the Education Committee, Dr. Elisabetta Buscarini by the Editor.



Dr. E. Buscarini, Italy, specialist in Medical Gastroenterology and Medical Ultrasound, member of EFSUMB and General Secretary of MASU, WFUMB Council member in 2000 and Chairman of the

WFUMB Education Committee in 2003.

Dr. Elisabetta Buscarini, you were elected as WFUMB Councillor in 2000, and in 2003 you were appointed as Chairman of the WFUMB Education Committee.

Yes, my impression was that I was appointed chairman of the committee because of my previous work for educational initiatives in Africa, as council member, from 2000 to 2003. Actually, I think this work was valued, as the need for education in ultrasound has been clearly perceived by the initial experience we had in Africa and Asia; in other words, this work gave the power to colleagues from emerging countries to be listened to and understood in their educational needs by the WFUMB Board (do you remember the essay of Vaclav Havel, former President of Czechoslovakia, "The power of powerless people"?).

You had a great experience in education in medical ultrasound before your appointment.

I have been involved in educational activities in my country, Italy, through several years. I had been teaching in an ultrasound school in my hospital, I was involved in educational activities in Africa since 1996, and I was the General Secretary of the Mediterranean and African Society of Ultrasound till 2004. I found that it really was important to spend the time with this kind of initiatives, and I became really interested in education activity.

My impression was that WFUMB had a great power and potential in education not yet fully exploited. In the beginning of the WFUMB activities there was a great interest in the work of the WFUMB Safety Committee. However, I felt that a very important mission for WFUMB as a scientific society would be education, so I was really pushing in this sense. I have to admit that I found a great reception within WFUMB Board to foster educational activity.

And in 2003 you began your chairmanship work for the WFUMB Education Committee. What was your first challenge?

I found that it was very challenging that the trust had been put on me. I was telling myself to demonstrate that that trust in me and the Educational Committee should be worth it. I asked myself and the people in the Educational Committee to prepare plans of activities that were really worthy.

Actually, the first challenge was to nominate members of the Education Committee. The WFUMB President, Marvin Ziskin set me free, so I suggested some colleagues from WFUMB who were really interested and involved in ultrasound education, besides of course with a fair representation from different continents. I was glad to learn that all the colleagues proposed accepted to be member of the committee.

The WFUMB Education Committee thus includes the following members:

Dr. B.I.Choi, Korea; Dr. L. Fernandez, Venezuela; Dr. H. Gharbi, Tunisia; Dr. H. Lutz, Germany; Dr. H. Watanabe, Japan.

What did you see as the initial problems facing world wide ultrasound education?

It was evident there was (and there is) an enormous need for education in ultrasound especially in certain areas of the world. We have simply been working trying to catch suggestions from different continents. From the previous council there existed two educational projects that were already running, the African and Asian projects. The experience I had in the period 2000 – 2003 in Africa was very inspiring for me. So, our wish was to continue this kind of project on a world scale. The idea was to start another project in Latin America (actually started thereafter in 2005) and probably one more in Eastern Europe.

Thereafter, the Education Committee had the intention to prepare a frame for future educational activity of WFUMB, to obviate the very poor uniformity in preparing courses and in accepting proposals from local teams.

We wanted also to understand what is the philosophy behind the WFUMB scholarship in order to choose the most effective way. In fact we had some discussions about the choice of having fellows supported by WFUMB scholarships in western countries from emerging ones, and it appeared a valuable option for "train-the-trainers" programs.

WFUMB is aware that the need for education programmes is different from one nation or society to another. Some have a need for basic education; others have a need for more advanced education. Some nations or societies have a well-defined education strategy; others have a less-defined education strategy. Could you comment on this situation?

This is a very important question we have to face. The level and the need are really different. So what really makes the best final result of our activity is a good interaction between the Education Committee and the local teams proposing different activities. And that is the reason why we firstly have to be aware of the different levels, and secondly have to receive detailed proposals from local teams. This was e.g. the case in some Sub-Saharan African countries, where we mainly did basic courses, while in the northern African countries we did more advanced courses, as it was in Asia, where most of the courses were training of trainer's.

How do you think WFUMB can stimulate the world wide education in ultrasound?

WFUMB can stimulate educational activities by:

- organising courses
- creating Centers of Excellence (COE) teaching ultrasound
- creating local education programs
- sponsoring of fellowships
- producing teaching materials
- interact with other organisations, e.g. WHO

Every one of these activities is of course very costly, and we have to take that into consideration. I think that the main interest for WFUMB is to stimulate local growth (a sort of "enzymatic" action, able to initiate and to promote education process). One scenario would be that WFUMB receives a proposal from a local team, for running a course and then tries to interact with the team in a way so that the local team can exploit its own power and its own resources, and succeed in the best way possible. The final result should be the growth of a local team that has matured thanks to this collaboration.

So, the process of a course preparation should

start with a proposal from a local team which has to be evaluated and weighed (and not only from a point of view of feasibility: I am thinking for example about the aspects of safety that we had to face in the last few years with terrorism).

The first matters to be solved for a local team is to evaluate the level of courses needed, educational facilities available and medical professionals being able to collaborate and teach. The education level is of course depending on local reality. The course format should be prepared in collaboration with the WFUMB Education Committee members.

The results of the latest year's courses in places such as Uganda and China have been that the local teams have grown through their activities in the preparation of the WFUMB courses, both in terms of a better collaboration between locals and WFUMB members and between the members of other teams of their country, or neighbouring countries.

What are presently the most important WFUMB education activities?

The present WFUMB activities on education are:

- Continental education programs
- Center of Excellence (COE) programs
- WFUMB Scholarships
- WHO interaction
- Guidelines on education
- Documents on education e.g. publications



WFUMB Asian Education Project
Beijing, China November 2004
The WFUMB teachers are from left: M.Kudo,
E.Buscarini, B.I Choi, K.Vairojanavong



*WFUMB Asian Education Project
Beijing, China November 2004
Lecture hall*

The present **Continental education programs** consist of educational programs with courses held in Asia, Africa, Latin America – and these are:

WFUMB ASIAN EDUCATION PROJECT

The WFUMB responsible are Dr. B. I. Choi, Korea; Dr. C. Chiang, China; Dr. M. Kudo, Japan.

The following courses have taken place:

"Training for the Trainers" courses:

Quezon City, Philippines, January 21-23, 2004.
32 trainers and 29 observers.

WFUMB teachers were B.I.Choi, H.Watanabe, G.McNally, M.Kudo, L.Fernandez, K.Vairojanavong.

Beijing, China, November 13-15, 2004.
100 trainers and 141 participants.

WFUMB teachers were B.I.Choi, M.Kudo, K.Vairojanavong, E.Buscarini.

Djakarta, Indonesia, January 27-29, 2006.
302 participants and 38 trainers.
WFUMB teachers were B.I.Choi, H.Watanabe, M.Kudo.

The next "Training for the Trainers" course will be held in India or Malaysia in the fall 2006.

WFUMB AFRICAN EDUCATION PROJECT

The WFUMB responsible are Dr. E.Buscarini, Italy; Dr. H. Gharbi, Tunisia; Dr. H.Lutz, Germany

Free Town, Sierra Leone, February 13-15, 2004.
Basic course.

13 participants (on a total of 250 physicians in the whole country).

WFUMB teachers were H. Lutz, H.Gharbi.



*WFUMB African Education Project
Free Town, Sierra Leone February 2004
Members of the faculty with WFUMB teachers to the left: H. Gharbi and H. Lutz*



*WFUMB African Education Project
Kampala, Uganda October 2004
The WFUMB teachers in the first row are H. Lutz, H. Gharbi, E. Buscarini. Academics of Kampala behind*

Kampala, Uganda, October 17-20, 2004
Basic and advanced course.

119 participants.

WFUMB teachers were E.Buscarini, H.Gharbi, H.Lutz.

Djerba, Tunisia, March 18-21, 2006.
146 participants
Advanced course.

WFUMB teachers were E.Buscarini, H.Gharbi, H.Lutz.

The next course will be held in Kenya, October 2006.

WFUMB LATIN AMERICAN EDUCATION PROJECT

WFUMB responsible are Dr. L. Fernandez, Venezuela, Dr. G. Cerri, Brazil.

Lima, Peru, March 10-14, 2005.

386 participants

Basic and advanced courses.

WFUMB teachers were L.Fernandez, G.Cerri.

Ciudad Guayana, Venezuela, June 23-25, 2005
450 participants

Basic and advanced courses.

WFUMB teachers were H.Watanabe, L.Fernandez, B.I.Choi, M.Claudon, S.Barnett.

The next course of the Latin American Education Project will be held in Guatemala, Brazil or Paraguay, fall 2006.

Thanks to WFUMB economical support the courses mentioned were realized, e.g. for expenses held by local and WFUMB teachers/trainers as well as for teaching material ect.

I should like to know about the "Training for the trainer's" course; what are the criteria for participation, to be a trainer?

Generally, it is the local organising committee that decides the number and quality of the participants to be accepted. The number is of course due to the facilities available. The attendees who are accepted for courses are generally decided on the basis of their skills in ultrasound. With attendance to the courses proposed by WFUMB they are expected to become eventually trainers in their own reality and to teach their colleagues the correct use of ultrasound.

The "Training for the trainer's" courses are important to disseminate the knowledge of ultrasound in the trainer's country.

Will there be a need for a feedback mechanism/ long term evaluation after the course, and do you have information on how the trainers have succeeded in working with students after the course?"



*WFUMB Latin American Education Project
Lima, Peru March 2005*

WFUMB teacher L. Fernandez to the left with faculty members

That is a key question. I think that every educational activity should be followed by an immediate and long term evaluation of results of the program. In the case of courses we have to look for immediate feedback in evaluation forms filled by trainees. This should be done not only to evaluate customer satisfaction, but really in terms of the impact of the course.

The second important aspect is feedback on the long term results of the daily practice of the trainers, and there should be a periodical evaluation on behalf of the WFUMB Education Committee. WFUMB should design a periodical follow-up of the trainers; it should be clearly defined for the future programs.

So, the feedback mechanism is important. Has it already been established by the Education Committee?

Presently we are in the preliminary phase of the preparation of the feedback mechanism; we have to take into account that we are in the first years of the Education Committee activity. But we absolutely need to have this feedback. Until now it has been performed in a very preliminary way in the Asian and African Education Project courses through an evaluation form filled by the participants. These evaluations showed a good satisfaction and included some useful suggestions for future courses.

All in all, I would like to mention that during the courses listed above the WFUMB Education Committee members have met about 2000 course participants. The participants were colleagues living and working in various conditions, from Sierra Leone just after the end of a civil war, to far more wealthy areas as China.

Independently from conditions of the country, wherever we were, we found a very lively attention and very motivated people, ready to afford many sacrifices to attend the courses such as long travelling, staying 12 hours a day or more in a conference room, and attend the practical sessions as well. We have always met colleagues well aware of the value of these cultural initiatives which in many occasions made them feel less lonely from a scientific point of view.

Center of Excellence (COE) is a new and important initiative of the WFUMB Education Committee. Will you comment on the COE's?

The Characteristics of a **Center of Excellence** are:

- **Aims:** Education in Medical Ultrasound in Developing Countries with accreditation
- **Establishment:** Agreement between WFUMB and a Society affiliated to WFUMB
- **Term:** Renewal every three years
- **Criteria of the Society:** The Society shall be from a developing Country, shall be well organized, have an independent office, experience on education and international influence
- **Training programs:** At least once every year
- **Budget:** Independent from WFUMB

So, a Center of Excellence is an institutional center in which you can find the expertise necessary to teach and to train in medical ultrasound. The fundamental characteristic of a COE is a geographical position that urges the Center of Excellence to be really important in covering particular areas.

The number of WFUMB Centers of Excellence is intended to be no more than one or two in each continent. A Center of Excellence is given to an ultrasound society and to a particular person or a team of people that can guarantee the continuity of ultrasound teaching over the next years.

It is very important to recall that the COE-appointment is a three-year-term appointment. At the end of this three-year term the activity of the center has to be checked and revised by the WFUMB Advisory Board for Centers of Excellence. The appointment can of course be renewed, provided the center has continued teaching in a proper way.

The site for a Center of Excellence is decided also from an epidemiological point of view. Local teams are encouraged to assess and meet their epidemiological need, meaning, for example, that they know best about specific diseases, and therefore, are better prepared for training people especially for those diseases. Courses should deal with local and regional needs to develop sufficient training programmes.

The objectives of the Center of Excellence courses are to help physicians to start ultrasound practice using a general purpose ultra-

sound scanner and to make available a basic ultrasound service to the people of the country and possibly of neighbouring countries.

WFUMB has established an **Advisory Board** for **Centers of Excellence**, and the members of this board are: Dr. H.Watanabe (Chair), Dr. E. Buscarini, Dr. Beryl Benacerraf, Dr. H.Lutz.

Below is a list of the WFUMB Centers of Excellence and the past activities:

BANGLADESH SOCIETY OF ULTRASONOGRAPHY (BSU), DHAKA, BANGLADESH.

Dr. Kanu Bala.

Established February 24th, 2004

1st WFUMB COE Workshop: Dhaka, February 24-26, 2004

2nd WFUMB COE Workshop: Dhaka, February 22-24, 2005



WFUMB Center of Excellence
The Bangladesh Society of Ultrasonography
2nd Workshop in Dhaka, Bangladesh February 2005
Dr. Kanu Bala, President of the Society, is organizing WFUMB teachers, H. Lutz, H.Watanabe, H.Gharbi, K.Vairojanavong, in a row for a photograph.



WFUMB Center of Excellence
The Bangladesh Society of Ultrasonography
1st Workshop in Dhaka, Bangladesh February 2004
WFUMB teachers H.Watanabe, L.Fernandez, B.I.Choi



WFUMB Center of Excellence
Uganda Association of Sonography
2nd Training Course Kampala, Uganda May 2005
Dr. M. Kawoya, COE Chair, giving a lecture

UGANDA ASSOCIATION OF SONOGRAPHY (UGASON), KAMPALA, UGANDA. Dr. Michael Kawoya.

Established June 8th, 2004

1st WFUMB COE Training Course: Kampala, October 17-20, 2004

2nd WFUMB COE Training Course, Kampala, May 27-28, 2005

SOCIEDAD VENEZOLANA DE ULTRASONIDO EN MEDICINA (AVUM), CARACAS, VENEZUELA. Dr. Leandro Fernandez.

Established February 6th, 2005

1st WFUMB COE Course: Ciudad Guayana, June 23-25, 2005

RUMANIAN SOCIETY OF ULTRASOUND

TIMISOARA, ROMANIA. Dr. Ioan Sporea.

Established February 2006 and yet to be launched.

One important requirement to be fulfilled by a Center of Excellence is that it has to give at least one course a year. The centers in Dhaka and Kampala have been able to organize three courses each till now, and one course has been held in the Caracas center.

The WFUMB budget for each of the four Centers of Excellence is equal to cover secretariat expenses. Each center can apply for having fees covered for the annual course.

Do you think the students will expect a kind of a formalised accreditation as an outcome besides being trained?

Of course, students expect a sort of accreditation from these kinds of courses, but I would

like to stress that accreditation is not a WFUMB intention. Accreditation should typically be offered by national scientific societies being able to follow-up on their trainees and check them regularly.

Normally a certificate of recognition is given to the participants at the end of a WFUMB course. Probably, in a few selected sites, as typically in Centers of Excellence, WFUMB could be able in the future to develop long standing programmes which could be regularly checked, and in such a case it might be possible to accredit students; we will see.

You mentioned that WFUMB has Scholarships.

In 2001 WFUMB established **WFUMB scholarships**. The aim of this scholarship is to improve the skill in medical ultrasound. Three scholarships of US dollars 5000 may be given to three individual members of WFUMB each year.

The WFUMB scholarships for 2003 were given to Dr. M. Sayed, Tunisia, to go to Paris for an advanced course on interventional ultrasound, and to Dr. R. Byanima, Uganda, to study in Crema, Italy for an advanced course on diagnostic and interventional abdominal Doppler ultrasound.

The scholarship for 2004 was given to Dr. N. Draman Assoa, Benin, to study in Tours, France.

In 2005 the scholarship was given to Dr. N. Sultana, Pakistan, to study in Caracas, Venezuela, on basic ultrasound and Doppler technology.

In 2006 the scholarship was given to Dr M. Gonzalez, Venezuela, to have a stage in Sydney, Australia.



WFUMB African Education Project
Moshi, Tanzania February 2002
Students during hand-on demonstration

And during the last Executive Council Meeting it was decided that the budget corresponding to fellowships not given in 2005 and 2006 will be used to support participation of selected members from the Centers of Excellence to the WFUMB 2006 congress in Seoul, Korea.

The rules for WFUMB's scholarships can be seen on www.wfumb.org.

WHO is, of course, interested in educational activities in the field of medical ultrasound.

WHO has established a Global Steering Group on Education in Medical Imaging, and in recent years WFUMB has had representatives at the WHO meetings in order to collaborate on global educational programs. The collaboration with WHO has also been very fruitful via bilateral suggestions for the development of training programmes in some countries or continents.

WFUMB is also grateful for the collaboration with WHO on the publication of the following two books:

"Training in Diagnostic Ultrasound, Essentials, Principles and Standards", WHO, 1998 and "Manual of Diagnostic Ultrasound", 1995.

Another important initiative born in the context of the Education Committee is the production of the WFUMB book: "Manual of Diagnostic Ultrasound in Infectious Tropical Diseases", Editors H. Lutz and H. Gharbi, 2005 (see also ECHOES NO 7, p. 7).

It is interesting that WHO has bought about 100 of copies of this book for global spread.

What kind of educational activities do you presently find most important?

I think it is difficult to answer this question. On one hand we have the Centers of Excellence for teaching in ultrasound, and these are very important because they offer a guarantee of continuity and offer the technology needed as well as training programmes.

On the other hand I think that it is very important to continue to offer basic and advanced courses and to have a more uniform educational activity all over the continental areas that are not covered by Centers of Excellence.

What are your wishes or plans for the near future activities of the Education Committee?



WFUMB Asian Education Project
Beijing, China November 2004
Hands-on demonstration performed by E. Buscarini

My wish is first of all that more people will be involved in educational activities.

And to my eyes it could be done if WFUMB could stimulate the people or organisations interested in the field and already working with educational programmes. For example, some national societies, such as the German and British Society of Ultrasound are interested in collaboration. So, WFUMB might invite people or teams from continents to create a WFUMB faculty in order to collaborate on educational programs.

If we are able to create such a faculty, we will be able to be more active than in the past.

A very interesting aspect is a possibility of leaving a teacher for a longer stay after a course has been completed, e.g. for a two-to-three week period, in order to perform practical training of the local team. We have to understand that to empower our educational activity inside WFUMB we need to increase human resources.

Another important task for the future activity of the Education Committee could be to find a better support from ultrasound companies. Companies might for example, in collaboration with WFUMB, offer some portable ultrasound machines to the centers, where WFUMB is doing courses. WFUMB might also be able to offer equipment to selected centers.

Do you have some final comments to the WFUMB education policy?

As a conclusion on activities of the Educational Committee I would like to point out that thanks to the farsighted policy of WFUMB President Marvin Ziskin the Education Committee has

been able to run the activities mentioned above. The WFUMB Council has given resources to empower educational activities by creating a more structured educational committee. I am also grateful for the collaboration with the entire WFUMB council in which we found a deep and valuable understanding for the formation of the educational programmes. And finally, of course, a heartfelt acknowledgement goes to the work and dedication of the five other members of the Educational Committee that have taken care of the programmes. I think that for a world-scale scientific society as WFUMB, it is of paramount importance to focus on education; if we look now behind our shoulders, we are really looking at appreciable initiatives having had a great impact on a lot of colleagues.

With your permission, Elisabetta, I would like to stress that all members of the WFUMB Committee's, including the Education Committee, have been working hard through the years with the most fruitful outcome - and that all the work is done completely voluntarily. With this kind of work many highly qualified colleagues use a lot of personal spare time and resources for which WFUMB is very grateful.

Finally, I should like to ask you: are you happy with your time as Chairman for the Education Committee in the period 2003 – 2006?



The Chairman of the WFUMB Education Committee
Dr. E. Buscarini with a group of African colleagues.

I think that the experience on the educational field is really a great deal, and also from a human point of view, I think it has been one of the best experiences in my career. I am convinced that my colleagues who have been working together with me in the Educational Committee do share this opinion. In spite of

some obvious sacrifices that we have paid in term of personal time, we feel that we have gained something very important out of our energies.

If I would be asked what I would focus on in my profession in the future, I would certainly save the educational activities.

Thank you Elisabetta, for the interview – and best wishes for a fruitful outcome of all the efforts done by the Education Committee.

More information on the WFUMB Committee's can be seen on the WFUMB home page:

www.wfumb.org.



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Latin American Federation for Ultrasound in Medicine (FLAUS) www.flaus.org

Australasian Society for Ultrasound in Medicine (ASUM) www.asum.com.au/open/home.htm

Mediterranean and African Society of Ultrasound (MASU) www.agonet.it/masu