#### **WFUMB Vision Statement**

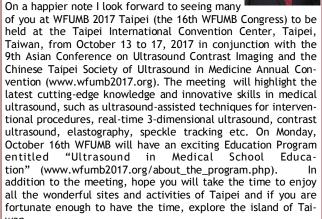
Through communication, collaboration and education, bring sustainable ultrasound programs to underserved areas in the world



### WFUMB Facts

#### Message from the President

It is with great sadness that we acknowledge the passing of 2 true giants in the field of ultrasound- Professor Peter N.T. Wells and Professor David Cosgrove. Please see "In Memoriam" in this issue of ECHOES.



Hope you enjoy and take pride in all the WFUMB and each of the member Federation activities and WFUMB Centers of Education (COEs) programs described in this issue of ECHOES.

#### WFUMB Leadership (2015-2017)

**Executive Bureau** 

President: Harvey Nisenbaum (USA)

President-Elect: Christian Nolsøe (Denmark) Vice President 1: Dieter Nürnberg (Germany) Vice President 2: Adrian Goudie (Australia)

Secretary: Seung Hyup Kim (Korea)
Treasurer: Jacques Abramowicz (USA)

Immediate Past President: Hassen Gharbi (Tunisia)

Administrative Councilors Michael Blaivas (USA) M. Cristina Chammas (Brazil)) Yi-Hong Chou (Taiwan) Christoph Dietrich (Germany) Sudhir Vinayak (Kenya)

Susan C. Westerway (Australia)

Co-Opted Councilors Byung Choi (Korea) Leandro Fernandez (Venezuela) Harald Lutz (Germany)

**UMB Journal Editor** 

Christy Holland, PhD (USA - AIUM)

#### WFUMB Committees

Archives Committee
Seung Hyup Kim, Chair
Hassen Gharbi
Harald Lutz
Christian Nolsøe
Harvey Nisenbaum, Ex Officio
Archives Advisors
Michael Claudon
Barry Goldberg
Søren Hancke
George Kossoff
Hiroki Wantanabe

Congress Committee Adrian Goudie, Chair Seung Hyup Kim Fabio Piscaglia Cristina Chammas Harvey Nisenbaum Yi-Hong Chou

Constitution Committee Dieter Nürnberg, Chair Hassen Gharbi Seung Hyup Kim Harvey Nisenbaum Christian Nolsøe

Collaboration Committee Christian Nolsøe, Chair

Michael Blaivas Cristina Chammas Byung Choi Hassen Gharbi Odd Helge Gilja Harvey Nisenbaum Sue Westerway Collaboration Advisors Ron Benzie Giovanni Cerri Michel Claudon Barry Goldberg Masatoshi Kudo

Nominating Committee Christian Nolsøe, Chair Jacques Abramowicz

Jacques Abramowicz Cristina Chammas Hassen Gharbi Adrian Goudie Seung Hyup Kim Dieter Nürnburg Harvey Nisenbaum, Ex Officio

Safety Committee Jacques Abramowicz, Chair David Evans J. Brian Fowkles Gail ter Haar Karel Marsal

Byung Choi, Co-Chair Harald Lutz, Co-Chair Michael Blaivas Bryann Bromley Cristina Chammas Yi-Hong Chou Barry Goldberg Christian Nolsøe Dieter Nürnberg Sudhir Vinayak Sue Westerway **COE Directors** Kanu Bala Leandro Fernandez Michael Kawooya Daniel Makes Sonin Sodov Lantam Sonhave Kofo Sovebi Ioan Sporea Sudhir Vinayak E-Learning Ádvisors Paul Dubbins Michael Kawooya Sudhir Vinayak

**Education Committee** 

Finance Committee
Dieter Nürnberg, Chair
Cristina Chammas
Adrian Goudie
Seung Hyup Kim
Harvey Nisenbaum
Christian Nolsøe

Sudhir Vinayak Jacques Abramowicz, Ex Officio

Publications Committee Christoph Dietrich, Chair Michael Blaivas Byung Choi Leandro Fernandez Sudhir Vinayak Sue Westerway

Christy Holland, Ex Officio

Communication Committee Seung Hyup Kim, Chair Yi-Hong Chou (AFSUMB) Michael Blaivas (AIUM) Sue Westerway (ASUM) Christoph Dietrich (EFSUMB) Cristina Chammas (FLAUS) Sudhir Vinayak (MASU)

Past President Advisory Group Masatoshi Kudo, Japan (2011-2013) Michel Claudon, France (2009-2011) Giovanni Cerri, Brazil (2006-2009) Hiroki Watanabe, Japan (2000-2003) Harald Lutz, Germany (1997-2000) Barry Goldberg, USA (1994-1997) George Kossoff, Australia (1982-1985)

## WFUMB Statistics (as of May 2017)

6 Member organizations

93 Countries

52,925 Individual Members



|        | Countries | Individual<br>members |
|--------|-----------|-----------------------|
| AFSUMB | 16        | 19,272                |
| AIUM   | 2         | 5,399                 |
| ASUM   | 2         | 2,064                 |
| EFSUMB | 28        | 20,274                |
| FLAUS  | 13        | 4,196                 |
| MASU   | 32        | 1,720                 |
| Total  | 93        | 52,925                |

### WFUMB Activities

**ARCHIVES COMMITTEE:** The Archives Committee developed WFUMB Digital Archives. It is a collection of historic documents, articles, publications, and photos in digital form and currently it is about 10GB in size. Now it is kept in webhard system (www.webhard.net) and is open to WFUMB Administrative Council and Committees members. The Archives Committee is planning a separate website for WFUMB Digital Archives and will be open to the public by a link to WFUMB main website.

COMMUNICATION COMMITTEE: The role of the Communication Committee is to facilitate communication of WFUMB and WFUMB-affiliated organizations, to maintain the WFUMB website up-to-date, and to publish the WFUMB Newsletter "ECHOES" regularly in intervals as WFUMB Administrative Council decides. WFUMB website (www.wfumb.org) was renewed in November 2016 in a visitor-friendly and mobile-responsive platform. WFUMB newsletter ECHOES, which was not published regularly for a while, was also revived in November 2016 as ECHOES #16 and will be published regularly twice a year.



**CONGRESS COMMITTEE:** The Congress Committee has been pleased to watch the excellent work being done for the preparation of WFUMB 2017 Taipei, and will use this as the basis for future congresses. The report of WFUMB 2017 Taipei is included on a separate page (page 16).

WFUMB 2019 in Melbourne will be held on 5-9 September, 2019 at the Melbourne Convention Center. Preliminary planning has commenced and ASUM and WFUMB look forward to many international delegates to learn and share their expertise.

Expressions of interest for WFUMB 2021 have been received and the winning venue will be announced shortly.

**NOMINATING COMMITTEE:** The Nominating Committee has it as its purpose to select nominations for the officers of WFUMB and present these to the Administrative Council in the year prior to the WFUMB congress. The Nominating Committee selects these nominations from candidates submitted by the Affiliate members. The Committee convened via conference call on 18 April 2017 to discuss the nominations for WFUMB's Elections this year. A list of candidates was unanimously decided and will be presented to the Administrative Council in due time.

## WFUMB Activities\_continued

#### **PUBLICATION COMMITTEE:**

Recent activities of publication committee include the writing of a WFUMB drafting concept which has been accepted and used, e.g., for guideline preparation [for further details see the WFUMB-website].

The following WFUMB-guidelines and good clinical practice recommendations for contrast enhanced ultrasound (CEUS), elastography and safety issues (initiatives in cooperation with representatives of



AFSUMB, AIUM, ASUM, EFSUMB, FLAUS and MASU) have been published in recent years. WFUMB has also recently published two position papers on point of care ultrasound and how to learn gastrointestinal ultrasound. Current activities include a position paper on medical student education. The WFUMB Publication Committee members warmly welcome ideas for future projects including state of the art papers.

#### **COLLABORATION COMMITTEE:**

The WFUMB Collaboration Committee is a newcomer at the WFUMB homepage and in this issue of ECHOES. It is, however mostly the name that is new. At our latest Administrative Counsel meeting in Kenya it was decided to change the name of the previous Co-Sponsorship Committee to Collaboration Committee and at the same time update bylaw 7.5 that describes the duties of this committee. In short WFUMB Collaboration Committee has it as its overall mission to stimulate and initiate collaboration with commercial and non-commercial organizations on mutual ultrasound educational projects to promote the use of ultrasound worldwide. In keeping with this purpose the Collaboration Committee reaches out to professional organizations as well as ultrasound manufactures at congresses and suitable ultrasound events on a global scale.

For the third year in a row a committee delegation met with other professional medical organizations and vendors at the worlds largest annual medical congress, RSNA in Chicago. Through a busy 3-days-program a total of 12 personal meetings enabled WFUMB to make dedicated contact and stimulate collaboration with RAD-AID, Imaging the World, World federation for Pediatric Imaging, Philips, GE, Bracco, Siemens, Mindray, Neusoft, Toshiba, Hitachi and Samsung. Some contacts quickly develop into fruitful collaboration while others may take some time to mature.

In the first category WFUMB has throughout the last year experienced successful joint ventures around the world. In Brazil Bracco has worked in close collaboration with FLAUS Counselor Cristina Chammas to develop CEUS courses enabling hugely important education in the use of the newly Brazil-registered Sonovue ultrasound contrast. In Kenya Philips has collaborated through the WFUMB COE in Nairobi where COE Secretary and MASU President Sudhir Vinayak has lead a most successful midwife-Visiq-ultrasound project. The results prove this to be a great way to utilize tablet-based ultrasound equipment in rural areas and in addition the project produced in a scientific report.

In Nigeria GE and WFUMB COE in Lagos under the strong leadership of Kofo Soyebi is at the bring of start-up of a similar midwife scanning project, only at a much larger scale aiming with time to cover rural areas all over Nigeria. This project utilizes the tablet sized V-Scan Access which was partly developed for this purpose. At the time being intensive training-of-the-trainers sessions are rolled out.

In Ethiopia RAD-AID is collaborating with WFUMB to extend our long-running education activities at Black Lion Hospital in Addis Ababa to run a fist-time-ever full-week ultrasound course in Gondar, the largest city of Northern Ethiopia. WFUMB education activities in Ethiopia is carried out in close collaboration with University of Bergen and NCUG leader, EFSUMB President, Odd Helge Gilja and the Gondar course will run as a joint venture with all three organizations contributing to a hopefully successful event come October 2017.

The WFUMB Collaboration Committee will continue to pursuit our goal and we are eager to collaborate with ultrasound education projects all over the world. Kindly contact us through our website http://www.wfumb.org or WFUMB Administrative Manager, Allie Garza agarza@wfumb.org.



WFUMB-vendor meeting at RSNA



Hands-on session in Ethiopia

## WFUMB COEs

Originally "COE" meant "Center of Excellence" and was changed to mean "Center of Education" in January 2015. Currently WFUMB is sponsoring 13 COEs.





# **WFUMB COEs History** -This is an article viewed by Hiroki Watanabe and Masatoshi Kudo

In WHO, Harald Østensen, former medical officer, founded "Global Steering Group for Education and Training in Diagnostic Imaging" and discussed to establish education centers in developing countries in the late nineties, especially in Africa as "African project", led by Harald Lutz and Søren Hancke. Independently from this, Hiroki Watanabe, WFUMB President at the time, moved his specific plan for the establishment of "WFUMB COE", based upon a principle that "WFUMB only gives the name and local societies organize each education center for ultrasound by their own effort" to WFUMB Education Committee Meeting (Chair: Harald Lutz) held in Dhaka on June 6, 2002.

The plan was moved to WFUMB Administrative Council Meeting, held in Montreal on May 31, 2003. The motion was carried and the first COE was established in Dhaka, Bangladesh, on February 24, 2004. This was followed by COE in Kampala, Uganda (June 8, 2004), which met well with the idea of "African project". Marvin Ziskin, the next President, appointed Hiroki Watanabe as the Chair, Advisory Board for COE Committee in 2004, and he established COE in Caracas, Venezuela (February 6, 2005).

Since 2006, three Presidents including Giovanni Cerri, Michel Claudon, and Masatoshi Kudo appointed Byung Ihn Choi as the Chair to evolve the system. He established COE in Timisoara, Romania (June 1, 2007), COE in Jakarta, Indonesia (February 12, 2011), COE in Lome, Togo (February 13, 2013), and COE in Lagos, Nigeria (February 13, 2013). Since 2013, President Hassen Gharbi and Harvey Nisenbaum appointed Byung Ihn Choi and Harald Lutz as Co-chairs of education committee to supervise, monitor and stabilized the system of COEs. They established COE in Ulaanbaatar, Mongolia (July 26, 2013). With the support of Christian Nolsøe, Dieter Nürnberg, and Odd Helge Gilja additional COEs in Africa were established: COE in Nairobi, Kenya (January 17, 2014) and COE in Addis Abbaba, Ethiopia (March 17, 2014). Since then additional COE Candidates have been approved: COE Candidate in Asuncion, Paraguay (March 22, 2015); COE Candidate in Karthoum, Sudan (January 19, 2017); and COE Candidate in Chisinau, Moldova (January 19, 2017) [Minor editing was done by Byung Ihn Choi and Harvey Nisenbaum]

#### Comments to this article

Michel Claudon: Thank you for having prepared this summary of the history of the COEs. This document is mainly a factual history document and easy to read to members, and could be fruitfully published in Echoes #17.

Hassen Gharbi: I personally had the chance to be member of this community since 1992, and working with the great names of US pioneers. I was one of the founders of the MASU and since the beginning in 1986 we promoted education in developing countries in Africa, we called it MASU Courses under the auspices at the beginning of WHO then since 1992 under the auspices of WFUMB/WHO. WFUMB has to be proud for this great achievement, the COEs, in developing world. All of us are proud to be involved more or less in this project.

### WFUMB COEs

WFUMB COE, Current Status and Future Plans -By Choi BI and Lutz H, Co-chairs of Education Committee

At the administrative council meeting in Kenya in 2017, two new candidates of WFUMB COE in Khartoum, Sudan, and Chisinau, Moldova, were approved. Therefore, the total number of WFUMBH COE is 13. Current 13 WFUMB COEs are listed and shown on the world map on page 4.

The responsibility of COE is developing training programs, financial administration, and reporting activity every year to WFUMB. The responsibility of WFUMB is approval of the name, recommendation of curriculum, recognition of budget, recommendation of teachers, examination and accreditation of the trainers, and advice for management of COEs. The responsibility of the sponsoring society is location in developing country, solid society, and independent office, and experience on education in the past and ability to attract trainees from own and surrounding countries. Annual COE workshops in 2016 and 2017 are summarized in Table 1 and 2 below.

In general, most of WFUMB COEs do their work well. But, the Ethiopian COE is not yet under the umbrella of MASU. MASU has helped to synergize a working relationship between the Ethiopian US society (in the process of registration) and WFUMB. Hopefully the society will soon be operational with the support of WFUMB, MASU and University of Bergen, Norway. Togo COE has been revitalized through the hard work of Philippe Arbeille and Director, Lantam Sonhaye (see Togo COE report page 8)". Khartoum COE in Sudan was approved in last January and hopefully will be set up in the near future by Dieter Nürnberg and local supporters. Chisinau COE in Moldova was also was approved in last January and hopefully will be established in the future supported by Harald Lutz, Dieter Nürnberg and Romanian COE.

There are three WFUMB COE meetings on the basis of region, including Latin America, Africa & Eastern Europe and Asia, because WFUMB can save expenses of airfare and accommodation of participants for the meeting, and can discuss COE activities in depth and detail. Two WFUMB COE meetings were held in 2016. Asian meeting was held in Kyoto, Japan on May 27-29, 2016, in conjunction with AFSUMB meeting (Figs. 1, 2). Africa & Eastern Europe meeting

Table 1. COE Workshop 2016

| Country    | Date            | City           |  |
|------------|-----------------|----------------|--|
| Bangladesh | March 4         | Dhaka          |  |
| Uganda     | November 4-5    | Kampala        |  |
| Venezuela  | October 6-7     | Caracas        |  |
| Romania    | June 23-25      | Craiova        |  |
| Indonesia  | 10th ISUM       | Medan          |  |
| Togo       | September 14-16 | Lome           |  |
| Mongolia   | September 15-17 | Ulaanbaatar    |  |
| Kenya      | November 17-18  | Nairobi        |  |
| Ethiopia   | Unknown         | Addis Ababa    |  |
| Nigeria    | April 30        | April 30 Lagos |  |

Table 2. COE Workshop 2017

| Country    | Date                     | City        |  |
|------------|--------------------------|-------------|--|
| Bangladesh | March 3                  | Dhaka       |  |
| Uganda     | May, October             | Kampala     |  |
| Venezuela  | End of September         | Caracas     |  |
| Romania    | June                     | Cluj-Napoca |  |
| Indonesia  | 10th ISUM                | Medan       |  |
| Togo       | March                    | Lome        |  |
| Mongolia   | July 26-29               | Ulaanbaatar |  |
| Kenya      | May 26-27, October 26-28 | Nairobi     |  |
| Ethiopia   | Unknown                  | Addis Ababa |  |
| Nigeria    | April 30                 | Lagos       |  |
| Paraguay   | March 20                 | Caaguazu    |  |

Fig. 1



Fig. 2





Fig. 3



Fig. 4

### WFUMB COEs

### WFUMB COEs Update

#### COE, Dhaka, Bangladesh (director, Dr. Kanu Bala)

The 19th WFUMB COE Workshop was held on 3 March 2017, Friday at the Auditorium of the National Institute of Nuclear Medicine and Allied Science [NINMAS], Bangabandhu Sheikh Mujib Medical University Campus, Dhaka, Bangladesh. 152 participants attended the workshop. The participants were very attentive and enthusiastic. All through the whole auditorium was packed up with participants and there was pin-drop silence. At the Inauguration Ceremony Prof. Kanu Bala, Director of the WFUMB COE Bangladesh explained the history and present status of the COE.

The topic of the workshop was "Controversies in Pregnancy Ultrasound". Nine lectures covered some of the areas of fetal anomalies in depth and in breadth. All the world-class lecturers were from Bangladesh Society of Ultrasonography. Some of the topics were very much new and untouched. At the last part of the workshop there was a patient and probe session.

Prof. Byung Ihn Choi (Korea) is the Chairperson of the Advisory Board of the WFUMB COEs and Prof. Kanu Bala (Bangladesh) is the Director of the WFUMB COE Bangladesh. Prof. Choi played a key role for the organizing of the workshop properly. He maintained the quality of workshop as per requirements of the WFUMB. He has to place a full report of the workshop at the WFUMB Council. Bangladesh Society of Ultrasonography is the host organization.





#### COE, Timisoara, Romania (director, Dr. Ioan Sporea)

The WFUMB COE Timişoara Romania will organize, this year, the Annual Workshop with the topic Gastrointestinal Ultrasound (GIUS), on the 2nd of June 2017, in conjunction with the XXth National Conference of the Romanian Society of Ultrasound in Medicine and Biology (http://medevents.ro/srumb2017/). Prof. Odd Helge Gilja (Norway), Prof. Dieter Nürnberg (Germany) and Mrs. Lynne Rudd (United Kingdom) will be guests at this meeting.

Also in 10-11 November 2017 the center will organize in Timisoara a Euroson School Course with the topic Elastography. R.J. de Knegt (The Netherland), Matteo Rosselli (United Kingdom), Simona Bota (Austria), Bogdan Procopet (Romania) will be among the invited speakers along with the members of the center: Ioan Sporea, Alina Popescu, Roxana Sirli, Mirela Danila. More information will be availabe on the center's website (www.ulctimisoara.ro). All those that are interested are welcomed. Also the center is open for everybody that wants to learn ultrasound or looks to improve their experience.



#### COE, Nairobi, Kenya (director, Dr. Sudhir Vinayak)

COE, Kenya (director, Dr. Sudhir Vinayak) We had our annual COE conference on 17th/18th November, 2016 which was very successful. The registration had to be closed at 110 participants as the venue was filled to capacity. Odd Helge was the WFUMB speaker and all sessions were well attended. The registrants included: Radiologists, Sonographers, Physicians, and Physicists. A wide range of subjects were covered; hence the excellent response from members of the ultrasound society.

CMEs: In collaboration with Kenya Society of ultrasound (KESUMB), regular CME lectures on ultrasound updates take place at the COE with good attendance. Since the last echoes bulletin, we have given another 4 lectures. Since the COE was established, educational activities and 'hands-on experience' have improved skills for practicing Sonographers especially when performing difficult/challenging ultrasound procedures. The CME lectures are popular and feedback from Sonographers is very positive. Accreditation: As a COE, we have written a curriculum to provide accreditation for qualified Sonographers. We are still awaiting approval from authorities to start the accreditation process.

Research: The Visiq research project was completed in 2016. The results are very encouraging and this pilot scheme will certainly form the template on which larger projects can be structured. The manuscript entitled, "Training Midwives to Perform Basic Obstetric Point of Care Ultrasound in Rural Areas Using a Tablet Platform and Mobile Phone Transmission Technology - A WFUMB COE Project" has been accepted for publication in UMB.









#### COE, Ulaanbaatar, Mongolia (director, Dr. Sodov Sonin)

During WFUMB Congress held in Sao Paulo, in 2013, decision to establish WFUMB COE in Mongolia was made in accordance with the request of Mongolian Society of Diagnostic Ultrasound (MSDU). Then, WFUMB COE in Mongolia was established in July 2013 in Ulaanbaatar and now it is running activities successfully. With establishment of the WFUMB COE, there is good opportunity to invite worldwide famous US leaders, speakers, lecturers to give valuable information, educate Mongolian doctors and share experiences, to present modern diagnostic methods and advanced technology to our doctors.

As mission of WFUMB, our mission is to disseminate scientific information, improve healthcare through collaboration, communication, and education. Since started, WFUMB COE in Mongolia organized 4 workshops in Abdominal US, Cardiology, Obstetrics and Gynecology, Musculo-skeletal and Pediatric ultrasound and totally around 800 medical doctors were enrolled. This year, in July 27-29, 2017, we are preparing to organize the 5th workshop of WFUMB COE Mongolia.

Also, as part of continuing education programs, 1-month familiarization to ultrasound and 3-month refresher courses are conducted on regular basis and approximately 300 medical doctors from family and rural health centers were involved in these trainings, which gave benefits to Mongolian remote rural primary health care units to improve their diagnostic capacity and quality.





#### COE, Lagos, Nigeria (director, Dr. Kofo Soyebi)

National Sickle Cell Centre (NSCC) retained four of the best performing 10 Graduates capacity built through C.U.R.E, in Transcranial Doppler scanning, to conduct screening TCD on a daily basis, Monday to Friday, 8 am to 5 pm on children with Sickle Cell Disease (SCD), screening aimed at early detection of stroke-risk.

The Observation: Remarkable increase in number of children screened by my Team of three Radiologists over 9 months, scanning once a week, 4hours per visit from 93 to 886 children in the same period. Children from every part of the country and neighboring countries started visiting this solitary TCD Centre for screening signifying a great need.

My Intervention: 2016 and 2017 Grants were obtained from magnanimous RSNA Research and Education Foundation to increase the number of TCD centers from one to seven in Nigeria and train TCD Sonographers for them.

The Project is ongoing. Heartfelt gratitude is expressed by ALL Beneficiaries.





#### COE, Lome, Togo (director, Dr. Lantam Sonhaye)

COE Workshop Lome was held on March 16-17th, 2017 with Pr Ph Arbeille, Pr Ph Devred (MASU WFUMB contributers and observer).

Scientific program was composed of 13 main lectures of 25min each on various topics including (4 of them from the WFUMB representatives) overview of the common echographic practice on abdominal, cardiac, vascular, musculoskeletal, fetal echography, pediatric abdominal, practice in emergency, future application of ultrasound in the assessment of cardiovascular aging effect, and teleechocardiography principle and current application. There were 36 oral presentations (15min) on the same topics and others. There were four demonstration and training sessions (2 of them by the WFUMB representatives) on suprasternal vessels, lower limb vessels, fetal echography, and tele-echography. Demonstration were performed by an expert on a volunteer, and later on the participant (20 to 30) practiced on the same subject with the assistance of the expert. For these session a portable Echograph Sonoscanner Orcheolite (Paris Fr) was used with a high frequency linear probe (17MHz), a curved array probe (3,5-7 MHz), for the conventional echographies. Echograph from CNES "French space agency" provided, carried, and managed by Ph Arbeille. During each demo or training session the Echograph was connected to the video projector so the audience could follow the echography performed on the main screen. For the Tele-echography the same device was used but in a "Teleoperated mode" that allow to control from away all the setting and function of the Echograph and also the transducer orientation inside the Motorized probe (3,5 -7MHz). For the demonstration and training the Expert site was installed at one extremity of the podium (Dummy probe USB connected to a portable PC) while the patient site (patient on a bed with the tele-operated Echograph and motorized probe) at the opposite extremity of the podium (10m away). The 2 sites were linked thank to a RJ45 wire. The expert started to set up 2 soft in order to check he can control the probe movement and the Echograph setting function. Then a nonsonographer person held the motorized probe on the patient at the place indicated (vocally) by the expert away and maintained it motionless while the expert changed the orientation of the transducer by manipulating the dummy probe. Several attendees successfully manipulated the dummy probe and were capable to visualize the abdominal aorta, inferior vena cava, portal vein...

This "installation" was a copy of what has been installed onboard the space station and the COE attendees who tried the system in Lome today did exactly what will be done in 2-3 weeks with the space station the expert center being in Toulouse (France).

The COE workshop was organized by STUM (Togolese Society for Ultrasound in Medicine) under the responsibility of Pr Sonhaye, Pr Adjenou, and Pr N Dakena from the University Hospital Campus in Lome. The meeting took place at the Palace Hotel at the periphery of Lome. A 200 sit room with air conditioned and video projector was available for the main lecture and training session, and another room similarly equipped served for the free (short) communication. The technicians in charge of the equipment in these room were particularly efficient.

The power point of each communication was collected for being printed on a CD to be sent to the attendees.

Around 100 medical doctors participated to the workshop over the 2 days. The participants originated from 6 different countries of Western Africa (Ivory coast, Burkina Fasso, Niger, Benin, Guinea, Togo). Several foreign participant gave main lecture during the meeting. The



The Palace hotel where the COE workshop took place (Well designed for meetings but .... several electricity interruption during the sessions)



P Arbeille, Pr N'Dakena, Pr Devred, Pr Agbere (Dean), Pr Adjenou



Tele echography demo: Expert on left, distal patient on right. (sites linked by RJ 45 wire)

#### COE, Caaguazu, Paraguay (director, Dr. Ramon Bataglia)

We had tradicional course in 2015 and 2016 with the National university of Caaguazu the professors and authorities of Paraguayan Society of Ultrasonography and our WFUMB COE. We had in both seminars 90 and 120 participants of rural areas all over the country. During 2 days in a theoretical and hands-on sessions of internal and obstetrics and gynecology items.





#### COE, Chisinau, Moldova (director, Dr. Sergiu Puiu)

On 4-5 November 2016 the First Workshop of Chisinau Ultrasound Learning Center in cooperation with WFUMB was held in Chisinau, Republic of Moldova. The event was held in conjunction with the WFUMB COE Timisoara, Romania, Moldovan Society of Ultrasound in Medicine and Biology (SUMB) and State University of Medicine and Pharmacy (SUMP) "Nicolae Testemitanu".

WFUMB Speakers attended the program were Prof. Dr. Dieter Nürnberg (Germany), Prof. Dr. Ioan Sporea (Romania), Dr. Mirela Danila (Romania), and Dr. Roxana Sirli (Romania). The Program covered important aspects of ultrasound, particularly focused on following topics: ultrasound in diffuse liver diseases and liver elastography, contrast enhanced ultrasound in focal liver lesions, ultrasound in pancreas pathology, ultrasound for acute abdominal pain, abdominal free fluid and gas, kidney and adrenal glands ultrasound. The workshop was attended by 221 participants from all over Moldova. Both the speakers and participants appreciated the workshop very much. The WFUMB delegation also had a meeting with Prof. Dr. Ion Ababii, the Rector of SUMP "Nicolae Testemitanu". During a warm and friendly atmosphere the Chisinau COE's foundation and future plans have been discussed.

The SUMB was established in November 2006 and has actually 429 members. The society joined EFSUMB in June 2008. On 27 February 2017 WFUMB has designated The Society of Ultrasound in Medicine and Biology of the Republic of Moldova as a WFUMB COE candidate. The following persons are staff of the center:

Director: Dr. Serghei Puiu, MD, PhD

Executive director: Prof. Andrei Testemitanu, MD, PhD; Secretary: Anatol Cretu, MD, Members; Prof. Vasile Turcanu, MD, PhD; Liliana Fuior-Bulhac, MD, PhD; Ecaterina Puskina, MD

More training courses in close collaboration with WFUMB are planned for the future.



(Left) WFUMB lecturers and SUM's President, November 2016, Chisinau. Left to right: Prof. Ioan Sporea, Prof. Vasile Turcanu, Prof. Dieter Nürnberg, Dr. Roxana Sirli, Dr. Mirela



(Right) Participants of the WFUMB First Workshop of Chisinau COE's, November 2016, Chisinau.





World Federation of Ultrasound in Medicine and Biology Melbourne Exhibition Centre, South Wharf, VIC, Australia



#### COE, Khartoum, Sudan (director, Dr. Suzan Elhakim)

The Panarab 2000, an international event of Gastroentrology & Hepatology meeting, held in Khartoum has witnessed the first workshop in clinical & interventional abdominal ultrasonography of the Centre of Gastroentrology & hepatology in Ibn Sina hospital. Prof Lucas Greiner, honorary secretary of EFSUMB and well known course director of DEGUM (German US society), was the chair and lecturer of this course. The event has opened new strategies for the education in abdominal and interdisciplinary ultrasonography in Sudan which included missions for training of clinicians in ultrasonography & in interventional techniques.

This promising start in US education with the international support was later rewarded by a spectacular visit of WFUMB representatives in 2005. The WFUMB event was attended by the pioneers of the WFUMB, Prof Harald Lutz (Germany), Prof Hassen Gharbi (Tunisia) and Prof Elizabetta Buscarini (Italy and representative of MASU). It was a great success creating awareness and motivation to learn. Moreover the event was credited by the collaboration of radiologists, gastroenterologists & clinicians in general with prospects of practicing ultrasonography. Moreover, before they leave, the WFUMB honorable guests initiative was to create an interdisciplinary Sudanese Society of Ultrasonography. A preparatory meeting was successfully held & chaired by them. A mobile ultrasound machine gift was a finger print & an additional support from the WFUMB to start with better US education. The need & support of a referral & link to international societies grew stronger.

The workshop activity held as part of the Gastroentrology conferences continued to be supported by the WFUMB delegates & certification up to date in most of the events. Since its establishment in 1998 the dedicated US unit of the National Centre of Gastroentrology & Hepatology in Ibn Sina Hospital offers continuous orientation, training and related interventions to clinicians of all specialties. Ultrasound now is integrated in the education program of several specialties of doctors and it is also open to neighboring African candidates. In the years that followed Dr. Suzan Al/Hakeem organized annual workshops in basic, advanced & clinical ultrasonography in combination with the annual conference of the Sudanese Society of Gastroenterology (SSG) with the help of the gastroenterology and radiology colleagues. In 2010 Prof. Dieter Nürnberg, representative of EFSUMB and DEGUM honored the Conference and chaired together with Dr. Suzan Al/Hakeem a very successful US workshop.

The shortage of resources in a third world territory has credited ultrasonography superiority, necessitating quality improvement, hopefully achieved through links to international US societies to combat with the advances in the subject. The workshop activity continued to be supported by WFUMB delegate, namely Prof. Dieter Nürnberg (vice president of WFUMB) in 2014, 2016 & 2017. The course in 2014 was certificated by the EFSUMB, the program of 2016 and 2017 was supported by the WFUMB. Prof. Nürnberg gave a WFUMB lecture about "US education - the options in Sudan" at the international SSG conference. Of special importance in a tropical country is tropical ultrasonography. With the help of the Hydatid group (CESSARI), engagement in tropical ultrasonography training & surveillance was planned & supported. Such efforts were later crowned by a successful workshop in conjunction with the CESSARI international conference held in Khartoum in 2013. US in tropical disease is a special topic of US education program.

In 2014 and 2015 four doctors from Ibn Sina Hospital visited, the EFSUMB US Learning Center in Germany, Neuruppin(Prof. Nürnberg) to improve their knowledge in abdominal and interventional US and to teach in the US education department in Khartoum. The 10th of January 2015 was the specified date of opening of the WGO COE(World Gastroenterology Organization centre of education) in Khartoum at the National centre of Gastroentrology & Hepatology in Ibn Sina hospital. In the near future the centre will also be the premises of the (WFUMB COE) for an effective collaborative work with the help of international lecturers and trainers. A meeting with the President of MASU Prof. Sudhir Vinayak, WFUMB representatives & the Sudanese US representatives was held in Alexandria during the event of the last MASU conference in Alexandria. The agenda of the meeting was to prepare for the Accreditation of Khartoum as an COE and to integrate the SSUS in the MASU.

In March 2017 Ibn Sina Hospital Karthoum got the accreditation of the WFUMB and MASU to work as an accepted WFUMB COE. The COE is chaired by Dr. ErayahM. Mustafa, radiologist and president of the Sudanese Society of Ultrasound (SSUS) and Dr. Suzan Elhakim, the head of the US department of Ibn Sina Hospital as co ndirector. The Sudanese Society of US (SSUS) under the leadership of Dr. Mustafa will organize an interdisciplinary spectrum of ultrasound education in the future. The society will be an active member of MASU in the next years. Dr. Suzan Elhakim will organize the practical training in US and the workshops in the future.

The WFUMB COE Khartoum will work as a COE type 2: basic ultrasound interdisciplinary and advanced in gastroenterology. Next activities in education are planned in January 2018: Interdisciplinary US Workshop basic and advanced and an EUS workshop.

The contact persons of the WFUMB COE in Khartoum are:

Dr. Elrayah M. Mustafa, COE director

Dr. Suzan Elhakim, COÉ Co-director

The COE is working with the special sponsorship of Prof. Dieter Nürnberg, WFUMB  $\,$ 





# WFUMB Affiliated Organizations

## AFSUMB ASIAN FEDERATION OF SOCIETIES FOR ULTRASOUND IN MEDICINE AND BIOLOGY

#### (www.afsumb.org)

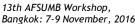
AFSUMB represents 19,272 physicians, scientists, engineers and sonographers in Asia. AFSUMB consists of 16 affiliated societies, namely, BSU: Bangladesh Society of Ultrasonography, CSUM: Cambodian Society of Ultrasound in Medicine, CTSUM: Chinese Taipei Society of Ultrasound in Medicine, HKSUM: Hong Kong Society of Ultrasound in Medicine, IFUMB: Indian Federation of Ultrasound in Medicine and Biology, ISUM: Indonesian Society of Ultrasound in Medicine, JSUM: Japan Society of Ultrasonics in Medicine, KSUM: Korean Society of Ultrasound in Medicine, MSDU: Mongolian Society of Diagnostic Ultrasound, MSUM: Malaysian Society of Ultrasound in Medicine, MUSS: Medical Ultrasound Society of Singapore, MUST: Medical Ultrasonic Society of Thailand, PSUCMI: Philippine Society of Ultrasound in Clinical Medicine Inc. SUM/CMA: Society of Ultrasound in Medicine of Chinese Medical Association, USP: Ultrasound Society of Pakistan, USN: Ultrasound Society

The AFSUMB's Asian Symposium on Advanced Ultrasound Technology (ASAUT) 2015 was successfully held in Taipei, chaired by the President of Chinese Taipei Society of Ultrasound in Medicine (CTSUM), Professor San-Kan Lee, and Yi-Hong Chou. With the strong support from the AC members and the CTSUM Board members, the ASAUT attracted more than 400 attendees. The 13th AFSUMB Workshop was held at Golden Jubilee Building, Thai Medical Society, New Pechaburi Road, Bangkok on 7-9 November 2016. The workshop was hosted by Medical Ultrasound Society of Thailand (MUST) and organized by Dr. Wilaiporn Bhothisuwan. AFSUMB 2016 was held in on 27-29 May in Kyoto, Japan, and AFSUMB 2018 will be held on 23~26 May 2018 in Seoul Korea.



AFSUMB 2016, Kyoto Japan, Congress Banquet









AFSUMB 2018, Seoul Korea

## AIUM alum

#### (www.aium.org)

The AIUM has had a very busy year culminating with a successful annual convention held at the end of March in Orlando Florida. The meeting attracted physicians, scientists, sonographers and students from around the country and the world. A successful series of preconvention courses was highlighted by "Sonoslam" an event focusing on ultrasound in medical education. More than 200 medical students from around the United States competed on challenging cases and live scanning (Figure 1). The AIUM has focused heavily on medical student education over the past several years and is now a leading voice for ultrasound introduction into medical schools in partnership with the Society for Ultrasound in Medical Education (SUSME).

As part of AIUM's ongoing mission to reach out to a broad base of ultrasound users, the point of care community of practice held a hands-on seminar for internal medicine physicians at AIUM (Figure 2). The internal medicine community in the United States is experience tremendous growth in ultrasound interest/use and the AIUM has partnered with the American College of Physicians for a third year to help organize and run their new ultrasound pre-conference course which was held this year in San Diego, overlapping with the AIUM annual conven-

The AIUM continues to pursue partnerships with other societies to improve communication and ultrasound practice. Highlights on safety and quality of practice continue to be a focus at special sessions and webinars.



Figure 1. "Sonoslam" at AIUM 2017.



Figure 2. Hands-on session for internal medicine physicians at AIUM 2017

# WFUMB Affiliated Organizations





(www.asum.com.au)

ASUM has continued its strong performance in providing educational opportunities for its multidisciplinary members.

In October 2016, over 650 delegates attended the ASUM's 46th Annual Scientific Meeting in Brisbane with five renowned international speakers, including Professor Seung Kim as the WFUMB speaker. In addition to this meeting another 30 events have been held throughout Australia and New Zealand, covering O&G, cardiology, vascular, rheumatology, MSK and trainee assessment and supervision.





The 2017 Annual Scientific Meeting will be held in Melbourne Victoria from 6-8th October with international keynote speakers including Professor Christoph Dietrich as the WFUMB speaker.

The ASUM's formal education has also continued to grow, with the addition of the Graduate Diploma in Medical Ultrasound (GDMU) for sonographers in general, cardiac, vascular and O&G streams. These courses join a long list of ultrasound qualifications and credentialing for both medical and allied health workers.

In February 2017 ASUM became one of the first ultrasound societies in the world to work with a national infection control group to formulate guidelines for infection prevention in ultrasound practice. The Australian College of Infection Prevention & Control (ACIPC) will continue to work with ASUM to ensure patient safety, with workshops planned around Australia and New Zealand over the coming year. Associate Professor Sue Westerway, WFUMB councillor, and the ASUM editorial assistant Dr Jocelyne Basseal are now working on the results of the WFUMB infection control survey and producing stream-lined recommendations for ultrasound users worldwide. Visit the ASUM website (www.asum.com.au/standards-of-practice) to view the updated article.

Preparations for WFUMB 2019 in Melbourne 5-9th September are well under way. The Melbourne convention centre is an ideal location for a meeting being in the heart of the city and walking distance to good hotels and restaurants. There will be topics to cover all aspects of ultrasound practice including abdominal, breast, cardiac, head and neck, O&G, vascular, emergency and critical care, education, MSK and many more.



The past president is Associate Professor Susan Campbell





WFUMB 2019, Melbourne

Professor George Condous currently presides as the President of ASUM and will continue in this position until 2018.

## WFUMB Affiliated Organizations\_continued

### **EFSUMB**



(www.efsumb.org)

EFSUMB promotes the exchange of scientific knowledge and development in the medical and biological professions as applied to ultrasound and is the biggest ultrasound federation in the WFUMB family. Recent activities include the EFSUMB guidelines on interventional ultrasound, gastrointestinal ultrasound and the updated guidelines on elastography of the liver, which can be freely downloaded from the EFSUMB website. We also refer to the EFSUMB position papers on the pediatric use of CEUS and medical student education. To promote student education in ultrasound is a major task for EFSUMB and recently a student committee was established, also to increase the student program at our Euroson congresses. Furthermore, EFSUMB is hosting approximately 10 Euroson Schools and 15 endorsed courses yearly to ensure high quality education and hands-on training for our members. A few endorsed courses are also held outside Europe, the last in Mansoura, Egypt in February 2017 (Figure 1).



Figure 1. The foto shows participants of the EFSUMB endorsed course in Mansoura, Egypt (February 2017).



Figure 2. The foto shows a combined working meeting in Ljubljana with EFSUMB ExB and the Turkish Local Congress Committee.

Cases of the month (one of EFSUMB's most visited sites) has been translated into 14 different languages. Current EFSUMB activities are also presented at our website, hosting eBooks and the EFSUMB Course Book on Ultrasound (ECB), for details see. Please consider to visit the EFSUMB-website to sign up for the EFSUMB newsletter for updated information. One of the biggest highlights in 2017 will be the Euroson Congress in Ljubljana, Slovenia, hosted by the Turkish Ultrasound Society. Figure 2 shows a working meeting in Ljubljana with a combined meeting with EFSUMB ExB and the Turkish local Congress Committee. Welcome to Ljubljana in September! Registration now OPEN

Voting at the Consensus Meeting on the CEUS nonliver Guidelines Update 2016 London





## WFUMB Affiliated Organizations\_continued

### **FLAUS**



#### (www.flaus-us.org)

An In the last week of February 2017, Dr. Fernando Chavarría Estrada, President of FLAUS (2015-2017), met in Washington on behalf of FLAUS with the Committee Director of the Alliance for Physician Certification and Advancement (APCA) in order to plan the activities to be developed in 2017. An important announcement is the achievement of a new system created to take the Certification Exam in the area of Abdomen Ultrasound (AB-LA) as well as Obstetrics and Gynecology (OB-LA), through the company Pearson VUE, a world-class institution, highly specialized in these activities, which has examining centers throughout Latin America. The exams are computerized and delivered in Spanish. Pearson VUE is based in at least 15 Latin American countries, so certification exams can be carried out simultaneously during a full month, from July 13, 2017 to August 14, Including one in the city of Sao Paulo, Brazil, where FLAUS will have their meeting. With this grand opening, virtually all applicants for certification will have the opportunity to apply on any day, during this month, in their own country, prior registration.



President and Secretary of FLAUS



In 2016 FLAUS developed 2 courses in order to spread applications in CEUS, sponsored by BRACCO. The first one was held in Belo Horizonte, Minas Gerais, October 28, hosted by SBAD (Gastrenterology Meeting - there were about 80-90 people and 50% were gastroenterologist. Stephanie Wilson was fabulous and has enchanted the public! Another international speaker, Dean Huang, was great as well! (Conducted the Pre-congress Image Course during SBAD - Brazilian Week of the Digestive System, in Belo Horizonte, in partnership with SRMG - Society of Radiology of Minas Gerais and Ibiscus and educational support of Bracco. Participation of Dr. Stepahnie Wilson from Canada and Dr. Dean Huang from England).

COURSE BRACCO SBAD 2016

In December 13 (8h - 12h), FLAUS conducts the Microbubble Contrast Ultrasound Symposium in partnership with InRad, WFUMB and educational support from Bracco, with the participation of the international speaker, Dr. Massimo Mischi, from Eidhoven University, Holland, which was held in São Paulo (University of São Paulo), about urological, pediatrics, cardiac, oncological and breast topics, including perspectives for the future.

During these first months of the year 2017, FLAUS cooperated with the Continuing Ultrasound Education Congresses being held in Bolivia, the Dominican Republic, Ecuador and Guatemala. Currently two successful events have been held, the joint event 47th São Paulo Radiological Congress / II French-Brazilian-Latin American Radiology Congress (JPR'2017) / FLAUS and the II Congress of Medical Ultrasound SPUMB 2017. Next we have the IX Dominican Congress of Sonography dedicated to the FLAUS will be held from May 19 to 21, 2017.



COURSE Sao Paulo. Dr. Carlos Ventura -Massimo Mischi- Cristina Chammas- Wilson Mathias Jr - Marcelo Straus



SPUMB and FLAUS speakers

## WFUMB Affiliated Organizations\_continued

### MASU 🦱



#### (www.masu-ultrasound.com)

COE activities. The COE in Nairobi at Aga Khan University Hospital has completed the Visiq project and the. COE director is Sudhir

MASU Congress. The 16th MASU congress took place in Alexandria, Egypt from 5th - 7th October 2016. The congress was a huge success with 838 attendees, 165 faculty, 63 exhibitors and 44 Oral presentations. Subspecialties covered were: Abdominal, Women's Imaging, Cardio-thoracic, Vascular, Head & Neck, Pediatrics, Intervention, Genitourinary and Musculoskeletal. Feedback from participants was excellent. The next MASU meeting will be in Italy, 2018.

#### Philips Visig project at the COE in Nairobi.

The COE in Nairobi has completed the "Visiq" project in collaboration with WFUMB. This is a novel project that will train midwives to perform a simple ultrasound examination on expectant mothers with a view to screen high risk pregnancies in rural Kenya. The manuscript is ready and findings will soon be published.

#### Report on CURE projects (Nigeria).

Centre for Ultrasound Research and Education (C.U.R.E) is based in Nigeria and is the 56th Affiliate Centre of the Jefferson Ultrasound Research and Education Institute, Philadelphia, PA, USA. The COE in Nigeria has just embarked on a new project involving Sonographer training in obstetric imaging. COE director is Kofo Seyabi.

#### Ethiopia COE Initiative

The Ethiopian COE is not yet under the umbrella of MASU. However, MASU has helped to synthesize a working relationship between the Ethiopian Ultrasound Society (in the process of formation) and WFUMB. We are hopeful that the society will be operational soon.









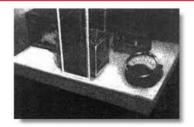


# History of Ultrasound and WFUMB (1939~1949)

| Year      | Facts  | Person                            | Country |
|-----------|--|-----------------------------------|---------|
| 1939-1945 | World War II   |                                   |         |
| 1941      | Pulse-echo US instrument with a second non-generating        | Donald Sproule and others working | England |
|           | transducer to detect returning echoes                        | for Henry Hughes and Son          |         |
|           | Reflectoscope with a single transducer as both generator     | EL 1.E                            | USA     |
| 1941      | and receiver   | Floyd Firestone                   |         |
| 1943      | There emerged non-destructive ultrasonic flaw detection      |                                   |         |
| 1943      | techniques from marine sonar                                 |                                   |         |
| 1946      | Use of high-intensity US as a noninvasive surgical technique |                                   | USA     |
| 1940      | to treat brain-related disorders                             | William Fry                       | USA     |
| 1947      | Hyperphonograms of cerebral ventricles produced              | Karl Dussik, Friedrich Dussick    | Austria |
| 1947      | Experiments on detection of gallstones and foreign bodies    | Coorgo Ludwig                     | USA     |
| 1947      | using A-mode presentation of reflected echoes                | George Ludwig                     |         |
| 1949      | Measured the thickness of excised bowel tissue using a       | John Wild                         | USA     |
|           | Navy radar trainer operating at 15 MHz                       | John Wild                         |         |
| 1949      | First International Congress on Ultrasound in Medicine in    | Karl Dussick                      | USA     |
|           | Erlangen and Dussik presented his hyperphonograms            | Nail Dussick                      |         |
| 1949      | Japan's first A-mode US equipment at the research labora-    | Rokuro Uchida                     | Japan   |
|           | tories of Nihon Musen (Japan Radio) Company (now Aloka)      | NOKUIO OCIIIUd                    |         |
| 1949      | 'Ultrasonics' published                                      | Benson Carlin                     | USA     |
| 1949      | 'Der Ultraschall in der Medizin' in Erlangen, Germany.       |                                   | Germany |



Ultrasound flaw detector (1941)



Dussick's initial ultrasonic generator (1942)





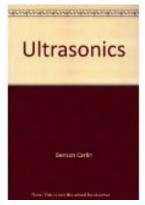
George Ludwig and his A-mode apparatus in his gall stone expetimentDussick's initial ultrasonic generator (1947)



Title page of congress proceedings\_Ultrashall in der Medizin (1949)



William Fry who tried to use high intensity ultrasound to treat brain-related disorders



Title page of Ultrasonics (1949)

## In Memoriam

### Professor Peter Wells (1936-2017)



Professor Peter Wells was one of the highly regarded pioneers in the world of medical ultrasound and did outstanding contribution to World Federation for Ultrasound in Medicine and Biology (WFUMB).

After Peter got PhD from the University of Bristol, he served as a medical physicist at United Bristol Hospitals (1960-1971) and Welsh National School of Medicine (1972-1974). Peter was a chief physicist at United Bristol Hospitals until 2000. After retirement from Bristol (2011), Peter became a Distinguished Research Professor at Cardiff University where he continued his



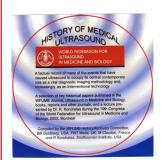
Well's articular-arm scanner in 196

pioneering work of ultrasound. Peter was awarded the Royal Medal from the Royal

Society (2013) and the Sir Frank Whittle Medal by the Royal Academy of Engineering (2014).

Peter served as the Editor in Chief of 'Ultrasound in Medicine and Biology', official journal of WFUMB, for 15 years

(1992-2006). He also served as the Vice President (1988-1991) and as the chair or member of various committees including Chair of Publication Committee (1982-1985), Member of Committee on Standards and Information Technology (1997-2000), Chair of History and Archives Committee (2000-2006), and Member of Nominating Committee (2003-2006). In 2003, as the Chair of History and Archives Committee of WFUMB, he produced 'An Archive of Historical Articles of Ultrasound Development'. Peter will be missed and always remembered for the great contributions he made to enhance the use of ultrasound. Hassen Gharbi and David Evans represented WFUMB at Peter's Memorial Service in Clifton College Chapel on 30 June, 2017.







### Professor David Cosgrove (1938~2017)

Dr. David Cosgrove, a leading researcher and teacher from London, died on Tuesday, 16 May, at the age of 78. David was a pioneer in the clinical application of ultrasound and a passionate advocate of ultrasound technologies including contrast enhanced ultrasound and elastography. David was an esteemed educator and prominent leader, and devoted himself to research for innovation of Ultrasound. David contributed a lot to WFUMB and WFUMB-affiliated organization by innumerable innovative lectures. He was a great mentor, advisor, collaborator, colleague and

friend of our group. He will be dearly missed, by us and many people around the world.





So what will matter?
How will the value of our days be measured?

What will matter is not our competence, but our character.

What will matter is not how many people we knew,
but the depth of the lasting loss felt when we are gone.

What will matter are not our memories,
but the memories that live in those who loved us.

Living a life that matters doesn't happen by accident.
It's not a matter of circumstance, but of choice.

David chose to live a life that mattered.

From his memorial service brochure

# WFUMB Congresses

### WFUMB2017 Taipei, October 13-17



The WFUMB 2017 TAIPEI (the 16th Congress of the World Federation for Ultrasound in Medicine & Biology) will be held at the Taipei International Convention Center, Taipei, Taiwan, from October 13 to 17, 2017. The venue is located within 5-minute walking distance to the landmark of Taipei, Taipei 101, and a range of excellent hotels, and restaurants.

The WFUMB 2017 TAIPEI will provide an international platform for physicians, researchers and clinical professionals to exchange ideas, share experiences and interact with world renowned experts. The program will highlight the latest cutting-edge knowledge via workshop/hands-on sessions in the Pre-Congress on October 13, and 22 parallel Tracks in the Main Congress, October 14-17. Most of the world renowned ultrasound experts are invited, please visit the website (www.wfumb2017.org) for the tentative program as well as other important information.

Free papers are also one of the most important parts of the WFUMB 2017 TAIPEI and great channel for ongoing collaborative/ individual efforts to present and exchange experiences. There will be competitions for the Young Investigator Award (YIA) for delegates under 40 years old, and Best Oral Presentation Award and Best Poster Award for all delegates to encourage continuing scientific researches.

Taipei, the lovely and friendly capital of Taiwan, is not merely the political and economic center of Taiwan but best -known as an international metropolis abundant with a vibrant contrast of the old and the modern cultures. With such a diverse range of attractions, convenient mass transportation and a grand selection of dining and accommodation options, Taipei is a perfectly ideal destination for you. In addition to the scientific programs, four different half -day city tour lines, fair priced and quality guaranteed are arranged to our value participants to discover the essence of Taipei!

Cheng-Wen Chiang, MD., FAPSC, FACC Co-President, WFUMB 2017 TAIPEI

Cheng-Wen Chiang



National Dr. Sun Yat-sen Memorial Hall



National Palace Museum



National Chiang Kai-Shek Memorial Hall