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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 pleasure that we present this issue of ECHOES signaling the rebirth of WFUMB’s newsletter.
I would like to acknowledge the hard work of Dr. Seung Kim, WFUMB Secretary and Allie Garza, WFUMB Administrative Manager that helped make it possible.

As WFUMB members and as you read ECHOES, I hope you appreciate and take tremendous pride in the important activities of WFUMB member Federations and WFUMB Centers of Education (COEs).

One of the important missions of WFUMB is to help bring sustainable ultrasound programs to underserved areas of the world through communication, collaboration, and education to improve global healthcare.

I want to thank all of you as WFUMB members for all your activities to help improve global health through the appropriate use of ultrasound.

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Giovanni Cerri, Brazil (2006-2009)
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Barry Goldberg, USA (1994-1997)
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UMB Journal Editor
Christy Holland, PhD (USA - AIUM)
WFUMB Statistics (as of November 2016)

6 Member organizations

89 Countries

51,155 Individual Members

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WFUMB Activities

**WFUMB Guidelines**

In 2015, WFUMB published guidelines and recommendations for clinical use of ultrasound elastography in UMB, official journal of WFUMB, under the leadership of Masatoshi Kudo. Articles published are on ‘foreword’, ‘basic’, ‘breast’, and ‘liver’ in UMB 2015;41(5):1125-1179. On-going projects are guidelines for cleaning transvaginal ultrasound transducers between patients, guidelines for disinfection and hygiene practice in medical ultrasound, and guidelines for ultrasound elastography of thyroid and prostate.

**WFUMB Outreach Projects**

Among these ventures, the most recent has been a partnership with RAD-AID to organize sustainable ultrasound training in Gondar, Ethiopia. WFUMB hosted another successful World Congress together with AIUM’s Annual Convention in Orlando, Florida in March 2015; partnered with Philips to provide ultrasound courses at the Black Lion Hospital in Addis Abba, Ethiopia in November 2015; launched a restructured Centers of Education program; completed Elastography Guidelines for the Thyroid and Prostate; and has received more than 1,000 international replies to a Germ Survey aimed at better understand disinfection and hygiene practice amongst ultrasound users throughout the world. In support of our outreach efforts, WFUMB Leadership continues to represent WFUMB as guest lecturers at regional meetings of various scales such as the AIUM Forum - "Beyond Ultrasound First - Quality and Standardization of Ultrasound in OB/GYN," the ASUM Annual Conference, and the WHO Non-ionizing Radiation Taskforce.

WFUMB plans to build on the successes of the last couple years by redesigning the WFUMB Website and forming new collaborations in 2016 with other societies and industry leaders to provide sustainable ultrasound education across developing nations. We look forward to continuing the mission of WFUMB and sharing with the global ultrasound community.
WFUMB COEs

Updates of WFUMB COEs

Mission: The WFUMB Centers of Education (COEs) shall provide education in medical ultrasound in developing (underserved) countries. They should grant recognition to participants after completion of courses, accumulate ultrasound related reference materials and serve as reference centers for the region, they are situated.

History: Centers of Excellence (COEs) were a project of WHO, originally. Harald Østensen, former medical officer of WHO, had the idea, to establish centers for education in basic radiology for developing countries, one center in each continent of the world. He started this project in the late nineties and founded the "Global Steering Group for Education and Training in Diagnostic Imaging", chaired by WHO, to discuss the projects of several organizations in this field and to improve the cooperation. At the same time, WFUMB and WHO started a closer cooperation, initiated by Barry Goldberg. H. Østensen stressed his special interest for the promotion of ultrasound in developing countries. Based on the discussions between H. Østensen and H. Lutz, it was agreed and decided that the centers for ultrasound should be founded separately from the centers for basic radiology and under the responsibility of WFUMB. WFUMB founds the COEs in cooperation with its regional member-organization and based on a formal contract with the national societies for ultrasound.

The first COEs, launched by WFUMB were: Dhaka, Bangladesh - Asia (2004), Kampala, Uganda - Africa (2004), Caracas, Venezuela - Latin America (2005), Timisoara, Romania - Eastern Europe (2007), Jakarta (Indonesia) - Southeast Asia (2011). These first COEs proved to be a useful institution. On the other side there are barriers in developing countries, concerning e.g. travelling or languages. In so far the original concept of one center in each continent was changed by WFUMB and further COEs were launched in the following years: Lagos, Nigeria (2013) and Lomé, Togo (2013) for English and French speaking areas - West Africa, Ulaanbaatar, Mongolia - Northeast Asia (2013), Nairobi, Kenya - East Africa (2014), Addis Ababa, Ethiopia - Central Africa (2014)

At the meeting of WFUMB-Executive Bureau 2015 in Mauritius, a new and more detailed structure of the COEs was worked out. The name was changed into WFUMB Center of Education (COE)

Definition: WFUMB Center of Education (COE) is the name for an institution, which offers education in ultrasound for doctors and medical personnel, regularly (at least once a year). It has to be recommended by the ultrasound society of its country or region and recognized by WFUMB. A responsible person (director) is in charge for the COE.

Terms: The COE shall be established for an initial term of 3 years as a "candidate". The agreement with the COE shall be eligible for renewal on a biennial basis thereafter. In order for the agreement to be renewed, the COE must have upheld its responsibilities in accordance with this agreement and be approved for renewal by the WFUMB COE Advisory Board and the WFUMB Administrative Council.

Types: Specialty, capability and experience of the director and his/her team, and the capacity of the institution are the decisive criteria for the classification of the COEs. A COE may offer: 1. Ultrasound courses (basic, advanced and for special fields and techniques) at regular intervals; 2. Training facilities for long term education in practical ultrasound; 3. Library and teaching material; 4. E-learning facilities. It may serve as reference center (e.g. via telemedicine) for the region and former students, especially. Big (high level) centers may spread their activities and efficiency in the region by founding and supporting satellite centers in its region.

Type 1 COEs, basic (minimum) criteria are: Organization of courses for basic ultrasound and the use of ultrasound in at least one specialty (e.g. Ob/Gyn or abdominal work) including hands on training, at regular intervals; Library and teaching material

Type 2 COEs, prerequisites are: Organization of ultrasound courses for basic and advanced ultrasound at frequent intervals (>1/ year) in - at least - one major specialty (e.g. Ob/Gyn or Gastroenterology); Training facilities for long term education in practical ultrasound; Library and teaching material; E-learning facilities. A center level 2 may show the specialty, in which it works (e.g. COE for ultrasound in Ob/Gyn)

Type 3 COEs are: Centers based on an university hospital or another big hospital and are able to offer all facilities, mentioned above in at least 2 or more specialties. Such a center may spread its capacity by organizing satellite centers (level 1 or specialty centers). It may serve as a reference center for ultrasound in the region and may have contact to its satellite centers and former students, via telemedicine, ideally.

Type 1 COE: trains basic ultrasound

Type 2 COE: trains basic and advanced ultrasound, may show specialty

Type 3 COE: based on university hospital or equivalent
WFUMB COEs Update

COE, Bangladesh (director, Dr. Kanu Bala) Bangladesh is the first WFUMB COE established in 2004. The 15th WFUMB COE Workshop was held on 4 March 2016, Friday at the Auditorium of the National Institute of Nuclear Medicine and Allied Science (NINNAS), Bangladesh. 160 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, Secretary of the WFUMB COE Bangladesh explained the history and present status of the COE. The topic of the workshop was “Diagnosis and Management of Fetal Anomalies”. 9 lectures covered some of the areas of fetal anomalies in depth and in breadth. All the world class lecturers were from BSU. Some of the topics like genetics and prenatal ultrasound diagnosis 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 Secretary of the WFUMB Center of Education Bangladesh. Prof. Choi played a key role for the organization 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, Indonesia (director, Dr. Daniel Makes) The 4th WFUMB COE Seminar in conjunction with 12th Asian Breast Diseases Association (ABDA) Teaching Course held on October 16 – 18, 2014 at Sanur Paradise Plaza Hotel & Suites, Sanur, Bali, Indonesia with the theme “Update on Breast Imaging, Pathology & Early Breast Cancer Treatment” attended by 278 participants. The speakers who attended the event from domestic and overseas are Prof. Hyup Seung Kim (Korea), Prof. John George (Malaysia), Prof. Carlo Martinoli (Italy), Ashutosh Prakash (Singapore), Dr. Daniel Makes (Indonesia), Dr. H. Sidharta (Indonesia), Dr. Paulus Rahardo (Indonesia), Prof. I. B. Tjakra Wibawa Mansaba (Indonesia), Prof. Huairah S. Cheung (Malaysia), Prof. Wilaiporn Bhothisuwan (Thailand), Prof. Woo Kyung Moon (Korea), Prof. Yi-Hong Chou (Taiwan), Prof. Tiu Chui-Mei (Taiwan), Dr. Chin-Yu Chen (Taiwan), Dr. Teo Sze Yuen (Singapore), Dr. Liew Mardhiana (Indonesia), Dr. Gary Tse Man-Kit (Hong Kong), A/Prof. Rin Yamaguchi (Japan), Prof. Tan Puay Hoon (Singapore), Prof. Shotaro Maeda (Japan), Prof. Chi-Ming Chen (Taiwan), A/Prof. Philip Tsau Choong Iau (Singapore), Dr. Kardinah (Indonesia), and Dr. Patricia M. Wijaya (Indonesia).

COE, Kenya (director, Dr. Sudhir Vinayak) Phillips Medical Systems chose our COE for the “Visiq” research project in collaboration with, and strong backing of WFUMB. This is a novel project that trained midwives to perform simple ultrasound examinations on expectant mothers with a view to screen high risk pregnancies in rural Kenya. Midwives with no previous experience in performing ultrasound were trained for 4 weeks at the COE using a well-structured curriculum that included both classroom teaching and hands on experience. All scans were performed on portableVisiq ultrasound machines at three remote centres. Images and provisional reports were sent to the COE using mobile phone internet technology and validated by Radiologists. Preliminary findings highlighting accuracy of performing and reporting scans by midwives, as well as assessing this type of teleradiology were presented at the recently concluded AFSUMB conference. The manuscript is almost ready and will soon be published. The outcomes were very encouraging and we are planning a series of further pilot activities using mobile phones and portable ultrasound scanners with a view to offer the services in rural Africa.

CMEEs: In collaboration with Kenya Society of Ultrasound (KESUMB), regular CME lectures on ultrasound updates take place at the COE with good attendance. These include: upper limb Doppler ultrasound, pelvic arteriovenous malformations (AVMs), physics of Doppler ultrasound, Focused Assessment with Sonography in Trauma (FAST ) and first trimester ultrasounds. 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. However it is only amenable to those that live in Nairobi. Sonographers from other cities find it difficult to attend and so we are developing a website so that all CME lectures are available to members of KESUMB.

Accreditation: Last year we realized that there are some poorly trained Sonographers in Kenya who have been certified and are licensed to work. This poses serious challenges about patient safety. As a COE, we are now finalizing a proposal to provide accreditation for qualified Sonographers. This will take the form of a written test and DOPS for hands-on skills; those that pass will receive accreditation. Those that fail will be offered training (mainly ‘hands on’) to achieve accreditation. This idea has been floated amongst the Sonographer community and the response has been very positive. We are waiting for approval from authorities to start the accreditation process and hope to get this later in the year.

Conference: The COE is organizing a conference later this year with help from WFUMB. We expect a good turnout.
WFUMB COEs Update_continued

COE, Mongolia (director, Dr. Sodov Sonin) During the Congress of WFUMB held in Sao Paulo, in May 2013, decision was adopted for Mongolian Society of Diagnostic Ultrasound (MSDU) to establish the Center of Excellence (COE) in Mongolia. COE director was Dondog Enkhbayar, MD, and the COE location was Maternity Hospital No1, Ulaanbaatar, Mongolia. The COE was established on 25 August, 2013, and organized ultrasound training courses for medical doctors on regular basis to update knowledge of Mongolian ultrasonographers. Since 2013 until now, we have organized one-month ultrasound training courses 6 times per year/totally 18; 3-month training courses 2 times per year/totally 6; and WFUMB COE Workshop once a year/totally 3. By 2016, we organized successfully, 3 WFUMB COE Workshops, in which participants were over 500. In 1-month courses attended 220 doctors, 3-month courses attended 64 doctors from all over the country. In this September (15-17 Sep.) we are planning to organize the 4th WFUMB COE Workshop in Ulaanbaatar.

COE, Romania (director, Dr. Ioan Sporea) 2007-2016: The WFUMB COE Romania was established in 2007 and it is located in Timişoara. It is conducted by Prof. Ioan Sporea, MD, PhD, and it is also an EFSUMB Ultrasound Learning Centre since 2014. Until now more than 1500 physicians started their ultrasound experience in our center under the supervision of the center’s members. Every year the center organize 2 courses of general ultrasound, 3 months each, the annual workshop, several courses for students. We had organized ten annual workshops with different topics: Interventional ultrasound, Contrast enhanced ultrasound, Ultrasound in Gastroenterology and Hepatology, Elastography, Ultrasound in Emergencies, Clinical Abdominal Ultrasound, etc. The center is open for everybody that wants to learn ultrasound or looks to improve their experience - www.ulctimisoara.ro.

COE, Venezuela (director, Dr. Leandro Fernandez) The COE WFUMB-Venezuela initiated its activities in 2005 and since this year until 2014, we have had a number of attendees of 3,310 with a mean of 306 - 550 persons in each event. The lectures level have been basic, intermediate and advanced ultrasound with Workshops and Hands-on sessions. In all meetings, we had renowned National and International speakers, including many FLAUS and WFUMB Officers. In 2016, we decided to change the format of just an annual meeting with a high number of participants. We started to offer courses with longer hands-on session for smaller groups of physicians. The mean number of trainees is 20 per course. The areas covered are Musculoskeletal, Neurovascular, Nephro-Urology, Abdomen and Vascular. The COE WFUMB-Venezuela is financially independent of WFUMB but maintain the initiative and commitment for education and promotion for the good practice of ultrasound. WFUMB Latin American Education Project Activity Report 2015-2016: The WFUMB Latin American Education Project was created in 2005 and has organized educational meetings once a year in different locations such Brazil, Dominican Republic Guatemala, Paraguay, Peru and Venezuela, with a mean of 250 attendees per meeting. During 2015-2016 we changed the format of the meetings, now oriented to smaller groups with more opportunity for practice with models and patients. The meetings were held in Colombia, Ecuador, and

COE, Nigeria (director, Dr. Kofo Soyebi) The 5-year pilot study on a 12-month certification programme in basic ultrasound in obstetrics and gynaecology (April 2012 - December 2016) in the COE-Nigeria is rounding up. The aim was to train ultrasound users in safe ultrasound practice thus increasing the number and spread of ultrasound practitioners throughout Nigeria. Total number of participants is 169. Some of the findings, interventions and outcomes are noted in this Document. Third Evidence-based revised Curriculum outcome is the tested Curriculum used since 2014. Most significant inclusion was the 14weeks of intensive Basic Sciences relevant to Sonography, strengthened by practical sessions in Anatomy Laboratory and Handcrafting models of the pelvis and its contents; assessed by Seminar power-point presentations, scores forming part of the Module’s Assessment. Paper Models (C) are replacing Clay (A & B) which disintegrates over time. At this year’s Annual meeting tagged “Come let’s build Ultrasound Community together”, Alumni Association was formed.
WFUMB Affiliated Organizations

AFSUMB


New officers and councilors of the AFSUMB 2016-2018: President, Dr. Masatoshi Kudo, m-kudo@med.kindai.ac.jp; Secretary, Dr. Yung-Liang Wan, ylw0518@gmail.com; etc.

AFSUMB’s principal objectives: One of AFSUMB’s principal objectives is to provide resources for ultrasound education programs in developing and emerging countries. AFSUMB Executive Board has been working enthusiastically during the past two years for the promotion of US training in Asian. With the assistance of Prof. Byung Ihn Choi, and Prof. Cheng-Wen Chiang, and Prof. Masatoshi Kudo, AFSUMB has been devoted to promote the WFUMB objectives in the entire world, especially in Asia.

AFSUMB Activities and National Societies: Japan Society of Ultrasonics in Medicine (JSUM) is the largest national society in Asia (Physician + Engineer members = 8,072), followed by Chinese Taipei Society of Ultrasound in Medicine (CTSUM) with active members: 5810, and Korean Society for Ultrasonics in Medicine (KSUM) : 1810. BSU, CTSUM, HKSUM, IFUMB, ISUM, JSUM, KSUM, MUSS, MUST, PSUCMI, SUM/CMA, USP, all have their own annual meeting, and MSDU, USN hold their educational courses regularly.

WFUMB Center of Education: In the year 2011, ISUM became the 2nd WFUMB COE in Asia following BSU. In the year 2013, MSDU became the 3rd WFUMB COE in Asia.

AFSUMB Congress: JSUM held its 2016 Annual Congress in Kyoto on May 26-29th, 2016 in conjunction with 12th AFSUMB Congress 2016. The 11th AFSUMB Congress 2014 was held in Kuala Lumpur, Malaysia. The Local Organizer is MSUM. The 13th AFSUMB Congress 2018 will be held in Seoul, Korea, the local organizer is KSUM.

AFSUMB Workshop: The 11th AFSUMB Workshop-2013 was organized by the MUSS, Key Person: Dr. Ong Chiu Li, President of the MUSS, 28 & 29 September 2013. 110 participants attended the workshop. The 12th AFSUMB Workshop-2014 was organized by the USN, Key person: Dr. Mukter Alam Ansari, President of the USN, 28 February & 1 March 2014. 130 from all over Nepal. The 1st AFSUMB Asian Symposium on Advanced US Technology was organized by the CTSUM, Key persons: Dr. Yi-Hong Chou, President of AFSUMB and Dr San-Kan Lee, President of the CTSUM.

AFSUMB Journal: Journal of Medical Ultrasound (JMU), the Official Journal of AFSUMB. Editors: Por-Tying Hung, San-Kan Lee, Chih-Ping Chen, Yi-Hong Chou. Now the Vol. 24 no. 1 (March 2016) Issue has been published. (Prepared by Yi-Hong Chou, AFSUMB Immediate Past President)


AFSUMB Administrative Committee (2014-2016) Meeting at AFSUMB 2016 in Kyoto (May 27-29, 2016). All Officers, Councilors and National Representatives attended the meeting.

AIUM Convention Wrap Up

Earlier this year, physicians, sonographers, scientists, and educators from across the country and around the world attended the AIUM Annual Convention in New York City. Here are a few highlights:

The ballroom was packed for the Opening Plenary session that featured an engaging talk by Alfred Abuhamad, MD, titled, “Global Maternal Health: Ultrasound and Access to Care.” Attendees also heard from William J. Fry Memorial Lecturer Dirk Timmerman, MD, PhD, FRCOG, on “Tips and Tricks of Successfully Ultrasound Studies.” AIUM hosted SonoSlam, a student competition where teams vie for the Peter Arger Cup. Attendees enjoyed the mix of sessions from 18 different ultrasound specialties. AIUM recognized the following award winners: Alfred Abuhamad, MD—Joseph H. Holmes Clinical Pioneer Award; Michael Kolios, PhD—Joseph H. Holmes Basic Science Award; Christian Fox, MD, RDMS—Peter Arger Excellence in Medical Student Education Award; Daniel Mer- ton, BS, RDMS—Distinguished Sonographer Award; Aris Papageorghiou, MD—Honorary Fellow; Paul Sidhu, BSc, MBBS, MRCP, FRCR—Honorary Fellow; For a more complete summary of the event, check out AIUM’s blog, The Scan. And mark your calendars for the 2017 AIUM Annual Convention, March 25-29 in Orlando, Florida. Registration will open in October.
ASUM

The Australasian Society for Ultrasound in Medicine (ASUM) is the peak multidisciplinary society for medical ultrasound in Australia and New Zealand. The mission and primary role of ASUM is to advance the clinical practice of medical ultrasound for the highest standards of patient care and to assist in the dissemination of scientific information, to provide education and to set standards of practice in this continually developing specialty. The aims of ASUM are to encourage and assist education and research in diagnostic ultrasound; to lay down appropriate standards of practice; to provide certification indicating proficiency in ultrasound; to advise Government and Statutory Authorities on aspects of the practice of diagnostic ultrasound; and to provide social intercourse and good fellowship among practitioners. Several of the royal colleges include diagnostic ultrasound in their own area of interest, but only ASUM provides regular education in diagnostic ultrasound across all disciplines. The Australasian Journal for Ultrasound in Medicine (AJUM) is published quarterly and is progressing its application from the National Library of Medicine to Medline Listing. ASUM has over 3,000 members, 8 full-time staff, 7 part-time staff members and hundreds of member volunteer positions on various committees. Council Elections take place every year with councilors elected for a 3 year term to the Board of Directors. The ASUM president for 2014-2016 is Associate Professor Susan Campbell Westerway, the president elect is Associate Professor Condous and the past president Dr Adrian Goudie. The 2016 Annual Scientific Meeting will be held in Brisbane, Queensland from 28-30th October. International Keynote Speakers included: Professor Wellington Martins – Brazil, Professor Basky Thilaganathan – UK, Professor David Bahner – USA, Professor Seung Kim – WFUMB - Korea, Dr Carmel Moran – BMUS President – UK. Plenary sessions and workshops include: Obstetrics and Gynaecology, General, Breast, Vascular, MSK, Point of Care, Cardiac, Midwives, Infection Control. Over the past 12 months, ASUM has hosted more than 30 Continuing Professional Development Branch Meetings and Workshops across Australia and New Zealand.

With over 25 years in the medical imaging industry, Lyndal Macpherson became the new CEO of ASUM. Lyndal is a qualified sonographer and radiographer with vast experience in the corporate world of ultrasound. Lyndal’s career history in ultrasound including roles such as applications specialist, marketing and product manager. This is further enhanced by her clinical experience with a passion for pediatric ultrasound. During her time at ASUM she will further promote ultrasound excellence as they advocate for training and recognition of the skill and knowledge required to perform an ultrasound for the optimal patient outcome.

EDUCATION. ASUM offers the following post graduate education programs: Diploma of Diagnostic Ultrasound for medical practitioners, Certificate in Clinician Performed Ultrasound, Diploma of Medical Ultrasound (General, Obstetric, Vascular and Cardiac) for sonographers, Certificate in Allied Health Performed Ultrasound for nurses / midwives, physiotherapists. The Diploma of Medical Ultrasound Course for Sonographers has recently been rewritten and formally accredited by the Australian Quality Skills Authority. ASUM are currently at the final stage of becoming a Registered Training Organisation which will allow the Course to be benchmarked with Australian Universities and Nationally. ASUM also partners with Vision College in Kuala Lumpur in Malaysia to offer the DMU Asia, which is a 12 month full time course for sonographers.
Since 1972 the European Federation of Societies for Ultrasound in Medicine and Biology (EFSUMB, currently 28 Societies, 20280 members) promotes the exchange of scientific knowledge and development in the medical and biological professions as applied to ultrasound. Over the last decade EFSUMB has produced a series of Guidelines and Recommendations. Contrast-enhanced ultrasound (CEUS) guidelines were first introduced in 2004, updated 2008, 2011 and 2012. The recently published version was a successful joint WFUMB-EFSUMB venture. The first elastography guidelines were introduced in 2013 followed by guidelines on ultrasound guided interventions (INVUS, 2015) and gastrointestinal ultrasound (GIUS, 2016). In 2016, the updated guidelines on non-hepatic CEUS applications and liver elastography are expected. EFSUMB is hosting ebooks on the www.efsumb.org website (EFSUMB course book), videos on anatomy and examination technique, CEUS School recordings and webinars. The Case of the Month continues to be one of EFSUMB’s most visited sites and in the last few years has been translated into fourteen different languages including Chinese. The website shows all the current EUROSON Schools, endorsed Courses, forthcoming EUROSON congresses and other related ultrasound events. A guide to the EFSUMB website has been recently published [Dietrich CF, Rudd L. The EFSUMB website, a guide for better understanding. Med Ultrason 2013;15:215-223].

An important goal has been achieved by Flaus this year. In most country members of FLAUS we don’t find a national accreditation or certification program that could contribute to guarantee quality for ultrasonography patients. The present board, however, managed to establish a partnership with APCA (Alliance for Physician Certification and Advancement) that made possible to accomplish three pilot plans from May to July, in Peru, Dominican Republic and Mexico. As an outcome of this huge effort of all involved, were successfully developed accreditation of capacity exams, focusing general abdominal US and gynecologic-obstetrical US, in the three mentioned countries. Another important achievement was to publish reference cases in FLAUS’ website (www.flaus-us.org), providing guidance for Latin-American professionals. Obviously it was just a beginning and we expect contributions from all over to become an important source of educational material in Portuguese and Spanish languages. In addition, it was decided that the next FLAUS’ Congress will be held in Baranquilla, Colombia, on July 12th to 15th 2017, and shortly more information will be available. In parallel, we continue supporting professors to participate as guest speakers in our country members’ congresses, as a way to contribute to the exchange of knowledge in Latin-America.
MASU

COE activities. The COE in Nairobi at Aga Khan University Hospital has been active doing the Visiq project. COE director is Sudhir Vinayak. The COE in Nigeria has just embarked on a new project involved in training Sonographers in obstetric imaging. COE director Kofo Seyabi.

MASU Congress. The next MASU congress is scheduled to take place in Alexandria, Egypt from 5th - 7th October 2016. Congress arrangements started in earnest during the last quarter of 2015. MASU will run the congress under the auspices of WFUMB.

US Elastography Project. A close collaboration in research projects between the COE in Nairobi and the Medical School of Pavia University (Italy) started in 2014. The area of interest is in the field of Elastography and Dr. Sudhir Vinayak, MASU President and Chair of the Imaging and Diagnostic Radiology department of Aga Khan University Hospital, Nairobi was trained in this field at Pavia University (Italy). Since then, the COE in Nairobi has embarked on a couple of research projects that are still running with completion anticipated in 2016.

Philips Visiq project at the COE in Nairobi. The COE in Nairobi was selected by Philips Medical systems for the “Visiq” project with collaboration and strong backing of 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 project started in earnest when three midwives were trained for four weeks and sent out to scan patients. Three elements were analyzed; the training, competency of midwives and performance of the modem teleradiology system used for image transfers. Data is being analyzed and will soon be published; more in the COE report.

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. In 2012, C.U.R.E set out to conduct a 5 year pilot study on one-year programmes culminating in proficiency certification in OBGYN Ultrasonography. The fifth set of participants are now undergoing training and since inception 150 trainees have graduated. C.U.R.E has been hosting an annual conference since 2012, generously supported by WFUMB who have sent lecturers to all their conferences. The 2015 conference was titled: Through the looking Glass: Developing and realizing a vision for ultrasonography. In 2016, the centre embarked on a ‘train the trainer’ program using GE V-scan machines in collaboration with WFUMB.

Midwives project at COE in Nairobi. There is an initiative by an international consortium to plan a series of pilot activities to prove the concept of mobile/portable ultrasound scanning capabilities being delivered in rural areas of East Africa in order to support the on-going drive to improve maternal health outcomes. The study will be conducted at the outreach centers of the Aga Khan University Hospital by trained midwives in mobile vehicles that will visit rural health centers and villages. The entire project will be run through the COE in Nairobi and steered by Dr. Vinayak. MASU will participate in the project as an observer with interest in the outcome. The research project was delayed due to funding approvals. It is back on track and there is a small pilot project being carried out in Northern Tanzania.

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. A successful ultrasound conference was held in Addis Ababa in November, 2015; speakers from WFUMB, MASU and University of Bergen, Norway participated. A follow up conference will be held in November 2016.
### History of Ultrasound and WFUMB (1761–1939)

<table>
<thead>
<tr>
<th>Year</th>
<th>Facts</th>
<th>Person</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>1761</td>
<td>Auscultation</td>
<td>Leopold Auenbrugger</td>
<td>Austria</td>
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<tr>
<td>1819</td>
<td>Stethoscope</td>
<td>R.T.H. Laennec</td>
<td>France</td>
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<td>1826</td>
<td>Experiment on velocity of sound in water</td>
<td>Jean-Daniel Colladon, Charles Sturm</td>
<td>Switzerland</td>
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<tr>
<td>1842</td>
<td>Doppler effect proposed</td>
<td>Christian Doppler</td>
<td>Austria</td>
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<tr>
<td>1851</td>
<td>Ophthalmoscope</td>
<td>Hermann Helmholtz</td>
<td>Germany</td>
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<tr>
<td>1854</td>
<td>Laryngoscope</td>
<td>Manuel Garcia (singer)</td>
<td>Spain</td>
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<tr>
<td>1876</td>
<td>Cystoscope</td>
<td>Max Nitze</td>
<td>Germany</td>
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<tr>
<td>1877</td>
<td>The theory of sound</td>
<td>Lord Rayleigh</td>
<td>England</td>
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<tr>
<td>1880</td>
<td>Discovery of the piezoelectric effect</td>
<td>Pierre and Jacques Curie</td>
<td>France</td>
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<tr>
<td>1912</td>
<td>The tragic loss of the Titanic</td>
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<tr>
<td>1914-1918</td>
<td>World War I</td>
<td></td>
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<tr>
<td>1917</td>
<td>First piezoelectric US transducer using a single large quartz crystal</td>
<td>Paul Langevin</td>
<td>France</td>
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<tr>
<td>1928</td>
<td>US could be used to detect hidden flaws in metals</td>
<td>Sergei Sokolov</td>
<td>Soviet</td>
</tr>
<tr>
<td>1937</td>
<td>US through transmission used to visualize ventricles in the brain</td>
<td>Karl Dussik, Friedrich Dussick</td>
<td>Austria</td>
</tr>
<tr>
<td>1939</td>
<td>Der Ultrachall (English edition) published</td>
<td>L. Bergmann</td>
<td>Germany</td>
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</tbody>
</table>

**Doppler effect proposed by Austrian physicist Christian Doppler (1842)**

**Lord Rayleigh and his book ‘The Theory of Sound’ (1877)**

**Karl Dussick and hyperphonogram**

**Dussick and his ultrasonic apparatus (1946)**
WFUMB Congresses

WFUMB2017 Taipei, October 13-17

Dear Colleagues:

As Co-Presidents, we would like to extend our most heartfelt welcome to you for attending the WFUMB 2017 TAIPEI (the 16th Congress of the WFUMB), which will be held at the Taipei International Convention Center, Taipei, Taiwan, from October 13 to 17, 2017.

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. It will highlight the latest cutting-edge knowledge and innovative skills in medical ultrasound, such as ultrasound-assisted techniques for interventional procedures, real-time 3-dimensional ultrasound, contrast ultrasound, elastography, speckle tracking etc. Most importantly, your active participation will render the congress much more fruitful and successful.

Beyond the scientific programs, we will also provide attractive social activities and tours so that you can enjoy your stay in Taipei. Taipei is a lovely and friendly city full of eastern culture and old traditions as well as western infrastructure and modern innovations. The top tourist’s favorite spots include National Palace Museum, National Sun Yat-Sen Memorial Hall, Freedom Square (National Chiang Kai-Shek Memorial Hall), Yangmingshan National Park, Taipei 101 and famous Night Markets with a variety of delicious, price-friendly cuisine. Many of these spots are within walking distance from the congress venue. Remember to bring your family to explore the wide spectrum of this exhilarating, non-sleeping city.

We wish you a wonderful memory and unforgettable experience in Taiwan!

Sincerely

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

WFUMB2019 Melbourne, September 5-9

ASUM is proud to be hosting WFUMB in 2019. The 4 day conference will run from Friday 5th to Monday 9th September 2019 at the Melbourne Convention and Exhibition Centre. The venue is adjacent to the Yarra River and is within easy walking distance to a range of excellent hotels, restaurants and a variety of shops. Melbourne is the thriving capital of Victoria and is renowned for its hidden laneways with eclectic restaurants, great coffee, art galleries and Australian football. The conference program promises to be an amazing networking opportunity as well as an inspiring educational experience, covering all aspects of medical ultrasound. In addition we will be organising hands on workshops in MSK, O&G, general and emergency medicine to name a few. Please join us ‘down under’ for the ultrasound experience of 2019.

Associate Professor Susan Campbell Westerway - ASUM President 2014-2016
Lyndal Macpherson - ASUM CEO