



# ECHOES

WORLD FEDERATION FOR ULTRASOUND IN MEDICINE AND BIOLOGY

A NEWSLETTER PROVIDING REPORTS AND HIGHLIGHTS OF WFUMB'S WORLDWIDE EDUCATIONAL ENDEAVORS

WFUMB IS DEDICATED TO THE  
ADVANCEMENT OF ULTRASOUND BY  
ENCOURAGING RESEARCH,  
PROMOTING INTERNATIONAL  
COOPERATION, DISSEMINATING  
SCIENTIFIC INFORMATION, AND  
IMPROVING COMMUNICATION AND  
UNDERSTANDING IN THE WORLD  
COMMUNITY.

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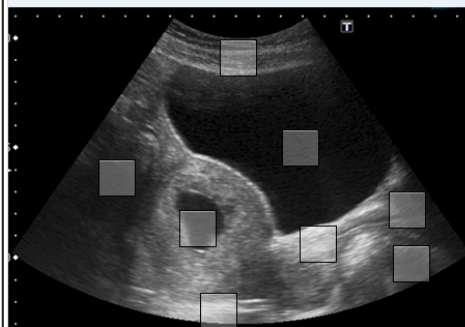
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Now you try and identify the anatomical landmarks on the same ultrasound image.

Drag the labels to the correct areas on the image.



- 1 Abdominal wall
- 2 Bowel gas shadowing
- 3 Bladder
- 4 Uterus with early gestation
- 5 Cervix
- 6 Vagina
- 7 Rectum
- 8 Pouch of Douglas

Submit

The results are stunning—  
visually appealing, highly  
interactive, educationally  
sound, clinically accurate  
learning.

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### Introduction

The Ultrasound Techniques in Pregnancy e-learning project is a free educational resource aimed at midwives and sonographers in developing countries. The project's development is supported by the Education Committee of WFUMB. Almost eighteen months after the project was started, it is now being formally piloted at the Centre of Excellence in Kampala, Uganda.

The project, currently consisting of ten short e-learning episodes (or 'sessions') covers all the basics of

obstetric ultrasound, such as fetal and maternal anatomy, ultrasound techniques, assessment in both early and late pregnancy, the prediction of pregnancy complications, and identification of common abnormalities that might interfere with delivery.

Each highly interactive session takes about 20 minutes to complete, and explains often complex concepts using clearly written text, diagrams, videos and animations, whilst also providing questions to help test the learner's knowledge.

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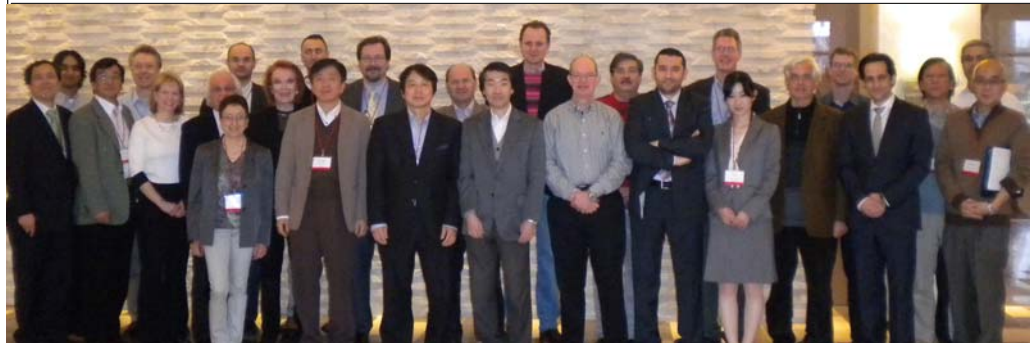
## Elastography Consensus Guidelines

### COVERING PHYSICS, LIVER, BREAST, AND THYROID

On March 16-17, 2013, the World Federation for Ultrasound in Medicine and Biology (WFUMB) convened a panel of 35 experts from Europe (France, Germany, Italy, Romania, UK), North America (Canada, USA) and Asia (Japan, Korea) to facilitate the generation of an "International Guidelines and Good Clinical Practice Recommendations for Elastography Ultrasound."

Sections will include standardized terminology and practice recommendations, as well as tips and tricks, results, and limitations.

The purpose of the document will be to provide a general explanation of elastography in these areas and define variances in machine output by manufacturer. The document will include a glossary of terminology as well as a table of manufactur-



"One of the primary goals of my presidency was to obtain consensus on elastography by convening a panel of international experts representative of different practices of elastography worldwide," said WFUMB president Masatoshi Kudo, who chaired the meeting. The plan is to publish the consensus guidelines in *Ultrasound in Medicine and Biology (UMB)* later this year.

The document will be written for the basic clinician and divided into 4 sections: physics; liver; breast; and thyroid, and will include information on both strain and shear-wave elastography.

ers and what they call their technique in relation to the terminology. The publication will also include links to Web-based animations to further aid the reader.

While a significant portion of the work was accomplished at the meeting, which was held just outside of Washington, DC, USA, the group has continued to meet via email and at local meetings when possible. It is anticipated that the complete guidelines will be finalized and results of the meeting will be reported during a session on May 4, 2013 during WFUMB2013 in São Paulo, Brazil.

"The lack of consensus regarding terminology and practice of elastography is a source of confusion in the ultrasound community."

— Richard Barr



## UMB Update



The WFUMB's journal, *Ultrasound in Medicine and Biology (UMB)*, continues to flourish under the direction of Editor-in-Chief Christy Holland. The recently-released 2011 impact factor for *UMB* is 2.293. In addition, the journal is number 4 of 30 titles in Acoustics and 42 of 116 titles in Radiology.

Manuscript submissions have increased 25% since 2010. The acceptance rate has averaged 41% during this time and submissions have been received from an average of 45 different countries.

This is a testament to the quality of the material being published in *UMB* and to the entire *UMB* editorial board and staff.

**A major initiative of WFUMB is to unify as many statements as possible across the many ultrasound organizations concerned with safety so as to produce consistent advice and reduce confusion.**

## WFUMB Safety Committee Statements

### WFUMB SAFETY COMMITTEE ANNOUNCES THE PUBLICATION OF SAFETY STATEMENTS IN *UMB*

Source: *Ultrasound in Medicine and Biology (UMB)*

One important role of the Safety Committee is to stay abreast of the current knowledge of bioeffects and develop practical advice for users based on that knowledge. The committee periodically releases statements and recommendations on various internationally relevant safety issues and is actively working with other ultrasound organizations to produce consensus statements. A major initiative of WFUMB is to unify as many statements as possible across the many ultrasound organizations concerned with safety so as to produce consistent advice and reduce confusion. These statements are constantly evolving with time due to changes of knowledge and/or of clinical applications. All the current WFUMB statements have been very recently reviewed and updated.

The May, 2013 issue of *UMB* includes five such statements/recommendations, all approved by the WFUMB Administrative Council:

- WFUMB Policy on Live Scanning at Commercial Exhibitions
- WFUMB/ISUOG Statement on the Safe Use of Doppler Ultrasound during Scans at 11–14 Weeks (or earlier in pregnancy). This text is identical to that in the statement published by AFSUMB, AIUM, BMUS, EFSUMB and JSUMB
- WFUMB/ISUOG Policy Statement on Souvenir Imaging of the Fetus
- WFUMB Recommendations on Nonmedical Use of Ultrasound
- WFUMB Clinical Safety Statement for Diagnostic Ultrasound: An Overview

It is hoped that these statements/policies will be helpful in educating the clinical end-users and will assist in keeping ultrasound safe. Further information is available at [www.wfumb.org](http://www.wfumb.org)



## WFUMB Centers of Excellence (COEs)



### COE LOCATIONS AND LEADERSHIP

#### Bangladesh Society of Ultrasonography

Dhaka, Bangladesh; Established 2004  
Secretary: Kanu Bala

#### Indonesian Society of Ultrasound in Medicine

Jakarta, Indonesia; Established 2011  
Secretary: Daniel Makes

#### Nigerian Society of Ultrasound Practitioners (NSUP)

Lagos, Nigeria; Established 2013  
Secretary: Kofo Soyebi

#### Romanian Society of Ultrasound in Medicine and Biology

Timisoara, Romania; Established 2007  
Secretary: Ioan Sporea

#### Societe Togolaise D'Ultrasonographie Medicale

Lome, Togo; Established 2013  
Secretary: Lantham Sonhaye

#### Sociedad Venezolana de Ultrasonido en Medicina

Caracas, Venezuela; Established 2005  
Secretary: Leandro Fernandez

#### Uganda Association of Sonography

Kampala, Uganda; Established 2004  
Secretary: Michael Kawooya

### COE REQUIREMENTS

**Mission:** to provide education in medical ultrasound in developing countries, grant recognition to participants after completion of a course, and accumulate ultrasound-related reference materials.

**Sponsoring Society:** The Society sponsoring the COE must be a legally-established organization and partnered with a WFUMB federation. It must be located in a developing country and possess an independent office with sufficient past experience in ultrasound education. Also, it must have the ability to attract trainees, not only from its own country, but also from surrounding countries.

**COE Responsibilities:** The COE shall be responsible for conducting annual educational programs at least once a year and divided into two tracks: one for ultrasound practitioners and one for ultrasound educators.

## WFUMB Welcomes Lomé, Togo Center of Excellence

### First Session Held February 13-15, 2013

WFUMB's 6th COE came into existence on February 13, 2013 in Lomé, Togo.

The signing was held in conjunction with the Societe Togolaise pour les Ultrasons en Medecine's (STEM) 3-day refresher course, February 13–15, 2013.

Lantham Sonhaye, a radiologist at Lomé University Hospital and STEM president, has been named the COE Secretariat.



The first workshop of the COE was on Doppler and special ultrasound techniques. Invited speakers Philippe Arbeille and Michael Kawooya represented WFUMB and joined 5 local Togolese lecturers at the meeting, which attracted over 40 participants.

The COE, which will be housed by the University of Togo, is in need of ultrasound machines, books and other learning materials, and curriculum materials for both doctors and technologists.

## WFUMB Leadership 2011-2013

### A SPECIAL THANKS TO THE WFUMB LEADERSHIP FOR THEIR 2011-2013 TERM OF SERVICE

### Executive Bureau

#### President:

Masatoshi Kudo (Japan–AFSUMB)

#### President-Elect:

Hassen Gharbi (Tunisia–MASU)

#### Vice President 1:

Ronald Benzie (Australia–ASUM)

#### Vice President 2:

Cheng-Wen Chiang (Taiwan–AFSUMB)

#### Secretary:

David Evans (United Kingdom–EFSUMB)

#### Treasurer:

Harvey Nisenbaum (USA–AIUM)

#### Immediate Past President:

Michael Claudon (France–EFSUMB)

### Administrative Councilors

Jacques Abramowicz (USA–AIUM)

Azza Hammou (Tunisia–MASU)

Seung Hyup Kim (South Korea–AFSUMB)

Herman Muñoz (Chile–FLAUS)

Christian Nolsøe (Denmark–EFSUMB)

Fergus Scott (Australia–ASUM)

### Co-Opted Councilors

Byung Choi (South Korea–AFSUMB)

Leandro Fernandez (Venezuela–FLAUS)

Barry Goldberg (USA–AIUM)

### Journal Editor (*UMB*)

Christy Holland

The addition of a Center of Excellence in areas such as Ethiopia, Mongolia, or Paraguay would greatly enhance the level of educational expertise in rural areas throughout the world.

*continued from p1*

## E-Learning: A Fresh Approach to Obstetric Ultrasound Education

### A CONSISTENT EDUCATIONAL APPROACH REACHING A GEOGRAPHICALLY DIVERSE AUDIENCE

#### History

The project came into being thanks to endeavours by the WFUMB Education Committee, under the leadership of the Chair, Professor Barry Goldberg, to find a consistent educational approach that could reach a large number of learners who may be geographically spread out and without access to high quality classroom training on a regular basis. WFUMB had already established a network of training centers (the centers of excellence) and continues to seek to expand these, but recognized that there was a need for additional complementary methods of education delivery that respond to the particular difficulties presented by the remoteness of some communities. Sponsorship of visiting lecturers to support local educational efforts and support for trainees to visit educational institutions both at home and abroad continue to be a part of the work of WFUMB but it was perceived that e-learning might allow access to a much wider audience. Based on an understanding of the Millennium goals, the WFUMB commissioned a pilot module of the ultrasound curriculum to address training in limited obstetric ultrasound. This would be evaluated in resource-limited communities to determine how well it would work.

#### Development

The content of the module is based on the limited obstetric curriculum developed by Paul and refined and approved by members of the Education Committee. Although most of the sessions have also been written by him, there has been invaluable support from colleagues within WFUMB, Plymouth Hospitals, members of the equipment industry, and the wider ultrasound and scientific community who have provided illustrations, waived copyright and provided advice and support. These are acknowledged within the program but without their support the content would not be nearly so rich.

The first activity undertaken by Dr Dubbins was to consider the scope of each session and translate it into a series of 'learning objectives'. The learning objectives are the backbone to every e-learning session - they list what the learner should be able to realistically achieve after completing an e-learning session. Once each session in the project had been planned in detail, the detail of the content was gathered, along with clinical images, diagrams, and cines, and handed over to Mrs Baj.

With a combination of knowledge and training in educational theory, educational technology, Web design, graphic design and experience

*(continued)*

*WFUMB extends its sincerest thanks and appreciation to Paul and Neha and all others who worked tirelessly on this project.*



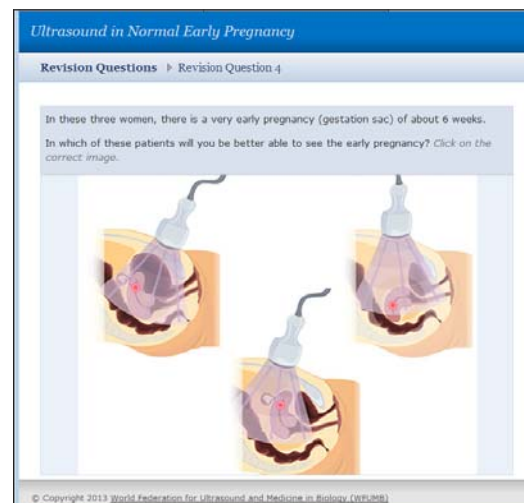
#### Neha Baj

Director, Anu Technologies Ltd, Nantwich, UK

Neha is the director of a learning and technology consultancy firm based in the UK. She is a computer engineer and an educational technologist who, since 2005, has been working on large e-learning projects for the UK Department of Health. She is currently project manager for a radiology e-learning project delivered in partnership with the Royal College of Radiologists.

#### Ultrasound Techniques in Pregnancy Modules:

1. Transabdominal Ultrasound Female Pelvis
2. Normal Early Pregnancy
3. Abnormal Early Pregnancy Part I
4. Abnormal Early Pregnancy Part II
5. Scanning in the Second and Third Trimesters: An Introduction to Technique
6. Fetal Measurement: Gestational Age
7. Fetal Measurement: Assessment of Growth
8. Ultrasound Assessment of Placenta and Amniotic Fluid
9. Fetal Abnormality
10. Multiple Pregnancy



**Fig 1** A typical page in an e-learning session - interactive and with images



### ...SUPPORTING E-LEARNING AT WFUMB COES

in classroom training and e-learning, the pairing of clinical expert and designer was an equal partnership, ensuring that the clinical expertise provided by Dr Dubbins was transformed by educational, graphical and technical expertise by Mrs Baj.

With an aim to keep session development costs as low as possible, various free sources of e-learning development software were explored. A highly comprehensive and sophisticated program was eventually chosen, called eXact Packager by Exact Learning Solutions. Access to the software and its associated e-learning templates was kindly provided free of charge by the UK Department of Health's e-learning for Healthcare program.

Sources of free-of-charge copyright-free anatomy diagrams and other images were also required by the project. In some cases, these were also provided by e-Learning for Healthcare, with the remainder coming either from copyright-free stock libraries, or a small proportion that was designed bespoke for the project.

The results are stunning – visually appealing, highly interactive, educationally sound, clinically accurate learning. All completed sessions were peer-reviewed by members of the education committee and by midwives, sonographers, and radiology trainees in Plymouth hospitals before being signed off, ensuring high quality, accessibility and a high level of accuracy.

### Where we are now

The pilot of the e-learning program commenced in March 2013, with a small cohort of trainees based at the Ernest Cook Ultrasound Research and Education Institute (ECUREI) in Kampala, Uganda. The pilot is led by Dr Michael Kawooya, with the e-learning program forming part of a wider range of educational activities over an 8-week period, including hands-on training. The e-learning can be delivered offline using USB memory sticks, thus facilitating usage in areas where internet access is not available, or not sufficiently reliable.

Development on the project has now come to an end. However, following the pilot in Uganda, the sessions will be tweaked and updated based on learner feedback.

### What does the future hold?

Following the pilot, it is envisaged that the e-learning will be disseminated to other WFUMB Centers of Excellence. Early talks are also taking place between the project team and GE Healthcare, who are exploring the delivery of the e-learning to 400 midwives in Ghana as part of an educational initiative in partnership with the Ghanaian Ministry of Health.

Based on the outcome of the pilot WFUMB will consider the development of further modules to cover aspects of physics governing image production as well as point of care ultrasound in other clinical settings.



**Paul Dubbins**

Project Clinical Lead, Consultant Radiologist, Plymouth Hospitals NHS Trust, Plymouth, UK.

Former Vice President of the Royal College of Radiologists, he led the introduction of an innovative programme of radiology education combining e-learning, simulation and traditional training. Paul considered that the concept of e-learning might have great application in situations where there is a shortage of qualified trainers. He has developed a limited ultrasound curriculum and was invited to join the Education Committee of WFUMB to develop a learning programme.

### Ultrasound Assessment of Placenta and Amniotic Fluid

#### Imaging the Placenta ▶ Locating the Placenta

Look at the video again.

Where do you think the placenta is?

Select the best option from the answers below.

- A. [At the fundus](#)
- B. [At the lower uterus](#)
- C. [Anterior](#)
- D. [Posterior](#)
- E. [Position unclear](#)



**Fig 2** A typical question in an e-learning session

For more information about the project, please visit [www.tinyurl.com/wfumb](http://www.tinyurl.com/wfumb).



## President's Farewell

The World Federation for Ultrasound in Medicine and Biology (WFUMB) has grown significantly in recent years, primarily due to its focus on collaboration. In an age where the global community has so many opportunities to interact, I have no doubt that WFUMB's educational endeavors are contributing to the development of strong clinical practices of ultrasound worldwide.

WFUMB continues to work with organizations such as the International Society of Radiology (ISR) on educational efforts. ISR President Jan Labuscagne, from Burbury, Australia will speak at WFUMB 2013, and WFUMB, who sent speakers to ICR 2012, will participate again in ICR 2014. In addition, we have initiated a joint educational project on ultrasound/CT in Ethiopia, equally funded by both organizations, with an expected debut in early 2014. As a preamble for this course, WFUMB sent two lecturers, together with a team from the National Centre for Ultrasound in Gastroenterology of Haukeland University Hospital, Bergen, Norway, to Tikur Anbessa (Black Lion) University Hospital in Addis Ababa, Ethiopia, March 11-15, 2013, to jointly conduct an ultrasound training course for 80 participants. The team is also working together towards the formation of a WFUMB Center of Excellence (COE) in Addis Ababa. We anticipate the addition of another COE, this one in Mongolia, in the coming months. Two new COEs, in Lomé, Togo and Lagos, Nigeria, were established earlier this year.

Our obstetric ultrasound e-learning modules are in the final testing phase and will soon be distributed to teaching facilities in developing areas throughout the world (see cover story for details).

The WFUMB Safety Committee has increased collaborative efforts to produce strong, unified safety statements. The most recent compilation of these statements appears in the May, 2013 issue of *Ultrasound in Medicine and Biology (UMB)* and is being distributed to WFUMB 2013 attendees. The committee is also developing a safety-themed slide set to assist clinicians with adding safety information to their lectures.

Last year, I convened a group of elastography ultrasound leaders from around the world to coordinate and facilitate the development of an "International Guidelines and Good Clinical Practice Recommendations for Elastography Ultrasound." These international experts have contributed to the guideline's progress, working both in-person and online. It is anticipated that the completed guidelines will be finalized and results of the meeting will be reported during a session at WFUMB 2013 in São Paulo. The consensus guidelines will be published in *UMB* later this year.

WFUMB has grown tremendously since its inception and now represents over 51,000 individuals from all over the globe. I would like to thank all those individuals who have volunteered their time, energy, and expertise to the myriad of projects undertaken by the organization in recent years. As my presidency comes to an end, I am confident that the activities initiated by myself and my predecessors will continue to be nurtured and expanded under the guidance of incoming President Hassen Gharbi and the new WFUMB leadership.

Masatoshi Kudo  
President, WFUMB

*"Committee work is the driving force behind our successes. It is essential to recognize those that continually and tirelessly contribute to the mission of the organization."*  
Michel Claudon

## WFUMB Committees

**WFUMB extends its gratitude to all its 2011-2013 committee participants, and a special thanks to committee chairs:**

### Archives Committee

Barry Goldberg

### Congress Committee

David Evans

### Constitution Committee

Seung Hyup Kim & David Evans

### Education Committee

Barry Goldberg

Byung Choi - Vice Chair

### Finance Committee

Cheng-Wen Chiang

### Nominating Committee

Hassen Gharbi

### Safety Committee

Jacques Abramowicz

### Publications/Communications Committee

David Evans

It's time to think **ultrasound** for all the right reasons.  
**first**

**Ultrasound First is an endeavor devoted to education and increasing awareness of the effectiveness of ultrasound in enhancing patient care.**

### Objectives

- Raise awareness of the value and benefits of ultrasound among patients, health care providers, and insurers
- Provide ultrasound education and evidence-based guidelines for health care providers
- Educate insurers about the cost savings and patient benefits associated with performing an ultrasound study when scientific evidence supports its potential effectiveness compared to other imaging modalities
- Educate patients about the benefits of ultrasound as the appropriate imaging modality for their care
- Encourage the incorporation of ultrasound into medical education

### Safe

Ultrasound emits NO ionizing radiation. It may be all you need.

### Effective

Ultrasound has comparable or superior diagnostic capability in a growing number of imaging scenarios making it the smart diagnostic choice.

### Affordable

Ultrasound is an inexpensive and portable tool that can provide faster diagnosis. Image more for less.

Visit [www.ultrasoundfirst.org](http://www.ultrasoundfirst.org) to learn how you can get involved and support the Ultrasound First mission.

Organized by the **aium**



Scan QR code with your mobile device for more information.





## Affiliate Highlights

**AIUM**—Enhanced Guidelines offer image references and a self-study test worth 0.5 CME credit (free to AIUM members). The team of dedicated volunteers has completed enhancements of 6 guidelines to date.

More than 30 online lectures captured from past AIUM Annual Conventions are available free to AIUM members and are accessible within each respective community.

A growing collection of webinars is archived on the AIUM website (another free CME benefit for members). A new teaching resource, Breast Imaging: Where Are We Going? is also available at [www.aium.org](http://www.aium.org).

The AIUM Resource Library provides members online access to publications on topics such as ultrasound techniques, terminology, safety and bioeffects, and quality assurance for all professional levels.

The AIUM hosted an Ultrasound First Forum in November of 2012, which addressed the expanding role of ultrasound imaging as a "first" imaging examination and was devoted to encouraging the use of ultrasound as a safe, effective, and affordable alternative to other diagnostic imaging modalities where scientific evidence supports its appropriateness. Proceedings from the Forum are available in the April issue of the *Journal of Ultrasound in Medicine (JUM)*, featuring summaries of clinical presentations, panel discussions, breakout sessions, and an agenda for the future. Open access to the proceedings and video clips of each segment are available at [www.ultrasoundfirst.org](http://www.ultrasoundfirst.org)

The Sound Judgment Series in the JUM has resulted in more than 20 highly cited peer-reviewed articles highlighting the clinical value of using ultrasound first in specific clinical diagnoses where ultrasound has shown comparative or superior value. This series serves as an important educational resource for our educators and clinicians.

### Future Conventions

- March 29-April 2, 2014, Las Vegas, NV
- March 21-25, 2015, Orlando, FL (WFUMB)

**MASU**—The 13th Mediterranean & African Society of Ultrasound (MASU) International Conference took place from 17th to 19th October 2012 in Nairobi, Kenya, and was hosted by the Aga Khan University Hospital. There were participants from the following countries: Kenya, Uganda, Tanzania, Italy, Belgium, Rwanda, Tunisia, France, USA, South Africa and Australia. The quality of lectures and scientific papers was excellent and was delivered by world renowned experts. Prominent speakers included the current president of Internal Society of Radiology (ISR), the past president of the EFSUMB, one past president and the president elect of WFUMB and many other distinguished speakers. Three speakers were sponsored by WFUMB.

All major international suppliers of ultrasound equipment exhibited during the Conference and brought in their full range of ultrasound machines; some companies launched products for the first time in Africa. In addition to the lectures, there were two half-day hands-on sessions where specialists from various countries demonstrated basic as well as advanced skills in performing ultrasound procedures. These were interactive sessions that were well attended and gave participants an opportunity to perform ultrasound and improve their skills in the presence of specialists in various fields of ultrasound.



**EFSUMB**—The CEUS non-liver guidelines were published in the first 2012 issue of our official journal "Ultraschall in der Medizin / European Journal of Ultrasound" and dispatched to all EFSUMB members. At the end of 2012 the joint WFUMB/EFSUMB CEUS liver guidelines went e-pub.

The preparation of Recommendations on the use of ultrasound Elastography is expected to be published online and appear in print in 2013. These will be the first guidelines released by a multidisciplinary ultrasound society.

EFSUMB has proposed a new term, Echoscropy, for bedside-focused, clinically-simple applications that can also be carried out with pocket-size scanners. The EFSUMB position on this topic, relevant for everybody, but especially clinicians, is reported in the UIM/EJU newsletter, Issue 1.

In 2012 the EFSUMB Education Committee approved 8 Euroson Schools and 11 Endorsed courses from Peru to Romania. Educational activities carried out within the EFSUMB mainframe are to be adequately recognized with EFSUMB educational credits.

The EFSUMB website has been enriched constantly. The Case of the Month receives thousands of visits per month and is now translated into several languages. Online education continues with the postgraduate Web courses which can be completed online to receive the EFSUMB CME certificate.

We look forward to working closely with our National Societies in 2013 building the European ultrasound community.

**FLAUS**—Activities August 2011—Present

*15th Congress of the Brazilian Society for Ultrasound (S.B.U.S.)*

*September 21-24, 2011 ~ São Paulo, Brasil*

*5th Congress of Venezuelan Society for Ultrasound in Medicine (AVUM)*

*September 28–October 1, 2011 ~ Porlamar Margarita Venezuela*

*Brazilian Congress for Radiology (CBR 2011)*

*October 13-15, 2011 ~ Recife, Brazil*

*10th World Congress for Perinatal Medicine (WAPM)*

*November 8-11, 2011 ~ Punta del Este, Uruguay*

*Signing of Academic Cooperation Agreement between FLAUS and the Spanish Society of Ultrasound (SEECU)*

*April 23, 2012*

*ICR 2012 27th International Congress of Radiology; JPR 2012 42th São Paulo Radiological Meeting*

*May 3-6, 2012 ~ São Paulo, Brazil*

*8th Paraguayan Congress of Obstetrics and Gynecology; 5th Paraguayan Congress for Perinatology; Pre-congress Course Paraguayan Society of Echography -FLAUS; 1st CIR - FLAUS Course; Inter-American School of Radiology (CIR); Latin-American Federation of Ultrasound in Medicine and Biology (FLAUS); Radiology and Imaging Society of Uruguay*

*June 29-30th, 2012 ~ Montevideo, Uruguay*

*Meeting of the Latin American Consensus on Resonance in Obstetrics; Latin-American Federation of Ultrasound in Medicine and Biology (FLAUS); Latin-American Federation of the Obstetrics and gynecology Society (FLAUS); SOCHOG – International Society of Ultrasound in Obstetrics and Gynecology (ISUOG)*

*July 14-15, 2012 ~ Santiago, Chile*

*National Congress for Ultrasound; Mexican Federation of Societies and Schools of Ultrasound in Medicine and Biology (FMACU)*

*July 25-28, 2012 ~ Xalapa, Mexico*

*26th Venezuelan Congress for Ultrasound in Medicine. (ECOMED 2012); III the Caribbean International Congress; VIII Excellency Center of WFUMB; FLAUS – SOVERADI*

*August 1-4, 2012 ~ Maremare, Lecheria –Venezuela*

*Obstetrics and Gynecology International Congress, Medical School of Honduras; Obstetrics and Gynecology Society of Honduras*

*Pre-congress of Ultrasonography (FLAUS); Doctors and radiologists meeting for arrangement of the USG Society of Honduras, and the integration to FLAUS the next assembly 2013*

*August 21, 2012 ~ Cap. North Occidental*

*VIII WFUMB Latin American Ultrasound Course; V International Conference on Ultrasound Course FLAUS*



## WFUMB 2013: In Appreciation

WFUMB extends its thanks and appreciation to the Sociedade Paulista de Radiologia e Diagnóstico por Imagem and the Federación Latinoamericana de Sociedades de Ultrasonido en Medicina y Biología for their hospitality and role in organizing WFUMB 2013 in such an excellent location as São Paulo, with its welcoming people, supporting a socially enjoyable and memorable Congress.

Christina Chammas, chair of the Scientific Committee of WFUMB 2013, is to be commended for her outstanding contributions and service in organizing WFUMB 2013 and for generating an exemplary scientific program.

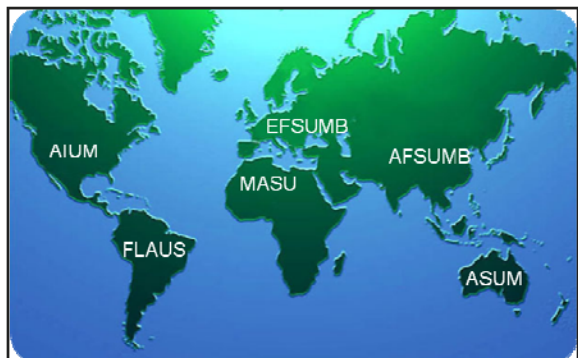
WFUMB's primary mission is to expand the opportunities for ultrasound practitioners throughout the world to participate in ongoing and newly developed educational programs. Through events such as WFUMB 2013, the WFUMB Council, in partnership with our member societies, is able to reach our collective goal of raising the level of patient care by raising the level of ultrasound education worldwide.

Thank you to all those who joined us in São Paulo for WFUMB 2013, bringing together the latest aspects of ultrasound education and equipment.

*The first "World Congress of Ultrasound" was held in Vienna in 1969. At that time, 700 international participants presented over 190 scientific papers.*

Visit [www.wfumb.org](http://www.wfumb.org) to view the full report from each affiliate.

\*At printing time, a report from some affiliates was unavailable. Updates will be displayed on the WFUMB website.



Save the Date:

**WFUMB 2015**  
Orlando, USA  
March 21-25, 2015

**WFUMB 2017**  
Taipei, Taiwan  
October 13-17, 2017

## Our Affiliated Organizations

- American Institute of Ultrasound in Medicine (AIUM)  
[www.aium.org](http://www.aium.org)
- Asian Federation of Societies for Ultrasound in Medicine and Biology (AFSUMB)  
[www.afsumb.org](http://www.afsumb.org)
- Australasian Society for Ultrasound in Medicine (ASUM)  
[www.asum.com.au](http://www.asum.com.au)
- European Federation of Societies for Ultrasound in Medicine and Biology (EFSUMB)  
[www.efsumb.org](http://www.efsumb.org)
- Latin American Federation for Ultrasound in Medicine (FLAUS)  
[www.flaus.org.py](http://www.flaus.org.py)
- Mediterranean and African Society of Ultrasound (MASU)  
[www.masu-ultrasound.com](http://www.masu-ultrasound.com)

### DID YOU KNOW?

**WFUMB 2013, the 14th World Congress of the WFUMB, was held in conjunction with the 16th Congress of the Latin American Federation of Ultrasound and the 43rd São Paulo Radiological Meeting—JPR '2013**



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