During EUROSON 2016 a joint committee session focused on Student Education. Various presentations (a total of 9) were given focusing on the purpose of better student education in the field of ultrasonography. The first presentation, given by A. Kabaalioglu from Antalya, Turkey, focused on how ultrasonography is taught in the medical schools which responded to the European survey. The main reason why ultrasonography is not taught enough was considered to be the lack of resources and instructors. It was discussed that medical schools throughout Europe should strive for better communication between each other and for EFSUMB to provide better information about the education of ultrasonography. While the review focused on the medical schools we were also able to hear and see students’ observations.

A study in Denmark, presented by student S. Krog, revealed that teaching ultrasonography as a way to learn musculoskeletal anatomy is probably not the best idea. The results of the experiment showed that only learning ultrasound next to anatomy did not help to improve anatomy grades or give the students the incentive to learn ultrasonography. It was however discussed that ultrasound could be a helpful tool in helping students understand anatomy and physiology, and that the beginning of learning ultrasonography should involve abdominal anatomy and physiology rather than just focusing on musculoskeletal anatomy. The official EFSUMB Statement on medical student education on ultrasound was presented by R. Badea, Romania. During this presentation it was discussed why the practical part of ultrasound teaching is missing. It was concluded that medical school curriculum is already very tight to add anything new and that most of the departments are sharing the load in the training of ultrasonography but changes are needed and would be appreciated by students.

While discussing the reasons why ultrasonography learning is important we had an amazing chance to observe one of the ways hands on training could be implemented using simulators.

During the live session, presented by M. Østergaard and M. Bachmann Nielsen from Denmark, on the use of simulators focusing on the abdomen it was discussed how much simulators bring value both to the students and resident doctors. The simulators could allow both students and residents to increase their knowledge and practical skills throughout time, while also being both cost and time efficient. The simulators would allow hands on training at any time with various programs and various difficulty levels for practical training. This would allow both resident doctors to check their practical skills and students to learn and build on their existing knowledge.

Though simulators are a very important tool we were also presented how little training is needed for a student to begin to understand ultrasound and how is it used. A presentation given by W. Kosiak, Poland, with his student Bogna Staniuk, 6th year medical student demonstrating, showed us that practicing up to 2 hours per month for 2 years leads to a level training to become adequate in the field.

Also some ideas were shared about student teaching ideas and how to implement them. An amazing presentation made by M. Glasoe, Norway, introduced to us that ultrasound itself should be approachable for students and that a quite easy way to implement this is through student tutors. This practice has shown to be validated in the universities of Norway. While teaching
ultrasound we should not forget about essential safety in ultrasound. A presentation made by C. Kollmann, Austria, explained how to make sure that the ultrasound is safe for use. Though considered a basically safe technique, certain rules should be followed in order to minimize its potential effects on the tissues. It should be noted that the ultrasound machine should have European safety approval, that it meets all the requirements and that it is cleaned correctly after every use. Also it was stated that different programs should be discussed on different cases i.e. though ultrasonography is safe to use on a pregnant woman, Doppler use should be kept to a minimum in early pregnancy.

How students should be trained also was discussed. A presentation given by T. Todsen, Denmark, discussed the importance of evidence-based ultrasound training in the undergraduate curriculum. The main points included that the knowledge should not only be given in theoretical and practical ways but assessments should be made as well. Students should be evaluated in their knowledge and practical skills after the ultrasound courses. It is not just relevant to ask did they enjoy the course, though that knowledge is valuable for the tutors to make the course more enjoyable, the assessment would give us more knowledge about the usefulness of the course.

Last but not least, a presentation given by E. Valestrand, Norway, gave us the student point of view towards ultrasound teaching and the field of ultrasonography itself. Students require tasks that can be distributed into several parts and made simple. A simple task is easier to tackle than a vast one! Secondly students enjoy things that are precise and correct, a precise knowledge of the material helps the student to think about the whole field more than just looking at the given task. Lastly, students strive for positive reinforcement, tutors while implementing teaching ideas should use positive reinforcement to allow students to feel comfortable in the field and be able to branch out. This presentation gave us insight into the minds of students, what they really need and want, which allows us to make adjustments and think about teaching in the future.

All in all, the joint EFSUMB committee session was a great success giving all the listeners new ideas from various universities throughout Europe and new ways of teaching and implementing the teaching programs of ultrasonography in universities. It should be mentioned that cooperation and communication between universities is the key to a successful program, and new horizons in the field of ultrasonography await.

Written by Guoda Liutkutė, 6th year medical student, Lithuanian University of Health Sciences

EFSUMB Honorary Members

EFSUMB is pleased to announce the election of Prof Luigi Bolondi, Bologna, Italy as an Honorary Member, for his major contribution to the field of ultrasound.

Luigi Bolondi has pioneered the development of clinical ultrasonography in Europe and worldwide. He became involved in this new technique in his late medical school years in 1972/3. He rapidly developed and led the new emerging imaging technology and wrote textbooks in abdominal ultrasound based on his personal experience and discoveries in the late 70's, which have been the reference to learn ultrasound for many Italian and European physicians. He has been a visiting fellow at Prof. Holm's laboratory in Copenhagen and following this was among the first ones to report on the possibility to perform ultrasound guided liver and pancreatic interventions and particularly US guided biopsy and percutaneous ethanol injection for small HCC. He published several works in the field of applications of ultrasound in liver disease, including the diagnosis of Budd Chiari syndrome, the abnormalities occurring in the instance of portal hypertension and the diagnostic patterns and treatment modalities of hepatocellular carcinoma. He has been mentor to many Italian and international physicians, some of which have later grown to the maturity to lead national and international scientific societies.

His contribution to Ultrasound has been particularly remarkable in the field of focal liver lesions and hepatocellular carcinoma. He was part of the board of the organizers of the first European Consensus Meeting leading to the release of the first guidelines for the management of Hepatocellular Carcinoma by the European Association for the Study of the Liver (EASL) in 2001 (Bruix J et al. J Hep 2001), which for the first time endorsed the use of ultrasound for the diagnosis of HCC when able to demonstrate arterial hypervascularization and recommended surveillance of cirrhotic patients by ultrasonography, thus establishing the official standard use of ultrasound for cirrhotic patients. He has also been co-author of the first EFSUMB guidelines on the use of Contrast Enhanced Ultrasound.

He has achieved an ISI H-index of 54, published 340 full papers and received more than 14000 citations. He served as President for the European Federation of Societies for Ultrasound in Medicine and Biology in the term 1996–1999 and was President of the Italian Society (SIUMB) from 1992 to 1994. He organized the successful WFUMB congress in Florence in 2000.
(over 2400 attendees from more than 40 Countries) and the EUROSON congresses in Bologna in 1978 and in 2006.

As EFSUMB President he paid great attention to the promotion of countries from the former Soviet Union, facilitating the training and participation of their members to European initiatives. Those countries which in many instances had become independent only for a relative short time are now very active and relevant contributors to EFSUMB. He also promoted the change in the EUROSON congress organization from a self standing event to an event to be run in conjunction with one National Society at a time during its national congress, revitalizing the congresses, in a modality which is still successfully adopted today.

Written by Stefania Speco, President SIUMB 2016


The EFSUMB Honorary member Hans Henrik Holm (HHH) and the founder of the Danish Ultrasound Diagnostic Society (DUDS) passed away at the age of 84. HHH’s importance to both Danish and international ultrasound imaging simply cannot be overstated. Even his nicknames “The father of interventional ultrasound” and “The father of Danish ultrasound” speaks for the greatness of his achievements. HHH graduated from Copenhagen University in 1958. As a resident in the department of urology at Gentofte Hospital in the beginning of the 60’s his vision for ultrasound was recognized early. HHH established a laboratory of ultrasound with a dedicated group of other young residents at the hospital. No B-mode scanners were commercially available at that time, so HHH had to build one. HHH did the first ultrasound image guided puncture of a renal cyst and he named the technique ‘2-D static scanning puncture.’ The procedure was filmed and presented at the AIUM meeting in USA in 1970 intervention. Other achievements were a transurethral ultrasound scanner in 1973 and presentation of the real-time ultrasound guided puncture technique using a linear array transducer in 1974. In February 1974, the Danish Society of Diagnostic Ultrasound was founded and HHH was elected as its first president.

In 1983, Holm introduced the transrectal ultrasound (TRUS) guided implantation technique for the treatment of prostatic cancer (brachytherapy). Several procedures, equipment and applications of interventional ultrasound were born there in collaboration with industrial partners. Ultrasound guided ablation techniques, using laser, microwaves, radiofrequency, cryo and radioactive seeds were developed or clinically implemented because HHH had created an unsurpassed environment for research and innovation. There was a constant flow of doctors visiting the Ultrasound Department from all over the world. All returned to their homelands stimulated and enriched by HHH, and several of them returned and founded ultrasound units in their hospitals after the concept they had experienced.

HHH had an incredible drive and commitment and combined with his winning character he was in charge of many international congresses. The culmination was of the “Deutsche Arbeitsgemeinschaft für Ultraschalldiagnostik” (German Association for Ultrasound Diagnostics) evolving in 1977 into the “Deutsche Gesellschaft für Ultraschall in der Medizin” (DEGUM, German Society for Ultrasound in Medicine). As early as 1967/1968 he introduced world famous “Vidoson” representing real-time B-mode imaging. He trained thousands of doctors in many fields of internal medicine. He was co-founder of our successful journal “Ultraschall in der Medizin”. Both patients and colleagues appreciated his knowledge and didactic capacities. We are truly sad to say goodbye to a polymath, great teacher and generalist.

Christoph F Dietrich summarises the DEGUM obituary of Gerhard Rettenmaier published in Issue 1 this year

Prof. Dr. Gerhard Rettenmaier, a musician and pioneer in ultrasound, introduced ultrasound in internal medicine. His oftencited mission was that “ultrasound is a continuation of the physical examination by other means”. He was a founding member of the "Deutsche Arbeitsgemeinschaft für Ultraschalldiagnostik" (German Association for Ultrasound Diagnostics) evolving in 1977 into the “Deutsche Gesellschaft für Ultraschall in der Medizin” (DEGUM, German Society for Ultrasound in Medicine). As early as 1967/1968 he introduced world famous “Vidoson” representing real-time B-mode imaging. He trained thousands of doctors in many fields of internal medicine. He was co-founder of our successful journal “Ultraschall in der Medizin”. Both patients and colleagues appreciated his knowledge and didactic capacities. We are truly sad to say goodbye to a polymath, great teacher and generalist.

Prof. Dr. Gerhard Rettenmaier

Odd Helge Gilja

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Ultrasschalldiagnostik (German Association for Ultrasound Diagnostics) evolving in 1977 into the “Deutsche Gesellschaft für Ultraschall in der Medizin” (DEGUM, German Society for Ultrasound in Medicine). As early as 1967/1968 he introduced world famous “Vidoson” representing real-time B-mode imaging. He trained thousands of doctors in many fields of internal medicine. He was co-founder of our successful journal “Ultraschall in der Medizin”. Both patients and colleagues appreciated his knowledge and didactic capacities. We are truly sad to say goodbye to a polymath, great teacher and generalist.
**EFSUMB Fellows**

At the Board of Delegates Meeting at EUROSON 2016 the following EFSUMB members were approved as Fellows for their substantial contribution to the field of ultrasound over a prolonged period:

Svein Ødegaard, Norway, Klaas Bom, The Netherlands, Lorenzo Derchi, Italy and Diana Gaitini, Israel

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**EFSUMB Best Published Paper Prize**

The winner of the best published paper prize of 500 € submitted in the last 2 years was awarded to Gitto Salvatore, Italy for the paper ‘Normal Sonographic Anatomy of the Wrist with Emphasis on Assessment of Tendons, Nerves, and Ligaments’ published in J Ultrasound Med 2016; 35:e15–e28

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**Winners of the EFSUMB Young Investigator Award at EUROSON 2016**

- **Best technical presentation**
  Emiel van Disseldorp – The Netherlands

  Patient-Specific Mechanical Characterization of Abdominal Aortic Aneurysms using 4D Ultrasound

- **Best clinical presentation**
  Anesa Mulabecirovic – Norway

  In vitro quantification of tissue elasticity using three shear wave elastography platforms on liver fibrosis phantoms

Congratulations to all the nine participants for a close and exciting competition.

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Left to right: Annabianca Amoruso (IT), Belinda Gorell (UK), Anesa Mulabecirovic (NO), Emiel van Disseldorp (NL), Vito Cantisani (Chair), Michael Bachmann Nielsen (Chair), Malene R Pedersen (DK), Ruxandra Mare (RO), Gokce Akgunduz (TR) and Kaloyan Pavlov (BG). Not in the photograph Antanas Budėnas (LT)

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EFSUMB Euroson Schools with more information on www.efsumb.org

**Next webinar**

Watch the EFSUMB website for the details of the next LI-RADS webinar to be held on 19 January 2017 at 18.00 CET.