

## PROFESSOR STURLA EIK-NES NORWAY



Sturla Hall Eik-Nes is a Norwegian gynecologist and obstetrician with ultrasound diagnosis and fetal medicine as a special area. He is a professor of clinical physiology and biomedical technology at the Norwegian University of Science and Technology, NTNU, and senior physician at the National Center for Fetal Medicine (NCFM) at St. Olavs Hospital in Trondheim. Eik-Nes is a world-renowned authority in ultrasound diagnostics and fetal medicine. His pioneering work in Trondheim in 1979-80 includes the development of a duplex unit (imaging and Doppler ultrasound) used as a method to measure blood circulation; this made it possible for the first time to quantify blood flow in human fetal aorta as well as in the umbilical vein. At the same time, he carried out the so-called Ålesund and Trondheim surveys that were randomized controlled studies to assess the value of systematic scanning of all pregnant women as opposed to using ultrasound on a clinical indication only. In the Cochrane Collaboration 2015, these two studies, along with an additional 7 studies emerging from them, were named as the first to present the evidence basis for offering ultrasound to the total population of pregnant women around week 18. Eik-Nes' work in general was central to the decision to introduce such an offer to all pregnant women in Norway in 1986 and many countries around the world.

Eik-Nes became Professor at the University of Trondheim in 1985, later NTNU, and founded the National Center for Fetal Medicine in 1990 at St. Olavs University Hospital in Trondheim. At this center, he initiated fetal medicine in Norway and thus the basis for looking at the fetus as an independent patient. During that time the center was involved in the organization of fetal medicine, and the development of a university-based education for midwives performing ultrasound was started.

In total, 39 people now work at the center. In 2006, Eik-Nes was knighted by the Norwegian King Harald V and appointed Commander of the Royal Norwegian St. Olav's order for his efforts in fetal medicine. In the decision it was emphasized that "Eik-Nes had promoted Norwegian medicine internationally in a very beneficial way". Eik-Nes retired 2015 from his clinical duties at NCFM at the age of 70, but he is still active and is currently involved in three ongoing PhD thesis. He now is Professor emeritus at The Norwegian University of Science and Technology.

Eik-Nes was a founding member of the Norwegian Society of Ultrasound in 1977. He attended his first EUROSON congress in Bologna in 1978 and attended all EUROSON congresses over the next 25 years. As president of EFSUMB during 1993-1996, Eik-Nes started an extensive educational program named "EFUMB East West Collaboration". The program aimed to reach out a hand to the countries previously behind the "Iron Curtain". The use of ultrasound in all relevant subject areas was taught along the entire former border to the East: Murmansk, Poland, Czechoslovakia and Hungary. Presidents who succeeded Eik-Nes, starting with Luigi Bolondi, have continued the program.



Eik-Nes took over as President of EFSUMB at a time when the society was losing impact and fewer members attended the congresses. Facing a situation where the EFSUMB would not manage to maintain a EUROSON congress every third year, he managed to pass a new and still active format for the EUROSON congresses at his last Board Meeting in Budapest 1996: In the years to come, the EUROSON congress would be organized annually, but always in conjunction with another member country's annual conference. Retrospectively seen, this was probably one of the most important decisions in the history of EFSUMB since its initiation.

In 1998, Eik-Nes took over as the second President of the newly established International Society of Ultrasound in Obstetrics and Gynecology (ISUOG) during the period 1998-2002. During his presidency he continued his interest to promote ultrasound in "the third world" and continued his "East West Collaboration" program with ISUOG as the umbrella organization, now called "ISUOG Outreach Program".

Programs for using ultrasound in the field of pregnancy care were established in the Philippines, Turkey, Hong Kong for further work in China, Thailand and the Middle East and South Africa. This project was fully incorporated by ISUOG in 2008, and has now been continued by his colleagues in ISUOG throughout the developing world.

Using his "home institution", NCFM, Eik-Nes started teaching centers in Singapore, Cape Town and Durban. From 2001, Eik-Nes responded to Nelson Mandela's former health director's request for education programs aimed at South African midwives whose work in the resource-poor areas was previously neglected by the Apartheid government. Since then, NCFM has had increased its activity in South Africa, which involves both teaching and developing ultrasonic equipment adapted to be used in the rough, tough areas. As a result of the international activity promoted by Eik-Nes, the National Center for Fetal Medicine in 1996 was offered cooperation with WHO as the "WHO Collaborating Center in Diagnostic Ultrasound in Obstetrics and Gynecology". This cooperation continued and was chaired by Eik-Nes as long as was head of NCFM.

Eik-Nes has mentored 20 PhD theses and has produced 137 peer review papers. His focused research has had a high scientific impact and has over the years been cited close to 8000 times; he has achieved an h-index of 51 and an i10-index of 106. Over the years, he has presented approximately 5000 scientific and teaching lectures worldwide.

Kari Utne, President of NFUD 2017

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