

## Presentation of the 1992 Ian Donald Gold Medal to Stuart Campbell



Professor Stuart Campbell with ISUOG Secretary Professor Asim Kurjak and Congress President, Professor Manfred Hansmann

The Ian Donald Gold Medal is awarded at the time of each World Congress to a person who has made a profound and significant contribution to the development of ultrasound in obstetrics and gynecology.

The award is made by the Executive Committee of ISUOG after taking advice from a wide range of opinion from within the membership of the Society.

The 1992 Gold Medal was presented at the General Assembly on Wednesday, 1st July to Professor Stuart



Stuart Campbell with the Ian Donald Gold Medal

Campbell. The Secretary of ISUOG, Professor Asim Kurjak, made the following oration.

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*When the idea of creating an International Society was first discussed by leading world figures in ultrasound in obstetrics and gynecology, there was not the slightest argument as to who should be our first President. Stuart Campbell was chosen not just because of his leadership qualities but because of his numerous significant contributions to the development of ultrasound in our field. Indeed, looking through his career is rather like reading a history of the development of ultrasound in obstetrics and gynecology.*

*Stuart Campbell was born in Glasgow and is a graduate of Glasgow University. In 1963, as a junior doctor, he worked with the pioneering team established by Ian Donald in the Queen Mother's Hospital. Fetal biometry in those days consisted of 'blind' A-scan measurements of the biparietal diameter, which were very inaccurate; Campbell really pioneered accurate fetal biometry, using the large cumbersome B-mode scanners, by developing reliable techniques of fetal measurements based on systematically obtained reproducible planes according to internal anatomical markers. He developed the currently accepted techniques for biparietal diameter, head circumference, and abdominal circumference measurement, was the first to develop a cross-sectional fetal cephalometry chart and he established the first velocity growth charts based on longitudinal measurements. From these charts, he introduced*

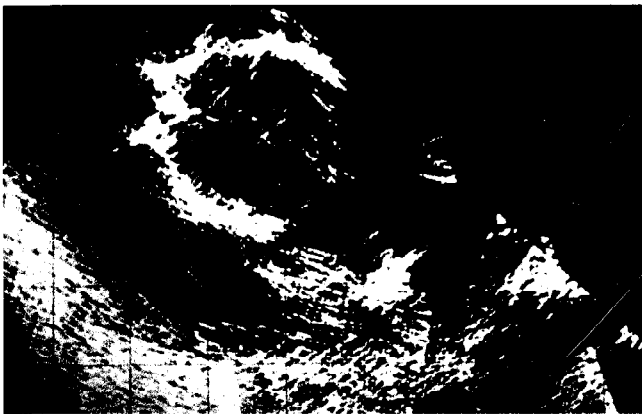
*the use of early measurements of the biparietal diameter to predict the expected date of confinement and the concept that the earlier a measurement is made, the more accurate the prediction of gestational age.*

*In 1970, Stuart Campbell was appointed as lecturer to the Department of Obstetrics and Gynaecology at Queen Charlotte's Hospital in London, and he has remained in London ever since, carrying out, as he says, missionary work among the English disbelievers. When at Queen Charlotte's, he introduced the estimation of fetal weight from the fetal abdominal circumference measurement, which was a great improvement on previous techniques, and remains the most important parameter for fetal weight prediction today. He also explained the concept of a consistent percentage error for weight estimation throughout the birth weight range. Following this, he described the head-to-abdomen circumference ratio as a means of classifying the small-for-gestational-age fetus into symmetric and asymmetric groups.*

*In 1972, in a seminal paper, he introduced early ultrasound prenatal diagnosis of fetal abnormalities, by describing the first early diagnosis of anencephaly (followed by therapeutic abortion) and this was succeeded by papers on the early diagnosis of spina bifida and ventriculomegaly. He first proposed, as far back as 1969, that ultrasound should be used routinely in the second trimester to date*



Stuart Campbell as a young researcher using the Disonograph 4102



The first ultrasound picture of spina bifida (1974). This was taken before the case was published in *The Lancet* the following year. A large number of abnormalities were diagnosed with the Disonograph despite the cumbersome gantry and lack of gray scale

*pregnancies, and, more than anyone, he propagated the concept of routine ultrasound screening for all pregnant women, both for dating and abnormality detection.*

*In 1976, he was appointed Professor and Chairman of the Department of Obstetrics and Gynaecology at King's*

*College Hospital. He quickly established an Ultrasound Diagnostic Centre and Fetal Medicine Unit of international renown and gathered a team that was to extend considerably the frontiers of prenatal diagnosis and therapy. Charles Rodeck, Kypros Nicolaidis and Lindsey Allan are just a few of the famous researchers who developed their interests and talents under his influence.*

*His own personal research interests then went in new directions. In obstetrics, he pioneered the Doppler assessment of the uteroplacental circulation, and identified the association between abnormal uteroplacental waveforms and proteinuric hypertension and fetal distress. He also introduced the concept of predicting the later development of pre-eclampsia and intrauterine growth retardation by early screening of uteroplacental waveforms. In this work, he was helped by David Griffin and Malcolm Pearce. Stuart Campbell now turned his mind to gynecological applications and was the first to introduce a research program screening women over the age of 45 for ovarian cancer, demonstrating that both abdominal and transvaginal ultrasound were effective in detecting Stage I disease. The gynecological screening team is now almost as famous as the Fetal Medicine Group and Rajat Goswamy, Tom Bourne, Davor Jurkovic, Christopher Steer and Eric Jauniaux have all made significant contributions, especially in the field of color Doppler in gynecology and early pregnancy.*

*Fellow members of ISUOG, you will agree that this is a formidable list of achievements, and yet you will realize that, with over 400 scientific publications to his name, I have only been able to skate over the surface and there are many aspects of his research work I have not even commented upon.*

*Professor Campbell was rather embarrassed when told that he was to be awarded with this medal, firstly, because he is President of our Society and secondly, because he says that he has only just started his research career! I have no doubt that there will be many more exciting developments from him and his team. However, today, ISUOG salutes his great contributions to our specialty by awarding him the Ian Donald Gold Medal.*