

# 15<sup>th</sup> World Congress on Ultrasound in Obstetrics and Gynecology, 25–29 September 2005, Vancouver, Canada: presentations and awards

## Tribute to Professor Stuart Campbell

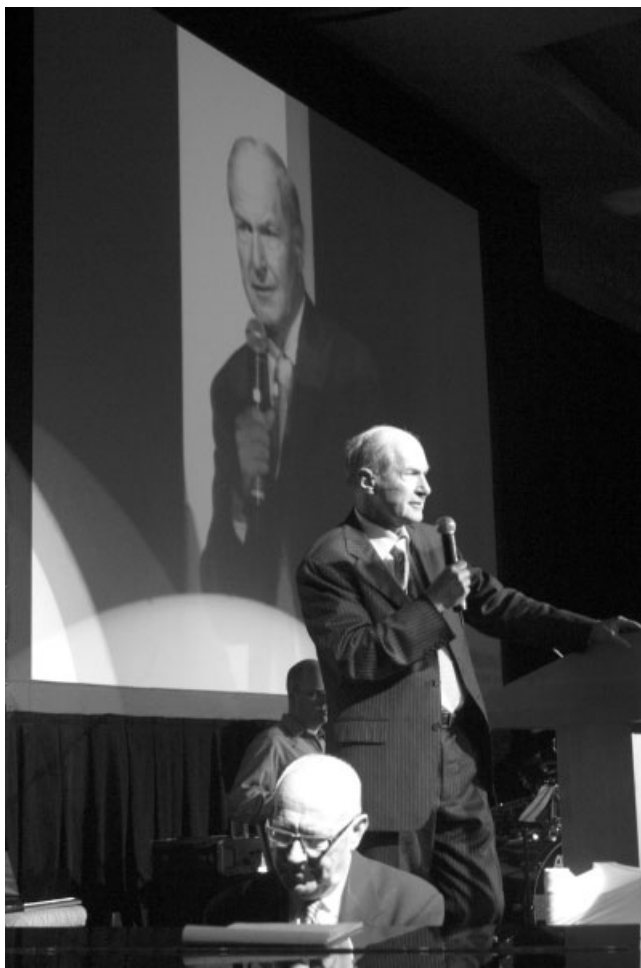
The 15<sup>th</sup> World Congress on Ultrasound in Obstetrics and Gynecology was kicked off with a tribute to ISUOG's founding president and the White Journal's founding Editor-in-Chief, Professor Stuart Campbell (known by his students as 'Prof').

Perhaps one of the most well-known figures in the world of obstetric and gynecological ultrasound, Prof's career has been truly legendary. Under the tutelage of Professor Ian Donald at the Queen Mother's Hospital in Glasgow, he rose quickly to publish landmark papers on the measurement of fetal biparietal diameter as well as other biometric indices, with the nomograms he published in the

early 1970s still in use today. From there, his research into ultrasound, prenatal diagnosis, fetal medicine and therapy has grown to span an incredible number of important areas, including pioneering studies on fetoscopy, uterine artery Doppler, ovarian and endometrial cancer, IVF and 3D/4D ultrasound, to name but a few.

Prof has written well over 500 original research papers and articles, authored or co-authored around 50 books and monographs, taught extensively in centers throughout Europe and the US and been an invited keynote speaker at innumerable important international meetings.

As a tribute to his lasting legacy, ISUOG's Board of Directors honored Prof's contributions with the creation of the Stuart Campbell Award for Education and the new Stuart Campbell lecture, to be given by an outstanding contributor to *Ultrasound in Obstetrics & Gynecology*, at future ISUOG World Congresses.



Following an opening tribute given by Lawrence Platt, Stuart Campbell takes to the stage for the climax of a unique musical ceremony by John Hobbins and Manny Porto.

## Presentation of the Stuart Campbell Award for Education to Sturla Eik-Nes

The opportunity to receive the Stuart Campbell Award for Education arises in only the most exceptional circumstances and for individuals whose contribution to the advancement of ultrasound via the education of others has been unwavering over the course of their career.



Sturla Eik-Nes receiving awards from Lawrence Platt.

Sturla Eik-Nes more than fulfills both of these criteria. Having been ISUOG's President from 1998 to 2002, on the Editorial Board of *Ultrasound in Obstetrics & Gynecology* since its creation and, most recently, Chair of ISUOG's Education Committee, he has worked tirelessly and unselfishly to promote the work contained within the Journal's pages to those across the globe. As a result of his dedication to the dissemination of knowledge over the years, Sturla has touched countless lives, in particular through his outreach programs in Africa, south-east Asia and eastern Europe, where his efforts will leave a legacy for centuries to come. The health care of these regions has been improved immeasurably by his personal efforts. One person can and did make a difference.

For these achievements, Professor Sturla Eik-Nes was honored by being the first to receive the Stuart Campbell Award for Education.

Lawrence Platt  
Los Angeles, USA

### Presentation of the Ian Donald Gold Medal to Jean-Claude Fouron

The Ian Donald Gold Medal is the most prestigious award given by ISUOG. The ISUOG website states that 'The Ian Donald Gold Medal is awarded once a year to an individual who has made an outstanding scientific contribution to the field of Ultrasound in Obstetrics and Gynecology.' It is a great honor for me to announce that the Gold Medal Committee, consisting of the previous medallists, have decided to award the 2005 Ian Donald Gold Medal to Professor Jean-Claude Fouron.

Professor Fouron, fetal cardiologist and the master of reverse flow in the fetal aortic isthmus, is currently Professor of Pediatrics and Director of the Fetal Cardiology Unit at the University of Montreal. He was born and grew up in Haiti, where he also graduated from medical school. In 1960 he moved to Canada, where he fulfilled his postgraduate training and became a specialist in pediatrics, cardiology and ultrasonography. For 4 years, he worked as a research fellow in pediatric cardiology under the supervision of Professor Abraham Rudolph, initially

at the Albert Einstein Medical College in New York and later at the Cardiovascular Research Institute in San Francisco. This provided the foundation for his outstanding research, in which he combined his excellent knowledge of the physiology of the fetal cardiovascular system and skills in animal experimental work with the vast clinical experience he has in perinatal cardiology and with his expertise in ultrasonography. Since the late sixties, Professor Fouron has been affiliated with the Department of Pediatrics at the Sainte-Justine Hospital in Montreal, where, in 1989, he founded the Fetal Cardiology Unit.

Over the course of his research, Jean-Claude Fouron investigated many important clinical and physiological questions in the fetus, neonate and child, for example, cardiac arrhythmias, fetal myocardial performance, congenital heart malformations, circulation in the large fetal veins, circulatory changes in twin-to-twin transfusion syndrome and the effects of maternal hyperoxygenation on the fetus. The results of his scientific work are published in close to 200 original papers in peer-reviewed journals. In the early nineties, Fouron's group published a series of papers on the role of the fetal aortic isthmus in the redistribution of fetal flow. This excellent piece of scientific work can be characterized as a prime example of translational research. Fouron observed that increased resistance to the umbilical flow in fetal sheep led to a reversal of the diastolic flow in the aortic isthmus. This was studied in further detail under experimental conditions, leading to the characterization of the aortic isthmus as a watershed in the fetal circulation. Following this discovery, Fouron developed an ultrasound technique for recording blood flow in the aortic isthmus of the human fetus and showed that, in growth-restricted fetuses, there was reversal of flow in diastole similar to that observed in the ovine fetus under experimental conditions. Later, Fouron and his coworkers demonstrated an impaired neurological development in children who have had abnormal aortic isthmus flow *in utero*. These studies demonstrate clearly Fouron's systematic approach to scientific work, which is based on his keen interest in fetal physiology, never-ending curiosity and dogged perseverance.

Research has always been Jean-Claude's foremost hobby, taking up the majority of his time. Yet, despite this devotion, he has always made time for those around



Karel Maršál and Jean-Claude Fouron



Ian Donald Gold Medal



Lawrence Platt and Samuel Maslak

him – his patients, colleagues and staff and, above all, his family. All of us know Jean-Claude as a gentle man – a true gentleman of the old school – always very interested in other people and extremely kind. This becomes apparent as soon as one tries to send him an e-mail: his address is Jean-Claude.Fouron@sympatico.ca. As with many other researchers in the field of Doppler ultrasound, he is very fond of classical music. He is a passionate sailor, though, having said this, his windsurfing exploits sometimes lead to expeditions (led by his wife) to rescue him by car from the other side of the lake. Jean-Claude is also very enthusiastic about another sport which, as Europeans, many of his colleagues might have some difficulty appreciating. This is, of course, American football – a game he considers to be comparable to chess.

It is impossible to describe in such a short time Jean-Claude's myriad qualities as a clinician, researcher, scholar, teacher and friend. His scientific work has contributed immeasurably to our knowledge of fetal cardiology and demonstrated how invaluable ultrasound technique is in the study of fetoplacental circulatory physiology.

It is, therefore, with great pleasure that I present to you the 2005 Ian Donald Gold Medal winner – Jean-Claude Fouron.

Karel Maršál  
Lund, Sweden

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### Presentation of the Ian Donald Medal for Technical Merit to Samuel Maslak

The Ian Donald Award for Technical Merit is given to individuals noted for their outstanding contribution to the technical development of Ultrasound in Obstetrics and Gynecology. It is with great pleasure that I introduce the 2005 winner of this prestigious award, Dr Samuel Maslak.

Samuel Maslak was educated at the Massachusetts Institute of Technology, where, in 1971, he obtained his degrees in Electrical Engineering, as well as his SB and SM. He was inspired to undertake his doctoral dissertation on the subject of ultrasound instrumentation, having realized its huge potential as a means of performing non-invasive medical examinations. For this, he was awarded his Sc.D in 1975.

Moving to California, he took up work as project manager and member of Hewlett-Packard's technical staff, where he invented and patented a novel piece of scanner architecture that was to form the basis of all of Hewlett-Packard's cardiac PA ultrasound systems until 1997. Dr Maslak left Hewlett-Packard in 1978 in order to develop his own ideas on a new approach to medical ultrasound imaging.

At the time, ultrasound scanners produced diagnostic images by returning ultrasonographic echoes from a total of 64 channels. These images, while being satisfactory, could not be further refined due to the analog nature of the ultrasound signal's processing.

What Dr Maslak pioneered was the integration of novel computer technology to allow for the digital enhancement and processing of 128 sonographic channels, greatly increasing the amount of detail visible in the images obtained during ultrasound examinations. As we all know, it is only rarely that a breakthrough emerges that is agreed by most to be revolutionary. The Acuson 128 Computer Sonography System, the first product released by a company founded in 1982 by Samuel Maslak, Amin Hanafy and Robert Younge – the Acuson Corporation, was one of such a rare breed of revolutionary products.

Through an extraordinary commitment to developing and refining their ultrasound technologies, Acuson, led by Dr Maslak as President and CEO, clocked up an impressive string of sales, becoming a leader in what others had thought to be a saturated market. The release of the Sequoia 512 in 1996 provided clinicians with unparalleled diagnostic capabilities, offering the user increased spatial and temporal image resolution through the use of both phase and amplitude information from the ultrasound echoes. Having been elected Chairman of the Board the previous year, Dr Maslak remained active in product development for Acuson as the company achieved some of its largest figures in ultrasound equipment sales, prior to its merger with Siemens in 2000.

Holder of over 40 patents and named as one of *Healthweek's* top 25 innovators (August 1989), Samuel Maslak has received numerous accolades, including being honored as: CEO of the Entrepreneurial Company of the Year at the 13<sup>th</sup> Annual Awards (presented by the Stanford Business School Alumni Association); San Francisco Bay Area Entrepreneur of the Year (July 1989); one of *Business Week's* 'CEO's of 1000 Top Companies' (1991), as well as holder of the Joseph H. Holmes Pioneer Award for Basic Science (presented by the American Institute of Ultrasound in Medicine in 2002). It is with great honor that we can now add the 2005 Ian Donald Award for Technical Merit to this list.

Please join me in congratulating Samuel H. Maslak, Sc.D.

Lawrence Platt  
Los Angeles, USA

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### Free communication acknowledgments

The following free communications, presented during the 15<sup>th</sup> World Congress on Ultrasound in Obstetrics and Gynecology, were each selected as the best presentation in their submission category. Selection was according to a combination of the anonymous peer-review score for abstracts in advance of the congress and the scores for presentation and/or scientific merit allocated on-site by a panel of judges.

Full abstracts to these titles may be found in *Ultrasound Obstet Gynecol* 2005; 26 (4). The authors' valuable contribution to the scientific program is gratefully acknowledged.

### Oral communications

'Intraventricular fused fornices', a marker for complex midline anomalies (OC02.06)

J. Slevin, S. Blaser\*, D. Chitayat, H. Berger, W. Halliday, S. Keating, G. Ryan, A. Toi, S. Pantazi, C. Raybaud.

\**Department of Diagnostic Imaging, The Hospital for Sick Children, University of Toronto, Ontario, Canada*

Growth rate of corpus callosum in very premature infants (OC06.02)

N. Anderson\*, I. Laurent, N. Cook, T. E. Inder.

\**Christchurch Hospital, Christchurch, New Zealand*

Uterine artery Doppler flow velocity following uterine fibroid embolization (OC07.07)

Z. Novacovik, U. Kirste, E. Dorenberg, H. Husby, G. Haugen. *Rikshospitalet University Hospital, Oslo, Norway*

A new echographic marker for 2nd–3rd trimester prenatal diagnosis of trisomy 21: the linear insertion of the atrioventricular valves without defect on 40 740 pregnancies (OC11.03)

C. Fredouille\*, J. E. Develay-Morice, M. Gonzales, CFEF French College of Ultrasonography, M. Duyme. \**CHU La Timone Marseille, France*

Outcomes after the functional evaluation of fetal pulmonary vascular reactivity by the maternal hyperoxygenation test in diaphragmatic hernia (OC14.04)

D. Wood\*, E. Done, S. Desai, A. Ness, J. Airoidi, R. E. Broth, V. Berghella, R. J. Librizzi, S. Weiner.

\**Thomas Jefferson University, Philadelphia, PA, USA*

'The Shetland and the Clydesdale revisited'; paternal height influences fetal humerus and femur length in the midtrimester (OC17.01)

A. Wilde, M. J. Permezel, E. A. McCarthy, A. Ugoni, S. P. Walker. *University Department, Mercy Hospital for Women, Victoria, Australia*

Fetal echo and cardiovascular profile score (CVS) as a prognostic risk factor in fetal sacrococcygeal teratoma (SCT) (OC18.07)

M. Respondek-Liberska, K. Janiak, S. Forys. *Research Institute Polish Mother's Memorial Hospital & Medical University of Lodz, Poland*

Is there any calcium in that skull? (OC21.05)

L. F. Goncalves\*, E. Soto, K. Richani, P. Devers, J. Espinoza, W. Lee, M. C. Treadwell, R. Romero. \**Wayne State University, Detroit, MI, USA*

The role of sonographic examination in the follow up of gynecological neoplasms (OC25.02)

A. C. Testa\*, E. Fruscella, M. Ludovisi, R. De Vincenzo, M. Malaggesi, D. Basso, G. Scambia, G. Ferrandina. \**Dept. of Obstetrics and Gynecology, Catholic University of Sacred Heart, Rome, Italy*

Intervention thresholds for severe early onset growth restriction (IUGR) (OC27.04)

A. A. Baschat\*, C. Bilardo, U. Germer, J. Hartung, S. Rigano, C. Berg, M. L. Kush, A. Bhide, H. L. Galan, B. Thilaganathan, E. Ferrazzi, K. Hecher, U. Gembruch, C. P. Weiner, C. R. Harman. \**University of Maryland, Baltimore, MD, USA*

A new method of transvaginal ultrasound-guided polypectomy: a feasibility study (OC28.05)

J. Ben Nagi, C. Lee, J. Yazbek, D. Ofili-Yebovi, A. Davies, D. Jurkovic. *King's College Hospital, London, UK*

Improving results with percutaneous fetal endoscopic tracheal occlusion (FETO) for severe left congenital diaphragmatic hernia: a controlled study (OC30.06)

J. Jani\*, E. Gratacos, H. Vandecruys, K. Allegaert, E. Carrera, A. Greenough, J. L. Peiro, K. H. Nicolaidis, J. Deprest. \**University Hospital Gasthuisberg Leuven, Belgium*

What is the optimal approach to accurately classifying failing pregnancies of unknown location (PULs)? (OC31.08)

G. Condous\*, E. Kirk, Z. Haider, B. Van Calster, S. Van Huffel, D. Timmerman, T. Bourne. \**St George's Hospital Medical School, London, UK*

Pregnancy in women with hypertrophic or dilated cardiomyopathy: the role of ultrasound examination for planning rational strategies (OC32.07)

I. G. Fedorova, O. A. Pitirimova, E. D. Bespalova. *Bakoulev Center for Cardiovascular Surgery, Moscow, Russia*

Early visualization of the fetal coronary arteries by four-dimensional ultrasonography with B-flow imaging and spatiotemporal image correlation (STIC) (OC33.03)

L. F. Goncalves\*, J. Espinoza, J. P. Kusanovic, G. Mari, W. Lee, E. Soto, J. Santolaya-Forgas, M. C. Treadwell, R. Romero. \**Wayne State University, Detroit, MI, USA*

Ultrasound and histological findings in women with suspected incomplete miscarriage (OC37.02)

E. Ofuasia, E. Sawyer, D. Ofili-Yebovi, J. Yazbek, S. Helmy, D. Jurkovic. *Kings College Hospital, London, UK*

### Posters

Prenatal diagnosis of agenesis of the corpus callosum: advantages and pitfalls (P02.05)

O. Nevo\*, S. Blaser, D. Chitayat, A. Toi, S. Pantazi, G. Ryan, C. Raybaud. \**Mount Sinai Hospital, Toronto, Ontario, Canada*

Epiphysis and metaphysis prenatal ultrasound examination: normal aspect and a new sign for achondroplasia (P03.19)

M. Althuser, J. P. Bault, M. Fontanges, N. Fries. *Collège Français d'Echographie Foetale, France*

Gender-specific fetal lung volume measured with 3-dimensional ultrasonography (P04.22)

F. A. Gerards, J. W. R. Twisk, J. M. G. van Vugt. *VU University Medical Center, The Netherlands*

Evaluation of PR interval in fetuses of Anti Ro positive pregnancies (P05.29)

L. Pasquini\*, C. Belmar, A. Seale, S. Oseku-Afful, M. Thomas, H. M. Gardiner. \**Queen Charlotte's and Chelsea Hospital, Imperial College, London, UK*

Natural history of amniotic fluid volume discordance in monochorionic-diamniotic twins (P06.06)

M. Swiatkowska-Freund\*, Z. Pankrac, M. H. Allen, P. W. Bornick, R. H. Chmait, R. A. Quintero. \**Medical University of Gdansk, Poland*

Recurrent uterine arteriovenous malformation after selective embolization and uneventful delivery (P07.02)

P. Dar, I. Karmin, M. H. Einstein, A. Wang, S. J. Gross. *Albert Einstein College of Medicine and Montefiore Medical Center, Bronx, NY, USA*

Pre-operative staging of endometrial cancer: transvaginal sonography is the key (P08.06)

L. Savelli, M. Ceccarini, M. Ludovisi, E. Fruscella, P. A. De Iaco, N. Rizzo, G. Ferrandina, A. C. Testa\*. \**University of Sacred Heart, Rome, Italy*

Recurrence of twin–twin transfusion syndrome (TTTS) and feto-fetal hemorrhage: two complications of laser treatment with distinct ultrasound features (P09.15)

R. Robyr\*, L. Lewi, L. J. Salomon, M. Yamamoto, J. P. Bernard, J. Deprest, Y. Ville. \**CHI de Poissy/Paris-Ouest University, France*

Relationship between estimated fetal weight and amniotic fluid index in the third trimester (P10.04)

N. Vohra, B. Nyein, N. Kohn, B. Rochelson. *North Shore University Hospital, Manhasset, NY, USA*

Can we improve the performance of logistic regression analysis for predicting the outcome of pregnancies of unknown location (PULs)? (P12.03)

G. Condous\*, E. Kirk, Z. Haider, B. Van Calster, S. Van Huffel, D. Timmerman, T. Bourne. \**St George's Hospital Medical School, London, UK*

The use of 3D rendering, VCI-C, 3D power Doppler and B-flow in the evaluation of cornual pregnancy with arterio-venous fistula (P13.03)

D. V. Valsky, A. Verstandig, S. Savchev, D. Rosenak, S. Y. Yagel. *Hadassah University Hospital – Mt. Scopus, Israel*

Evaluation of patients with stress urinary incontinence by perineal ultrasound (P14.01)

M. Onofriescu, D. Nemescu. *University of Medicine Iasi, Romania*

Ophthalmic and central retinal arteries Doppler as a new parameter to distinguish moderate to severe preeclampsia (P15.01)

A. L. D. Diniz\*, A. F. Moron, M. C. Santos, N. Sass, C. R. Pires. \**Federal University of São Paulo, Brazil*

“Flip the coin”: 360 degree visualization of fetal anatomical structures with xMatrix 4D real-time ultrasonography (P16.03)

L. F. Gonçalves\*, J. Espinoza, J. P. Kusanovic, W. Lee, J. K. Nyen, J. Santolaya-Forgas, G. Mari, M. C. Treadwell, R. Romero. \**Wayne State University, Detroit, MI, USA*