

18th World Congress on Ultrasound in Obstetrics and Gynecology, 24–28 August 2008, Chicago, USA: presentations and awards

Presentation of the Ian Donald Gold Medal to Lawrence D. Platt

When asked to introduce Larry Platt as the 2008 Gold Medal recipient, I was more than delighted to do so. One might consider this to be a daunting task. However, since Larry's career is so robust, it was actually easy to chronicle his contributions through the years.

To me, the Ian Donald Gold Medal Award is the greatest honor that one can receive in our field of obstetric and gynecological ultrasonography. Since it carries so much respect, when I heard that Larry Platt was this year's recipient I thought to myself, 'it's about time'. Why? Firstly, Larry has been a prolific contributor to the literature. Secondly, he has been a tenacious supporter of ultrasound education. And thirdly, aside from Stuart Campbell, I can think of no one who has been a greater advocate for ISUOG. He has served as President of the Society, Associate Editor of *Ultrasound in Obstetrics and Gynecology*, and has been on the Board for many years; he has simply put ISUOG first, ahead of his many other responsibilities.

When I recently thumbed through my most recent book on ultrasound, I found that I had cited Larry's work in five different chapters. First and foremost, one cannot mention his name without connecting it to the wonderful contribution that he and Frank Manning made in designing the biophysical profile. It is hard to believe that this was published 28 years ago, and is still being used in its original form by virtually everyone managing



John Hobbins, Lawrence Platt and Stuart Campbell.

high-risk pregnancies. In another chapter I cited his work with Dru Carlson, a beloved colleague, on quantifying micrognathia through fetal mandibular length and, with this same investigator, he clarified the association of polyhydramnios with aneuploidy. His latest contributions on the use of three-dimensional techniques to evaluate the fetal face display his ability to stay abreast and, frankly, ahead of current knowledge.

Larry Platt is one of the few people I know who is always 'switched on'. I am constantly amazed at his ability to carry on two conversations at the same time – one with me while having dinner, and the other on his cell phone with the owner of a company in Israel making some type of medical gadget.

People often ask me what makes Larry run. Frankly, he is simply striving to be the very best that he can at what he does. This is exactly why he is being recognized with this great honor. Larry, you are the best.

John C. Hobbins
Denver, CO, USA

Acceptance speech – Igniting the Future and Reflections from the Past

It is a most humbling experience to accept this distinguished award, the Ian Donald Gold Medal, and to join the list of giants who have previously received it and who have each taught me so much. It is with their inspiration that much of my own work has been undertaken and will continue in the future.

There are many people that I formally wish to thank. The most important are those who have allowed me to do what I do – my family. My dear wife of 32 years, Wendy, my children, Joshua and his lovely wife Shirley, my daughter Adeena and her husband Yitz, and my son Ari, who I hope one day will follow in my footsteps to medicine. And, of course, the next generation: my granddaughters Isabelle and Sophie and, befitting this presentation, the future: my yet unborn first grandson.

We would not be where we are today in OB/GYN ultrasound if it weren't for those giants and their patients who have done so much to make my life so blessed. I have been supported by many teachers, colleagues, patients, students and ultrasound manufacturers. They have been my partners in science and caring, far too many to individually list. A special thank you is due to my residency mentor at Sinai Hospital in Detroit, Dr Alfred

Sherman, and the late Dr Milt Goldrath; to my mentors in fellowship at the University of Southern California (USC) who have made a long-lasting impression upon me, Dr Edward Quilligan, the late Dr Ed Hon, Dr Richard Paul and Dr Frank Manning amongst many other faculty members at USC, and my support staff who have made so many of my tasks that much easier. There are impossible thanks to give to those who are no longer with us, the Drs Hon, Goldrath and Gottesfeld, and to three of my former partners, Chuck Hohler, Arnie Medearis and Dru Carlson whose inspiration kept my enthusiasm going on a daily basis. Of course I thank the National Institutes of Health, other granting agencies and commercial companies for their support, for without them much of my research and that which you see presented here at this meeting would not be possible.

I can categorize my early years of research as a combination of luck, vision, success and failure, all of which contribute to the advancement of clinical medicine. I was fortunate to work with Frank Manning on developing the fetal biophysical profile. My early interest began with the study of fetal breathing and led ultimately to the development of the fetal biophysical profile. Our desire was to utilize ultrasound to assess multiple biophysical variables to evaluate the fetus. Prior to 1980, the primary method of fetal assessment was fetal heart rate monitoring, the contraction stress test and the non-stress test. It was Frank's ingenuity in many of our discussions that ultimately led to the assessment of multiple biophysical variables. Initially we used dynamic ultrasound to assess fetal breathing including 24-hour constant surveillance of the fetus to characterize fetal breathing movements over time. Later we used a combination of testing and fetal breathing, fetal movement and the non-stress test that ultimately allowed us and many other investigators to develop the concept of combining long-term and short-term constant variables of fetal health. Our assessment of fetal dynamics included the amniotic fluid assessment. We were the first to report the qualitative assessment of amniotic fluid, the 1-cm rule, subsequently a 2-cm rule, and later others described the amniotic fluid index. All of these were used to define fetuses at risk for abnormal outcome. Like Virginia Apgar and her newborn score, we considered the tone of the fetus by assessing how fetuses moved, and included the ability of the fetus to spontaneously flex and extend its extremities and trunk (the 'fetal tone') as one of the components of our biophysical profile. Ultimately, in the early 1980s we developed the fetal biophysical profile with a biophysical score (which at one time we called the 'Planning Score' after Frank and me) that we described as an *in utero* Apgar score.

My work then moved on to the use of ultrasound to detect structural and chromosomal abnormalities. We followed up on observations that the femur and humerus were shortened in Down syndrome fetuses and found that there was a specific time when the sensitivity would be higher (between 17 and 19 weeks rather than between 15 and 22 weeks' gestation). I was fortunate at USC

to work with early adopters of magnetic resonance imaging (MRI) and, in an initial publication in 1991, we described numerous malformations that had been detected on ultrasound and confirmed with the use of MRI. This work can hardly compare to the remarkable MRI studies being presented at this conference.

My late associate, Dru Carlson, and I were fortunate to write an Editorial in the *New England Journal of Medicine* in 1992 commenting on a paper that looked at alpha fetoprotein (AFP) screening in women over the age of 35. We stated in that Editorial that we felt that it should no longer be acceptable for a woman's age alone to be used to determine the risk of Down syndrome. This idea took over a decade to catch on in most parts of the world.

In 1983, we published on a case of acardia acephalus with ultrasound imaging and were first to propose clamping of the cord as a method of preventing hydrops and other complications from occurring as a result of this condition. We also participated early on in fetal intervention and in 1982 used catheters in bladders, chests and in some cases of hydrocephaly. Obviously we were not always successful and, in fact, with the tragic outcomes in cases of transcutaneous shunting for hydrocephaly, a moratorium was put in place.

I participated in many multicenter trials, involving chorionic villus sampling, AFP, first-trimester assessment, maternal phenylketonuria, multiple markers and fetal growth, and the one thing that I came to realize is that working with others is valuable. Being the first author all of the time is not essential and allowing those who work with you to take the lead has great merit. A wonderful example of team work was my collaboration with Greg DeVore and his pioneering work on the fetal heart. I watched and learned how true dedication to focused research can benefit many others. My current associate, Dr Deborah Krakow, is a perfect example of how you can watch someone excel. I now seek her out for consultative work in the area of skeletal dysplasias and genetics and her expertise in three-dimensional (3D) ultrasound has been shared with a worldwide audience. It is my belief that she is the leading clinician-investigator in this area today.

The 3D and four-dimensional (4D) revolution has provided new and exciting experiences in fetal and gynecological imaging. Our research with the flipped face technique, for example, showed that if you use a little bit of imagination and take the time to exploit the technology, you can gain much more from the clinical tool. We use 3D ultrasound because we believe in it; we are not paid extra for doing so. For example, Blue Cross of California and other insurance companies consider it 'purely investigational' in spite of the hundreds of papers that have shown clinical value in certain areas, such as in the diagnosis of isolated cleft palate. It also allows us to do things that were previously not possible, such as storing our data to make scans available for quality review. I believe that advances such as volume computer aided diagnosis and sonographic automated volume count

(SonoAVC) are just the beginning in realizing the true value of this technology.

My work with Dr Beth Karlin in the Gilda Radner Ovarian Cancer Detection program has shown us that while you may enter a field of research work with great enthusiasm you may not get the results as quickly as you would like, or even not at all. However, we did learn a lot and continue to try to find better ways to try to identify early markers of this disease where the tragic outcomes can be improved or even prevented.

These are just some of the highlights of my academic interests. There are many more and ultrasound is a field with a wealth of opportunities. I've tried to capitalize on as many of them as were in my reach. My 'take home' message is simply four things to consider: What have I learned? What should I share? How can I help? What can you do?

We all have to learn from past innovators. I am indebted to those whose literature I often quote, and for those friends and colleagues and mentors of mine from whom I have learned so much. Aim to learn from our past innovators and become one yourself. Excite your creativity and exploit it. Don't just think about what you want to study, do something about it. Focus your energies. Focus on getting the job done. Don't start the second project until you know you can finish the first. Ideas are easy to come by. They are the pathway to innovation but you must recognize that sometimes they don't turn out the way you want. Research studies can be outright failures, others may have delayed success. I've certainly had my share, but I didn't and you shouldn't let them stop you from moving ahead. Research is said to be like peeling an onion: you peel a little, you cry a little, you peel a little more, you cry a little more, and, in the end, sometimes you don't have anything left. Many times because of the 'failed work' there is another opportunity waiting to be had. I often quote one example of a delayed response. In 1974 my senior resident paper which my mentor Dr Milton Goldrath and I presented at the American Association of Gynecologic Laparoscopy was entitled 'Treatment of ectopic tubal pregnancies by laparoscopy' (a series of cases in which ectopic pregnancies were treated by this modality). This paper was rejected for publication in the *American Journal of Obstetrics and Gynecology* on the grounds that 'this treatment has no place in modern medicine. These authors are lucky they got away without hurting patients as a result. This is a dangerous technique and the paper should not be published'. As you all know, this technique did become standard practice and we were far from being wayward cowboys. After this I moved on to fellowship and other responsibilities, and this paper laid dormant until 2002 when the Editor of the laparoscopy journal heard about it and asked if we would submit it in its original form to the journal. So out the files came and it was subsequently published in the journal of the American Association of Gynecologic Laparoscopy.

Mentors are invaluable and essential but don't have to be from your own home town. Many of mine were not. We

live in a world of technology where communication knows no boundary. I have to recognize two very special mentors and friends, John C. Hobbins and Stuart Campbell. Their leadership, innovation and creativity, along with their determination to make things happen and train others is a model for all of us. They are truly special.

We face many challenges today: the 80-hour working week for trainees in the United States (soon to possibly become the 60-hour working week) and the demands on our time. We have a problem with ultrasound education around the world in that it is inconsistent. We need to generate enthusiasm to make ultrasound education a priority in medical training instead of it taking a backseat to other facets of our specialty that have stronger advocates. We need to bring ourselves together to provide a creative solution to this educational problem. We need to make the most of our time, particularly as time is being limited.

We need to improve our diagnostic abilities with ultrasound. In the past, equipment was a problem, today it is not. It's phenomenal and getting better. Our problem is the user who does not know how to exploit it or doesn't really care or doesn't have the time. Many have others to do the scans for them. We need to learn from our European colleagues who are truly more hands-on than we are here in the United States. Do not delegate ultrasound to someone if you yourself do not have the proper skills. Sonographers are an important part of our health delivery system. Work together as a team and not as a surrogate.

Yes we do face many hurdles. We do have less money to spend on these improved technologies and less time to think about it. We have less time to learn and play often resulting in less creativity. Don't let these obstacles stop you. Find a way to make it happen. Persue research: you might assume that research needs a lot of money from the government and private funding, it doesn't. We can do small innovative research projects on a shoestring. Many clinical investigators just go about getting them done. Encourage your institutions to support you in these endeavors. Use your lobbying power to lobby government to support research. Just get involved.

Cherish ISUOG. It is truly an example of how one small 'idea', generated on an island 19 years ago, has grown into this important international professional society. Learn from others, build relationships. I have made so many great friends through ISUOG, too many to list. Share your research results as we are here at this meeting this week. Help educate others. Improve the quality of ultrasound and follow our mission, education, research, and clinical care. Attend our annual conferences and learn about the newest innovations in our field. Read our outstanding journal *Ultrasound in Obstetrics and Gynecology* regularly.

In closing, a special thank you to those who gave and continue to give their time to ISUOG to make it what it is today. To all of our past presidents: Stuart Campbell, Sturla Eik-Nes, Karel Marsal, Kurt Hecher and to our

incoming president Gianluigi Pilu who I am confident will do a superb job in taking us to an even higher level. To all our present and past board members and officers, thank you. Of course a very special recognition to the ISUOG executive staff led by the remarkable Sarah Johnson, whose efforts make all of what ISUOG does happen, to our Journal Editors and Sarah Hatcher, our incredible Managing Editor. Finally, last but not means least, I close with a very special thank you to all my associates past and present, my clinical staff, support, the residents and fellows, the nursing and research staff all of whom in one way or another have covered for me during my many absences from work to go to places near and far that have allowed me to both teach and learn, I would not be standing here today without them and, of course, my family. Thank you ISUOG for this humbling honor.

Lawrence D. Platt
Los Angeles, CA, USA



Free communication acknowledgments

Oral Communications – Top five abstracts

The following abstracts were the five highest scored at the 18th World Congress on Ultrasound in Obstetrics and Gynecology. Selection of these abstracts was according to anonymous peer review in advance of the Congress. These abstracts were presented during the opening plenaries at the world Congress and scored for presentation and scientific merit by a panel of judges to select the overall winner.

Full abstracts to these titles can be found in *Ultrasound in Obstetrics and Gynecology* 2008; 32 (3). The authors' valuable contribution to the scientific program is gratefully acknowledged.

Best Oral Communication

Fetal cardiac output determination by four-dimensional fetal echocardiography using spatiotemporal image correlation (STIC) and VOCAL™ (OC004)

N. Hamill¹; R. Romero²; S. A. Myers³; J. P. Kusanovic²; P. Mittal¹; A. Carletti²; T. Chaiworapongsa¹; E. Vaisbuch²; J. Espinoza²; F. Gotsch²; W. Lee⁴; L. Goncalves²; S. Hassan¹. ¹Wayne State University, Department of Obstetrics and Gynecology, United States; ²Perinatology Research Branch, NICHD, NIH, DHHS, United States; ³Case-Metrohealth, United States; ⁴William Beaumont Hospital, United States

Runners up:

Prospective assessment of simple rules to distinguish between malignant and benign adnexal masses prior to surgery (OC001)

D. Timmerman¹; L. Ameye²; C. Van Holsbeke³; R. Fruscio⁴; A. Czekierdowski⁵; S. Guerriero⁶; A. C. Testa⁷; V. Vandenbroucke¹; T. H. Bourne⁸; B. Van Calster²; G. Betsas¹; P. Neven¹; S. Van Huffel²; L. Valentin⁹. ¹UZ Leuven, Dept Obstetrics and Gynecology, Belgium; ²Katholieke Universiteit Leuven, Electrical Engineering (ESAT-SISTA), Belgium; ³UZ Leuven and ZOL Genk, Dept Obstetrics and Gynecology, Belgium; ⁴San Gerardo Hospital, Dept Obstetrics and Gynecology, Italy; ⁵Medical University, Dept Obstetrics and Gynecology, Poland; ⁶Ospedale San Giovanni di Dio, Dept Obstetrics and Gynecology, Italy; ⁷Università Cattolica del Sacro Cuore, Dept Obstetrics and Gynecology, Italy; ⁸St George's Hospital and UZ Leuven, Dept Obstetrics and Gynecology, United Kingdom; ⁹University Hospital, Dept Obstetrics and Gynecology, Sweden

BOLD MRI: A reliable non-invasive method for measuring changes in fetal tissue oxygenation (OC002)

A. Sorensen¹; M. Pedersen²; A. Tietze³; L. Ottesen⁴; L. Duus⁴; N. Ulbjerg¹. ¹Aarhus University Hospital, Department of gynecology and obstetrics, Denmark; ²Aarhus University Center, MR Research Center, Denmark; ³Aarhus University Hospital, Department of radiology, Denmark; ⁴Aarhus University Hospital, Denmark

The effect of vaginal childbirth on levator hiatal dimensions (OC003)

K. L. Shek; H. P. Dietz. University of Sydney, Nepean Clinical School, Australia

Ultrasound bioeffects: Quantification of cellular damage in animal fetal liver after use of Doppler pulse to measure Ductus Venous (OC005)

B. Pellicer¹; S. Herraiz²; T. S. Russell³; A. Montllor⁴; V. Felipo⁵; C. Simon⁶; A. Pellicer⁷. ¹Prenatal Diagnosis Unit, Dr Peset Hospital, Obstetrics and Gynecology Department, Spain; ²Instituto Universitario IVI, University of Valencia, Fundacion IVI, Spain; ³Instituto Universitario IVI, University of Valencia, Spain; ⁴Dr Peset Hospital, Obstetrics and Gynecology Department, Spain; ⁵Neurobiology laboratory, Centro de Investigacion Principe Felipe, Spain; ⁶Stem cell Bank, Centro de Investigacion Principe Felipe, Spain; ⁷Dr Peset Hospital and CIPF, Obstetrics and Gynecology Department and Fundacion, Spain

Oral Posters

The following free communications, presented during the 18th World Congress on Ultrasound in Obstetrics and Gynecology, were selected as the best poster presentations in their subject area. Selection was according to a combination of anonymous peer review in advance of the Congress and scores for presentation and scientific merit on-site by a panel of judges.

Full abstracts to these titles can be found in *Ultrasound in Obstetrics and Gynecology* 2008; 32 (3). The authors' valuable contribution to the scientific program is gratefully acknowledged.

First trimester absent nasal bone to detect fetuses with Down syndrome. A Meta-analysis (OP01.14)

L. Tolaymat; L. Sanchez-Ramos; A. M. Kaunitz. *University of Florida, Obstetrics and Gynecology, United States*

Comparative analysis of eyeballs dynamics development in prenatal and postnatal period (OP03.12)

M. Karolczak-Kulesza¹; M. Pietryga²; A. Jankowiak¹; M. Brazert³; J. Kociejki¹; J. Brazert². ¹Poznan University of Medical Sciences, Department of Ophthalmology, Poland; ²Poznan University of Medical Sciences, Department of Obstetrics and Women's Diseases, Poland; ³Poznan University of Medical Sciences, Department of Endocrinology, Infertility and Repro, Poland

Fetal corpus callosum resolution improved by combined MR post-processing technique (OP04.10)

D. M. Twickler¹; R. McColl². ¹UT Southwestern Medical Center, United States; ²UT Southwestern Medical School, United States

The SECURE study: Ultrasound evaluation of the caesarean scar - Preliminary results on the prevalence of a niche and relation with abnormal uterine bleeding (OP05.09)

A. J. M. Bij de Vaate¹; J. W. van der Slikke¹; J. Bartholomew²; H. A. M. Brolmann¹. ¹VU University Medical Center, Gynaecology, Netherlands; ²Medison, Netherlands

Effectiveness of a new ultrasound-based model of care in the management of women with acute gynaecological complications (OP06.07)

S. Burnet¹; T. Bignardi¹; D. Alhamdan¹; C. Lu²; J. Pardey¹; G. Condous¹. ¹University of Sydney, Nepean Centre for Perinatal Care and Research, Australia; ²University of Wales, Department of Computer Science, United Kingdom

Fertility after uterine fibroid embolization: A series of 54 pregnancies in France (OP07.01)

O. Ami¹; A. Aymard²; J. M. Bourret²; N. Ciraru²; J. J. Merland²; J. H. Ravina². ¹Hopital Beclere, France; ²Clinique BIZET, France

Fetal myocardium: Compressible or noncompressible? (OP08.15)

B. Messing; D. V. Valsky; S. M. Cohen; D. Rosenak; S. Yagel. *Hadassah-Hebrew University Medical Centers, Obstetrics and Gynecology, Israel*

Jugular lymphatic sacs in first-trimester fetuses with a normal nuchal translucency (OP09.11)

Y. M. Mooij de¹; M. N. Bekker¹; M. D. Spreeuwenberg²; J. M. G. Vugt van¹. ¹VU University Medical Center, Prenatal Diagnostics, Netherlands; ²VU University Medical Center, Clinical Epidemiology and Biostatistics, Netherlands

Cervical shortening rate as a predictor for preterm delivery in twin pregnancies (OP10.02)

M. Yamamoto; L. A. Caicedo; J. L. Leiva; P. Valentini; J. Carrillo; A. Insunza. *Hospital Padre Hurtado, Facultad de Medicina Clinica Alemana de Santiago - Universidad del Desarrollo, Chile*

Maternal myocardial function in asymptomatic 24 weeks' bilateral notching women (OP11.10)

B. Vasapollo¹; G. Gagliardi¹; G. P. Novelli²; H. Valensise¹. ¹Tor Vergata University, Obstetrics and Gynecology, Italy; ²San Sebastiano Martire Hospital, ASL RMH, Cardiology, Italy

Outcome prediction of single-dose intramuscular methotrexate treatment for tubal pregnancy (OP12.12)

M. H. Moon¹; J. Y. Cho²; M. J. Song¹; Y. H. Lee¹. ¹Cheil General Hospital & Women's Healthcare Center, Kwandong University College of Medicine, Republic of Korea; ²Seoul National University College of Medicine, and the Institute of Radiation Medicine, Republic of Korea

The maxilla-nasion-mandibula angle at 16-34 weeks' gestation: An objective 3D ultrasound measurement for the anteroposterior relationship of the jaws (OP13.11)

E. A. P. de Jong-Pleij¹; L. S. M. Ribbert¹; G. T. R. Manten²; E. Tromp¹; C. M. Bilardo³. ¹St. Antonius Hospital, Netherlands; ²University Medical Centre Utrecht, Netherlands; ³Academic Medical Centre Amsterdam, Netherlands

Predictors of cardiovascular deterioration in placenta-based fetal growth restriction (FGR) (OP14.10)

O. Turan¹; S. Turan¹; C. Berg²; U. Gembruch²; K. H. Nicolaides³; C. R. Harman¹; A. A. Baschat¹. ¹University of Maryland, Ob/Gyn, United States; ²Friedrich Wilhelm University, Obstetrics & Prenatal Medicine, Germany; ³Kings College Medical School, Harris Birthright Centre for Fetal Medicine, United Kingdom

The role of reason for referral, genetic counseling, and genetic sonogram in maternal decision making regarding amniocentesis among pregnancies identified with a Trisomy 21 fetus (OP15.10)

R. M. Benoit; B. Polanco; G. R. DeVore. *Fetal Diagnostic Center, United States*

First-trimester nuchal translucency screening for fetal aneuploidies in multiple pregnancies (OP16.02)

P. Prats; M. Torrents; A. Muñoz; M. Echevarria; M. A. Rodríguez. *Institut Universitari Dexeus, Prenatal Diagnosis Unit, Obstetrics Department, Spain*

A critical analysis of three-dimensional power-Doppler angiography (3D-PDA) vascular sampling: Comparison between manual and 5-cc sphere sampling (OP17.02)

M. Prka¹; J. L. Alcazar². ¹Sveti Duh Hospital, Obstetrics and Gynecology, Croatia; ²Clinica Universitaria de Navarra, Obstetrics and Gynecology, Spain

Assessing correlation between ovarian and stromal volumes and fasting and postprandial insulin levels in PCOS patients (OP18.07)

C. B. Nagori¹; S. Y. Panchal². ¹*Dr. Nagori's Institute for Infertility and IVF, Infertility, India;* ²*Dr. Nagori's Institute for Infertility and IVF, Ultrasound, India*

Imaging the Hyrtl anastomosis with 3D/4D ultrasound modalities. Anatomy and functional assessment (OP20.08)

B. Messing; D. V. Valsky; S. M. Cohen; D. Rosenak; D. Hochner-Celnikier; S. Yagel. *Hadassah - Hebrew University Hospitals, Obstetrics and Gynecology, Israel*

Cord occlusion in complicated monochorionic (MC) multiple pregnancies: A comparison of techniques (OP22.06)

G. Seaward¹; R. Windrim¹; J. Kachura²; F. Alkazaleh¹; E. N. Kelly³; G. Ryan¹; K. Gouin¹. ¹*Mount Sinai Hospital, University of Toronto, Fetal Medicine Unit, Canada;* ²*Interventional Radiology, Mount Sinai Hospital,*

University of Toronto, Interventional Radiology, Canada; ³*Neonatal Unit, Mount Sinai Hospital, University of Toronto, Neonatology, Canada*

Intrapartum assessment of fetal head descent: A feasibility study using three dimensional transperineal ultrasound (OP23.06)

C. E. Macpherson¹; F. Lovegrove¹; S. Harris¹; K. D. Kalache²; G. Michailidis¹. ¹*University of Southampton, School of Medicine, United Kingdom;* ²*Charite Campus Benjamin Franklin, Klinik für Geburtsmedizin, Germany*

Pelvic floor anatomy in adult females within the Bladder-Exstrophy-Eispadias-Complex (BEEC) (OP24.07)

A. K. Ebert¹; A. Falkert²; H. Schiegl³; B. Seelbach-Göbel²; W. H. Rösch¹. ¹*Pediatric Urology, Germany;* ²*Department of Obstetrics and Gynecology, University of Regensburg, Germany;* ³*Department of Radiology, Barmherzige Brüder Regensburg, Germany*