27th World Congress on Ultrasound in Obstetrics and Gynecology
16 – 19 September 2017, Vienna, Austria

Final Program

Up to 29 CME credits

Join the Congress conversation
#ISUOG2017
Welcome to ISUOG!

As a Congress delegate, you are also an ISUOG member from now until December 2018. Take a moment to visit us at the ISUOG lounge to find out more about the exciting opportunities available to you as an ISUOG member during the Congress and throughout the year.

Upgrade your membership at the Registration desk or on our website to include a subscription to our journal *Ultrasound in Obstetrics and Gynecology*.

**Online learning**
- 500+ web lectures and webcasts from ISUOG education courses
- CME platform for continuing education; earn CME credits online
- 1500+ World Congress presentations via ISUOG On Demand
- visuog: a visual encyclopedia for ultrasound in obstetrics and gynecology

**Reduced fees to ISUOG events**
- 28th World Congress in Singapore, 20-24 October 2018
- International Symposium in Athens, Greece, 20-22 April 2018
- ISUOG’s intensive education courses

**Regional education**
- Opportunities to participate in:
  - ISUOG approved courses
  - Satellite education
  - Outreach projects

97.6% of Members surveyed in 2016 would recommend ISUOG!
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Welcome to Vienna

On behalf of ISUOG, its Board of Trustees and the Congress Organising Committees, we are extremely pleased to welcome you to Vienna, for the 27th World Congress on Ultrasound in Obstetrics and Gynecology.

ISUOG’s Congress is known for its outstanding scientific content and this year will be no exception. We received a record number of abstracts on cutting edge research and with a great diversity of content which will make for a lively program. We are also joined by world experts who will present keynote lectures, masterclasses and invited talks. As usual we have a wide variety of different formats such as hands-on training, poster Hub discussions, special interest groups and much more which we encourage you to attend.

This is a unique event in the scientific calendar bringing clinicians from 89 countries to one place for five days, therefore please make the most of this wonderful networking opportunity and attend the social program, lunches and Hubs. This year we have set out two meeting points at the business lounge and the ISUOG stand. Please use these to help organise your meetings and connect with people using the ‘Chat’ function on the Congress app.

During your stay with us in Vienna, we recommend you explore and enjoy the city. Historically known for its medieval and baroque architecture, opera and fine arts, Vienna is home to a multitude of palaces, gothic churches, opera houses and galleries. With its fast subways and trams you can quickly get to all the interesting places in the city centre. Close to the ACV venue, you have the Danube and the popular recreation area known as the Donauinsel and Copa Cagrana. If you bring your swimsuit you can swim in Europe’s longest river!

Thank you again for joining us for the 27th year of the Congress. Your support as a delegate, member, speaker or industry partner is what makes the Congress possible. We hope you thoroughly enjoy your time in Vienna.

Christoph Brezinka
Congress Chair

Daniela Prayer
Congress Chair
Venue floor plans
Opening times

**Registration**

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The registration desk is located in the main lobby.

**Exhibition**

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The exhibition is located in the main lobby and on the mezzanine.

**Speaker preparation room L1**

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The speaker preparation room is located in L1, on the first floor. Poster presenters who have submitted your presentation, you do not need to go to the speaker preparation room; all other oral communication and invited speakers must check-in. If you need to upload or edit a presentation, please make your way to this room as early as possible on the day before presenting, and no later than four hours prior to your start time. Please note there will be no laptop plug/converter in the lecture halls except by prior arrangement.
All ISUOG members are invited to attend the Annual General Meeting. This takes place on Saturday 16th September in Session Hall A, from 09:50-10:35.

Stay up-to-date with what’s going on at the Congress by downloading the ISUOG Congress app. Go to the App Store or Google play and type in ‘ISUOG 2017’. You’ll be able to create a personalised agenda, engage with other attendees, read all the abstracts, post on social media as well as have your say by rating, voting and filling out our surveys.

This year the Society of Gynaecology and Obstetrics will award €500 to the best presentation presented by a speaker from an Austrian Institution. The winner will be announced at the Closing ceremony on Tuesday 19 September.

There is a cash machine located at the entrance to the ACV building, near the glass doors to registration and the exhibition. Most banks in Vienna are open from Monday to Friday from 08:00 to 12:30 and from 13:30 to 15:00, and until 17:30 on Thursdays. In the city centre, almost all banks are open over lunchtime.

Tea, coffee and light lunches will be served in the exhibition hall (ground floor foyer and the mezzanine/first floor level) from Saturday morning until Tuesday lunchtime, excluding exhibition build and breakdown times. All breaks are included for all registered personnel.

To receive your certificate of attendance you will need to complete a Congress evaluation form which will be emailed to your registered email address. If you have any questions, please ask at the registration desk.

ISUOG is accredited by the European Accreditation Council for Continuing Medical Education (EACCME) to provide the following CME activity for medical specialists. The EACCME is an institution of the European Union of Medical Specialists (UEMS).

The 27th World Congress on Ultrasound in Obstetrics and Gynecology is designated for a maximum of (or ‘for up to’) 36 hours of European external CME credits, including pre-Congress courses. Your badge will be scanned at session hall entrances for CME accreditation. Each medical specialist should claim only those hours of credit that they actually spent in educational activity.

Through an agreement between the European Union of Medical Specialists and the American Medical Association, physicians may convert EACCME credits to an equivalent number of AMA PRA Category 1 Credits™. Information on the process to convert EACCME credit to AMA credit can be found at www.ama-assn.org/go/internationalcme.

Please note that only the presenting author is listed in the event Program. The names of the co-authors can be found on the ISUOG app, the online On Demand stations and in the abstract book.

Best endeavours will be made to present the program as printed. However ISUOG and its agents reserve the right to alter or cancel, without prior notice, any of the arrangements, timetables, plans or other items relating directly or indirectly to the Congress for any reason beyond its reasonable control. ISUOG and its agents are not liable for any loss or inconvenience caused as a result of such alteration.

All Electronic Posters (EPs) and recorded Congress talks will be available at the ISUOG On Demand stations which are located at the ISUOG Lounge.
First aid
Should you require assistance during the Congress hours, please contact the registration desk where an ISUOG member of staff will be able to assist you.

Future meetings
All literature regarding future meetings which may be of interest to delegates will be displayed in the exhibition area.

Lost property
Please hand any lost property to the staff at the registration desk where it will be made available for collection.

Mobile phones
Throughout all of the Congress lectures, workshops and activities, ISUOG request that all mobile phones are kept on silent. Please also ensure that screen resolution remains low to prevent disturbing any other delegates and speakers.

Name badges
Please wear your name badge at all times; you will need this to gain admission to the sessions or exhibition area. Please note, our staff members are instructed not to permit entry without your badge, so please understand if you are asked to return to the registration desk.

Parking
Parking is available at the venue. Please use the Austria Center Vienna’s parking garages. Information regarding access and fees can be found online: www.acv.at/teilnehmen/anreise-und-verkehr/travelling-by-car.html

Prayer room
The prayer room is located in 0.41, on the ground floor, along the left hand side of the building.

Recordings/duplications
All sessions are available to delegates and ISUOG members during and after the Congress, through the ISUOG On Demand web portal*. Other photography, audio taping, video recording, digital taping or any other form of duplication is strictly prohibited in the session halls and poster areas, except with the express consent, in advance, of ISUOG staff and the speakers involved.

Smoking policy
Smoking is not permitted in the building.

Speaker preparation room
The Speaker preparation room is located in L1, on the first floor.

Star rating
In the Congress app you will be able to give each session you attend a star rating. Our session Chairs will remind you throughout the event.

Tickets
If you have purchased a ticket for the Congress party or if you have bought an additional Opening ceremony and Welcome drinks pass, tickets will be given to you when you collect your badge from Registration. If you lose your ticket for the Congress party please inform the ISUOG Registration. Tickets are selling fast for the Congress party so please check at Registration if there are any available.

WIFI
ISUOG will provide complimentary Wi-Fi in the venue for delegates’ usage. Please find the ACVs network on your phone called ‘ACV’. Then open up a web page and click ‘accept’ and then ‘continue’. There is no password needed.

*Please note that Hubs will not be recorded.
Social program

Saturday 16 September - 17:30-19:30
Opening ceremony and welcome drinks - ACV
After our keynote plenary speakers, attendees will be treated to a performance of traditional Austrian singing by the Mozart Boys. The evening will continue with more classical music, drinks and snacks served in the exhibition. Take this opportunity to network with fellow delegates from over 80 countries.

With grateful acknowledgement to our sponsor for this event:

TOSHIBA MEDICAL

Sunday 17 September - 19:00-00:30
Congress party - Rathaus City Hall
This is a unique opportunity to enjoy a three-course dinner at the beautiful opulent City Hall of Vienna. Home to some of the grandest balls in the city, attendees will enjoy live band entertainment throughout the dinner, a photo booth to creatively remember the evening and dancing until late with a professional DJ. Dress code: cocktail. Please enquire at Registration if you wish to attend.

Monday 18 September
Free night!
ISUOG has left this night free for attendees to enjoy the city, meet up with fellow colleagues, join sponsors for organised dinners or simply relax.

Tuesday 19 September - 16:20-17:30
Singapore style leaving drinks - Foyer A Level 2
To say farewell to Vienna and to launch the countdown to Singapore, ISUOG will be hosting Singaporean themed leaving drinks. Take the opportunity to enjoy refreshments before heading home.
Travel grant winners

We would like to congratulate our Travel Grant Award winners and wish them a warm welcome to Vienna.

Alim Swarray-Deen
Alim Swarray-Deen is an Obstetrician-Gynecologist at the Korle Bu Teaching Hospital, Ghana with a Masters in Medical Ultrasound from Imperial College, London. His areas of interest include prenatal diagnosis and fetomaternal medicine, particularly fetal anomalies and obstetric Doppler. Alim has also focused research on fetal middle cerebral artery indices and cerebroplacental ratio.

Amira Ayachi
From Bizerta, Tunisia, Amira Ayachi is a University Assistant in Obstetrics and Gynecology at the Teaching Hospital Bougatfa. She is greatly interested in sonography and fetal imaging, and the impact this has on improving health care in her region. Amira is looking forward to implementing changes in her practice from the research presented at the Congress.

Binod Parmar
Binod Parmar is an experienced clinician from Kathmandu, Nepal. Although coming from Nepal, Binod graduated in medicine from Ukraine and received his masters in Norway. He received training in ultrasonography from Japan and is currently working in the Radiology Department at Patan Academy of Health Science (Nepal) as the Coordinator of the ultrasound unit and has special interest in Doppler ultrasound in SGA/FGR fetus.

Celestin Mbonyizina
Joining us from Rwanda, Celestin Mbonyizina is a young researcher and newly graduated Obstetrician and Gynecologist. Celestin has been interested in imaging throughout his studies, in particular fetal anomalies and multiple pregnancy. He is looking forward to hearing about new research in ultrasound.

Hadijat Raji
Hadijat Raji is an Obstetrician-Gynecologist and a Lecturer at the University of Ilorin, Nigeria. Her main area of interest is fetomaternal medicine. She holds an MSc degree in Prenatal Genetics and Fetal Medicine from University College London and is a facilitator at the ISUOG accredited Benin Fetal Medicine and Diagnostic Ultrasound Workshop.

Mariam Raafat
Mariam Raafat is a Lecturer of Radiology in the Department of Radio-diagnosis at Cairo University. She is also currently working as a Lecturer of Radio-diagnosis in Elkasr Elini Hospital, and is a Radiology Consultant in female imaging, specialising in breast and obstetrics and gynecology imaging.

Apply for a 2018 Congress travel grant

ISUOG is again inviting researchers from underserved regions to apply in 2018 to participate at the Congress in Singapore. Travel, accommodation and registration will be offered to six successful applicants who submit an abstract for the Singapore Congress and meet the eligibility criteria. All applications must be accompanied by a submitted abstract. Abstract submission will open in January 2018.

Full terms, conditions and application criteria are available online at: www.isuog.org/events/world-congress/travel-grant
ULTRASOUND in Obstetrics & Gynecology

Are you looking for further information on a topic featured at the Congress? Would you like to gain further CME points? Supplement your learning with UOG articles and earn CME via: www.isuog.org/worldcongress2017/supplement-your-learning

Fetal growth

Saturday
- **Hall A - 09:00**
  Keynote lecture: Small babies, large babies and older mothers: when shall we induce?
- **Hall A - 11:45**
  Incidence of stillbirth is increased in familial LQTS: a retrospective study from 8 international centres
- **Hall A - 13:45**
  Workshop: New approaches to fetal growth: which should I use?

Sunday
- **Hall A - 07:30**
  Masterclass: Screening and prevention of stillbirth: possibilities and pitfalls G. Smith
- **Hall A - 09:20**
  OP01 Placental and maternal factors in IUGR
- **Hall A - 11:25**
  OP06 Fetal growth: anatomy and measurements
- **Hub 1 - 14:35**
  P08 Fetal growth

Monday
- **Hall F - 07:30**
  Masterclass: Management of fetal growth restriction in practice E. Gratacós; A. Baschat
- **Hall A - 09:20**
  OP13 Small-for-gestational age
- **Hall A - 13:30**
  Workshop: Big mothers, big babies: getting the most from your scan
- **Hub 1 - 14:35**
  P20 The prognostic value of growth parameters
- **Hall B - 15:40**
  Workshop: Late fetal growth restriction

Tuesday
- **Hub 2 - 09:20**
  P25 Fetal growth Doppler and hemodynamics

UOG Journal top pick: Severe fetal growth restriction at 26–32 weeks: key messages from the TRUFFLE study

Pre-eclampsia

- **Saturday** **Hall A - 11:55**
  Keynote lecture and top abstracts: Aspirin versus placebo in pregnancies at high-risk of preterm pre-eclampsia: a multicentre, double-blind, placebo-controlled trial
- **Sunday** **Hall A - 07:30**
  Masterclass Screening and prevention of stillbirth: possibilities and pitfalls G. Smith
- **Monday** **Hall B - 10:20**
  OP17: Hypertensive disease in pregnancy: screening to diagnosis
- **Tuesday** **Hall E - 13:30**
  Workshop: Pre-eclampsia in 2017
  - 4 CME modules online such as ‘How important is the evaluation of the placenta?’

UOG Journal top pick: ASPRE trial: performance of screening for preterm pre-eclampsia
Imaging in gynecological disease

- **Saturday Hall A - 15:55**  
  Big multicentre trials and gynecology ultrasound: how research can change clinical practice. *D. Timmerman*

- **Sunday Hall F - 10:20**  
  Workshop: Using ultrasound to help manage oncology patients

- **Sunday Hub 1 - 12:20**  
  In conversation with *A. Testa*: Diagnosing less common types of ovarian tumor

- **Monday Hall B - 07:30**  
  Masterclass: Revising IOTA terms and definitions: case examples of how to classify ovarian masses – how I manage non-tubal ectopic pregnancies? *L. Valentin*

- **Tuesday Hall - 11:25**  
  OP31: Using ultrasound to assess pelvic pain and diagnose endometriosis.

- 6 CME modules online such as ‘How can 3D enhance the gynecological ultrasound investigation?’

**UOG Journal top pick:** Diagnostic accuracy and cost-effectiveness of different strategies to triage women with adnexal masses: a prospective study

*E. Piovano, C. Cavallero, L. Fusco, E. Viora, A. Ferrero, G. Gregori, C. Grillo, C. Macchi, G. Mengozzi, M. Mitidieri, E. Pagano and P. Zola*


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Updates in genetic screening

- **Saturday Hall A - 15:30**  
  Cell-free DNA: from prenatal screening to molecular diagnosis of cancer. *D. Lo*

- **Sunday Hall B - 11:25**  
  OP08: Ultrasound and genetics

- **Monday Hall A - 13:30**  
  OP22 NIPT: issues and implementation

- **Tuesday Hall E - 07:30**  
  Masterclass: Screening for chromosomal anomalies: cfDNA for all, cfTS for all, microarray for all? *L.J. Salomon*

- 11 CME modules online such as ‘Noonan syndrome: A checkmate?’

**UOG Journal top pick:** Analysis of cell-free DNA in maternal blood in screening for aneuploidies: updated meta-analysis

*M. M. Gil, V. Accurci, B. Santacruz, M. N. Plana and K. H. Nicolaides*


Supplement your learning and earn CME via:  
[www.isuog.org/worldcongress2017/supplement-your-learning](http://www.isuog.org/worldcongress2017/supplement-your-learning)
The following speaker declarations have been received:

M. Al-Memar  
Paid an honorarium by Samsung to lecture on the IOTA ADNEX model

T.A. Andersen  
and H.C. Arneberg  
Thomas Scholbach co-developed the PixelFlux software and is medical advisor as well as co-owner of the Chameleon-software company (P21.07, EP22.07)

J.S. Carvalho  
Will perform a live scan and will refer to Hitachi equipment used. No direct financial interest with manufacturers; however Hitachi supports teaching courses, providing equipment for practical 'hands-on' or 'live scan' sessions

R. Chaoui  
Gives talks for GE on 3D and receives an honorarium for this

J.A. Copel  
equipment loan from Philips Ultrasound

A. Dall'Asta  
Samsung Medison has provided unrestricted travel and subsistence grant for this research (OC19.05, OP30.06)

G. DeVore  
Consultant for GE Healthcare; uses images from their machines

H.P. Dietz  
Received unrestricted educational grants and honoraria from GE Medical, of a total value of AUD 10,000 over the last ten years (OP28.03, OP28.04, OP28.06, OP28.08, P07.05, P07.06)

H. Feltovich  
Received engineering support, equipment loans and intellectual property from Siemens Ultrasound USA (EP22.12)

J. Gardosi  
Customised growth charts ('GROW') are licensed to ensure users have appropriate education and training. Is Director of the Perinatal Institute which provides, quality assures and derives income from licensing the electronic applications of the customised growth chart (GROW App)

A. Johnson  
Receives royalties from Up-To-Date as an author of chapters on TTTS

K.O. Kagan  
Poster about Cytotect (Immunoglobine for CMV infection); Presentation about cfDNA (Harmony-Test)

M.Y. Lee  
Study supported by The National Health Clinical Research Program Grant from the KHIDI, Republic of Korea (HC15C1336) (P22.04)

W. Lee  
Samsung WS80a ultrasound system (Live Scan); 5D Limb Volume software. Receives research support from Samsung

L.D. Platt  
Research support and speakers bureau GE Medical Systems; Medical Adviser, Illumina

N. Raine-Fenning  
May refer to GE Voluson machines. Is a Luminary/advisor for GE Healthcare, Ferring and Merck Serono

C. Redman  
Dawes Redman Computerised CTG system, marketed by Huntleigh Health Care, Cardiff, UK. Is an unpaid consultant for Huntleigh but receives financial assistance to attend meetings

I. Salim  
Study supported by Philips Ultrasound (P08.11)

S. Santhirakumaran  
Supported by loan equipment from Samsung and an unrestricted research grant from Samsung to Genesis Research Trust (EP22.12, EP22.13)

M. Schmid  
Authors are employees of Roche Sequencing Solutions, Inc. (OP22.04, EP06.13)

H. Shah  
Funding provided by Genesis Research Trust by way of an educational grant and the loan of Samsung Equipment by Samsung Medison Co. Ltd., South Korea (OP30.11, P09.07, EP22.23)

N.N. Subbarao  
Employee of Samsung Medison (EP27.03)

A. Tabor  
Participation in a yearly meeting with Ariosa/Roche and with Illumina

S. Verlohren  
Consultant/Speaker for Roche Diagnostic, ThermoFisher, Ferring

J. Weichert  
SAMSUNG HME. Receives workshop and lecture fees

The following presentations will include discussion of commercial products/services:

Award winners

**Greg DeVore**  
*Winner of the Ian Donald Gold Medal*

Dr. DeVore is an expert in fetal ultrasound who has pioneered work in the identification of congenital heart defects using 2D, 3D, 4D, and color Doppler ultrasound. He has published numerous studies in the peer-reviewed medical literature describing the use of fetal echocardiography to detect fetuses with Down syndrome and other chromosomal defects. Greg DeVore has the highest detection rate reported in medical literature for the detection of Down syndrome using Genetic Ultrasound.

He started his clinical training at Yale University where he received the prestigious Meehan-Miller award and a research grant from the Thrasher Research Fund. This allowed him to do pioneering research in the ultrasound evaluation of the fetal heart. After completing his training, Dr. DeVore joined the faculty at the University of Southern California School of Medicine where he was an Associate Professor for a number of years. After leaving the academic environment, he became a full-time consultant to assist community-based obstetricians with difficult fetal problems. Dr. DeVore was a consultant for the Perinatal Research Branch of the National Institutes of Health, Detroit, Michigan, where he was instrumental in implementing the fetal echocardiography program. Currently, Dr. DeVore is a Clinical Professor of Obstetrics and Gynecology at the David Geffen School of Medicine at UCLA, in Los Angeles, California.

Dr. DeVore has published research findings throughout his career, author over 120 peer-reviewed papers, contributed chapters to over 30 textbooks of medicine, and has been an invited speaker numerous national and international medical meetings.

**Gail ter Haar**  
*Winner of the Ian Donald Award for Technical Merit*

Gail ter Haar is currently chair of both the British and European committees for medical ultrasound safety and general secretary of the International Society of Therapeutic Ultrasound. She holds an MA(Oxon) and PhD in Physics and has been awarded a DSc(Oxon) in clinical medicine.

Gail ter Haar’s PhD research was a study of the interaction of ultrasound with tissue, in an effort to further understanding of both the safety of diagnostic ultrasound and of its potential therapeutic applications. She has continued this interest throughout her research career, initially developing an ultrasound hyperthermia system and looking at synergistic effects of ultrasound on heating tissue. She has also been closely involved in developing safety standards and guidelines for diagnostic ultrasound.

Most recently, she has been investigating the use of high intensity focused ultrasound (HIFU) to rapidly heat and kill malignant tumours, to provide pain relief for bone metastases, and to occlude placental blood vessels. She is also investigating the role of therapeutic ultrasound in stimulating the immune system.
Keynote speakers

Hans Härting
At Austrian Airlines, Captain Härting heads the Human Factors Training department in flight operations as well as being a crew resource management trainer.

Together with Prof. Pateisky, he has been working in medicine and industry since 2002. They apply tools and strategies that improve the safety of employees and patients.

His work with AssekuRisk involves the training of employees in medicine and business, as well as the practical support of projects on the ground. Safety is Captain Härting's passion. During our Congress, Captain Härting will give an interesting talk on the use and importance of Doppler, specifically how it helped you join us Vienna!

Dennis Lo
Dennis Lo is the Director of the Li Ka Shing Institute of Health Sciences, the Li Ka Shing Professor of Medicine and Professor of Chemical Pathology of the Chinese University of Hong Kong (CUHK). He is also the Associate Dean (Research) of the Faculty of Medicine of CUHK. Dennis Lo received his Bachelor of Arts degree from the University of Cambridge and Doctor of Medicine and Doctor of Philosophy degrees from the University of Oxford.

His research interests focus on the biology and diagnostic applications of cell-free nucleic acids in plasma. In particular, he discovered the presence of cell-free fetal DNA in maternal plasma in 1997 and has since then been pioneering non-invasive prenatal diagnosis using this technology.

In recognition of his work, Dennis Lo has received numerous awards and honours, including election as a Fellow of the Royal Society, a Foreign Associate of the US National Academy of Sciences and a Fellow of the World Academy of Sciences. He was awarded the King Faisal International Prize in Medicine in 2014 and the Future Science Prize in Life Science in 2016.

Adrianna Melo
Dr Adriana Melo studied Medicine at the Universidade Federal da Paraíba and has a Master’s Degree in Public Health from Universidade Estadual da Paraíba. She gained her PhD in Obstetrics and Gynecology from the Universidade Estadual de Campinas and has a Post-doctoral fellowship in Maternal and Child Health. She is a Professor at the Federal University of Campina Grande as well as being the President of the Research Institute Professor Joaquim Amorim Neto. She was the first researcher to publish cases of Congenital Zika and will be presenting the Stuart Campbell lecture ‘Zika virus intrauterine infection causes fetal brain abnormality and microcephaly: tip of the iceberg?’ at the ISUOG World Congress this year.
Mary Norton
Mary Norton is a perinatologist and geneticist, and is Professor and Interim Chair in the Department of Obstetrics, Gynecology and Reproductive Sciences at the University of California, San Francisco (UCSF). She is Director of the Prenatal Diagnostic Center at UCSF and co-Director of the UCSF Center for Maternal-Fetal Precision Medicine. She is also the President of the Perinatal Quality Foundation, and the Immediate Past President of the Society for Maternal-Fetal Medicine. Her clinical and research interests include genetic testing and its application to prenatal screening and diagnosis. She focuses on the unique aspects of translating new technologies into improved care for pregnant women and their fetuses. Much of her recent research has involved cell-free DNA screening and implementation into prenatal care.

Doron Rabinovici
Born in 1961 in Tel Aviv, Doron Rabinovici has lived in Vienna since 1964. His non-fiction study of the Jewish Council in World War II Vienna, Instanzen der Ohnmacht was published by Polity Press in 2011 as Eichmann’s Jews. His novel, Andernorts, was short-listed for the German Book Prize in 2010. From 2013 to 2015 Doron Rabinovici and Matthias Hartmann produced the performance “The Last Witnesses”. The production staged the memory of seven survivors and was set on the main stage of the Viennese Burgtheater. Doron Rabinovici’s numerous awards include the Anton Wildgans Prize, the Clemens Brentano Prize, the Jean-Améry-award and the Austrian Book Trade Honorary Award for Tolerance in Thought and Action. As an ISUOG keynote speaker, his talk promises to illuminate Viennese history which was pivotal in the shaping of modern Europe.

Tim Spector
Tim Spector is a Professor of Genetic Epidemiology and Director of the TwinsUK Registry at Kings College, London. He trained originally in rheumatology and epidemiology. In 1992 he moved into genetic epidemiology and founded the UK Twins Registry, of 13,000 twins, which is the richest collection of genotypic and phenotypic information worldwide. He is past President of the International Society of Twin Studies, directs the European Twin Registry Consortium (Discotwin) and collaborates with over 120 centres worldwide. He has demonstrated the genetic basis of a wide range of common complex traits, many previously thought to be mainly due to ageing and environment. Through genetic association studies (GWAS), his group have found over 500 novel gene loci in over 50 disease areas. He has published over 800 research articles and is ranked as being in the top 1% of the world’s most cited scientists by Thomson-Reuters as well as the most cited scientist at King’s College London. He held a prestigious European Research Council senior investigator award in epigenetics and is a NIHR Senior Investigator and is a Fellow of the UK Academy of Medical Sciences. His current work focuses on omics and the microbiome and directs the crowdfunded British Gut microbiome project. He is a prolific writer with several popular science books and a regular blog, focusing on genetics, epigenetics and most recently microbiome and diet (The Diet Myth). He is in demand as a public speaker and features regularly in the media.
Jim Thornton
Jim Thornton qualified from Leeds University in 1977. Between 1979 and 1983 he worked at the Chogoria Mission Hospital in Kenya. Since 2001 he has been working as a Professor of Obstetrics and Gynecology at Nottingham University where he has been undertaking research in clinical trials including, most recently, a clinical trial into the induction of labour at 39 weeks for women aged over 35 (35–39 trial).

He has previously worked as the editor for the European Journal of Obstetrics and Gynecology and British Journal of Obstetrics and Gynecology. He is currently the chair for the Swedish Research Council, Vetenskapsrådet, Clinical Therapy Research Board. In 2005 he stood for Parliament (Conservative Party) in Nottingham East.

Dirk Timmerman
Dirk Timmerman is Professor in Obstetrics and Gynecology at KU Leuven, Belgium, and Clinical Head of Benign Gynecology and Early Pregnancy UZ Leuven, Vice-chair of the Medical Council at the University Hospitals Leuven and Senior Clinical Investigator of the Scientific Research Fund (FWO) Flanders.

He is coordinator of the International Ovarian Tumor Analysis (IOTA) collaborative group including more than 50 centers for ovarian cancer diagnosis throughout the world. The IOTA group aims to develop new algorithms and liquid biopsies to diagnose and detect ovarian cancer and for optimal care of adnexal tumours (included patients n>22,500). Dirk Timmerman has received the InBev Baillet-Latour Prize for Clinical Research 2014 at the Royal Academy of Medicine, Belgium, Fellowship ad eundem from the Royal College of Obstetricians and Gynaecologists (RCOG, London, 2014) and the William J. Fry Memorial Lecture Award from the American Institute of Ultrasound in Medicine 2016 at AIUM Annual Convention, New York.
CFEF Hands-on training

Learn how to get the right view, the right measurement, in just a few minutes

The French College of Fetal Ultrasound (CFEF) will again be running their highly successful hands-on training at the World Congress in Vienna. The CFEF workshops* give participants the opportunity to take part in intimate training sessions on a specific difficult topic such as 3D surface, corpus callosum, and cerebral Doppler. Pregnant models will be in each room to assist seeing the normal view.

<table>
<thead>
<tr>
<th>Saturday 16 September 2017</th>
<th>ROOM 0.84</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE 1</td>
<td>GE 2</td>
</tr>
<tr>
<td>08:30 - 09:00</td>
<td>Biometry</td>
</tr>
<tr>
<td>09:15 - 09:45</td>
<td>Corpus callosum</td>
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<tr>
<td>10:00 - 10:30</td>
<td>Hard palate</td>
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<tr>
<td>10:30 - 11:00</td>
<td>Coffee break</td>
</tr>
<tr>
<td>11:00 - 11:30</td>
<td>Posterior fossa</td>
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<tr>
<td>11:45 - 12:15</td>
<td>Great vessels</td>
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<tr>
<td>12:15 - 13:45</td>
<td>Lunch</td>
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<tr>
<td>13:45 - 14:15</td>
<td>4 Chambers</td>
</tr>
<tr>
<td>14:30 - 15:00</td>
<td>3D Surface</td>
</tr>
<tr>
<td>15:00 - 15:30</td>
<td>Coffee break</td>
</tr>
<tr>
<td>15:30 - 16:00</td>
<td>3 Vessels &amp; trachea</td>
</tr>
<tr>
<td>16:15 - 16:45</td>
<td>Cerebral Doppler &amp; ductus venosus</td>
</tr>
</tbody>
</table>

* Maximum 3 workshops per delegate

Fee: €39.99 per workshop

How to participate: All participants should pre-register to attend these workshops. Please ask at Registration to see if there is any availability.
Certificate in Fetal MRI

There is an exciting opportunity this year to acquire a basic certificate in Fetal MRI at the World Congress in Vienna. For the first time, delegates attending the PCC in Fetal MRI will be able to follow a program convened by Prof Daniela Prayer and Prof Laurent Salomon. There will be a test at the end of the Congress where successful candidates will receive a certificate.

Conditions for successful completion of the course:

1. Attendance of the Pre Congress Course on Fetal MRI on Friday 15 September 2017
2. Attendance of five specifically marked Scientific sessions

Sessions: Examples of the specified sessions are below. These will be clearly marked in the program with the symbol ★. Certificate attendees should ensure they are scanned in to each session.

★ Brain anomalies: challenges in diagnosis and counselling
★ Fetal brain: form and function
★ Ultrasound meets MRI: form and function
★ Fetal anomalies: from diaphragm up
★ Fetal brain and CNS anomalies
★ Fetal growth and the brain
★ Fetal brain novel applications of ultrasound and MRI
★ New tools to evaluate the fetal brain and CNS
★ The challenge of evaluating the fetal brain

How to participate: If you have not already contacted congress@isuog.org, you will have the opportunity to sign up on the day of the Pre-Congres Course, Friday 15 September

Fee: Participants will need to pay for both the Pre-Congress Course and the Congress itself to achieve the certificate requirements. However, there is no additional charge for the certificate.

What’s next: The certificate can be used as the basis of knowledge to attend onsite training as suggested by the ISUOG guidelines for Fetal MRI at a Fetal MRI centre.

Please note that this course is not officially accredited.
Session types explained

**Masterclasses**
ISUOG invites individual experts to create, present and chair an entire session’s content. These popular sessions give attendees the opportunity to hear longer in-depth analysis on a particular subject from a world renowned speaker.

**Workshops**
Our workshops are created by members of ISUOG’s international faculty, who ask leading experts in their field to deliver didactic state-of-the-art talks on a particular topic.

**Oral Communications (OC)**
Oral Communications (OC) are presentations of abstracts from our submission process that are given 5 minutes to present and 3 minutes for discussion. These take place in the main session halls and are identified by the OC next to the title of the session.

**Short Oral Presentations (OP)**
Short Oral Presentations (OP) are single slide summaries of abstracts from our submission process that are given 2 minutes to summarise the research and 2 minutes for discussion. These succinct presentations give a quick insight into research happening on a particular topic.

**Poster discussions (P)**
Poster discussions (P) put together posters by topic for discussions in our Hub space. Chaired by an expert in the field, these are intimate, informal and friendly spaces designed to offer the author the opportunity to meet delegates interested in their research, discuss any comments and answer questions on their work.

**Electronic Posters (EP)**
Available on our app and On Demand stations, electronic posters give access to submitted research that is not being presented orally as PowerPoint slides. Delegates can contact authors through the integrated email facility On Demand.

**Hubs**
The Hubs are informal interactive sessions which provide excellent opportunities to communicate and network with fellow attendees. The Hubs cover various formats and topics such as: ‘Meet the professors’, poster discussions, ISUOG guidelines, Special Interest Group (SIGs) and Outreach, partnership and trainee sessions.

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**ISUOG AGM - Saturday 16.09.2017**

**Hall A: 9:50-10:35**
Hear what your society has been doing this year and have your say to change the future.
Download the official Congress app

Create your personalised agenda

Engage with other attendees

Stay up-to-date with what’s going on

Stay social on our Twitter and Facebook

Have your say by voting, rating and completing our surveys

Read all abstracts

Search for ‘ISUOG 2017’

Join the Congress conversation

#ISUOG2017
#ISUOG2017

## Friday 15.09.2017

<table>
<thead>
<tr>
<th>Hall B</th>
<th>Hall N</th>
<th>L2</th>
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</thead>
<tbody>
<tr>
<td>07:00</td>
<td>Registration open</td>
<td></td>
</tr>
<tr>
<td>08:00-17:45</td>
<td>Essentials in fetal MRI: methods and brain imaging (09:00-17:15)</td>
<td>Modern obstetric management: the latest updates (08:00-17:55)</td>
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<td></td>
<td>Fetal anatomy: normal or abnormal? The Basic Training approach (08:30-16:15)</td>
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</table>

## Saturday 16.09.2017

<table>
<thead>
<tr>
<th>Hall A</th>
<th>Hall E</th>
<th>Hall F</th>
<th>Hall B</th>
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<tbody>
<tr>
<td>07:00</td>
<td>Registration open</td>
<td></td>
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</tr>
<tr>
<td>08:30-09:50</td>
<td>Plenary</td>
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<td></td>
<td>Keynote lectures: Beyond ultrasound</td>
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<tr>
<td>09:50-10:35</td>
<td>AGM</td>
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<tr>
<td>10:35-11:00</td>
<td>Coffee and electronic poster viewing</td>
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<tr>
<td>11:00-12:15</td>
<td>Keynote lecture and top abstracts</td>
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<tr>
<td>15:05-15:30</td>
<td>Coffee and electronic poster viewing</td>
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<tr>
<td>15:30-17:30</td>
<td>Awards and keynotes</td>
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<tr>
<td>17:30-19:30</td>
<td>Opening ceremony and Welcome reception</td>
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## PROGRAM AT A GLANCE

### Sunday 17.09.2017

<table>
<thead>
<tr>
<th>Time</th>
<th>Hall A</th>
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<th>Hall B</th>
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</thead>
<tbody>
<tr>
<td>07:00</td>
<td>Registration open</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>07:30-08:10</td>
<td>Masterclass: Screening and prevention of stillbirth: possibilities and pitfalls</td>
<td>Masterclass: The heart of the matter</td>
<td>Masterclass: Evaluating the endometrium from fertility to menopause</td>
<td>Masterclass: What RCT’s can and can’t tell us</td>
</tr>
<tr>
<td>08:15-09:15</td>
<td>OC: Fetal growth: consequences of being too big or too small [LIVE SCAN]</td>
<td>OC: Fetal heart: what’s new</td>
<td>OC: Imaging, reproductive medicine and IVF</td>
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</tr>
<tr>
<td>09:20-10:00</td>
<td>OP: Placental and maternal factors in IUGR</td>
<td>OP: Fetal cardiac function</td>
<td>OP: Using ultrasound to solve old and diagnose new problems in reproductive medicine</td>
<td>OP: Fetal anomalies: from the diaphragm up</td>
</tr>
<tr>
<td>09:50-10:20</td>
<td>Coffee and electronic poster viewing</td>
<td></td>
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</tr>
<tr>
<td>11:25-12:05</td>
<td>OP: Fetal growth anatomy and measurements</td>
<td>OP: Hot topics around the fetal brain</td>
<td></td>
<td>OP: Ultrasound and genetics</td>
</tr>
<tr>
<td>12:00-13:30</td>
<td>Lunch and electronic poster viewing / Satellite Symposia (12:15-13:15)</td>
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</tr>
<tr>
<td>14:35-15:15</td>
<td>OP: Detection of fetal heart anomalies I</td>
<td>OP: Babies born too early or too small</td>
<td>OP: Complications in early pregnancy; using imaging and biomarkers to provide new insights</td>
<td>OP: Screening</td>
</tr>
<tr>
<td>15:10-15:40</td>
<td>Coffee and electronic poster viewing</td>
<td></td>
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<tr>
<td>15:40-17:00</td>
<td>WS: IUGR management after the TRUFFLE trial: key messages</td>
<td>WS: Abnormally invasive placenta</td>
<td>WS: The future of ultrasound for the detection of CNS anomalies after the MERIDIAN trial</td>
<td>WS: Difficult problems in early pregnancy: PUL, enhanced myometrial vascularity, diagnosing and managing Caesarean scar pregnancy</td>
</tr>
<tr>
<td>19:00-00:30</td>
<td>Congress party at the Rathaus</td>
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</table>
## Monday 18.09.2017

<table>
<thead>
<tr>
<th>Time</th>
<th>Hall A</th>
<th>Hall E</th>
<th>Hall F</th>
<th>Hall B</th>
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<tbody>
<tr>
<td>07:00</td>
<td>Registration open</td>
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<tr>
<td>07:30-08:10</td>
<td>Masterclass: Fetal neurosonography: tips and tricks</td>
<td>Masterclass: New frontiers in preterm labour</td>
<td>Masterclass: Management of fetal growth restriction in practice</td>
<td>Masterclass: Revising IOTA terms and definitions: case examples of how to classify ovarian masses</td>
</tr>
<tr>
<td>08:15-09:15</td>
<td>OC: Abnormal fetal growth: causation, detection and long-term effects</td>
<td>OC: Fetal brain exposed to Zika and CMV virus</td>
<td>OC: Using ultrasound to characterise and help manage ovarian masses</td>
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</tr>
<tr>
<td>09:20-10:00</td>
<td>OP: Small-for-gestational age</td>
<td>OP: Fetal brain and CNS anomalies</td>
<td>OP: Using ultrasound to characterise and guide the management of ovarian masses: do IOTA models work in practice?</td>
<td>OP: Detection of fetal heart anomalies II</td>
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<tr>
<td>09:50-10:20</td>
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<tr>
<td>11:25-12:05</td>
<td>OP: Fetal growth and the brain</td>
<td>OP: Ultrasound in the labour ward</td>
<td>OP: How using ultrasound can inform the management of patients with gynecological malignancy</td>
<td>OP: Fetal development in maternal conditions</td>
</tr>
<tr>
<td>12:00-13:30</td>
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<tr>
<td>13:30-14:30</td>
<td>WS: Big mothers, big babies: getting the most from your scan [LIVE SCAN]</td>
<td>OC: CfDNA tests: where are we now?</td>
<td>OC: Advances in fetal surgery</td>
<td>OC: Uterine and endometrial problems: from asymptomatic polyps to repairing Caesarean section scars</td>
</tr>
<tr>
<td>15:10-15:40</td>
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<tr>
<td>15:40-17:00</td>
<td>WS: Understanding outflow tract abnormalities [LIVE SCAN]</td>
<td>WS: Complications of twins: how to image, how to manage</td>
<td>WS: Update from IOTA group: how to use the IOTA rules and models</td>
<td>WS: Late fetal growth restriction</td>
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<td>17:15-18:15</td>
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# PROGRAM AT A GLANCE

## Tuesday 19.09.2017

<table>
<thead>
<tr>
<th>Time</th>
<th>Hall A</th>
<th>Hall E</th>
<th>Hall F</th>
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<tbody>
<tr>
<td>07:00</td>
<td>Registration open</td>
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</tr>
<tr>
<td>07:30-08:10</td>
<td>Masterclass: The first trimester anomaly scan</td>
<td>Masterclass: Screening for chromosomal anomalies: cfDNA for all, cfTS for all, microarray for all?</td>
<td>Masterclass: Examining women with pelvic pain: how I do it (case examples)</td>
<td>Masterclass: Computerised fetal heart rate analysis in high-risk pregnancy</td>
</tr>
<tr>
<td>08:15-09:15</td>
<td>OC: State-of-the-art techniques to image the fetus</td>
<td>OC: Is this placenta abnormally invasive?</td>
<td>OC: Solving problems in urogynecology including data from the OASIS trial</td>
<td>WS: Working in the field: ISUOG Outreach trainers workshop (08:30-10:30)</td>
</tr>
<tr>
<td>09:20-10:00</td>
<td>OP: Managing TTTS</td>
<td>OP: How to diagnose and manage abnormal placentaion</td>
<td>OP: Solving problems in urogynecology using ultrasound</td>
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<tr>
<td>09:50-10:20</td>
<td>Coffee and electronic poster viewing</td>
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<tr>
<td>10:20-11:20</td>
<td>OC: Advanced cytogenetic techniques: impact on ultrasound practice</td>
<td>WS: 3D/4D ultrasound: is it living up to its promise?</td>
<td>OC: How ultrasound is used to assess women with pelvic pain and diagnose endometriosis</td>
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<tr>
<td>12:00-13:30</td>
<td>Lunch and electronic poster viewing / Satellite Symposia (12:15-13:15)</td>
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<tr>
<td>13:30-14:50</td>
<td>WS: Ultrasound and genetic diagnostics at 12 weeks [LIVE SCAN]</td>
<td>WS: Pre-eclampsia in 2017</td>
<td>WS: Managing ovarian masses — what is the evidence base and which approach should we use to classify ovarian masses?</td>
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<tr>
<td>14:50-16:20</td>
<td>Closing plenary: Show us the power of ultrasound</td>
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<tr>
<td>16:20-17:30</td>
<td>Leaving drinks and welcome to Singapore 2018!</td>
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</tbody>
</table>
## Masterclasses

<table>
<thead>
<tr>
<th>Session</th>
<th>Presenter</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sunday 07:30-08:10</strong></td>
<td><strong>Screening and prevention of stillbirth: possibilities and pitfalls</strong></td>
<td>G. Smith (UK)</td>
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<td></td>
<td></td>
<td>G.R. DeVore (USA)</td>
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<td></td>
<td>The heart of the matter</td>
<td>T. Van den Bosch (Belgium)</td>
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<td><strong>(Ian Donald Gold Medal lecture)</strong></td>
<td>J. Thornton (UK)</td>
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<td></td>
<td>Evaluating the endometrium from fertility to menopause</td>
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<tr>
<td></td>
<td><strong>What RCT’s can and can’t tell us</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Monday 07:30-08:10</strong></td>
<td><strong>Fetal neurosonography: tips and tricks</strong></td>
<td>R. Chaoui (Germany)</td>
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<td></td>
<td>New frontiers in preterm labour</td>
<td>R. Romero (USA)</td>
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<td></td>
<td>Management of fetal growth restriction in practice</td>
<td>E. Gratacós (Spain)</td>
</tr>
<tr>
<td></td>
<td>Revising IOTA terms and definitions: case examples of how to classify ovarian masses – how I manage non-tubal ectopic pregnancies?</td>
<td>L. Valentin (Sweden)</td>
</tr>
<tr>
<td><strong>Tuesday 07:30-08:10</strong></td>
<td><strong>The first trimester anomaly scan</strong></td>
<td>C.M. Bilardo (Netherlands)</td>
</tr>
<tr>
<td></td>
<td>Screening for chromosomal anomalies: cfDNA for all, cfTS for all, microarray for all?</td>
<td>L.J. Salomon (France)</td>
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<td></td>
<td>Examining women with pelvic pain: how I do it (case examples)</td>
<td>B. Benacerraf (USA)</td>
</tr>
<tr>
<td></td>
<td>Computerised fetal heart rate analysis in high-risk pregnancy</td>
<td>C. Redman (UK)</td>
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## ISUOG Awards

At the Closing ceremony we will be announcing the winners of the:

- **Top Abstract**
- **Young Investigator prize**
- **Austrian Society for Gynaecology and Obstetrics award**
- **Best presentations in each topic**

All OC and OP presentations will be judged within their subject categories by the session chairpersons and the ISUOG Scientific Committee. Winners will be formally acknowledged in our journal, *Ultrasound in Obstetrics and Gynecology*.
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Room</th>
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</thead>
<tbody>
<tr>
<td><strong>Sunday</strong> 09:20-10:00</td>
<td>OP01 Placental and maternal factors in IUGR</td>
<td>Hall A</td>
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<td>OP02 Fetal cardiac function</td>
<td>Hall E</td>
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<td></td>
<td>OP03 Using ultrasound to solve old and diagnose new problems in reproductive medicine</td>
<td>Hall F</td>
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<td>OP04 Fetal anomalies: from the diaphragm up</td>
<td>Hall B</td>
</tr>
<tr>
<td>10:20-11:00</td>
<td>OP05 Ultrasound meets MRI: form and function</td>
<td>Hall B</td>
</tr>
<tr>
<td>11:25-12:05</td>
<td>OP06 Fetal growth: anatomy and measurements</td>
<td>Hall A</td>
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<td>OP07 Hot topics around the fetal brain</td>
<td>Hall E</td>
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<td>OP08 Ultrasound and genetics</td>
<td>Hall B</td>
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<tr>
<td>14:35-15:15</td>
<td>OP09 Detection of fetal heart anomalies I</td>
<td>Hall A</td>
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<td>OP10 Babies born too early or too small</td>
<td>Hall E</td>
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<tr>
<td></td>
<td>OP11 Complications in early pregnancy: using imaging and biomarkers to provide new insights</td>
<td>Hall F</td>
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<td></td>
<td>OP12 Screening</td>
<td>Hall B</td>
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<tr>
<td><strong>Monday</strong> 09:20-10:00</td>
<td>OP13 Small-for-gestational age</td>
<td>Hall A</td>
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<tr>
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<td>OP14 Fetal brain and CNS anomalies</td>
<td>Hall E</td>
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<tr>
<td></td>
<td>OP15 Using ultrasound to accurately characterise and guide the management of ovarian masses: do IOTA models work in practice?</td>
<td>Hall F</td>
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<tr>
<td></td>
<td>OP16 Detection of fetal heart anomalies II</td>
<td>Hall B</td>
</tr>
<tr>
<td>10:20-11:20</td>
<td>OP17 Hypertensive disease in pregnancy: screening to diagnosis</td>
<td>Hall B</td>
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<td>OP18 Fetal growth and the brain</td>
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<td>OP19 Ultrasound in the labour ward</td>
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<td>OP20 How using ultrasound can inform the management of patients with gynecological malignancy</td>
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<td>OP24 Uterine and endometrial problems: from elastography to using ultrasound to monitor treatment response</td>
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<td>OP25 Clinical challenges in chorionicity</td>
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<td>OP26 Managing TTTS</td>
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<td>OP27 How to diagnose and manage abnormal placentation</td>
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<td>OP28 Solving problems in urogynecology using ultrasound</td>
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<td>OP29 Education, simulation and safety</td>
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<td>OP30 Fetal brain novel applications of ultrasound and MRI (11:30-12:10)</td>
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<td>OP31 Using ultrasound to assess pelvic pain and diagnose endometriosis</td>
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# Poster discussions

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<td>New tools to evaluate the fetal brain and CNS</td>
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<td>Pre-eclampsia</td>
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<td>P06</td>
<td>Fetal echocardiography I</td>
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<td>P07</td>
<td>Using ultrasound in urogynecology patients</td>
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<td>P08</td>
<td>Fetal growth</td>
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<td>P09</td>
<td>Head, neck and bones</td>
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<tr>
<td>P10</td>
<td>Placenta, umbilical cord and amniotic fluid</td>
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<tr>
<td>P11</td>
<td>Using ultrasound to characterise and help manage ovarian masses: experience of using the IOTA ADNEX model and simple rules</td>
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<td>Cysts and other abdominal features</td>
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<td>Uterine and endometrial problems: from elastography to using ultrasound to monitor treatment response</td>
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<td>Maternal and fetal assessment in complicated pregnancies</td>
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<td>Techniques related to using ultrasound to assess pelvic pain and diagnose superficial endometriosis and DIE</td>
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<td>P19</td>
<td>Fetal echocardiography II</td>
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<tr>
<td>P20</td>
<td>The prognostic value of growth parameters</td>
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<td>P21</td>
<td>Predicting pregnancies at risk</td>
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<td>P22</td>
<td>Fetal echocardiography III</td>
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<td>Managing early pregnancy complications</td>
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<td>P24</td>
<td>The challenge of evaluating the fetal brain</td>
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<td>Techniques for fetal cardiac diagnosis</td>
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<td>P28</td>
<td>References, standards and markers</td>
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<tr>
<td>P29</td>
<td>Improving our management of twin pregnancies</td>
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<tr>
<td>P30</td>
<td>How to use imaging to manage oncology patients</td>
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Hubs - join the buzz!

The Hubs are informal interactive sessions which provide excellent opportunities to communicate and network with fellow attendees.

These intimate Hubs cover various formats and topics such as: ‘Meet the professors’, poster discussions, ISUOG guidelines, Special Interest Group (SIGs), and Outreach, partnership and trainee sessions.

In conversation with...

Poster discussions

Special interest groups

ISUOG Guidelines

The Hubs are a market place of information; if you have heard everything that you wanted to hear in one Hub simply move to the next!

Location: Room L3 and L6, first floor
Date: Sunday 17 - Tuesday 19 September
Program: Please see the Programs at a glance
Attending the Hubs: The Hubs are part of the Congress and there are no additional fees to attend.
#ISUOG2017

## Hubs at a glance

### HUB 1

#### Sunday

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<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Speaker(s)</th>
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<tr>
<td>08:15-09:15</td>
<td>In conversation with B. Benacerraf</td>
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<td>09:20-10:00</td>
<td>Preterm birth: maternal and fetal assessment</td>
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<td>13:30-14:30</td>
<td>In conversation with H.P Dietz</td>
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<td>14:35-15:15</td>
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<td>14:35-15:15</td>
<td>The prognostic value of growth parameters</td>
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#### Tuesday

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<td>Fetal growth Doppler and hemodynamics</td>
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<td>In conversation with D. Fischerová and E. Epstein</td>
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<td>Techniques for fetal cardiac diagnosis</td>
<td>References, standards and markers</td>
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<td>12:30-13:20</td>
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<td>★ MRI certificate exam</td>
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### HUB 3

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<td>The principles of ultrasound imaging</td>
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<td>Gynecology oncology case discussion</td>
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<td>The principles of ultrasound imaging</td>
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<td>Using ultrasound in urogynecology patients</td>
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<td>Ultrasound in the labour ward I</td>
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<td>Join the conversation: Live reporting – fetal MRI</td>
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### Highlights

- Ultrasound, reproductive medicine and IVF: In conversation with D. Jurkovic
- Improving our management of twin pregnancies: How to use imaging to manage oncology patients
- The highlights of the meeting in Chinese: In conversation with M. Herrera and G. Malinger
Electronic posters

Electronic posters (EP) are available for viewing throughout the Congress on the ISUOG On Demand terminals. You can also send questions or comments to authors using our integrated email facility. Electronic posters are subject-categorised in the following pages.

EP01  Fetal brain and CNS anomalies: cavum septum pellucidum, corpus callosum, choroid plexus and intracranial cysts
EP02  Fetal brain and CNS anomalies: ventriculomegaly, posterior fossa and neural tube defects
EP03  Improving the prenatal diagnosis of fetal brain and CNS anomalies
EP04  Fetal echocardiography
EP05  Fetal heart
EP06  Issues in prenatal screening
EP07  Bones and spine
EP08  Fetal structural abnormalities I
EP09  Fetal structural abnormalities II
EP10  Head and neck
EP11  Placenta, umbilical cord and amniotic fluid
EP12  Thorax and abdomen
EP13  Ultrasound of chromosomal anomalies
EP14  Normal and abnormal fetal growth
EP15  Case presentations of abnormal placentas
EP16  Doppler and pre-eclampsia
EP17  Maternal and fetal assessment
EP18  Preterm birth
EP19  Ultrasound in the labour ward
EP20  New data in multiple pregnancies
EP21  Fetal interventions
EP22  Innovations in obstetric imaging
EP23  Education, simulation and safety
EP24  Ultrasound and management of early pregnancy complications
EP25  Classifying and managing ovarian masses
EP26  Diagnosing a cause for pelvic pain and classifying endometriosis
EP27  Imaging and reproductive medicine
EP28  Bleeding, endometrial and myometrial pathology
EP29  Imaging in oncology patients
EP30  Imaging and the urogynecology patient
EP31  Innovations in gynecologic imaging
PRE-CONGRESS COURSES

Friday 15 September 2017

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Friday 15.09.2017

HALL N

Modern obstetric management: the latest updates

Chairs: A. Tabor (Denmark); M. Norton (United States)

08:00 Introduction
A. Tabor (Denmark)

08:15 Adverse obstetric outcomes: does prediction really matter?
M. Norton (United States)

09:00 Early prediction and prevention of pre-eclampsia
L. Poon (Hong Kong)

09:30 Point of care testing in hypertensive disease of pregnancy
S. Verlohren (Germany)

10:00 Can we improve on prediction of preterm birth?
H. Feltovich (United States)

10:30 Coffee
Chairs: M. Norton (United States); H. Feltovich (United States)

11:00 Evidence-based prevention of preterm birth in high-risk women (including twins)
R. Romero (United States)

11:45 How ultrasound and biomarkers can work together to predict adverse pregnancy outcomes
G. Smith (United Kingdom)

12:15 Future biomarker discovery: distinguishing cause, consequence and pathway
B. Thilaganathan (United Kingdom)

12:45 Lunch
Chairs: R. Romero; L. Wilkins-Haug (United States)

13:55 Fetal DNA in maternal blood to predict complications: the ultimate biomarker?
M. Norton (United States)

14:40 Screening for chromosomal abnormalities using cell-free DNA: latest updates
A. Tabor (Denmark)

15:25 Coffee
Chairs: A. Tabor (Denmark); L. Wilkins-Haug (United States)

15:55 First trimester scan is still useful in the era of cfDNA
R. Chaoui (Germany)

16:25 Expanding the reach of genetic carrier screening: sequencing for single gene disorders and exome testing – who benefits, what are the cautions?
L. Wilkins-Haug (United States)

16:55 Understanding NIPT in practice: interpreting difficult clinical situations through case-based discussions
B. Thilaganathan (United Kingdom)

17:25 Genetic disease in twins: unique aspects and management
L. Wilkins-Haug (United States)

17:55 Closing comments
A. Tabor (Denmark)
ROOM L2

Fetal anatomy: normal or abnormal? The Basic Training approach

Chairs: T. Chudleigh (United Kingdom); T. Cohen-Overbeek (Netherlands)

08:30 Introduction to ISUOG’s 4-day Basic Training programme
R. Abu-Rustum (Lebanon)

08:45 Pre-course test
T. Cohen-Overbeek (Netherlands)

From the long axis of the fetus to the TCD

09:00 The 20 planes approach to the routine mid-trimester scan
T. Chudleigh (United Kingdom)

09:30 Evaluating fetal anatomy from longitudinal sections
T. Cohen-Overbeek (Netherlands)

10:00 Distinguishing between normal and abnormal appearances of the skull and brain
S. Seshadri (India)

10:30 Coffee

From the TCD to the AC

11:00 Obtaining and interpreting heart views correctly
A. Abuhamad (United States)

11:45 Assessing the neck and chest
G. Chalouhi (France)

12:15 Lunch

From the AC to the FL

13:15 Examining the abdomen and anterior abdominal wall
A. Johnson (United States)

13:45 Distinguishing between N and Ab appearances of the urinary tract
S. Seshadri (India)

From the FL to the extremities and finally the face

14:15 Distinguishing between normal and abnormal appearances of the long bones and extremities
G. Chalouhi (France)

14:45 Coffee

15:15 Examining the upper lip, face and profile
T. Chudleigh (United Kingdom)

Evaluating the scan findings

15:45 Making a decision: normal or not? Interactive discussion (including delegate cases)
T. Cohen-Overbeek (Netherlands)

16:15 Post-course test and speaker discussion
HALL B

★ Essentials in fetal MRI: methods and brain imaging
   Chairs: D. Prayer; P.C. Brugger (Austria)

09:00  Introduction to the course and the fetal MRI certification
       D. Prayer (Austria)

09:15  Basic methods of fetal MRI: tips and tricks
       P.C. Brugger; F. Stuhr (Austria)

09:45  Advanced application of fetal MRI including application of contrast media
       A.E. Milischer (France)

10:15  3T or 1.5T: which field strength is more appropriate for fetal MRI?
       P.C. Brugger; D. Prayer (Austria)

10:45  Coffee

Chair: D. Pugash (Canada)

11:15  Normal supratentorial fetal brain development: ultrasound and MRI
       D. Pugash (Canada); L. Guibaud (France)

12:00  Abnormal development of cerebral commissures: ultrasound and MRI
       D. Paladini (Italy); G. Kasprian (Austria)

12:45  Lunch

Chair: G. Kasprian (Austria)

13:45  The fetal normal and pathological posterior fossa: ultrasound and MRI
       L. Guibaud (France); G. Kasprian (Austria)

14:30  Lissencephalies ultrasound and MRI
       D. Paladini (Italy); C. Mitter (Austria)

15:00  Ventriculomegaly and the FLAIR sequence: is it helpful?
       M. Cardoso Diogo (Portugal)

15:15  Acquired brain anomaly: ultrasound and MRI
       D. Pugash (Canada); D. Prayer (Austria)

15:45  Coffee

Chair: L. Guibaud (France)

16:15  Postmortem MRI: when, why and how?
       G.M. Gruber (Austria)

16:45  Brain malformation: ultrasound and MRI of complex syndromes
       All speakers

17:15  What would you have done? Interactive case session
       All speakers
**Why attend?**

Join colleagues from around the world to hear from leading experts in the fields of obstetrics and gynecology in ultrasound.

Attend cutting-edge lectures, workshops, live scans, hands-on training sessions and lively debates, whilst immersed in the historic surroundings of Athens; just a few minutes' walk from the ancient Acropolis.

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- 3D/4D Hands-on in obstetrics

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Royal Olympic, Athens
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**Critical dates**
- Registration & abstract submission opens: 01.07.17
- Early bird deadline: 20.02.18
- Exhibition/sponsorship deadline: 20.02.18
- Abstract deadline: 28.02.18
- Pre-Congress courses: 20.04.18

**Venue**
Royal Olympic, Athens
royalolympic.com

**Convenors**
N. Vrachnis (Greece) A.T. Papageorghiou (UK)

**Speakers**
C. Bilardo (Netherlands) A.T. Papageorghiou (UK)
T. Bourne (UK) B. Thilaganathan (UK)
J. Carvalho (UK) D. Timmerman (Belgium)
G. Malinger (Israel) L. Valentin (Sweden)
D. Paladinini (Italy) N. Vrachnis (Greece)
L. Salomon (France)

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Saturday 16 September 2017

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**SUNDAY PROGRAM**

**Saturday 16.09.2017**

**HALL A**

08:30-09:50  **Keynote lectures: Beyond ultrasound**
*Chairs: C. Brezinka; D. Prayer (Austria)*

- **08:30** Welcome from the ISUOG President
  *J.A. Copel (United States)*

- **08:35** How you got to Vienna using the Doppler effect
  *H. Härting (Austria)*

- **09:00** Small babies, large babies and older mothers: when shall we induce?
  *J. Thornton (United Kingdom)*

- **09:25** Twins, microbiomes and personalized health
  *T. Spector (United Kingdom)*

09:50-10:35  **ISUOG AGM**

10:35-11:00  **Coffee and e-poster viewing**

11:00-12:15  **Keynote lecture and top abstracts**
*Chairs: D. Timmerman (Belgium); A.T. Papageorghiou (United Kingdom)*

- **11:00** Stuart Campbell lecture: Zika virus intrauterine infection causes fetal brain abnormality and microcephaly: tip of the iceberg?
  *A. Melo (Brazil)*

- **11:25** **OC01.01** Risk of complications in conservatively managed adnexal masses initially thought to be benign at subjective impression by the ultrasound examiner
  *W. Froyman (Belgium)*

- **11:35** **OC01.02** How to estimate the degree of bowel stenosis in patients with colorectal endometriosis?
  *S. Ferrero (Italy)*

- **11:45** **OC01.03** Incidence of stillbirth is increased in familial LQTS: a retrospective study from eight international centres
  *B. Cuneo (United States)*

- **11:55** **OC01.04** Aspirin versus placebo in pregnancies at high-risk of preterm pre-eclampsia: a multicentre, double-blind, placebo-controlled trial
  *D.L. Rolnik (United Kingdom)*

- **12:05** **OC01.05** STRIDER UK: a randomised controlled trial of sildenafil therapy in dismal prognosis early-onset intrauterine growth restriction
  *A. Sharp (United Kingdom)*

12:15-13:45  **Lunch and e-poster viewing**

12:30-13:40  **Industry sponsored satellite symposia**

**Notes**

**Lunchtime satellite symposia** are brought to you by our sponsors and are not part of the ISUOG CME program. ISUOG takes no responsibility for scientific or clinical content. Please see page 158 for our satellite program.
**HALL A**

**Workshop**  
**New approaches to fetal growth: which charts should I use?**  
*Chairs: S. Campbell; J. Thornton (United Kingdom)*  
13:45 International standards ensuring continuity of care from conception to infancy  
*A.T. Papageorghiou (United Kingdom)*  
14:00 The World Health Organization fetal growth charts: a multinational longitudinal study  
*T. Kiserud (Norway)*  
14:15 The rationale for a customised approach for assessment of fetal growth and birthweight  
*J. Gardosi (United Kingdom)*  
14:30 Size charts versus growth velocity versus functional parameters: understanding limitations of our tests  
*G. Smith (United Kingdom)*  
14:45 Discussion

15:05-15:30  
**Coffee and e-poster viewing**

15:30-17:30  
**Awards and keynotes**  
*Chairs: T. Bourne (United Kingdom); J.A. Copel (United States)*  
15:30 Cell-free DNA: from prenatal screening to molecular diagnosis of cancer  
*D. Lo (Hong Kong)*  
15:55 Big multicentre trials and gynecology ultrasound: how research can change clinical practice  
*D. Timmerman (Belgium)*  
16:20 The brave new world of therapies: gene editing and beyond  
*M. Norton (United States)*  
16:45 Presentation and acceptance of the Ian Donald Gold Medal 2017 to G.R. DeVore  
*J.A. Copel (United States)*  
16:55 Presentation and acceptance of the Ian Donald Technical Development Award 2017 to G. Ter Haar  
*K. Maršál (Sweden)*  
17:05 Eichmann’s Jews: the Jewish administration of holocaust Vienna  
*D. Rabinovici (Austria); introduced by D. Prayer (Austria)*

17:30-18:00  
**Opening ceremony**

18:00-19:30  
**Welcome reception**

**HALL E**

**Workshop**  
**Safe ultrasound-assisted vaginal deliveries**  
*Chairs: G. Visser (Netherlands); T.M. Eggebø (Norway)*  
13:45 Consequences of vaginal delivery  
*H.P. Dietz (Australia)*  
14:00 Women are designed to deliver vaginally and not by Caesarean section  
*G. Visser (Netherlands)*  
14:15 Assisted vaginal delivery in middle and low resource countries  
*T.M. Eggebø (Norway)*  
14:30 Is it important to know fetal position?  
*T. Ghi (Italy)*  
14:45 Ultrasound-assessed fetal station before vacuum extraction  
*T.M. Eggebø (Norway)*  
15:00 Discussion

17:30-18:00  
**Opening ceremony**

18:00-19:30  
**Welcome reception**
**HALL F**

**Workshop**

*How to systematically describe adenomyosis and endometriosis and how this helps the surgeon*

*Chairs: G. Hudelist (Austria); G. Condous (Australia)*

- **13:45** How accurate is ultrasound for the diagnosis of bowel endometriosis  
  *G. Hudelist (Austria)*

- **14:00** How to predict the level of complexity of laparoscopic surgery for endometriosis using ultrasound  
  *G. Condous (Australia)*

- **14:15** A systematic approach to examining women with suspected endometriosis: the IDEA consensus  
  *L. Valentin (Sweden)*

- **14:30** How do you diagnose adenomyosis and how does it relate to symptoms?  
  *D. Jurkovic (United Kingdom)*

- **14:45** **LIVE SCAN**: how to scan deep infiltrating endometriosis – the surgeon and the sonographer view [industry supported*]  
  *G. Hudelist (Austria)*

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**HALL B**

**Workshop**

*MRI: it’s not just for heads anymore!*

*Chairs: D. Prayer (Austria); S. Laifer-Narin (United States)*

- **13:45** Fetal body MRI  
  *D. Prayer (Austria)*

- **14:05** Spectrum of fetal teratomas head to toe  
  *S. Laifer-Narin (United States)*

- **14:25** Congenital heart disease: where to look with MRI  
  *G. Kasprian (Austria)*

- **14:45** MRI in genitourinary malformations  
  *A.E. Millischer (France)*

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**ROOM L3 / L6**

**Workshop (13:00-16:30)**

*World Association for Trainees in Obstetrics and Gynecology (WATOG)*

*Chairs: P. Gabor (France)*

- **13:00** Gynecological ultrasound in the ER: what to look for?  
  *O. Ami (France)*

- **13:30** Biometry, biophysical profile and Doppler: for everyday needs  
  *O. Ami (France)*

- **14:00** Basic plans of the first trimester scan: how to get a correct plan for the CRL and the NT  
  *P. Gabor (France)*

- **14:30** Basic plans of the second trimester scan: explanation of anatomical references and the position of plans compared to each other  
  *P. Gabor (France)*

- **15:00** Coffee break

- **15:30** Twins: how not to get lost between them  
  *K. Dimassi (Tunisia)*

- **16:00** Ultrasound in the delivery room: how can it be useful?  
  *K. Dimassi (Tunisia)*

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Sunday 17.09.2017

**Hall A**

- **07:30-08:10**
  - Masterclass
  - Screening and prevention of stillbirth: possibilities and pitfalls
    - G. Smith (United Kingdom)

- **08:15-09:15**
  - Fetal growth: consequences of being too big or too small
    - Chairs: A.T. Papageorghiou (United Kingdom); E. Krampl-Bettelheim (Austria)
    - 08:15 LIVE SCAN: updates – optimal evaluation of fetal growth and size [industry supported*]
      - W. Lee (United States)
    - 08:35 OC02.01 Short-term fetal cardiovascular effects of maternal betamethasone versus dexamethasone: nested study from the blinded, randomised A*STEROID trial
      - A. Henry (Australia)
    - 08:43 OC02.03 Distal right coronary arterial flow in growth-restricted fetuses: a feasible sign of heart-sparing effect with reserved heart function?
      - S. Miyashita (Japan)
    - 08:51 OC02.04 Small head circumference at the 2nd trimester anomaly scan following a normal 1st trimester screening: association to chromosomal anomalies and adverse outcome
      - N. Lund (Denmark)
    - 08:59 OC02.05 MR-based brain volumetry in fetuses with congenital diaphragmatic hernia
      - F. Prayer (Austria)
    - 09:07 OC02.02 Cardiometabolic biomarkers are associated with fetal overgrowth and adiposity
      - C.M. O’Brien (Australia)

**Hall E**

- **07:30-08:10**
  - Masterclass
  - The heart of the matter (Ian Donald Gold Medal lecture)
    - G.R. DeVore (United States)

- **08:15**
  - Fetal heart: what’s new
    - Chairs: J.A. Copel (United States); K. Maršál (Sweden)
    - 08:15 INVITED: Fetal heart: just images
      - R. Chaoui (Germany)
    - 08:35 OC03.01 Abnormal cardiovascular 24-segment sphericity index of the right and left ventricles in fetuses with growth restriction
      - G.R. DeVore (United States)
    - 08:43 OC03.02 Prenatal detected isolated right aortic arch: insignificant or significant knowledge?
      - V. Gjørup (Denmark)
    - 08:51 OC03.03 Annular plane systolic excursion z-score in evaluation of heart systolic function of fetus with heart failure
      - K. Guo (China)
    - 08:59 OC03.04 Fetal cardiac tumour: genomic sequencing, echocardiography characteristics, clinical manifestations and outcomes
      - S. Ge (United States)
    - 09:07 OC03.05 Mitochondrial toxicity and fetal cardiac remodelling in HIV-infected pregnancies
      - F. Crispi (Spain)

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HALL F

Masterclass
Evaluating the endometrium from fertility to menopause
T. Van den Bosch (Belgium)

Imaging, reproductive medicine and IVF
Chairs: C. Brezinka (Austria);
N.J. Raine-Fenning (United Kingdom)

08:15 INVITED: What is the prevalence and clinical relevance of adhesions and other focal intrauterine pathology?
D. Jurkovic (United Kingdom)

08:35 OC04.01 Endometrial biopsy prior to IVF impacts on the ultrasound appearance of the endometrium at oocyte retrieval
L. Polanski (United Kingdom)

08:43 OC04.02 Follicular flushing does not improve pregnancy rates in women undergoing oocyte retrieval for IVF: a systematic review and meta-analysis
W.P. Martins (Brazil)

08:51 OC04.03 The effect of melatonin on ultrasound markers of follicular development: a double-blind placebo-controlled randomised trial
F. da Silva Costa (Australia)

08:59 OC04.04 Septate uterus by ESHRE-ESGE and ASRM classification: association with infertility and previous miscarriage
A. Ludwin (Poland)

09:07 OC04.05 Pelvic ultrasonography of patients awaiting uterine transplantation: the UK cohort
S. Saso (United Kingdom)

HALL B

Masterclass
What RCT’s can and can’t tell us
J. Thornton (United Kingdom)
HALL A

09:20-10:00 Short oral presentation (OP)
OP01 Placental and maternal factors in IUGR
Chairs: F. Figueras (Spain); L. Impey (United Kingdom)

09:50-10:20 Coffee and e-poster viewing

10:20-11:20 Fetal structural abnormalities
Chairs: G. Yeo (Singapore); H. Steiner (Austria)

10:20 LIVE SCAN: how I perform a mid-trimester scan [industry supported*]
K.O. Kagan (Germany)

10:40 OC05.01 Malformation or acquired lesion?
D. Covini (Argentina)

10:48 OC05.02 Fetal urine biochemistry in prediction of long-term (10–30 years of age) postnatal renal function in posterior urethral valves
Y. Ville (France)

10:56 OC05.03 Comparison of biochemistry analysis in fetal serum and fetal urine in the prediction of postnatal renal outcome in low urinary tract obstruction
J. Stirnemann (France)

11:04 OC05.04 Phenotypical spectrum of four antenatal diagnosed cases of MOPD type 1
S. Wavrant (Canada)

11:12 OC05.05 Prenatal diagnosis by ultrasound and amniocentesis in a single centre cohort of 1065 pregnancies complicated by maternal toxoplasma infection
L. Masini (Italy)

HALL E

09:20-10:00 Short oral presentation (OP)
OP02 Fetal cardiac function
Chairs: P. Acharya (India); S. Yagel (Israel)

09:50-10:20 Coffee and e-poster viewing

10:20-11:00 Brain anomalies: challenges in diagnosis and counselling
Chairs: A. Toi (Canada); E. Hafner (Austria)

10:20 ROLE PLAY: counselling of corpus callosum agenesis in practice
Counsellor: L.D. Platt (United States)
Father & Mother: A. Toi; D. Pugash (Canada)

10:40 OC06.01 Development of normal fetal brain structures: international standards based on ultrasound measurements from the INTERGROWTH-21st Project
V. Donadona (United Kingdom)

10:48 OC06.02 Prenatal diagnosis of brainstem anomalies: phenotypic spectrum and neuroimaging features
K.K. Haratz (Israel)

10:56 OC06.03 Reduced hippocampal volume in human fetal brains with agenesis of the corpus callosum revealed by magnetic resonance imaging
G. Kasprian (Austria)

11:04 OC06.04 MRI appearances of fetal temporal lobe abnormalities in skeletal dysplasias
C. Mitter (Austria)

11:12 OC06.05 Termination of pregnancy for central nervous system (CNS) anomalies
W. Dendas (Belgium)

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HALL F

Short oral presentation (OP)

OP03 Using ultrasound to solve old and diagnose new problems in reproductive medicine
Chairs: C. Brezinka (Austria); N.J. Raine-Fenning (United Kingdom)

Coffee and e-poster viewing

Workshop (10:20-12:00)
Using ultrasound to help manage oncology patients
Chairs: C. Fotopoulou (United Kingdom); A.C. Testa (Italy)

10:20 Ultrasound as a key imaging modality in the management of all gynecologic cancers
A.C. Testa (Italy)

10:40 To what extent does imaging make a difference to the oncology surgeon?
C. Fotopoulou (United Kingdom)

11:00 Imaging cervical and endometrial cancer – which modality and how imaging informs management
E. Epstein (Sweden)

11:20 How I use ultrasound to manage patients with ovarian cancer?
D. Fischerová (Czech Republic)

11:40 Discussion around two cases selected by Epstein and Fischerová
E. Epstein (Sweden)

HALL B

Short oral presentation (OP)

★ OP04 Fetal anomalies: from the diaphragm up
Chairs: A. Odibo (United States); P. Sladkevicius (Sweden)

Coffee and e-poster viewing

Short oral presentation (10:20-11:00)
★ OP05 Ultrasound meets MRI: form and function
Chairs: R. Abu-Rustum (Lebanon); W. Lee (United States)
11:25-12:05 | Short oral presentation (OP)  
**OP06** Fetal growth: anatomy and measurements  
*Chairs: E.A. Hernandez-Andrade; A. Odibo (United States)*

12:00-13:30 | Lunch and e-poster viewing

12:15-13:15 | Industry sponsored satellite symposia**

13:30-14:30 | Workshop  
**Fetal echocardiography: complexity made simple**  
*Chairs: R. Romero; L. Yeo (United States)*

  13:30 | **LIVE SCAN:** FINE: novel features with value in clinical practice [industry supported*]  
* L. Yeo (United States)*

  13:45 | Interactive case examples  
* Y. Ville (France)*

  13:55 | Tips and tricks of acquiring a good STIC of the fetal heart  
* L. Yeo (United States)*

  14:05 | Clinical implementation of the FINE method  
* J. Weichert (Germany)*

  14:15 | Cases of congenital heart disease using colour Doppler FINE  
* R. Romero (United States)*

**Hall E**

11:25-12:05 | Short oral presentation (OP)  
**OP07** Hot topics around the fetal brain  
*Chairs: R. Chaoui (Germany); C. Mitter (Austria)*

12:00-13:30 | Lunch and e-poster viewing

12:15-13:15 | Industry sponsored satellite symposia**

13:30 | **From poor placentation to pre-eclampsia**  
*Chairs: W. Arzt (Austria); A. Khalil (United Kingdom)*

  **DEBATE:** early screening for pre-eclampsia is a waste of money in the era of the sphygmomanometer  
*For:* M. Norton (United States)  
*Against:* J. Hyett (Australia)  
13:44 | Speaker rebuttals and voting

13:50 | **OC07.01** Pre-conception maternal hemodynamics is associated with subsequent development of pre-eclampsia (PE) or intrauterine growth restriction (IUGR)  
*L. Foo (United Kingdom)*

13:58 | **OC07.02** Multicentre screening for pre-eclampsia by maternal factors and biomarkers at 11–13 weeks’ gestation: comparison to NICE guidelines and ACOG recommendations  
*N. O’Gorman (United Kingdom)*

14:06 | **OC07.03** Identification of women remaining at high risk of pre-eclampsia after aspirin initiation in the first trimester of pregnancy  
*C. Gasse (Canada)*

14:14 | **OC07.04** Pregnancy outcome in women with raised uterine artery Doppler in the second trimester  
*A. Kaelin Agten (United Kingdom)*

14:22 | **OC07.05** Maternal cardiac function in patients with mild and severe pre-eclampsia compared with normal pregnant women  
*T. Yamada (Japan)*

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**HALL F**

**Miscarriage, ectopic pregnancy, PUL and other complications in early pregnancy**
*Chairs: B. Van Calster (Belgium); T. Bourne (United Kingdom)*

13:30 **INVITED**: How do we advise women with pain and bleeding in early pregnancy regarding the immediate and long-term outcome of the pregnancy? *M. Al-Memar (United Kingdom)*

13:42 **OC08.01** Evaluating the ultrasound diagnostic criteria for non-viable first trimester pregnancies *M. Atri (Canada)*

13:50 **OC08.02** Ultrasound diagnosis of molar pregnancy *A.M. Unipan (United Kingdom)*

13:58 **OC08.03** A randomised controlled trial comparing misoprostol to expectant care in early pregnancy failure *A. Fernlund (Sweden)*

14:06 **OC08.04** Local versus systemic methotrexate in uterine ectopic pregnancies *S. Schwab (Austria)*

14:14 **OC08.05** Rates of spontaneous pregnancy loss and ovulation-implantation interval within a prospective pre-conception cohort *L. Foo (United Kingdom)*

14:22 **OC08.06** Association of vaginal microbiota composition and outcomes in women found to have a pregnancy of unknown location (PUL) on an initial early pregnancy ultrasound scan *S. Bobdiwala (United Kingdom)*

*This presentation is eligible for the Young Investigator award (to be presented in the closing plenary).*

**HALL B**

**Short oral presentation (OP)**

**OP08** Ultrasound and genetics
*Chairs: L. Hui (Australia); L. Wilkins-Haug (United States)*
**HALL A**

14:35-15:15 Short oral presentation (OP)

**OP09** Detection of fetal heart anomalies I  
*Chairs: J.S. Carvalho (United Kingdom); E. Mlczoch (Austria)*

15:10-15:40 Coffee and e-poster viewing

15:40-17:00 Workshop

**IUGR management after the TRUFFLE trial: key messages**  
*Chairs: G. Visser (Netherlands); T. Frusca (Italy)*

<table>
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<th>Time</th>
<th>Session</th>
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| 15:40 | Overview  
*G. Visser (Netherlands)* |
| 15:55 | Is MCA useful in severe early onset FGR?  
*E.A. Hernandez-Andrade (United States)* |
| 16:05 | How is monitoring best achieved before 32 weeks?  
*K. Hecher (Germany)* |
| 16:15 | Fetal heart monitoring: STV versus PRSA  
*S. Lobmaier (Germany)* |
| 16:25 | Do steroids affect Dopplers and CTG?  
*C. Lees (United Kingdom)* |
| 16:35 | Putting TRUFFLE in perspective  
*C. Lees (United Kingdom)* |
| 16:50 | Discussion |

**HALL E**

14:35-15:15 Short oral presentation (OP)

**OP10** Babies born too early or too small  
*Chairs: H. Feltovich (United States); C. Wohlmuth (Austria)*

15:10-15:40 Coffee and e-poster viewing

15:40-16:40 Workshop

**Abnormally invasive placenta**  
*Chairs: L.J. Salomon (France); F. Chantraine (Belgium)*

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| 15:40 | Optimal utilisation of ultrasound: when and which signs?  
*S. Collins (United Kingdom)* |
| 15:55 | Improving detection using MRI: does contrast add benefit?  
*A.E. Millischer (France)* |
| 16:05 | A “centre of excellence” approach: how to set it up and what are the hurdles?  
*A. Bhide (United Kingdom)* |
| 16:25 | I just opened this patient and found an unsuspected accreta: what shall I do?  
*A. Abuhamad (United States)* |

**My answer in 5 minutes:**

16:40 Planned Caesarean hysterectomy in these women  
*I. Timor-Tritsch (United States)*

16:45 How to manage placenta accreta: just leave it all in  
*L. Sentilhes (France)*

16:50 How to manage placenta accreta: take the placenta out but leave the uterus in  
*A. Bhide (United Kingdom)*

16:55 Audience Q&A
HALL F

**Short oral presentation (OP)**

**OP11** Complications in early pregnancy: using imaging and biomarkers to provide new insights  
*Chairs: E. Kirk (United Kingdom); I. Timor-Tritsch (United States)*

**Coffee and e-poster viewing**

**Workshop**

The future of ultrasound for the detection of CNS anomalies after the MERIDIAN trial  
*Chairs: G. Malinger (Israel); M. Sanz Cortes (United States)*

- **15:40** The MERIDIAN study in the eyes of the radiologist  
  *Speaker to be confirmed*

- **16:00** The MERIDIAN study in the eyes of the ultrasonologist  
  *D. Paladini (Italy)*

- **16:20** Why I don’t need MRI in my practice  
  *G. Malinger (Israel)*

- **16:40** The additional value of MRI in current clinical practice  
  *M. Sanz Cortes (Spain)*

HALL B

**Short oral presentation (OP)**

**OP12** Screening  
*Chairs: M. Herrera (Colombia); J. Miller (United States)*

**Coffee and e-poster viewing**

**Workshop**

Difficult problems in early pregnancy: PUL, enhanced myometrial vascularity, diagnosing and managing Caesarean scar pregnancy  
*Chairs: G. Condous (Australia); T. Bourne (United Kingdom)*

- **15:40** Do we scan too many women too early? A practical validated approach to managing women with pregnancy of unknown location  
  *S. Bobdiwala (United Kingdom)*

- **15:55** What should we do when we find enhanced myometrial vascularity?  
  *T. Van den Bosch (Belgium)*

- **16:10** Diagnosing Caesarean scar pregnancy: over the scar; into the scar? Can we link ultrasound features to prognosis yet?  
  *I. Timor-Tritsch (United States)*

- **16:25** Managing Caesarean scar pregnancy: is this a surgical problem in all cases?  
  *D. Jurkovic (United Kingdom)*

- **16:40** Case discussions  
  *All speakers*
## HUB 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:15-09:15</td>
<td><strong>Interactive</strong></td>
<td>In conversation with B. Benacerraf: Gynecology cases: tips and tricks</td>
</tr>
<tr>
<td>09:20-10:00</td>
<td><strong>Poster discussion (P)</strong></td>
<td>P01: Preterm birth: maternal and fetal assessment <em>Chair: H. Feltovich (United States)</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td>P02: New tools to evaluate the fetal brain and CNS <em>Chair: J. Deng (United Kingdom)</em></td>
</tr>
<tr>
<td>10:20-11:20</td>
<td><strong>Interactive</strong></td>
<td>In conversation with M. Blanchette Porter: How do I use ultrasound to assess women with abnormal uterine bleeding?</td>
</tr>
<tr>
<td>11:25-12:05</td>
<td><strong>Poster discussion (P)</strong></td>
<td>P04: Ultrasound in the labour ward I <em>Chair: A. Gagnon (Canada)</em></td>
</tr>
<tr>
<td>12:20-13:20</td>
<td><strong>Interactive</strong></td>
<td>In conversation with A. Testa: Diagnosing less common types of ovarian tumour</td>
</tr>
<tr>
<td>13:30-14:30</td>
<td><strong>Interactive</strong></td>
<td>In conversation with H.P Dietz: How to examine the pelvic floor with ultrasound</td>
</tr>
<tr>
<td>14:35-15:15</td>
<td><strong>Poster discussion (P)</strong></td>
<td>P08: Fetal growth <em>Chair: G. Rizzo (Italy)</em></td>
</tr>
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## HUB 2

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<tr>
<td>12:20-13:20</td>
<td><strong>Interactive</strong></td>
<td>Join the conversation: ISUOG and FIGO—what is the trouble with established techniques and technologies in underserved regions? <em>Moderators: T.M. Eggebø (Norway); G. Visser (Netherlands)</em></td>
</tr>
<tr>
<td>13:30-14:30</td>
<td><strong>Interactive</strong></td>
<td>Join the conversation: ASPIRIN in pre-eclampsia <em>Moderator: F. da Silva Costa (Australia)</em></td>
</tr>
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## Interactive Sessions

- **Patientenselbsthilfegruppen und gynaekologischer Ultraschall – ein Austausch**
  *Moderator: C. Brezinka (Austria)*
### HUB 3

**Interactive**
- Special interest group (SIG): Doppler  
  *Chair: C. Lees (United Kingdom)*

**Poster discussion (P)**
- P03: Clinical consequences of abnormal placentation  
  *Chair: B. Tutschek (Switzerland)*

**Interactive**
- Special interest group (SIG): MRI  
  *Chair: G. Malinger (Israel)*

**Poster discussion (P)**
- P06: Fetal echocardiography I  
  *Chair: J.S. Carvalho (United Kingdom)*

**Interactive**
- Special interest group (SIG) 3D  
  *Chair: J. Deng (United Kingdom)*

**Interactive**
- Join the conversation: Aspirin in pre-eclampsia  
  *Moderator: F. da Silva Costa (Australia)*  
  *Opinion leaders: L. Poon (Hong Kong); E. Bujold (Canada)*

**Poster discussion (P)**
- P10: Placenta, umbilical cord and amniotic fluid  
  *Chair: T. Cohen-Overbeek (Netherlands)*

### HUB 4

**Flim launch**
- The principles of ultrasound imaging

**Interactive**
- The gynecology oncology case discussion meeting: oncology surgeons and ultrasound specialists discuss cases where imaging impacts management decisions  
  *Moderators: A.C. Testa (Italy); E. Epstein (Sweden)*

**Interactive**
- Special interest group (SIG) 3D  
  *Chair: J. Deng (United Kingdom)*

**Interactive**
- In conversation with B. Van Calster and J. Stirnemann: Statistics for clinical fellows

**Interactive**
- Join the conversation: Is aspirin in pre-eclampsia  
  *Moderator: F. da Silva Costa (Australia)*  
  *Opinion leaders: L. Poon (Hong Kong); E. Bujold (Canada)*

**Flim launch**
- The principles of ultrasound imaging  
  *(collaboration of MAF & ISUOG)*
OP01: Placental and maternal factors in IUGR

**Chairs:** F. Figueras (Spain); L. Impey (United Kingdom)

**OP01.01** Abnormal cerebroplacental (CPR) and cerebrorenal (CRR) Doppler indices in fetuses with small abdominal circumference
S. Contag (United States)

**OP01.02** Placenta-derived exosomes in pregnancies complicated with fetal growth restriction at term
J. Miranda (Spain)

**OP01.03** Placental histology and sFlt-1/PlGF ratio in intrauterine growth restriction
F. Fuse (Italy)

**OP01.04** Birthweight differences at term are explained by the gender, gestational age and placental dysfunction, but not by ethnicity
J. Morales-Roselló (Spain)

**OP01.05** Reduced third trimester growth velocity in appropriate-for-gestational-age fetuses is associated with multiple indicators of placental insufficiency
T.M. MacDonald (Australia)

**OP01.06** Prediction value of cerebral placental ratio for mode of delivery can be changed and improved using different classification criteria methods
E. Zohav (Israel)

**OP01.07** Maternal hemodynamic in hypertensive disorders and different fetoplacental growth patterns, in pregnancy and postpartum
F. Fuse (Italy)

**OP01.08** Prenatal stress modifies RNA expression of HSD11β2 and the hypothalamic-pituitary-adrenocortical axis in fetal growth restriction
J. Miranda (Spain)

**OP01.09** Prediction of birthweight in SGA at 11–13+6 weeks using maternal history, LMP, ultrasound and biochemistry
J. Stirnemann (France)

**WITHDRAWN**

**OP01.10** Maternal hemodynamic in pregnancies complicated by intrauterine growth restriction and hypertensive disorders
T. Izzo (Italy)

**OP02: Fetal cardiac function**

**Chairs:** P. Acharya (India); S. Yagel (Israel)

**OP02.01** Evaluation of ventricular function in fetus with Ebstein's anomaly by velocity vector imaging
M. Xie (China)

**OP02.02** 24-segment transverse ventricular fractional shortening: a new technique to evaluate fetal cardiac function
G.R. DeVore (United States)

**OP02.03** Quantile score: a new reference system for fetal echocardiography from a large multicentre study
S. Ge (United States)

**OP02.04** Aortic coarctation: biventricular functional pattern in the third trimester of pregnancy
F. Crispi (Spain)

**OP02.05** Ventricular remodelling in fetuses with aortic coarctation
F. Crispi (Spain)
Evaluation of multi-modality, global fetal cardiac function assessment in pregnancies complicated with IUGR, TTTS and sIUGR

H. Avnet (Australia)

Myocardial ventricular performance in normal fetuses at 11–38 weeks of gestation: comparison between speckle-tracking and traditional echocardiography

M. Bellotti (Italy)

WITHDRAWN

Fetal cardiac function and exercise during pregnancy

M. Brik (Spain)

Factor analysis on reverse flow phenomenon in aortic isthmus by fetal echocardiography

S. Ge (United States)

Congenital heart disease and the placenta: is hypoxia affecting the placenta?

E. Mlczoch (Austria)

**OP03: Using ultrasound to solve old and diagnose new problems in reproductive medicine**

*Chairs: C. Brezinka (Austria); N.J. Raine-Fenning (United Kingdom)*

09:20-09:36 What ultrasound tells us about a women’s reproductive function

N. Raine-Fenning (United Kingdom)

Time-lapse embryo incubation and/or selection for improving the reproductive outcomes: a systematic review and meta-analysis

W.P. Martins (Brazil)

Ultrasonographic findings related to insulin resistance in patients with polycystic ovarian syndrome

S. Guerriero (Italy)

3D-TVS criteria to diagnose t-shaped uterus

F. Leone (Italy)

A randomised control trial on the retention of intrauterine copper contraceptive device following postplacental and interval insertion

T. Dias (Sri Lanka)

Ovarian response to the gonadotropins during IVF or ICSI cycles in patients with presence of deep infiltrating endometriosis based on ultrasonography

S. Guerriero (Italy)

HyCoSy by using the new ultrasound contrast agent lignosal (mixture of 2% lignocaine jelly and saline) for the evaluation of tubal patency

N. Chegondi (India)

**OP04: OP: Fetal anomalies: from the diaphragm up**

*Chairs: A. Odibo (United States); P. Sladkevicius (Sweden)*

Interobserver variability of sonographic lung size measurement in congenital diaphragmatic hernia (CDH) across the NAFTNet* FETO Consortium

N. Abbasi (Canada)

Congenital diaphragmatic hernia and diaphragmatic eventration: separate entities or two sides of the same coin?

L. De Cate (Belgium)

Prenatal prediction of extracorporeal membrane oxygenation requirement in patients with congenital diaphragmatic hernia

J.L. Miller (United States)
Prenatally diagnosed fetal congenital cystic adenomatoid malformation (CCAM) and bronchopulmonary sequestration (BPS) showed excellent survival and prognosis: a 10-year review in a tertiary hospital

H. Yi (Republic of Korea)

Variation of fetal lung size in congenital diaphragmatic hernia (CDH): biology or measurement error?

J.L. Miller (United States)

Congenital lobar emphysema: how colour Doppler can help to reach the diagnosis

M. Brasseur-Daudruy (France)

Charts of fetal brain structures: a systematic review of methodological quality

V. Donadono (United Kingdom)

4D ultrasound assessment of facial expressions and their reproducibility in the third trimester

M.A. AboEllail (Japan)

WITHDRAWN

Prenatal diagnosis of a congenital lung deformity: horseshoe lung

M. Xie (China)

**OP05: Ultrasound meets MRI: form and function**

*Hall B*

*Chairs: R. Abu-Rustum (Lebanon); W. Lee (United States)*

Measurement of fetal urine production using three dimensional ultrasonography rotational technique (VOCALTM) in normal pregnancy

A. Rossi (Italy)

Reproducibility of virtual reality and three-dimensional power Doppler ultrasound measurements for non-invasive assessment of periconceptional utero(placental) vascularisation

I.F. Reijnders (Netherlands)

Sonographic assessment of normal fetal uterus using three-dimensional imaging: a new technique

F. Grosjean (France)

Cross-sectional comparison of two techniques for the non-invasive measurement of cardiac output in and outside pregnancy

G. Masini (United Kingdom)

New advances in fetal cardiovascular magnetic resonance imaging

L. Sun (China)

Ultrasound fetal and placental tissue characterisation in lung maturity in pre-eclamptic and diabetic patients

M. Podobnik (Croatia)

Prediction and utility of neonatal respiratory morbidity by quantitative lung texture analysis in pregnancies at risk for preterm/early term delivery

A. Khurana (India)

Novel placental evaluation using multimodal MRI

R. Pratt (United Kingdom)

Grading the fetal echogenic bowel (EB): correlation between quantitative computerised gray-scale analysis and subjective qualitative evaluation

L. Maggio (Netherlands)

Fetal magnetic resonance imaging (MRI) versus 3D ultrasonography (3D-US) in assessment of fetal lung volumes in cases at risk of pulmonary hypoplasia

M.R. Louis (Egypt)

Artefacts: reality in 3D/4D ultrasound examination of the fetus

D. Miric Tesanic (Croatia)
OP06: Fetal growth: anatomy and measurements  

**Hall A**

**Chairs:** E.A. Hernandez-Andrade; A. Odibo (United States)

Fetal longitudinal growth assessment and perinatal outcome after suspected preterm labour  
L. Gabasa (Spain)

Three-dimensional automated measure of the fetal thigh in high-risk pregnancies to predict fetal weight  
T. Izzo (Italy)

Distribution of highly oxygenated umbilical flow in normal human fetuses through the ductus venosus (DV) between 11 and 14+6 weeks of gestation  
M. Bellotti (Italy)

US anatomy of the middle and inner ear with high frequency probe: a pictorial essay  
M. Brasseur-Daudruy (France)

Clinical impact of using different normal ranges for amniotic fluid index  
S. Vannuccini (United Kingdom)

Fetal liver portal venous perfusion in severe growth-restricted fetuses  
N. Gilad (Israel)

WITHDRAWN

Investigation of fetal growth restriction genetic cause with SNP array  
E. Yang (China)

First trimester fetal anatomy assessment from a single 3D volume  
E. Pavlova (Bulgaria)

The association between suboptimal fetal abdominal circumference growth velocity and adverse neonatal outcome in appropriate-for-gestational-age neonates  
M. Hendrix (Netherlands)

External genitalia exploration: feasibility study of a second trimester systematic ultrasound based on the exploration of the labioscrotal folds fusion  
M. Massoud (France)

OP07: Hot topics around the fetal brain  

**Hall E**

**Chairs:** R. Chaoui (Germany); C. Mitter (Austria)

Fetal neurosonography vs magnetic resonance imaging: comparing their accuracy in diagnosing brain anomalies with respect to neuropsychiatric outcome  
C. Casato (Italy)

The relationship between the posterior fossa structures and foramen magnum using the occipitum-dens line (ODL) in following fetal surgery for myelomeningocele  
E.Q. Barreto (Brazil)

Fetuses with congenital heart disease display normal cerebral volume growth  
F.A. Jansen (Netherlands)

Functional ultrasound evaluation in fetuses with myelomeningocele: a preliminary study  
L. De Catte (Belgium)

Bilateral periventricular nodular heterotopia (BPNH) as detected on fetal and maternal MRI, caused by a previously undescribed Filamin A mutation  
S. Stoecklein (Germany)

Role of prenatal MRI in the prediction of long-term outcome of fetuses with isolated agenesis of the septum pellucidum  
L.J. Salomon (France)

Fetal cerebral hemorrhage: a multicentre case series and update of classification and counselling  
F. Correa (Spain)

Preoperative neurosonography in neonates with prenatally detected congenital heart defects  
F.A. Jansen (Netherlands)
Fetal akinesia deformation sequence: is motor assessment of additional value for in utero diagnosis?  
A ten-year cohort study  
J. Tjon (Netherlands)  
Neurosonographic evaluation of corpus callosum and cortical development in small-for-gestational age and growth-restricted fetuses  
J. Miranda (Spain)  
CSP dilatation in mid-trimester fetuses with DiGeorge syndrome: a case-control study  
C. Pylypjuk (Canada)  

**OP08: Ultrasound and genetics**  
**Hall B**  
*Chairs: L. Hui (Australia); L. Wilkins-Haug (United States)*  

Cytogenetic analysis in fetuses with late onset abnormal sonographic findings  
R. Bardin (Israel)  
The value of genetic testing and morphological examination in children with gastrochisis  
C.C. Lap (Netherlands)  
The prenatal diagnosis of volvulus in a fetus with congenital diarrhoea (CD) probably associated with a GUCY2C gene variant  
I. Clemens (Norway)  
Pregnancy outcome for fetuses with increased nuchal translucency ≥ 3.5mm but normal karyotype and CMA  
C. Votino (Italy)  
Prenatal diagnosis of Smith–Magenis syndrome in fetus with mild unilateral borderline ventriculomegaly: a case report  
A. Yulia (United Kingdom)  
Is aberrant right subclavian artery in fetuses a risk factor for microscopic and submicroscopic chromosomal aberrations?  
S. Ran (Israel)  
Chromosomal disorders in congenital anomalies of the kidney and the urinary tract  
V. Borobio (Spain)  

**OP09: Detection of fetal heart anomalies I**  
**Hall A**  
*Chairs: J.S. Carvalho (United Kingdom); E. Mlczoch (Austria)*  

In utero therapy for fetal heart block: UCLH, London experience  
A. Yulia (United Kingdom)  
Prenatal detection of congenital heart defects by sonographers on routine ultrasound examination in second trimester of pregnancy  
P. Sladkevicius (Sweden)  
CASSEAL: fetal cardiovascular system sonographic evaluation algorithm – multicentric study on its feasibility for prenatal diagnosis  
C. Bravo (Spain)  
Diagnostic options for detailed examination of the fetal heart in the first trimester: what we have learned so far – critical view on conventional and volumetric approaches in >170 cases  
L. Weichert (Germany)  
Detection of isolated major congenital heart defects at 11–13 weeks’ scan in fetuses with normal anatomy and normal nuchal translucency  
E.S. Nekrasova (Russian Federation)  
Residual diagnoses of major congenital heart defects by routine 30–34+6 weeks’ ultrasound  
I. Stirnemann (France)  
Improving fetal cardiac assessment using 5DHeart™ technique: from beginner to expert  
M. A. Gembicki (Germany)
Characterisation of subtypes of isolated ventricular septal defects demonstrated by fetal echocardiography and their postnatal outcome

L. Gindes (Israel)

Isolated aberrant right subclavian artery at 14–16 weeks of gestation, association with Down’s syndrome

A. Shrim (Israel)

The value of echocardiography in the diagnosis and postnatal outcome of fetal pure ventricular septal defect

Y. Guo (China)

The added value of f-TAPSE in the surveillance of pregnancies complicated by fetal and placental tumours

S. Perlman (Israel)

OP10: Babies born too early or too small

Chairs: H. Feltovich (United States); C. Wohlmuth (Austria)

Subclinical placental inflammation as a risk factor for impaired cognitive development in early childhood after suspected preterm labour

D. Oros (Spain)

Longitudinal transvaginal ultrasound of cervical length in pregnant women with prior conisation

C.B. Wulff (Denmark)

Gestational age-related changes in uterine cervical elasticity in normal pregnancy at 12–35 weeks’ gestation evaluated using shear wave elastography

T. Horinouchi (Japan)

Assessment of cervical elastography strain pattern and its association with preterm birth

R. Schmitz (Germany)

Pulmonary artery acceleration/ejection time as a predictor of neonatal respiratory complications in patients with preterm premature rupture of membranes

J.R. Duncan (United States)

Prediction of preterm birth and small-for-gestational-age neonates by fetal biometry at 19–24 gestational weeks

M. Kim (Republic of Korea)

Worsening of the uterine artery Doppler is independently associated with fetal redistribution

C.A. Mongaghan (United Kingdom)

How good are we in predicting low birthweight with third trimester ultrasound scan?

K.M. Motsum (United Kingdom)

Ischemia-modified albumin in pregnancy

A. Rossi (Italy)

Longitudinal change in the cerebroplacental ratio in pregnancies with small-for-gestational-age fetuses complicated by stillbirth and perinatal death

A. Khalil (United Kingdom)

OP11: Complications in early pregnancy: using imaging and biomarkers to provide new insights

Chairs: E. Kirk (United Kingdom); I. Timor-Tritsch (United States)

Outcome of ectopic uterine pregnancy (EUP) treated with methotrexate (MTX) associated with uterine artery embolisation (UAE)

D.G. Iliescu (Romania)

Endometrial thickness and its value in triaging women with a pregnancy of unknown location

S. Bobdiwala (United Kingdom)
Smaller than expected early Crown–rump length: does it predict the occurrence of early miscarriage in singleton pregnancies conceived by IVF?  
I. Martins (Portugal)

Should the beta hCG threshold level for ultrasound in the diagnosis of tubal ectopic pregnancies be abolished?  
I. Polanski (United Kingdom)

Predictors of the successful expectant management of tubal ectopic pregnancy  
H. Fourie (United Kingdom)

Diagnostic protocols for the management of pregnancy of unknown location (PUL): a systematic review and meta-analysis  
S. Bobdiwala (United Kingdom)

The natural history of pregnancy-related enhanced myometrial vascularity (EMV)  
K. Grewal (United Kingdom)

The management of recurrent ectopic pregnancy: a multi-centre observational study  
H. Fourie (United Kingdom)

Treatment strategies of fetal heart beat (FHB)-positive Caesarean scar pregnancy (CSP)  
T. Hoshino (Japan)

**OP12: Screening**

*Chairs: M. Herrera (Colombia); J. Miller (United States)*

Ultrasoundographic detection of fetal malformation and parental longitudinal psychological stress responses  
A. Kaasen (Norway)

Absent nasal bone without other features of Trisomy 21 in pregnant Caucasian women: check the clavicles for cleidocranial dysplasia  
F. Rypens (Canada)

To see or not to see anomalies: the nuchal translucency as a magnifying glass?  
M. Bakker (Netherlands)

Prenatal detection of major congenital malformations in a high-uptake population  
A.W. Olesen (Denmark)

Combination of early transvaginal and late second trimester ultrasound improves fetal anatomy screening in obese women  
R. Råman (Sweden)

Audit of gastroschisis and omphalocele in an Australian maternal-fetal medicine centre  
D. Di Filippo (Australia)

The prenatal diagnosis of disorders of sex development using 2D/3D ultrasonography: a 10-case experience  
Y. Kozuma (Japan)

Prenatal diagnosis of urinary tract anomalies: a cohort study in the northern Netherlands  
M. Bakker (Netherlands)

Ultrasound markers predicting complex gastroschisis and adverse outcome: a longitudinal prospective nationwide cohort study  
C.C. Lap (Netherlands)

Accuracy of prenatal diagnosis in infants with omphalocele  
P. Conner (Sweden)

Prediction of cervical changes and premature birth by cervical image pattern analysis using real-time tissue elastography  
R. Nagai (Japan)

Performance and errors of the first trimester (FT) extended anomaly scan: key points for the management of the scan protocol  
D.G. Iliescu (Romania)
P01: Preterm birth: maternal and fetal assessment

Chair: H. Feltovich (United States)

Transabdominal cervical length measurements above 35mm exclude short cervix in both twin and singleton pregnancies

A. Shrim (Israel)

WITHDRAWN

Ultrasound assessment of cervical length and volume: comparison of transabdominal and transvaginal approach

J. Wie (Republic of Korea)

Longitudinal assessments of the fetal adrenal gland indicates preterm birth

A. Diemert (Germany)

Relationship between fetal thymus size and cervical length in the second trimester of pregnancy and the risk of preterm birth

A.F. Moron (Brazil)

Effectiveness of the contemporary treatment of preterm labour: a comparison with a historical cohort

K.O. Kagan (Germany)

Vaginal progesterone and cervical pessary for the prevention of SPB in patients with CCI ≤ 5th percentile at routine ultrasound 11 – 13.6 weeks

M.A. Parra-Saavedra (Colombia)

Comparison of preventive measures for preterm deliveries in twin pregnancies between pessary-progesteron and cerclage alone

C. Gulumser (Turkey)

Uterine artery pulsatility index in pregnancies complicated by preterm premature rupture of membranes as predictor of placental vascular complications

J.R. Duncan (United States)

The cerebroplacental ratio does not appear to predict severe neonatal outcomes in preterm premature rupture of membranes

J.R. Duncan (United States)

Comparison between first and third trimester evaluation of uterine scar: a prospective study

K. Paquette (Canada)

P02: New tools to evaluate the fetal brain and CNS

Chair: J. Deng (United Kingdom)

Automatic evaluation of cortical folding pattern in isolated ventriculomegaly by magnetic resonance imaging

N.M. Hahner (Spain)

Multiplane and skeletal mode of 3D ultrasound for prenatal diagnosis of vertebral deformation and closed spina bifida

L. Xie (China)

Volumetric approach for detailed neurosonogram: diagnostic advantage or disadvantage?

J. Weichert (Germany)

Axial and coronal views of the vermian primary fissure assist in the diagnosis of vermian dysgenesis

D. Pugash (Canada)

Expert neurosonography versus magnetic resonance imaging in the antenatal diagnosis of cortical abnormalities: a prospective study in a high-risk population

N. Volpe (Italy)

Feasibility of fetal 2D and 3D neurosonography in a tertiary centre

S.M. Everwijn (Netherlands)
Termination of pregnancy for midline cerebral anomalies  
W. Dendas (Belgium)

Regression and improvement of Chiari II signs in repair of prenatal myelomeningocele  
P.M. Gonzalez (Chile)

**P03: Clinical consequences of abnormal placentation**  
Chair: B. Tutschek (Switzerland)

Validation of a clinical and sonographic-based scoring system for prenatal prediction of morbidly adherent placenta in high risk population  
A.S. Al Sadah (Canada)

The role of ultrasound in diagnosis of placenta previa and acreta in cases after previous surgical intervention  
S. Babloyan (Armenia)

Analysis of the antenatal ultrasonic diagnosis of placenta accreta  
L. Wang (China)

Velamentous and marginal cord insertion and the risk of adverse pregnancy outcomes in singleton pregnancies  
E. Cosmi (Italy)

Characteristics of fetal heart beat (FHB)-positive Caesarean scar pregnancy (CSP) and adverse effects of transarterial embolisation (TAE) therapy  
T. Hoshino (Japan)

Pregnancy outcome and patients' characteristics with low PAPP-A  
F. Ajibade (United Kingdom)

**P04: Ultrasound in the labour ward I**

Chair: A. Gagnon (Canada)

Intrapartum PRSA: a new method to predict fetal acidosis?  
J. Weyrich (Germany)

Umbilical cord index in prediction of short and long umbilical cord in term pregnancy: a new ultrasonographic method  
M. Basbug (Turkey)

What is the relationship between the cerebroumbilical ratio, operative delivery for fetal distress and time to delivery in nulliparous women?  
S. Usman (United Kingdom)

The subpubic arch angle in nulliparous women at term of pregnancy with fetuses in breech presentation  
N.A. Eltoweel (Egypt)

Measurement of retropubic tissue thickness using intrapartum transperineal ultrasound to assess cephalopelvic disproportion (CPD)  
C. Chor (China)

Fetal rotation during vacuum extraction  
B.H. Kohrs (Norway)

Sonographic assessment of fetal shoulder orientation after head delivery  
N. Volpe (Italy)

Neonatal head circumference is not a risk factor for levator ani avulsion  
I. Cataneo (Italy)

Intrapartum ultrasound and mode of delivery in prolonged second stage of labour  
A. Dall'Asta (Italy)

Intrapartum measurement of the lower uterine segment thickness (LUST): defining the normal  
R. Bardin (Israel)
**P05: Pre-eclampsia**  
Chair: L. Poon (Hong Kong)

- **Associations of “endothelial dysfunction” genes polymorphism in pregnancy-induced hypertension among Uzbek women: a case-control study**  
  U. Ashurova (Uzbekistan)

- **Changes in BOLD MRI in a STOX1 pre-eclamptic mouse model**  
  H. Collinot de Chanoud (France)

- **Correlation between placental vascularisation indices and histological findings of placentas in pregnancy hypertension**  
  A. Suranyi (Hungary)

- **Placental histology and sFlt-1/PIGF in pregnancies complicated by hypertensive disorders**  
  F. Fuse (Italy)

- **sFlt-1/PIGF ratio in clinical practice: reassessment of cut-off values for predicting pre-eclampsia in our cohort of patients**  
  K. Markova (Czech Republic)

- **The assessment of the role of (sFlt-1 / PLGF) ratio in pregnancy complicated by early severe pre-eclampsia**  
  M.A. Parra-Saavedra (Spain)

- **Three-dimensional power Doppler of uteroplacental vascularisation in third trimester: comparison between normal and placental insufficiency pregnancies (EVUPA study)**  
  A. Chabot-Lecoanet (France)

- **Differences in pre-pregnancy stress response between healthy and PE/FGR pregnancies**  
  J. Man (United Kingdom)

- **Uterine artery diastolic notch as risk factor for pre-eclampsia and differences of adiponectin between early onset and late onset pre-eclampsia**  
  Y. Wati (Indonesia)

- **Assessment of maternal cerebrovascular Doppler indices in pregnancies complicated by pre-eclampsia**  
  S. Han (Republic of Korea)

- **Cardiovascular function in women after experiencing a hypertensive disorder in pregnancy**  
  Z.N. Saumtally (United Kingdom)

- **The prognostic value of highly sensitive cardiac troponin I in pregnancies with pre-eclampsia: bicentric prospective study**  
  A. Ayachi (Tunisia)

**P06: Fetal echocardiography I**  
Chair: J.S. Carvalho (United Kingdom)

WITHDRAWN

- **Perinatal outcome of tetralogy of Fallot depending on time of diagnosis**  
  C. Enzensberger (Germany)

- **Measurement of the aortic outlet angle by ultrasound in fetuses with and without congenital heart malformations involving the left ventricular outflow tract**  
  L. Gindes (Israel)

- **First trimester screening for major congenital heart diseases: the septal-truncus angle**  
  S. Tudorache (Romania)

- **Automation of the fetal right myocardial performance index (RMPI) to optimise repeatability**  
  H. Avnet (Australia)

- **CASSEAL: fetal cardiovascular system sonographic evaluation algorithm – multicentric study on its clinical application for prenatal diagnosis**  
  C. Bravo (Spain)

- **Multicentric study for prenatal diagnosis of congenital cardiovascular anomalies in second trimester using CASSEAL (Cardiovascular System Sonographic Evaluation Algorithm)**  
  A. Ayachi (Tunisia)
C. Bravo (Spain)
Monitoring of sacrococcygeal teratoma: clinical evaluation of a computerised model

C. Wohlmuth (Austria)
Performance of TAPSE, MAPSE and TAPSE/MAPSE values in normal fetuses throughout gestation and in newborns by M-mode echocardiography

M. Rodríguez (Spain)
The application of z-scores in diagnosis of fetal pulmonary artery stenosis in Chinese patients

Y. Peng (China)
Comparison of M-mode and 2D-echocardiography in the assessment of fetal ventricular systolic function

F. Crispi (Spain)
Prenatal echocardiographic evaluation in pulmonary stenosis correlated with postnatal intervention

A. Takamizu (Japan)

**P07: Using ultrasound in urogynecology patients**

**L3 / L6 Hub 4**

Chair: A. Youssef (Italy)

Correlation and reliability of translabial B-mode and 3D ultrasonographic scan in evaluating transobturator adjustable tape (TOA) surgery success: preliminary results

M. Rolla (Italy)
Anal sphincter trauma and parity

Y. Li (China)
Transvaginal two-dimensional sonography: its role in observing the puborectalis in postpartum women

H. Wang (China)
Quantitative evaluation of a semi-automated measurement system for levator hiatus

H. Wang (China)
Prevalence of levator trauma and delivery mode

H.P. Dietz (Australia)
Does a pelvic floor contraction change the appearance of EAS defects?

H.P. Dietz (Australia)
Ultrasound imaging of transobturator suburethral tape and its association with surgical outcome

I. Ortega Cárdenes (Spain)
What is the best cut-off value for the levator-urethra gap (LUG) measurement in the diagnosis of avulsion defects?

V.H. Eisenberg (Israel)
Ultrasound assessment of changes in the pelvic floor before and after childbirth

B. Graupera (Spain)
Transperineal 3D pelvic ultrasound in the assessment of complex voiding dysfunction following failed suburethral sling division surgery

S. The (Australia)
WITHDRAWN

**P08: Fetal growth**

**L3 / L6 Hub 1**

Chair: G. Rizzo (Italy)

Cerebroplacental ratio (CPR) in fetuses with different estimated weight

R.S. Bataeva (Russian Federation)
The correlation between parental biometric parameters and neonatal head circumference: a prospective study

S. Porat (Israel)
Low-dose aspirin for prevention of fetal growth restriction and pre-eclampsia in twins: the GAP pilot randomised trial

E. Bujold (Canada)
The relationship between cardiomegaly and global strain in fetuses with intrauterine growth restriction (IUGR)

G. R. DeVore (United States)

Secondary ossification centres of fetal femur, humerus and tibia assessed by 3D ultrasound in third trimester: correlation with gestational age

G. Cohen (Israel)

Low molecular-weight heparin for prevention of placental insufficiency in women with history of a first pregnancy with early onset IUGR

O. Tica (Romania)

Which fetal growth chart detects the small baby? A comparison of abdominal circumference and estimated fetal weight on the Hadlock charts compared to the Gardosi customised chart in a London University Hospital

F. E. Bredaki (United Kingdom)

Pitfalls in interpretation of fetal growth curves in pregnancies complicated with maternal obesity and gestational diabetes

I. Ceausu (Romania)

The influence of cigarette smoking and dietary habits on first trimester growth rate and embryonic heart rate

B. Shakeri (Australia)

Embryonic growth and birthweight: a correlation study

M. Yamamoto (Chile)

Evaluation of an automated tool for fetal biometry

I. Salim (United Kingdom)

**P09: Head, neck and bones**

*Chair: P. Acharya (India)*

Otocephaly-agnathia, proboscis and holoprosencephaly diagnosed in a fetus with Trisomy 18 using three-dimensional ultrasound and postmortem magnetic resonance imaging

A. Alhousseini (United States)

Typical and atypical dural sinus malformation imaging in the fetus: based on 4 cases

X. Che (China)

MR of fetal neck and face masses: prediction of high morbidity neonatal outcome, including ex utero intrapartum therapy (EXIT)

D. M. Twickler (United States)

Prenatal diagnosis of diastematomyelia: case series of 9 patients

H. P. Tamhankar (India)

Evaluation of ossification timing of sacral vertebrae by transabdominal sonography in the second trimester of pregnancy

B. Moradi (Islamic Republic of Iran)

Pregnancy complicated with maternal and fetal osteogenesis imperfecta type III

R. Gerychova (Czech Republic)

Three-dimensional imaging of the fetal skeletal system at 9 weeks’ gestation

H. Shah (United Kingdom)

Rare case of unilateral tibial hemimelia in the first trimester

D. Singh (India)

Ultrasonographic clues for prenatal diagnosis of FGFR3-related skeletal dysplasia

B. Jeong (Republic of Korea)

Prenatal diagnosis of achondroplasia in the second trimester of pregnancy using the biparietal diameter/femur length ratio

J. Stirnemann (France)

Maxillo-occipital line: a sonographic marker for the screening of open spina bifida in the first trimester

F. Da Silva Costa (Australia)
The fetal thymus: morphology and volumetry in 3 Tesla postmortem MRI – a retrospective analysis
G.M. Gruber (Austria)

Repetitive non-persistent protrusion of the tongue on prenatal ultrasound
A.K. Kesrouani (Lebanon)

Hemivertebra: diagnosis at 11–14 weeks of pregnancy
A. Yulia (United Kingdom)

P10: Placenta, umbilical cord and amniotic fluid

P10.01 Barter syndrome: a rare cause of refractory severe polyhydramnios
A. Fatma (United Kingdom)

P10.02 Idiopathic polyhydramnios and antenatal Barter syndrome: diagnostic criteria?
J. Thomas (Australia)

P10.03 Prenatal diagnosis of multiple umbilical vein varices associated with massive thrombosis and velamentous cord insertion
H. Kang (Republic of Korea)

P10.04 Amniotic band syndrome: first trimester diagnosis and classification
C. Liq (United Kingdom)

P10.05 Prenatal diagnosis of an umbilical artery aneurysm in a dichorionic-diamniotic twin gestation with fetal growth discordance
E. Pschirrer (United States)

P10.06 Congenital fetal anomalies are associated with placental pathologic change
K. Chen (China)

P11: Using ultrasound to characterise and help manage ovarian masses: experience of using the IOTA ADNEX model and simple rules

P11.01 Diagnostic accuracy of IOTA ADNEX and IOTA LR2 model compared with subjective assessment (SA) in differentiating benign and malignant ovarian masses
M. Pietryga (Poland)

P11.02 Performance of IOTA ADNEX model in differentiating histological subtypes of borderline ovarian tumours
A. Gaurilcikas (Lithuania)

P11.03 Ultrasound features of ovarian carcinoma in patients with BRCA 1 or BRCA 2 mutation
S. Giunchi (Italy)

P11.04 Ultrasound evaluation of adnexal masses during pregnancy
E. Rabiej (Poland)

P11.05 Subjective ultrasound assessment and the ADNEX model to differentiate between benign and malignant ovarian tumours
S. Ferrero (Italy)

P11.06 Could LARP1 be a driving force in ovarian cancer transformation?
A. Coosemans (Belgium)

P11.07 Applying IOTA simple rules and ADNEX model in daily routine
D.R. Hortge (Germany)

P11.08 AOUI Verona gynecology oncology centre ultrasound experience using IOTA model to study adnexal masses: management and outcome prediction
F. Presti (Italy)

P11.09 A case of mature teratoma with strumal foci mimicking borderline ovarian cancer in pregnancy
R. Heremans (Belgium)

P11.10 Primary retroperitoneal mucinous tumours diagnosed in pregnancy: a case report and literature review
F. Tahmasebi (United Kingdom)
Monday 18.09.2017

**HALL A**

**Masterclass**
Fetal neurosonography: tips and tricks  
*R. Chaoui* (Germany)

07:30-08:10

**08:15-09:15**

**Abnormal fetal growth: causation, detection and long-term effects**  
*Chairs: C.M. Bilardo (Netherlands); G. Tulzer (Austria)*

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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</table>
| 08:15 | **INVITED**: Physiological effects of IUGR  
*F. Figueras* (Spain) |
| 08:25 | **OC09.01** Transgenerational effect of fetal growth restriction  
*A. Sepúlveda-Martínez* (Spain) |
| 08:33 | **OC09.02** Maternal hemodynamics in SGA fetuses that turn to IUGR and the potential efficacy of treatment  
*G. Tiralongo* (Italy) |
| 08:41 | **OC09.03** Pattern of placental stromal-vascular lesions in small fetuses with and without pre-eclampsia  
*L. Youssef* (Spain) |
| 08:49 | **OC09.04** Ductus venosus waveforms in expectant management of early IUGR fetuses and risk of adverse neonatal outcome: a survival analysis  
*E. Cosmi* (Italy) |
| 08:57 | **OC09.05** The effect of introducing umbilical artery Doppler examination on the management of fetal growth restriction in a low-income country  
*B.K. Parmar* (Nepal) |
| 09:05 | **OC09.06** Placental ageing in term small-for-gestational age and growth-restricted fetuses  
*F. Crispi* (Spain) |

**HALL E**

**Masterclass**
New frontiers in preterm labour  
*R. Romero* (United States)

07:30-08:10

**The fetal brain exposed to Zika and CMV virus**  
*Chairs: M. Herrera (Colombia); G. Kaspi (Austria)*

<table>
<thead>
<tr>
<th>Time</th>
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</table>
| 08:15 | **INVITED**: From maternal infection to fetal brain lesion: the natural history of congenital infection  
*Y. Ville* (France) |
| 08:35 | **OC10.01** The Zika virus epidemic in French Guiana: proposition of an ultrasound-based score for the diagnosis of fetal congenital Zika virus syndrome  
*L. Pomar* (French Guiana) |
| 08:35 | **OC10.02** Prevalent and incident cases of CNS anomalies in fetuses of pregnant women with symptoms of ZIKV infection: ZEN Initiative, Bucaramanga, Colombia  
*L.A. Gutierrez Rojas* (Colombia) |
| 08:51 | **OC10.03** Additional prognostic value of third trimester MRI following reassuring mid-trimester assessment of congenital CMV infection  
*Y. Ville* (France) |
| 08:59 | **OC10.04** The echogenic caudate nucleus: a sign for the identification of brain involvement in fetuses with CMV infection?  
*L. Har-Toov* (Israel) |
| 09:07 | **OC10.05** Middle cerebral artery pulsatility index may predict fetal cerebral injury in pregnancy complicated by cytomegalovirus infection  
*E. Cosmi* (Italy) |
**MONDAY PROGRAM**

**HALL F**

**Masterclass**
Management of fetal growth restriction in practice
E. Gratacos (Spain)

Using ultrasound to characterise and help manage ovarian masses
Chairs: T. Bourne (United Kingdom); H. Koelbl (Austria)

08:15 **OC11.01** Clinical utility of IOTA models, RMI and ROMA to refer patients with adnexal masses to specialised oncology care
L. Wynants (Belgium)

08:23 **OC11.02** IOTA benign easy descriptors and ADNEX model integrated in a ‘traffic light system’ to guide the clinical management of adnexal pathology
C. Landolfo (Belgium)

08:31 **OC11.03** Prospective validation of IOTA methods in the differentiation between benign and malignant adnexal masses
W. Froyman (Belgium)

08:39 **OC11.04** Ovarian masses in pregnancy
T. Eichenberger-Gautschi (United Kingdom)

08:47 **OC11.05** Transvaginal colour Doppler ultrasound in early diagnosis of ovarian cancer: our experience since 1999
M. Pascual (Spain)

08:55 **OC11.06** Ultrasonographic differences of papillations in benign and malignant adnexal unilocular-solid cysts with papillations and no other solid components: a retrospective multicentre study
C. Landolfo (Belgium)

09:03 **OC11.07** Ultrasound-guided laparoscopic ovarian wedge resection in recurrent serous borderline ovarian tumours
S. Saso (United Kingdom)

**HALL B**

**Masterclass**
Revising IOTA terms and definitions: case examples of how to classify ovarian masses – how I manage non-tubal ectopic pregnancies?
L. Valentin (Sweden)
**HALL A**

09:20-10:00  
**Short oral presentation (OP)**  
**OP13** Small-for-gestational age  
Chairs: G. Rizzo (Italy); B. Thilaganathan (United Kingdom)

09:50-10:20  
Coffee and e-poster viewing

10:20-11:20  
**Fetal brain: form and function**  
Chairs: D. Paladini (Italy); A. Ngu (Australia)

10:20  
**LIVE SCAN**: how I look at the fetal brain  
L. Guibaud (France)

10:40  
**OC12.01** Early maturation of the sensory-motor cortex assessed by fetal MRI  
S. Stoecklein (Germany)

10:48  
**OC12.02** The accuracy of fetal fiber tracking: a postnatal MRI correlation  
J. Song (United States)

10:56  
**OC12.03** Thicknesses of transient fetal layers in brains of 19–24 gestational weeks’ fetuses on 3-T MRI  
I. Pogledic (Austria)

11:04  
**OC12.04** Cortical development is correlated with neurodevelopmental outcome at 6 months in fetuses with isolated non-severe ventriculomegaly  
E. Eixarch (Spain)

11:12  
**OC12.05** Cortical age in fetuses with heart defects using automated age-prediction software  
S.M. Everwijn (Netherlands)

**HALL E**

09:20-10:00  
**Short oral presentation (OP)**  
**OP14** Fetal brain and CNS anomalies  
Chairs: L.J. Salomon (France); M. Sanz Cortes (United States)

09:50-10:20  
Coffee and e-poster viewing

10:20-11:20  
**Can ultrasound guide delivery?**  
Chairs: T.M. Eggebø (Norway); P. Husslein (Austria)

10:20  
**ISUOG GUIDELINES**: guidelines on ultrasound in labour  
T. Ghi (Italy)

10:40  
**OC13.01** Managing “big” babies: the impact of fetal head circumference  
S. Yagel (Israel)

10:48  
**OC13.02** Fetal head circumference to predict delivery mode: a pilot study  
S. Yagel (Israel)

10:56  
**OC13.03** Sonographic prediction of mode of delivery: a multicentre, prospective cohort study  
B.H. Kahrs (Norway)

11:04  
**OC13.04, OC13.05, OC13.06** Dynamic changes of the angle of progression at term and labour outcome  
A. Youssef (Italy)

11:12  
**OC13.07** Visual biofeedback using transperineal ultrasound during the second stage of labour  
Y. Gilboa (Israel)

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* This presentation is eligible for the Young Investigator award (to be presented in the closing plenary).
**HALL F**

**Short oral presentation (OP)**

**OP15** Using ultrasound to accurately characterise and guide the management of ovarian masses: do IOTA models work in practice?
*Chairs: S. Helmy (Austria); L. Valentin (Sweden)*

**Coffee and e-poster viewing**

**Using imaging to help in the management of oncology patients**

*Chairs: S. Helmy (United Kingdom); E. Epstein (Sweden)*

10:20 **OC14.01** Ultrasound characteristics of endometrial cancer as defined by the International Endometrial Tumor Analysis (IETA) consensus nomenclature: a prospective multicentre study
*E. Epstein (Sweden)*

10:40 **OC14.02** Ultrasound-based mathematical model for predicting persistent trophoblastic neoplasia from a large cohort of women with hydatidiform mole: the update of testing model
*L. Qin (China)*

10:48 **OC14.03** Preoperative assessment of the extent of disease in ovarian cancer: comparative study of ultrasound and CT scan
*L. Alcázar (Spain)*

10:56 **OC14.04** Role of intraoperative ultrasound to extend minimally invasive surgery for treatment of recurrent gynecological cancer
*A. Testa (Italy)*

11:04 **OC14.05** Contrast enhanced ultrasonography (CEUS) of cervical carcinoma: a pilot study on contrast distribution patterns and qualitative CEUS parameters in cervical cancer patients and in women with normal cervixes
*K. Palsdottir (Sweden)*

11:12 **OC14.06** Preoperative staging of advanced ovarian cancer: comparison between ultrasound, CT and WB-DWI/MRI
*D. Fischerová (Czech Republic)*

**HALL B**

**Short oral presentation (OP)**

**OP16** Detection of fetal heart anomalies II
*Chairs: A. Abuhamad (United States); G. Tulzer (Austria)*

**Coffee and e-poster viewing**

**Short oral presentation (OP)**

**OP17** Hypertensive disease in pregnancy: screening to diagnosis
*Chairs: F. Crispi (Spain); G. Di Renzo (Italy)*
**HALL A**

**11:25-12:05** Short oral presentation (OP)

★ **OP18** Fetal growth and the brain  
_Chairs: A. Ngu (Australia); D. Prayer (Austria)_

**12:00-13:30** Lunch and e-poster viewing

**12:15-13:15** Industry sponsored satellite symposia**

**Workshop**

**Big mothers, big babies: getting the most from your scan**

_Chair: H. Gardiner; J. Miller (United States)_

- **13:30** Effective fetal monitoring in diabetic mothers: physiology to practice  
  _J. Miller (United States)_

- **13:50** The heart of the problem: optimising screening for heart defects on a technically challenging scan  
  _H. Gardiner (United States)_

- **14:10** **LIVE SCAN:** optimising imaging in the overweight patient [industry supported*]  
  _P. Glanc (Canada)_

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**HALL E**

**11:25-12:05** Short oral presentation (OP)

★ **OP19** Ultrasound in the labour ward  
_Chairs: T. Ghi (Italy); C. Lees (United Kingdom)_

**12:00-13:30** Lunch and e-poster viewing

**12:15-13:15** Industry sponsored satellite symposia**

**Workshop**

**Big mothers, big babies: getting the most from your scan**

_Chair: L.D. Platt (United States); U. Lang (Austria)_

- **13:30** **INVITED:** ISUOG consensus statement  
  _L.J. Salomon (France)_

- **13:50** **OC15.01** Analysis of cell-free DNA in maternal blood in screening for aneuploidies: updated meta-analysis  
  _M. Gil (Spain)_

- **13:58** **OC15.02** Evolving role of ultrasound in the NIPT era: population-based trends in screening and diagnostic testing for fetal aneuploidy  
  _L. Hui (Australia)_

- **14:06** **OC15.03** Comparison between first trimester combined screening and a combination between ultrasound and cell-free DNA  
  _K.O. Kagan (Germany)_

- **14:14** **OC15.04** Chromosomal abnormalities detected by cell-free DNA testing as a contingent approach versus direct invasive prenatal diagnosis  
  _K.Y. Leung (Hong Kong)_

- **14:22** **OC15.05** Socioeconomic status and clinical variation in prenatal testing in the NIPT era  
  _L. Hui (Australia)_

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**HALL F**

**Short oral presentation (OP)**

OP20
How using ultrasound can inform the management of patients with gynecological malignancy
*Chairs: D. Fischerová (Czech Republic); M. Blanchette Porter (United States)*

Lunch and e-poster viewing

### Advances in fetal surgery

*Chairs: A. Johnson (United States); P. Klaritsch (Austria)*

13:30
**INVITED**: Fetal surgery for spina bifida in the 21st century
*A. Johnson (United States)*

13:50 **OC16.01** Fetoscopic repair of spina bifida also improves postnatal motor outcomes
*R. Pedreira (Brazil)*

13:58 **OC16.02** Percutaneous fetoscopic 3-layer closure of large open spina bifida defects using a bilaminar skin substitute
*R. Quintero (United States)*

14:06 **OC16.03** Effects of carbon dioxide gas (CO2) insufflation for fetoscopy on the amniotic fluid and fetal membranes
*R. Papanna (United States)*

14:14 **OC16.04** Intrauterine open fetal surgery for correction of isolated occipital encephalocele
*H.L. Milani (Brazil)*

14:22 **OC16.05** Open fetal surgery for congenital malformations: feasibility and perinatal outcomes
*A.F. Moron (Brazil)*

**HALL B**

**Short oral presentation (OP)**

OP21
Fetal development in maternal conditions
*Chairs: C.M. Bilardo (Netherlands); E. Krampl-Bettelheim (Austria)*

Lunch and e-poster viewing

### Uterine and endometrial problems: from asymptomatic polyps to repairing Caesarean section scars

*Chairs: T. Van den Bosch (Belgium); F. Leone (Italy)*

13:30 **OC17.01** Routine ultrasound monitoring of asymptomatic endometrial polyps offers no benefit in clinical practice
*M. Wong (United Kingdom)*

13:50 **OC17.02**: Non-atypical endometrial hyperplasia: clinical and sonographic characteristics and long-term outcome
*O. Rotenberg (United States)*

13:58 **OC17.03** Risk of endometrial cancer in asymptomatic postmenopausal women with endometrial thickness >11mm: systematic review and meta-analysis
*J.L. Alcázar (Spain)*

14:06 **OC17.04** Intra- and interobserver agreement using the MUSA terminology for ultrasonographic features associated with ill-defined lesions
*C. Kjaergaard (Denmark)*

14:14 **OC17.05** New sonographic and hysteroscopic combined classification for surgical repair of isthmoceles in an out-patient setting to ensure maximum safety in minimal invasive surgery
*A.M. Dueckelmann (Germany)*

14:22 **OC17.06** 2D-TVU is a more accurate modality than 3D-VCI in staging endometrial cancer
*R.W. Green (Sweden)*

*This presentation is eligible for the Young Investigator award (to be presented in the closing plenary).*
### HALL A

<table>
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<tbody>
<tr>
<td>14:35-15:15</td>
<td><strong>Short oral presentation (OP)</strong>&lt;br&gt;<strong>OP22</strong> NIPT: issues and implementation&lt;br&gt;<em>Chairs: J. Stirnemann (France); B. Tutschek (Switzerland)</em></td>
</tr>
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Coffee and e-poster viewing

**Workshop**<br>**Understanding outflow tract abnormalities**<br>*Chairs: A. Abuhamad (United States); J.S. Carvalho (United Kingdom)*

<table>
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<tr>
<td>15:40</td>
<td><strong>LIVE SCAN</strong>: effective screening for outflow tract abnormalities – tips and tricks&lt;br&gt;<em>[industry supported</em>] J.S. Carvalho (United Kingdom)*</td>
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<tr>
<td>16:00</td>
<td>Tetralogy of Fallot: from anatomy to ultrasound&lt;br&gt;<em>G. Rizzo (Italy)</em></td>
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<td>16:20</td>
<td>Transposition of the great arteries: from anatomy to ultrasound&lt;br&gt;<em>G.R. DeVore (United States)</em></td>
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<tr>
<td>16:40</td>
<td>Image quiz&lt;br&gt;<em>A. Abuhamad (United States)</em></td>
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17:15-18:15 Industry sponsored satellite symposia**

### HALL E

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<tr>
<td>14:35-15:15</td>
<td><strong>Short oral presentation (OP)</strong>&lt;br&gt;<strong>OP23</strong> Invasive procedures: new data&lt;br&gt;<em>Chairs: A. Gagnon (Canada); M. Yamamoto (Chile)</em></td>
</tr>
</tbody>
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Coffee and e-poster viewing

**Workshop**<br>**Complications of twins: how to image, how to manage**<br>*Chairs: A. Khalil (United Kingdom); E. Gratacós (Spain)*

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<tr>
<td>15:40</td>
<td>Twin–twin transfusion syndrome&lt;br&gt;<em>Y. Ville (France)</em></td>
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<td>16:00</td>
<td>Selective fetal growth restriction&lt;br&gt;<em>E. Gratacós (Spain)</em></td>
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<tr>
<td>16:20</td>
<td>Twin reversed arterial perfusion&lt;br&gt;<em>K. Hecher (Germany)</em></td>
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<tr>
<td>16:40</td>
<td>How to avoid stillbirth in twins&lt;br&gt;<em>A. Khalil (United Kingdom)</em></td>
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HALL F

Short oral presentation (OP)

OP24  Uterine and endometrial problems: from elastography to using ultrasound to monitor treatment response
Chairs: P. Schwärtzler (Austria); L. Valentin (Sweden)

Coffee and e-poster viewing

Workshop
Update from the IOTA group: how to use IOTA rules and models
Chairs: D. Timmerman (Belgium); D. Fischerová (Czech Republic)

15:40  How we approach scanning? Easy descriptors
T. Bourne (United Kingdom)

15:53  Using IOTA simple rules and simple rules risks
L. Valentin (Sweden)

16:06  The IOTA ADNEX model: variable required and how to interpret the results
A.C. Testa (Italy)

16:19  The optimum approach to evaluating masses: easy descriptors and the ADNEX model: data and case examples
D. Timmerman (Belgium)

16:29  Case examples
C. Landolfo (Italy)

16:44  Case examples
M. Al-Memar (United Kingdom)

HALL B

Short oral presentation (OP)

OP25  Clinical challenges in chorionicity
Chairs: K. Hecher (Germany); Y. Ville (France)

Coffee and e-poster viewing

Workshop
Late fetal growth restriction
Chairs: F. Figueras (Spain); J. Thornton (United Kingdom)

15:40  Late fetal compromise: scale of the problem
J. Thornton (United Kingdom)

16:00  Monitoring parameters and stillbirth
B. Thilaganathan (United Kingdom)

16:15  Neonatal morbidity in late gestation
F. Figueras (Spain)

16:30  Is late uterine Doppler useful?
K. Maršál (Sweden)

16:45  Why a third trimester randomised controlled trial is needed
C. Lees (United Kingdom)
<table>
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<tr>
<th>Time</th>
<th>Hub 1 Event</th>
<th>Hub 2 Event</th>
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<tr>
<td>09:20-10:00</td>
<td><strong>Poster discussion (P)</strong></td>
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<td>P12: Cysts and other abdominal features</td>
<td>P13: Ultrasound in the labour ward II</td>
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<td><em>Chair: S. Seshadri (India)</em></td>
<td><em>Chair: L.D. Platt (United States)</em></td>
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<td>10:20-11:20</td>
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<td><em>Are you practicing safe sonography?</em></td>
<td><em>D. Van Schoubroeck:</em> How to carry out a one-stop</td>
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<td><em>Moderator: S. Westerway (Australia)</em></td>
<td>fertility scan: using contrast in the uterus</td>
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<td>*Opinion leaders: E. Merz (Germany);</td>
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<td>G. Ter Haar (United Kingdom); C. Brezinka</td>
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<td>11:25-12:05</td>
<td><strong>Poster discussion (P)</strong></td>
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<td>P16: Screening for fetal anomalies</td>
<td>P19: Fetal echocardiography II</td>
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<td><em>Chair: K.O. Kogan (Germany)</em></td>
<td><em>Chair: W. Lee (United States)</em></td>
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<td>*How do I diagnose polycystic ovaries and</td>
<td><em>S. Guerriero:</em> Practical approach to ultrasound*</td>
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<td><em>Moderator: C. Brezinka (Austria)</em></td>
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<td>P20: The prognostic value of growth parameters</td>
<td>P21: Predicting pregnancies at risk</td>
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<td><em>Chair: C. Brezinka (Austria)</em></td>
<td><em>Chair: B. Thilaganathan (United Kingdom)</em></td>
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<td><em>Moderator: Q. Wu (China)</em></td>
<td><em>Moderator: M. Herrera (Columbia)</em></td>
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### HUB 3

**Poster discussion (P)**
- P14: Uterine and endometrial problems: from elastography to using ultrasound to monitor treatment response
  *Chair: E. Epstein (Sweden)*

**Interactive**
- Special interest group (SIG): Heart
  *Chair: J.S. Carvalho (United Kingdom)*

**Poster discussion (P)**
- P17: Maternal and fetal assessment in complicated pregnancies
  *Chair: M. Herrera (Colombia)*

**Interactive**
- In conversation with the CCEF
  *Moderators: P. Boukobza (France); G. Haddad (France)*

**Interactive**
- Join the conversation: UOG - Your Journal
  *Moderators: B. Thilaganathan; R. Hutchinson (United Kingdom)*

**Poster discussion (P)**
- P22: Fetal echocardiography III
  *Chair: F. Crispi (Spain)*

### HUB 4

**Poster discussion (P)**
- P15: Improving the outcome of fetal procedures
  *Chair: A. Johnson (United States)*

**Interactive**
- Join the conversation: How do I avoid medico legal issues?
  *Moderator: C. Brezinka (Austria)*
  *Opinion leaders: C. Lees (United Kingdom); N. Raine-Fenning (United Kingdom); J. Copel (United States)*

**Poster discussion (P)**
- P18: Techniques related to using ultrasound to assess pelvic pain and diagnose superficial endometriosis and DIE
  *Chairs: G. Condous (Australia); G. Hudelist (Austria)*

**Interactive**
- In conversation with L. Sentilhes and R. Romero: Consensus on preventing preterm birth in high-risk situations

**Interactive**
- Join the conversation: Live reporting – fetal MRI
  *Moderators: D. Prayer (Austria); D. Pugash (Canada); D.M. Twickler (United States)*

**Poster discussion (P)**
- P23: Managing early pregnancy complications
  *Chairs: S. Bobdiwala; D. Jurkovic (United Kingdom)*

**Guidelines**
- French
  *Moderator: G. Haddad (France)*

**Guidelines**
- Russian
  *Moderators: F. Ushakov (United Kingdom); E. Andreeva (Russian Federation)*
OP13: Small-for-gestational age

Chairs: G. Rizzo (Italy); B. Thilaganathan (United Kingdom)

Operative delivery due to fetal compromise in small-for-gestational-age fetuses at term: a prediction model and internal validation
E. Kalafat (Turkey)

Different expression of placental nutrient transporters among term small-for-gestational-age and growth-restricted fetuses
F. Crispi (Spain)

Prediction of delivery of small-for-gestational age neonates and adverse perinatal outcomes by angiogenic factors at 37 weeks’ gestation
S. Triunfo (Spain)

Mode of delivery and neonatal mortality among very low birthweight infants
A. Londero (Italy)

Echocardiographic differences between SGA and AGA fetuses
F. Cosmi (Italy)

Mechanical versus chemical labour induction in suspected IUGR/SGA: systematic review and meta-analysis
A. Henry (Australia)

Targeted lipidomics of maternal and cord blood in term gestations with suboptimal fetal growth
J. Miranda (Spain)

Placental three-dimensional power Doppler indices in pregnancies complicated by gestational diabetes mellitus
C. Chen (Taiwan)

Birthweight and intrauterine growth patterns of fetuses of pregnant women post-bariatric surgery
T. Maric (United Kingdom)

Prediction of birthweight in SGA at 11–13+6 weeks using maternal history, LMP, ultrasound and biochemistry
J. Stirnemann (France)

Placental mesenchymal dysplasia: four cases
Y. Copado Mendoza (Mexico)

OP14: Fetal brain and CNS anomalies

Chairs: L.J. Salomon (France); M. Sanz Cortes (United States)

Termination of pregnancy for central nervous system (CNS) anomalies: correlation of prenatal with postmortem diagnosis
W. Dendas (Belgium)

Cystic abnormalities of fetal posterior fossa at 11–13+6 weeks scan
E. Andreeva (Russian Federation)

Evaluation of fetal ventriculomegaly at 11–14 weeks of gestation
H. Gülmez (Switzerland)

Neurodevelopmental outcome of isolated fetal ventriculomegaly
E. Barzilay (Israel)

“Ganglionic eminence fingers”: MR evidence of disruptive migration in fetal hydrocephalus
G. Kasprian (Austria)

Finding the hippocampus: challenge accepted
C. Comanescu (Romania)
Outcomes of fetuses with small cerebellum on second and third trimester ultrasonography  
**M. Massoud** (France)  
Prenatal diagnosis of a new cobblestone malformation complex disorder: Walker-Warburg syndrome associated with tectocerebellar dysraphia  
**H. Bakry** (Israel)  
Pericallosal lipomas may escape detection during a second trimester scan  
**J. Har-Toov** (Israel)  
Normal ganglionic eminence and blighted ganglionic eminence in neuronal migration disorder cases detected by transvaginal neuroscan  
**R.K. Pooh** (Japan)  
Prenatal diagnosis of medullary tegmental cap dysplasia: a rare disorder of axonal guidance  
**K.K. Haratz** (Israel)  

**OP15: Using ultrasound to accurately characterise and guide the management of ovarian masses: do IOTA models work in practice?**  
**Hall F**  
**Chairs:** S. Helmy (Austria); L. Valentin (Sweden)  
09:20-09:32 Classifying solid ovarian masses  
**L. Valentin** (Sweden)  
Evaluating the ADNEX model in preoperatively predicting malignancy risks of ovarian masses: a prospective study in a tertiary hospital in the Philippines  
**J. Gobaldon-Las** (Philippines)  
Use of Crystal Vue technique for imaging of adnexal masses: a pilot study  
**S. Sosa** (United Kingdom)  
Evaluation of the STIC technology with high-definition colour Doppler for preoperative differential diagnosis of ovarian tumours: a prospective study  
**J.L. Alcázar** (Spain)  
Diagnostic performance of IOTA models in adnexal masses: a retrospective assessment  
**S. Schwab** (Austria)  
Opposite behaviour of CD8+ T cells in blood and tumour tissue of ovarian cancer patients  
**A. Coosemans** (Belgium)  
Performance of RMI, IOTA ADNEX and simple rules risk model in the assessment of adnexal masses not classifiable using the revised benign easy descriptors as first step: a novel two-step strategy  
**C. Landolfo** (Belgium)  
Prospective validation of International Ovarian Tumour Analysis (IOTA) malignancy indicators for adnexal masses: a 4-year study from a single centre  
**S. Johnson** (United Kingdom)  

**OP16: Detection of fetal heart anomalies II**  
**Hall B**  
**Chairs:** A. Abuhamad (United States); G. Tulzer (Austria)  
Absent pulmonary valve syndrome: diagnosis, associations and outcome in 71 prenatally diagnosed cases  
**R. Axt-Fliedner** (Germany)  
Pulmonary atresia-critical stenosis with intact ventricular septum: prospective validation of a prenatal score for prediction of postnatal outcome  
**E. Gómez Montes** (Spain)  
Perinatal and perioperative cardiac changes in fetuses with simple transposition of the great arteries  
**O. Patey** (United Kingdom)  
The prevalence of pathogenic copy number variation in tetralogy of Fallot and associated congenital heart defect diagnosed prenatally  
**S. Ge** (United States)
Prenatal diagnosis of tuberous sclerosis complex using high-throughput DNA sequencing combined with fetal echocardiography

**S. Ge (United States)**

Quality assessment of (semi-) automated evaluation of the fetal heart using fetal intelligent navigation echocardiography (FINE) in 700 cases

**D.R. Hartge (Germany)**

Fetal intelligent navigation echocardiography (FINE) detects congenital heart disease with a sensitivity of 98%, specificity of 93% and accuracy of 95%

**L. Yeo (United States)**

Feasibility and comparison of high definition flow and B flow in assessing fetal heart during first trimester screening

**S. Piri (Islamic Republic of Iran)**

A study on the application value of STIC technology for the prenatal diagnosis of abdominal vascular malformations

**Q. Pei (China)**

Prenatal diagnosis of aberrant right subclavian artery (ARSA) in unselected population: our own experience

**R.S. Bataeva (Russian Federation)**

Identification of fetal great arteries and their main branches by four-dimensional sonography with high-definition flow imaging

**Y. Zhang (China)**

**OP17: Hypertensive disease in pregnancy: screening to diagnosis**

**Hall B**

**Chairs: F. Crispi (Spain); G. Di Renzo (Italy)**

Risk assessment for pre-eclampsia in nulliparous women in the first trimester

**L.J. Salomon (France)**

First trimester data to predict pregnancy outcomes: the GOS study

**E. Bujold (Canada)**

Predictive value of serial sFlt-1, PlGF and sFlt-1/PlGF ratio measurement in predicting the development of placental syndrome in women at high risk: a pilot study

**J. Kolenburg (Netherlands)**

Diagnostic accuracy of different sFlt-1 and PlGF cut-off values in the assessment of preterm and term pre-eclampsia

**A. Schoetzau (Switzerland)**

Quality assessment of biomarkers measurement in the first trimester combined screening for pre-eclampsia in 26,543 cases

**F. da Silva Costa (Australia)**

Worsening of the uterine artery Doppler is associated with the development of hypertensive disorders of pregnancy

**J. Binder (United Kingdom)**

Echocardiography and heart rate variability in pregnant women with essential arterial hypertension and pre-eclampsia

**V. Makukhina (Russian Federation)**

Flow mediated dilation and peripheral arterial tonometry are disturbed in pre-eclampsia and reflect different aspects of endothelial function

**D. Mannaerts (Belgium)**

Possible new approach in the prediction of late gestational hypertension: the role of the fetal aortic intima-media thickness

**E. Cosmi (Italy)**

Does the presence of ascites among women with severe pre-eclampsia correlate with the severity and poor maternal and neonatal outcomes?

**C. Mbonyi (Rwanda)**
OP18: Fetal growth and the brain

**Hall A**

*Chairs: A. Ngu (Australia); D. Prayer (Austria)*

**OP18.01** Assessment of fetal brain vascularisation in fetuses affected by late onset fetal growth restriction using three dimensional power Doppler angiography  
*A. Rossi (Italy)*

**OP18.02** Cerebroplacental ratio in recurrent reduced fetal movements: evidence for worsening fetal hypoxemia  
*J. Binder (United Kingdom)*

**OP18.03** Development of a rabbit neurosphere model to study the neurodevelopmental damage induced by intrauterine growth restriction  
*M. Illa (Spain)*

**OP18.04** Reference values for fetal cerebrorenal and cerebroplacental ratios  
*S. Contag (United States)*

**OP18.05** The study of cranial ultrasound to diagnostic value of neonatal hypoxic-ischemic encephalopathy  
*C. Wu (China)*

**OP18.06** Comparison of fetal brain weight determined by fetal magnetic resonance imaging with autopsy brain weight  
*P.C. Brugger (Austria)*

**OP18.07** Growth of the fetal subarachnoid space: a volumetric fetal MRI study  
*P.C. Brugger (Austria)*

**OP18.08** FGR fetuses have less facial expressions than AGA counterparts with the assessment by four-dimensional high-definition live (4D HDlive) ultrasound  
*H. Chida (Japan)*

**OP18.09** Impact of maternal anxiety on intrauterine growth and fetoplacental circulation in late third trimester  
*S. Triunfo (Spain)*

**OP18.10** Association of fetal cardiac indices with cerebroplacental ratio in normal, diabetic and fetal growth-restricted pregnancies at term  
*O. Patey (United Kingdom)*

**OP18.11** Assessment of correlation between fetal middle cerebral artery peak systolic velocity and brain apparent diffusion coefficient in IUGR  
*M.S. Kutuk (Turkey)*

OP19: Ultrasound in the labour ward

**Hall E**

*Chairs: T. Ghi (Italy); C. Lees (United Kingdom)*

**OP19.01** MRI at station 0 in a small series: how well performs the ultrasound estimations?  
*D.G. Iliescu (Romania)*

**OP19.02** Maternal-fetal Doppler assessment in early labour and perinatal and delivery outcomes: a multicentre study  
*A. Dall’Asta (Italy)*

**OP19.03** Sonographic prediction of length of vacuum deliveries: a multicentre, prospective cohort study  
*B.H. Kohrs (Norway)*

**OP19.04** Vacuum extraction failure is associated with a large head circumference rather than high birth weight  
*S. Yagel (Israel)*

**OP19.05** Does McRoberts’ manoeuvre affect fetal head angle of progression in active second stage of labour?  
*A.I. Zimerman (Israel)*

**OP19.06** Longitudinal changes of subpubic arch angle during pregnancy  
*A. Youssif (Italy)*

**OP19.07** Transabdominal ultrasound to assess fetal position in labour: a gold standard?  
*S. Usman (United Kingdom)*
Higher rates of interventional delivery and maternal and neonatal complications in persistent occiput posterior position with a large head circumference

*S. Yagel (Israel)*

The value of transperineal ultrasound

*S. Usman (United Kingdom)*

**OP20: How using ultrasound can inform the management of patients with gynecological malignancy**

*Hall F*

*Chairs: D. Fischerová (Czech Republic); M. Blanchette Porter (United States)*

★ 11:25-11:37 MRI of ultrasound to delineate cervical carcinoma

*E. Epstein (Sweden)*

An independent predictor for methotrexate resistance in low-risk gestational trophoblastic neoplasia with myometrial invasion: a prospective study

*J. Qin (China)*

Sonographic features of inguinal lymph nodes in vulvar cancer

*P. Pinto (Portugal)*

Ultrasound features of endometrial stromal sarcomas

*M. Ludovisi (Italy)*

Imaging in gynecological disease: clinical and ultrasound features of ovarian clear cell carcinoma

*F. Moro (Italy)*

Ultrasound features of uterine leiomyosarcomas

*M. Ludovisi (Italy)*

Preoperative prediction of uterine sarcoma using signal intensity at T2 weighted imaging and apparent diffusion coefficient (ADC) on MRI

*Y. Oka (Japan)*

Transvaginal ultrasound (TVS) versus MRI for diagnosing myometrial infiltration in endometrial carcinoma: a systematic review and meta-analysis

*J.L. Alcázar (Spain)*

**OP21: Fetal development in maternal conditions**

*Hall B*

*Chairs: C.M. Bilardo (Netherlands); E. Krampl-Bettelheim (Austria)*

Pre-pregnancy exercise stress testing is related to normal physiological adaptation from pre-pregnancy to mid-pregnancy

*J. Man (United Kingdom)*

Assessment of relationship between fetal middle cerebral artery peak systolic velocity and umbilical vein blood gas values in diabetic pregnancies

*M.S. Kutuk (Turkey)*

Incidence of pregnancy induced hypertension (PIH) and small-for-gestational age-(SGA) infants in egg donation pregnancies: a prospective study

*C. Scala (Italy)*

The impact of pre-eclampsia for mothers and infants: analysis of outcomes from the PREDICT study

*K. Eastwood (United Kingdom)*

The cerebroplacental ratio as a prognostic factor of fetal outcome in pregnancies complicated by maternal sickle cell disease

*A. Swarray-Deen (Ghana)*

Gestational diabetes mellitus: could hemodynamic assessment identify patients with poor glycemic control at higher risk of labour complications?

*D. Lo Presti (Italy)*
From when can we detect an alteration in fetal weight to placental volume ratio in pregnancy complicated by diabetes mellitus?  
A. Suranyi (Hungary)

Fetal thymus size in pregnant women with diabetic disease  
K. Oelmeier de Murcia (Germany)

Fetal Dopplers for prediction of perinatal outcomes in pregnancies complicated by gestational diabetes mellitus  
A. Familiari (Italy)

**OP22: NIPT: issues and implementation**

*Hall A*

Chairs: J. Stirnemann (France); B. Tutschek (Switzerland)

Prenatal diagnosis of sex chromosome aneuploidies before and after NIPT: an analysis of 30 years of population-based data  
L. Hui (Australia)

The determination of fetal sex using cell-free DNA testing  
M. Hynek (Czech Republic)

Should pre-NIPT genetic counselling for sex chromosome aneuploidies be obligatory? A clinical audit of 5409 mixed risk pregnancies  
F. da Silva Costa (Australia)

Non-invasive prenatal testing (NIPT) for 22q11.2 deletion syndrome using a targeted microarray-based cell-free DNA (cfDNA) test  
M. Schmid (United States)

Changes in the utilisation of prenatal screening and diagnosis of chromosomal abnormalities in the era of cell-free DNA  
K.Y. Leung (Hong Kong)

Changing trend in common chromosomal aneuploidy management in the United Kingdom  
H. Gandhi (United Kingdom)

Validation of NIPT as a screening test for Trisomy 21, 18, 13 and fetal sex performed at Hvidovre Hospitals NIPT Centre, Copenhagen, Denmark  
T.S. Hartwig (Denmark)

Integrating ultrasound findings with chromosomal microarray stretches of homozygosity and principles in founder populations  
S. Yagel (Israel)

Does NIPS change the spectrum of detected major chromosomal aberrations (CHA)?  
Population-based data  
P. Calda (Czech Republic)

Characteristics of ‘no-calls’ from non-invasive prenatal testing (NIPT) performed at Hvidovre Hospitals NIPT Centre, Copenhagen, Denmark  
T.S. Hartwig (Denmark)

**OP23: Invasive procedures: new data**

*Hall E*

Chairs: A. Gagnon (Canada); M. Yamamoto (Chile)

Amniocentesis and cerclage: an invasive strategy to exclude patients with intra-amniotic infection before treatment  
J. Vojtech (Czech Republic)

Percutaneous transvesical chorionic villus sampling: an alternative method for difficult procedures  
P.I. Cavoretto (Italy)

Factors associated with the risk of intrauterine demise in Twin–twin transfusion syndrome cases treated with laser ablation  
A. Khalil (United Kingdom)
Selective reduction in complex triplet pregnancy by radio frequency ablation: single centre experience

E. Sanna (United Kingdom)

Procedure outcomes of embryo reduction and selective feticide with multifetal pregnancy to twin or singleton pregnancy: a retrospective study

M. Kim (Republic of Korea)

Time and temperature dependence of radiofrequency ablation in human placenta

P. Makarasen (Thailand)

Comparison between neodymium-doped yttrium aluminium garnet (Nd: YAG) and Diode lasers in different power and duration of interstitial laser ablation in human placental model

D. Hunsawongsekul (Thailand)

Longitudinal growth evaluation in fetuses with neural tube defect with and without prenatal-fetoscopic and open-repair

M. Sanz Cortes (United States)

Perinatal outcome in fetuses with dislodged pleuro-amniotic shunts (PAS)

N. Abbasi (Canada)

Best timing for sequential intrauterine transfusion in fetal alloimmune anemia

J. Rodriguez Calvo (Spain)

**OP24: Uterine and endometrial problems: from elastography to using ultrasound to monitor treatment response**

Chairs: P. Schwärtzler (Austria); L. Valentin (Sweden)

Ultrasound features of atypical endometrial hyperplasia

L. Jokubkiene (Sweden)

Combination of use of dienogest with LNG IUD Mirena

K. Tokhunts (Armenia)

Sonography before and after hysteroscopic management of isthmocele: is the myometrial wall reconstructed?

P. Capmas (France)

Value of “elasto strain ratio” ultrasound elastography in the diagnosis of intramural uterine fibroids: preliminary study

P.R. Szkodziak (Poland)

Highly vascularised uterine myomas at ultrasound and correlation to histopathology

S. Camilli (Italy)

Comparison of 2D and 3D-transvaginal sonography to assess endometrial thickness

F. Leone (Italy)

Proliferative endometrium in postmenopausal bleeding: clinical and sonographic characteristics and long-term outcome

O. Rotenberg (United States)

Combined treatment with the levonorgestrel-releasing intrauterine device and ulipristal acetate in patients with uterine adenomyosis

S. Ferrero (Italy)

Ulipristal acetate (UPA) therapy increased ultrasound features of adenomyosis: a good treatment given in an erroneous diagnosis of uterine fibroids

F. Conway (Italy)
OP25: Clinical challenges in chorionicity

Chairs: K. Hecher (Germany); Y. Ville (France)

Natural history of early selective intrauterine growth restriction in monochorionic diamniotic pregnancies

C. Colmant (France)

Experience of selective reduction by radiofrequency ablation in complicated monochorionic twin pregnancy between 2007 and 2016

S. Wavrant (Canada)

Iatrogenic preterm prelabour rupture of membranes after umbilical cord occlusion in monochorionic diamniotic pregnancies

T. Micheletti (Spain)

Perinatal outcomes of fetoscopic laser photoagulation for monochorionic twin gestation with selective intrauterine growth restriction accompanied by oligohydramnios

K. Ishii (Japan)

Selective intrauterine growth restriction monochorionic diamniotic twin pregnancies: outcomes from a tertiary centre in Western Australia

W. Almeida (Australia)

Selective feticide in monochorionic dizygotic twins discordant for heart anomaly and sIUGR with prenatally confirmed blood chimerism

Y. Sciaky Tamir (Israel)

First trimester inter- and intrafetal size discrepancies in dichorionic twins conceived by in vitro fertilisation: can it predict pregnancy outcome?

R. Bardin (Israel)

Prognostic value of intra-amniotic interleukin-6 and cervical length in monochorionic twins after fetal surgery

J. Vojtech (Czech Republic)

Cervical length

F. Moretti (Canada)

Outcomes of emergency cerclage placement in twin pregnancy

H. Boo (Republic of Korea)
P12: Cysts and other abdominal features
Chair: S. Seshadri (India)

Fetal cystic mass which was found out as fetus in fetu
W. Kim (Republic of Korea)

Morgagni diaphragmatic hernia presenting with massive pericardial effusion
J. Miguelez (Brazil)

Fetal congenital imperforate hymen
I. Ortega Cárdenes (Spain)

Congenital megalourethra: a rare form of obstructive uropathy
D. Atanassova (Bulgaria)

Sacrococcygeal fetiform teratoma in a male fetus
L. Wang (China)

Prenatal diagnosis of a warfarin-associated fetal hemoperitoneum: a case report
S. Wavrant (Canada)

Prenatal diagnosis of an extensive congenital lymphatic malformation as a starting point for sirolimus therapy after birth: a case report
M. Hynek (Czech Republic)

Isolated fetal ascites: diagnostic algorithm and management protocol
M. ElDarawi (Egypt)

Fetal intra-abdominal umbilical vein varix: a retrospective cohort study, systematic review of the literature and meta-analysis
L.J. Salomon (France)

Prenatal and postnatal evolution of 14 cases of fetal splenic cysts
F. Fuchs (France)

Prenatal severe hydronephrosis: the added value of CAKUT in the prediction of postnatal outcome
S. Perlman (Israel)

P13: Ultrasound in the labour ward II
Chair: L.D. Platt (United States)

The role of caput in accuracy of assessing fetal position in labour
J. Goldkamp (United States)

The role of prior vaginal delivery and fetal station in assessing fetal position in labor
J. Goldkamp (United States)

Correlations of the sonopartogram with classic clinical partogram and key points from a pilot study
D.G. Iliescu (Romania)

The role of ultrasound in prediction of successful induction of labour
V. Masroosi (Islamic Republic of Iran)

Can the “dynamic” assessment of intrapartum ultrasound parameters serve a better predictor for mode of delivery?
N.A. Elbarbary (Egypt)

Ultrasound evaluation of safely of postpartum hemorrhage (PPH) compression belt in reduction of uterine, internal iliac and femoral artery blood flow in healthy postpartum women
T. Dips (Sri Lanka)

Acceptability of transabdominal and transperineal ultrasound compared to vaginal examinations prior to delivery
S. Usman (United Kingdom)
Intrapartum sonographic diagnosis of malpositions and cephalic malpresentations
F. Bellussi (Italy)  
Is a prolonged second stage of labour too long?  
S. Vogel (Israel)

**P14: Uterine and endometrial problems: from elastography to using ultrasound to monitor treatment response**  
Chair: E. Epstein (Sweden)

- Evaluation of intramural fibroid vascularisation after uterine artery embolisation by 3D power Doppler ultrasound  
P. Czuczwar (Poland)
- Ultrasonographic evaluation of possible endometrial pathology in symptomatic women via IETA and MUSA rules  
F. Domali (Greece)
- Inter- and intrarater reproducibility in detecting deep myometrial invasion and cervical stromal invasion using 2D-TVU and 3D-VCI  
R.W. Green (Sweden)
- Atypical glandular cells and ultrasound changes: is there a relationship?  
M.D. Bernardo (Portugal)
- Macroscopic endometrial findings in patients with myomas treated with ulipristal acetate: ultrasonographic and hysteroscopic correlations with histologic analysis  
C. Ros (Spain)
- Ulipristal acetate in the treatment of fibroids: report of the initial experience of a tertiary centre in Portugal  
J. Pereira (Portugal)
- Thickened endometrium secondary to continuous ulipristal acetate treatment  
M. Munmany (Spain)
- Focal endometrial pathology, ultrasound, hysteroscopy and histology: what is the correlation between them?  
A. Galvão (Portugal)
- Ultrasound markers of impending intrauterine adhesions: new data about natural history and prevention  
T. Amia (United Kingdom)
- Factors associated with inconsistency in visibility of the endometrial echo on transvaginal ultrasound of postmenopausal women  
P. Dar (United States)
- Review of current evidence on investigations for postmenopausal bleeding by transvaginal scan followed by hysteroscopy: gap in clinical effectiveness  
E. Zielinski (United Kingdom)
- 3D parameters via Render Mode during transvaginal ultrasonography and endometrial malignancy  
F. Domali (Greece)
- Ultrasound-guided transvaginal thrombin injection to treat uterine arteries pseudoaneurysms  
C. Ros (Spain)
- Acquired uterine arteriovenous malformation (AVM): case series  
A.E. Dominguez (Philippines)

**P15: Improving the outcome of fetal procedures**  
Chair: A. Johnson (United States)

- Procedure-to-delivery interval after late amniocentesis (28 and 33 weeks): is there a rationale in giving glucocorticoids prior to the procedure?  
K.K. Haratz (Israel)
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<td>M. Yamamoto (Chile)</td>
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<td>E. Kalofat (Turkey)</td>
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**P16: Screening for fetal anomalies**  
**Chair: K.O. Kagan (Germany)**

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<td>O.B. Petersen (Denmark)</td>
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<td>Prevalence of submicroscopic chromosome aberrations in pregnancies without increased risk for structural chromosome aberrations: a systematic review of the literature</td>
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<td>The influence of chromosomal microarray and NIPT on the diagnostic yield in 6,811 high-risk pregnancies without ultrasound anomalies</td>
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<td>First trimester ultrasound screening for Trisomy 21 based on maternal age, fetal nuchal translucency and different methods of ductus venosus assessment</td>
<td>K.O. Kagan (Germany)</td>
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<td>Screening for fetal aneuploidy and major abnormalities at 11–13 weeks’ gestation, local particularities</td>
<td>D. Nemescu (Romania)</td>
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<td>E. Thia (Singapore)</td>
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<td>J. Miguelez (Brazil)</td>
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<td>A.M. Adno (Australia)</td>
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P17: Maternal and fetal assessment in complicated pregnancies  
L3 / L6  Hub 3

Chair: M. Herrera (Colombia)

The maternal hepatic and uteroplacental blood flow in pregnant women with hepatic dysfunction during pregnancy  
I.V. Ignatko (Russian Federation)

Hepatic steatosis: a prenatal process?  
V. Berger-Kulemann (Austria)

Risk factor survey for intrauterine deaths among mothers who attend Teaching Hospital Peradeniya over last five years  
J.P. Jayasinghe (Sri Lanka)

Perinatal risk scale: detection of perinatal risk degree based on the results of antenatal ultrasonographic monitoring  
I. Safonova (Ukraine)

Relationship between uterine artery Doppler and the risk of stillbirth in our population  
N. Caner (Spain)

Updating amniotic fluid index nomogram according to perinatal outcome  
R. Bardin (Israel)

WITHDRAWN

Differences in three-dimensional power Doppler vascularisation indices in placenta syndrome compared to healthy pregnancies: a pilot study  
V. Schiffer (Netherlands)

Assessment and validation of a novel three-dimensional power Doppler VOCAL sonobiopsy technique  
D. Pellaers (Netherlands)

Pre-pregnancy exercise test hemodynamic responses are related to birthweight in subsequent pregnancy  
J. Man (United Kingdom)

P18: Techniques related to using ultrasound to assess pelvic pain and diagnose superficial endometriosis and DIE  
L3 / L6  Hub 4

Chairs: G. Condous (Australia); G. Hudelist (Austria)

Transvaginal diagnosis of endometrioma: how often are there other endometriosis pelvic lesions?  
C. Exacoustos (Italy)

Prevalence of negative ‘sliding sign’ in low-risk population: a feasibility study  
B. Shakeri (Australia)

Learning curve for the ultrasonographic diagnosis of deep endometriosis using an intensive training program  
S. Guerriero (Italy)

Transvaginal ultrasound (TVS) combined evaluation of pelvic sites of implants and the “sliding sign” to predict likelihood of rectal/rectosigmoid deep infiltrating endometriosis (DIE) at laparoscopy  
M. Espada (Australia)

Many faces of whirlpool in patients with adnexal torsion  
A.N. Joshi (India)

Bowel preparation prior to transvaginal ultrasound improves the diagnosis of rectosigmoid deep infiltrating endometriosis: a prospective study  
C. Ros (Spain)

Caesarean scar endometriosis: case series – ultrasound and Doppler characteristics  
K. Rathod (India)

Bowel resection for DIE: 2D and 3D transvaginal sonographic evaluation of residual disease and associated symptoms  
F.G. Martire (Italy)

Retzius’ retroperitoneal bladder endometriosis: a new entity of an enigmatic disease  
F. Leone (Italy)
Correlation between laparoscopic macroscopic appearance of superficial endometriosis and histopathological confirmation

B. Nadim (Australia)

P19: Fetal echocardiography II

Chair: W. Lee (United States)

Application of different frame rates in two-dimensional speckle-tracking in fetal echocardiography and their influence on strain analysis

C. Enzensberger (Germany)

The effects of maternal diabetes on fetal heart function: a systematic review

A.L. Depla (Netherlands)

Evaluation of emerging modalities for fetal global cardiac function assessment in normal pregnancies

H. Avnet (Australia)

Fetal atrioventricular time intervals assessed by three different pulsed-wave Doppler methods

S. Anuwutnavin (Thailand)

Speckle-tracking echocardiography and myocardial ventricular performance in fetuses with left ventricular obstruction

M. Bellotti (Italy)

Gestational diabetes (GDM) and fetal myocardial function: evaluation using speckle-tracking echocardiography (STE) and traditional echocardiography

M. Bellotti (Italy)

High incidence of abnormal Tei index in the fetuses with maternal anti SS-A antibody

Y. Maeno (Japan)

Growth and arterial Doppler in fetuses with congenital heart disease

V. Jowett (United Kingdom)

Preoperative cardiac time intervals in recipient twin in Twin–twin transfusion syndrome in relation to Quintero stage

M. Gijtenbeek (Netherlands)

Cardiac dysfunction in TTTS donor and recipient twins: same effect on myocardial performance index time intervals?

J.U. Ortiz (Spain)

Novel technique to assess fetal fractional shortening by two-dimensional tracking

S. Nagasaki (Japan)

Ultrasonic screening of fetal cardiac structure in the first trimester

Y. Wu (China)

P20: The prognostic value of growth parameters

Chair: C. Brezinka (Austria)

Third-trimester prediction of late fetal growth restriction by longitudinal versus cross-sectional assessment

S. Triunfo (Spain)

Prediction of adverse perinatal outcomes using fetal biometric parameters in women with gestational diabetes mellitus: a Korean multicentre study

H. Kim (Republic of Korea)

Long-term prognosis of fetal growth restriction and association with autistic spectrum disorder

T. Shiga (Japan)

Longitudinal growth assessment for the prediction of adverse perinatal outcome among SGA-suspected fetuses

J. Caradeux (Spain)

Prediction of large-for-gestational-age neonates in in vitro fertilisation pregnancies and Crown–rump length at 11–13+6 weeks’ gestation

D. Kwak (Republic of Korea)
The accuracy of prenatal ultrasound in predicting fetal birthweight in diabetic singleton pregnancies  
*C. Nash* (Canada)

Abdominal circumference growth velocity and cerebroplacental ratio as predictors of perinatal outcome in small-for-gestational-age fetuses  
*A. Cavallaro* (United Kingdom)

Prediction of small-for-gestational-age neonate in a cohort of estimated normal weight fetuses at term  
*A. Laoreti* (United Kingdom)

The probability of cephalic presentation across pregnancy in the INTERGROWTH-21st fetal growth longitudinal study  
*I. Salim* (United Kingdom)

Prediction of large-for-gestational-age neonate in a cohort of estimated normal weight fetuses at term  
*A. Laoreti* (United Kingdom)

Small-for-gestational-age (SGA) fetuses are at higher risk of neonatal unit (NNU) admission: we aimed to develop and validate a predictive model for the risk of NNU admission in SGA fetuses at term  
*E. Kalafat* (Turkey)

**P21: Predicting pregnancies at risk**  
*Chair: B. Thilaganathan* (United Kingdom)

Perinatal outcomes of pregnancies conceived by assisted reproductive technologies in an 11+0–13+6 weeks’ screening program  
*A. Sepúlveda-Martínez* (Chile)

In high-risk women, first trimester blood pressure elevation below current treatment thresholds leads to pre-eclampsia  
*J.L. Miller* (United States)

First trimester pre-eclampsia screening in low-risk nulliparous women: the great obstetrical syndrome (GOS) study  
*A. Boutin* (Canada)

First trimester prediction of pre-eclampsia in high-risk women using 3D power Doppler placental vascularisation indices  
*K. Eastwood* (United Kingdom)

Prediction of pre-eclampsia by biochemical and biophysical markers at first trimester among Mongolian pregnant women  
*U. Tserensambuu* (Mongolia)

Perinatal risk degree determination: the role of ductus venosus flow, cerebroplacental ratio and cardiothoracic ratio  
*I. Safonova* (Ukraine)

Association between uterine artery blood flow volume and fetal weight gain  
*H. Arneberg* (Norway)

Diagnosis of metabolic risk during pregnancy by body mass index (BMI): does a better method exist? Preliminary results  
*A. Rocha* (Brazil)

Incorporation of vasa previa screening into a routine anomaly scan  
*D. Nyberg* (United Kingdom)

Development of vasa previa with advancing gestation from placental and umbilical cord vessels in the lower uterine segment  
*J. Hasegawa* (Japan)

Third-trimester sonographic evaluation of intra-abdominal adhesions in patients with previous Caesarean section  
*J. Baron* (Israel)
P22: Fetal echocardiography III

Chair: F. Crispi (Spain)

Fetal echocardiography and pregnancy outcome in Serbia
S. Vrzic Petronijevic (Serbia)
P22.01

Polish National Registry for fetal cardiac anomalies in 2016
M. Respondek-Liberska (Poland)
P22.02

Electronic STIC improves four-dimensional fetal echocardiography
F. Bellussi (Italy)
P22.03

Clinical value of chromosomal microarray analysis in prenatally diagnosed transposition of the great arteries
M. Lee (Republic of Korea)
P22.04

Outcome of pregnancy after the prenatal diagnosis of isolated major congenital heart diseases
S. Tudorache (Romania)
P22.05

HDliveFlow with spatiotemporal image correlation for diagnosing congenital heart diseases
M.A. AboEllail (Japan)
P22.06

Clinical significance of prenatal ultrasound diagnosis on fetal with congenital conotruncal defects and category from northwest China: a single centre experience
T. Zhu (China)
P22.07

Characteristics of interventricular shunt flow in fetuses with isolated ventricular septal defect assessed by dual Doppler imaging
T. Kaji (Japan)
P22.08

Prenatal ultrasonic diagnosis of isolated left subclavian artery and left brachiocephalic trunk malformation
Q. Pei (China)
P22.09

Prenatal diagnosis of fetal aberrant subclavian artery: associated anomalies and perinatal outcome in 104 cases
M. Xie (China)
P22.10

Systematic evaluation of the fetal hepatic venous system in mid-trimester scan (CASSEAL protocol in a multicentric study)
C. Bravo (Spain)
P22.11

P23: Managing early pregnancy complications

Chairs: S. Bobdiwala; D. Jurkovic (United Kingdom)

Doppler colour scoring system using offline video analysis in women with an incomplete miscarriage: inter- and intraobserver reproducibility study
G.T. Leong (Australia)
P23.01

Ectopic pregnancies and treatment: surgery is not the only choice
E. Domali (Greece)
P23.02

Comparison of risk factors and diagnostic term of tubal pregnancy and low-lying implantation ectopic pregnancy
V. Makukhina (Russian Federation)
P23.03

The value of 3D Doppler indices in prediction of successful medical treatment in missed abortion
M. Odeh (Israel)
P23.04

Medical termination of pregnancy in a tertiary centre in Greece: a case series of a diverse population including refugees and travellers
E. Domali (Greece)
P23.05

Hemoperitoneum and ectopic pregnancy does not always mean surgery
B. Nadim (Australia)
P23.06

Ultrasound markers prior to 8 weeks’ gestational age for the prediction of fetal demise prior to 12 weeks gestation
T.J. Taylor (Australia)
P23.07
ISUOG Outreach trainers workshop

ISUOG will be hosting its first Outreach trainers workshop during the World Congress.

During this two hour session, attendees will gain an understanding of ISUOG’s outreach mission and vision, the cultural preparation needed, what to expect once you’re there and the continuation of the relationships once the trip has finished. Expert trainers will share best practice, provide real life examples, answer questions and allow others to share their experiences.

Date: Tuesday 19 September 2017
Time: 08.30-10.30
Location: Hall B
Program: Please see page 101
Course Chairs:
Anthony Johnson (USA)
Gesù Antonio Báez (ISUOG International Development Coordinator, UK/Italy)
Speakers:
Ann Tabor (Denmark)
Reem Abu-Rustum (Lebanon)
Lisbet Hanson (USA)
Theodora Pepera-Hibbert (UK/Ghana)
Eleni Xilakis (ISUOG Education Officer, UK)

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4468 trainees
100 international partnerships

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2700 DELEGATES
over 96% would recommend the Congress
1211 abstract submissions | 5 travel grants

BASIC TRAINING
281 delegates
from 29 countries
6.1/7 satisfaction

INTENSIVE COURSES
185 live delegates
510 livestream
71 countries

ISUOG Education

ONLINE LEARNING
+500 online lectures
90658 On Demand views
832 users of CME activities

INTERNATIONAL DEVELOPMENT
Outreach Sudan
30 trainees
155 patients
58 Approved courses
7,864 delegates
Guidelines in 17 languages

2016
6.1/7 satisfaction
Tuesday 19.09.2017

HALL A

07:30-08:10  Masterclass
The first trimester anomaly scan
C.M. Bilardo (Netherlands)

08:15-09:15  State-of-the-art techniques to image the fetus
Chairs: K.O. Kagan (Germany); F. da Silva Costa (Australia)

08:15  INVITED: What you can do with ultrasound in 2017
B. Benoit (France)

08:35  OC18.01 Fetal enhanced tridimensional and translational anatomical landscape: FETTAL Project
A. Lamouroux (France)

08:43  OC18.02 Magnetic resonance imaging (MRI) T1 relaxation properties of fetal blood in normal and in suspected anemic fetuses
D. Jørgense (Denmark)

08:51  OC18.03 Superb microvascular imaging of the fetus, placenta and umbilical cord
K. Yamamoto (Japan)

08:59  OC18.04 Ultrasound-based computer-aided tracking technique of fetal breathing movement analysis for intrauterine growth restriction
I. Mendicioglu (Turkey)

09:07  OC18.05 Echogenicity of the fetal bowel using histogram gray-scale analyser: a comparison between normal fetuses and fetuses with echogenic bowel (EB)
L. Maggio (Netherlands)

09:20-10:00  Short oral presentation (OP)
OP26 Managing TTTS
Chair: K. Hecher (Germany)

HALL E

07:30-08:10  Masterclass
Screening for chromosomal anomalies: cfDNA for all, cfTS for all, microarray for all?
L.J. Salomon (France)

08:15-09:15  Is this placenta abnormally invasive?
Chairs: A. Bhide (United Kingdom); I. Timor-Tritsch (United States)

08:15  INVITED: Placenta accreta: screening, diagnostic and management options
A. Bhide (United Kingdom)

08:35  OC19.01 Comparison of ultrasound descriptors of abnormally invasive placenta (AIP) in second versus third trimester: is an increase verifiable?
M.E. Gorczyca (Austria)

08:43  OC19.02 The natural development of low-lying placentas diagnosed in the second trimester
A. Kaelin Agten (United Kingdom)

08:51  OC19.03 Evaluating the accuracy of ultrasonography in predicting morbidly adherent placenta using a scoring system
B.S. Albagawi (Saudi Arabia)

08:59  OC19.04 Validation of the placenta accreta index by ultrasound to predict morbidly adherent placenta
D.M. Twickler (United States)

09:07  OC19.05 The tramline sign for abnormally invasive placenta using Crystal Vue with flow
A. Dall’Asta (Italy)

09:20-10:00  Short oral presentation (OP)
OP27 How to diagnose and manage abnormal placenta
Chair: P. Calda (Czech Republic); D.M. Twickler (United States)

*This presentation is eligible for the Young Investigator award (to be presented in the closing plenary).*
**Workshop** 08:30-10:30

**Working in the field: ISUOG Outreach trainers workshop**

*Chairs: A. Johnson (United States); G.A. Báez (United Kingdom)*

**Introduction**

08:30  Understanding ISUOG vision and Outreach mission

*A. Johnson (United States)*

08:40  Anatomy of the Outreach program

*A. Johnson (United States)*

08:45  The role of the Outreach volunteer

*R. Abu-Rustum (Lebanon)*

**Cultural preparation**

08:55  Understanding the dynamics of your destination

*G.A. Báez (United Kingdom)*

09:05  Understanding culture shock and how to prepare

*G.A. Báez (United Kingdom)*

**On the ground**

09:10  Pedagogical approach: how to interact and teach knowledge and skills

*E. Xilakis (United Kingdom)*

09:15  Outreach training: how to comprehend the trainees educational needs and how to attune your content and teach accordingly

*A. Tabor (Denmark)*

09:20  How to work with ISUOG templates

*A. Tabor (Denmark)*

09:30  How to assess learning: pre and post tests

*R. Abu-Rustum (Lebanon)*

09:35  Hands-on training: what to expect and how to manage

*T. Pepera-Hibbert (United Kingdom)*

09:40  Empowering trainees for ownership

*T. Pepera-Hibbert (United Kingdom)*

**After the trip**

09:50  Continuing the relationship post training: mentoring

*L. Hanson (United States)*

10:00  Assessing feedback and evaluating

*L. Hanson (United States)*

10:05  Trainers share their experience

10:15  Q&A with speakers
HALL A

09:50-10:20 Coffee and e-poster viewing

10:20-11:20 Advanced cytogenetic techniques: impact on ultrasound practice

Chairs: L. Hui (Australia); D. Bettelheim (Austria)

DEBATE: is it still worth measuring nuchal translucency in 2017?

10:20 For: D. Bettelheim (Austria)
10:30 Against: J. Hyett (Australia)
10:40 Speaker rebuttals and voting
10:48 OC21.01 Whole-genome array as a first-tier cytogenetic test in routine prenatal diagnosis
M. Hynek (Czech Republic)
10:56 OC21.02 Fetal abnormalities associated with increased nuchal translucency versus cell-free fetal DNA
F. Bardi (Netherlands)
11:04 OC21.04 Chromosomal microarray as a primary diagnostic genomic tool for pregnancies defined as being at increased risk within a population-based combined first trimester screening program
I. Vogel (Denmark)
11:12 OC21.05 Implications of inconclusive results in prenatal maternal serum cell-free DNA testing
M. Smet (Australia)

11:25-12:05 Short oral presentation (OP)

OP29 Education, simulation and safety
Chair: S. Eik-Nes (Norway)

12:00-13:30 Lunch and e-poster viewing

12:15-13:15 Industry sponsored satellite symposia**

HALL E

Coffee and e-poster viewing

Workshop

3D/4D ultrasound: is it living up to its promise?

Chairs: J. Deng (United Kingdom); L. Gindes (Israel)

DEBATE: 3D/4D has proven its clinical utility

10:20 For: R. Chaoui (Germany)
10:27 Against: A. Abuhamad (United States)
10:34 Rebuttal (speaker 1)
10:37 Rebuttal (speaker 2)
10:40 Audience vote and results
10:45 3D/4D specific artefacts: how to recognise, minimise and avoid them
J. Deng (United Kingdom)
11:04 3D uterine malformations: clinical classifications old and new
B. Benacerraf (United States)
11:10 3D and 4D pelvic floor exploration
A. Youssef (Italy)

**Lunchtime satellite symposia are brought to you by our sponsors and are not part of the ISUOG CME program. ISUOG takes no responsibility for scientific or clinical content. Please see page 158 for our satellite program.
HALL F

Coffee and e-poster viewing

How ultrasound is used to assess women with pelvic pain and diagnose endometriosis

Chairs: G. Condous (Australia); S. Guerriero (Italy)

10:20 Invited: Establishing a uniform approach to the reporting of DIE using ultrasound

G. Condous (Australia)

10:40 OC22.01 Transvaginal sonography-based minimal invasive surgery for urinary tract endometriosis: test accuracy and outcomes

G. Hudelist (Austria)

10:48 OC22.02 Diagnostic accuracy of the transvaginal ultrasound “sliding sign”, direct visualisation and combination of both for the prediction of deep infiltrating endometriosis of the rectum and the rectosigmoid

M. Espada (Australia)

10:56 OC22.03 The relationship between gastrointestinal symptoms and ultrasound findings in women with suspected endometriosis: a prospective pilot study

V.H. Eisenberg (Israel)

11:04 OC22.04 Transvaginal ultrasonography combined with computed tomographic colonography in the diagnosis of bowel endometriosis

S. Ferrero (Italy)

11:12 Yi OC22.05 3D transvaginal ultrasound in adenomyosis: are we looking at all there is?

T. Tellum (Norway)

Short oral presentation (OP)

OP31 Using ultrasound to assess pelvic pain and diagnose endometriosis

Chairs: S. Ferrero (Italy); G. Hudelist (Austria)

Lunch and e-poster viewing

yi This presentation is eligible for the Young Investigator award (to be presented in the closing plenary).
**HALL A**

**Workshop**

**Ultrasound and genetic diagnostics at 12 weeks**

*Chairs: A. Tabor (Denmark); E. Krampl-Bettelheim (Austria)*

13:30 The scope of sonographic screening and of a detailed anatomical survey at 12 weeks
*B. Tutschek* (Switzerland)

13:50 **LIVE SCAN**: how I optimise detection of anomalies at 12 weeks [industry supported*]
*C.M. Bilardo* (Netherlands)

14:10 The potential of the biochemical component of combined screening in the era of NIPT: beyond T21/18/13
*A. Tabor* (Denmark)

14:30 Non-invasive screening for genetic conditions: where will we be by Berlin 2019?
*S. Yagel* (Israel)

14:50-16:20 **Closing plenary: show us the power of ultrasound**

*Chairs: G. Condous (Australia); L.J. Salomon (France); G. Yeo (Singapore)*

14:50 Awards presentation: Top abstract, Young Investigator and best in category
*D. Timmerman* (Belgium)

Austrian Society of Gynaecology and Obstetrics for best contribution from Austria
*P. Kohlberger* (Austria)

15:05 The power of ultrasound: top images from top experts
*B. Benoit* (France), *R. Chaoui* (Germany);
*G.R. DeVore* (United States);
*B. Benacerraf* (United States); *C. Brezinka* (Austria)

15:35 Discussion and voting

16:20 **Congress leaving drinks**

Join us in Singapore in 2018!
HALL F

Workshop
Managing ovarian masses – what is the evidence base and which approach should we use to classify ovarian masses?
Chairs: T. Bourne (United Kingdom); J.L. Alcázar (Spain)

13:30  A systematic review of the evidence and meta-analysis
B. Van Calster (Belgium)

13:50  A randomised trial of the use of the IOTA simple rules and the risk of malignancy index (to include OC23.01)
N.P. Nunes (United Kingdom)

OC23.01  Comparison of two protocols for the management of pain-free postmenopausal women with adnexal tumours: an RCT of RMI/RCOG versus simple rules
N.P. Nunes (United Kingdom)

14:10  Based on the data from the IOTA study: what do we think is the best approach to classifying ovarian masses in 2017?
W. Froyman (Belgium)

14:30  Discussion of case examples
D. Timmerman (Belgium); J.L. Alcázar (Spain);
D. Jurkovic (United Kingdom)
### Hubs

#### HUB 1

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<td>08:15-09:15</td>
<td>Interactive&lt;br&gt;In conversation with E. Kirk: Diagnosing and managing ectopic pregnancy: expectant, medical or surgical</td>
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<tr>
<td>09:20-10:00</td>
<td>Poster discussion (P)★&lt;br&gt;P24: The challenge of evaluating the fetal brain&lt;br&gt;Chair: E.A. Hernandez-Andrade (United States)</td>
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<tr>
<td>10:20-11:20</td>
<td>Interactive&lt;br&gt;In conversation with D. Fischerová and E. Epstein: Using ultrasound to assess the oncology patient including staging</td>
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<td>11:25-12:05</td>
<td>Poster discussion (P)★&lt;br&gt;P27: Techniques for fetal cardiac diagnosis&lt;br&gt;Chair: H. Gardiner (United States)</td>
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<tr>
<td>12:20-13:20</td>
<td>Interactive&lt;br&gt;★MRI certificate exam&lt;br&gt;Moderators: G. Kasprian; D. Prayer (Austria)</td>
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#### HUB 2

<table>
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<tr>
<td>09:20-10:00</td>
<td>Poster discussion (P)★&lt;br&gt;P25: Fetal growth Doppler and hemodynamics&lt;br&gt;Chair: F. da Silva Costa (Australia)</td>
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<tr>
<td>10:20-11:20</td>
<td>Interactive&lt;br&gt;In conversation with D. Jurkovic: How do I manage non-tubal ectopic pregnancies?</td>
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<tr>
<td>11:25-12:05</td>
<td>Poster discussion (P)★&lt;br&gt;P28: References, standards and markers&lt;br&gt;Chair: S. Yagel (Israel)</td>
</tr>
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13:30-14:30

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#ISUOG2017
**HUB 3**

**Poster discussion (P)**
P26: Ultrasound, reproductive medicine and IVF  
*Chair: W. Froyman (Belgium)*

**Interactive**
In conversation with D. Jurkovic:  
How do I manage non-tubal ectopic pregnancies?

**Poster discussion (P)**
P29: Improving our management of twin pregnancies  
*Chair: K. Hecher (Germany)*

**Interactive**
The highlights of the meeting in Chinese  
*Moderator: Q. Wu (China)*

**HUB 4**

**Interactive**
In conversation with D. Jurkovic:  
Diagnosing and managing ectopic pregnancy: expectant, medical or surgical

**Poster discussion (P)**
P25: Fetal growth Doppler and hemodynamics  
*Chair: F. da Silva Costa (Australia)*

**Poster discussion (P)**
P26: Ultrasound, reproductive medicine and IVF  
*Chair: W. Froyman (Belgium)*

**Interactive**
In conversation with D. Fischerová and E. Epstein:  
Using ultrasound to assess the oncology patient including staging

**Poster discussion (P)**
P27: Techniques for fetal cardiac diagnosis  
*Chair: H. Gardiner (United States)*

**Poster discussion (P)**
P28: References, standards and markers  
*Chair: S. Yagel (Israel)*

**Poster discussion (P)**
P29: Improving our management of twin pregnancies  
*Chair: K. Hecher (Germany)*

**Interactive**
WATOG: Join the conversation on issues for trainees worldwide  
*Moderator: K. Dimassi (Tunisia)*  
*Opinion leaders: N. Vrachnis (Greece); G. Szabo (Hungary); Y. Mendaza Copado (Mexico); P. Gabor (France); O. Ami (France)*

**Interactive**
In conversation with M. Herrera and G. Malinger:  
The status of the Zika crisis
**OP - Tuesday 19.09.2017**

**OP26: Managing TTTS**

*Chair: K. Hecher (Germany)*

- TTTS before 18 weeks: what you need to know
  *B. Mylrea-Lowndes* (United Kingdom)

- Short cervix in Twin–twin transfusion syndrome and pregnancy outcome
  *J.U. Ortiz* (Spain)

- Low cerebroplacental ratio can predict subsequent fetal demise of donor or smaller twin with abnormal umbilical artery flow after fetoscopic laser surgery
  *M. Nakata* (Japan)

- Differences in prognostic factors of single fetal demise after laser therapy for Twin–twin transfusion syndrome between early and late fetal demise
  *A. Yamashita* (Japan)

- Outcome of surviving twins underwent intrauterine transfusion for severe anemia subsequent to single fetal death in monochorionic twin gestations
  *M. Kanda* (Japan)

- Perinatal outcome of fetoscopic laser surgery for severe Twin–twin transfusion syndrome in early gestation,
  *E. Tiblad* (Sweden)

- 25% of fetal interposition (FI) in the placental equator in TTTS placentas: the fetoscopical approach
  *M. Yamamoto* (Chile)

- Fetal E/e' by dual gate Doppler method in Twin–twin transfusion syndrome and relationship with amniotic fluid brain-type natriuretic peptide
  *M. Takano* (Japan)

- Assessment of fetal cardiac function and structure in monochorionic diamniotic twins with Twin–twin transfusion syndrome before and after fetal therapy
  *X. Torres* (Spain)

**OP27: How to diagnose and manage abnormal placentation**

*Chairs: P. Calda (Czech Republic); D.M. Twickler (United States)*

- The jellyfish sign: a new sonographic marker for morbidly adherent placenta previa diagnosis
  *E. Bertucci* (Italy)

- “Rail” sign for prediction of advanced AIP (abnormally invasive placenta)
  *J. Shih* (Taiwan)

- Ultrasound: a valuable tool to face the epidemic of placenta accreta in Tunisia
  *D. Chelli* (Tunisia)

- Comparison of transabdominal ultrasound (US) versus transvaginal US in the accurate prenatal assessment of abnormally invasive placenta (AIP)
  *M. Aboulghar* (Egypt)

- Variants of abnormal placentation: retrospective analysis of selected cases and possible clinical implications
  *P. Pateisky* (Austria)

- An audit on the management of suspected cases of morbidly adherent placenta at the Heart of England Foundation Trust: a pathway to enhance patient care
  *A. Fatma* (United Kingdom)
Does imaging correlate with clinical findings for morbidly adherent placenta? An audit from University Hospitals Coventry and Warwickshire

**L.J. Ewington (United Kingdom)**

The risk factors for antenatal bleeding in pregnancy with placenta previa

**H. Cho (Republic of Korea)**

The utility of a routine screening for abnormal invasive placentation in women with previous Caesarean sections according to placental insertion site

**E. Bertucci (Italy)**

Is leaving placenta in situ all we need in the treatment of morbidly adherent placenta? Comparison of three different treatment approaches

**M.S. Kutuk (Turkey)**

HDLive, HDLiveFlow and HDLiveFlow silhouette mode for the diagnosis of gestational trophoblastic disease

**K. Yamamoto (Japan)**

**OP28: Solving problems in urogynecology using ultrasound**

**Hall F**

Chairs: A. Youssef (Italy); I. Geiss (Austria)

Levator avulsion and parity

**C.F. Walsh (Australia)**

Levator ani muscle avulsion and risk of recurrence after facial surgery for pelvic organ prolapse: preliminary results

**F. Leone (Italy)**

The prevalence of pelvic organ prolapse in a Nepali gynecology clinic

**H.P. Dietz (Australia)**

The prevalence of major birth trauma in Nepali women

**H.P. Dietz (Australia)**

Association of uterine leiomyoma and overactive bladder syndrome: a cohort study

**S. Schwaab (Austria)**

Pelvic organ descent and hiatal dimensions in Asian and Caucasian women with symptomatic pelvic organ prolapse

**H.P. Dietz (Australia)**

WITHDRAWN

Is abnormal posterior compartment anatomy associated with anal incontinence?

**H.P. Dietz (Australia)**

The levator-urethral gap measurement: tomographic ultrasound imaging (TUI) versus Omiview-volume contrast imaging (VCI)

**E. Montaguti (Italy)**

The effect of Kristeller maneouvre on postpartum pelvic organ prolapse: prospective case-control study

**M. Paganotto (Italy)**

**OP29: Education, simulation and safety**

**Hall A**

Chair: S. Eik-Nes (Norway)

B-mode fetal echocardiography perception analysis with the use of eye tracking technology and voice recordings

**M. Wiechec (Poland)**

Thermal and mechanical index for obstetric scans: an analysis

**C. Lees (United Kingdom)**

Measurement of temperature during transvaginal scans

**C. Lees (United Kingdom)**
Establishing infection prevention flowcharts for obstetric and gynecological ultrasound practitioners

S.C. Westerway (Australia)

WATOOG satisfaction survey on the ultrasound training of trainees in obstetrics and gynecology

P. Gabor (France)

Evaluation of Canadian obstetrics and gynecology ultrasound curriculum and self-reported competency of final-year residents

M. Leonardi (Canada)

ISUOG Basic Training live streaming: evaluation of Nigerian attendees training and practice of obstetric ultrasound

H.O. Raji (Nigeria)

Impact of image orientation during transvaginal ultrasound training

E. Dreisler (Denmark)

Development of an obstetrics ultrasound Doppler simulator

F.A. Guerra (Chile)

Simulation in amniocentesis using a training model in a Latin American setting

E. Gil Guevara (United States)

OP30: Fetal brain novel applications of ultrasound and MRI

Chairs: J. Hyett (Australia); A. Toi (Canada)

Photoacoustics as a new imaging technique for in utero assessment of fetal cerebellar tissue oxygenation

E. Gil Guevara (United States)

Ultrasound and MRI abnormalities of fetal cortical plate morphology correlate with development of cerebral malformations

D. Pugash (Canada)

Segmentation of prenatal cerebellar vermian pathologies in fetal MRI

G. Kasprian (Austria)

Fusion imaging (FI) in brain structure measurements on a fetus phantom when combining real-time ultrasound (US) with magnetic resonance imaging (MRI)

A. Arechvo (Sweden)

Volumetric MRI study of the intrauterine growth restriction fetal brain

E. Katorza (Israel)

Imaging the optic chiasm and nerves using Crystal Vue and Crystal Vue flow

A. Dall’Asta (United Kingdom)

A new semi-automated method for measuring volume of structures in the fetal brain

E. Katorza (Israel)

Reproducibility of a new three-dimensional ultrasound method for the measurement of fetal frontal lobe volume

M.E. Albers (Netherlands)

Postmortem MRI and histological correlation of the rostral migratory stream in the human fetal brain

C. Mitter (Austria)

Automated measurements of cephalic fetal biometry by three-dimensional ultrasound: feasibility and reproducibility

A. Chabot-Lecoanet (France)

The first trimester fetal central nervous system: a novel ultrasonographic perspective

H. Shah (United Kingdom)
OP31: Using ultrasound to assess pelvic pain and diagnose endometriosis

Chairs: S. Ferrero (Italy); G. Hudelist (Austria)

New sonographic score of adenomyosis: classification of type and degree of the myometrial involvement and correlation to symptoms
C. Exacoustos (Italy)

Changes in endometriomas and rectovaginal endometriotic nodules during treatment with norethindrone acetate or extended-cycle oral contraceptive
C. Scala (Italy)

Pelvic floor morphometry at three- and four-dimensional transperineal ultrasound in women with ovarian endometriosis or deep infiltrating endometriosis
A. Benfenati (Italy)

Evidence of adenomyosis on transvaginal ultrasound and infertility management of patients with endometriosis selected for surgical intervention
V.H. Eisenberg (Israel)

Ultrasound appearance of decidualised deep endometriosis during pregnancy
I. De Blasis (Italy)

Decidualisation of endometriotic lesions in pregnancy
E. Bean (United Kingdom)

Papillary bladder carcinoma of low-malignant potential during pregnancy: 2D and 3D ultrasonography
A. Mulic-Lutvica (Sweden)

New sonographic score of adenomyosis: interobserver reproducibility in the evaluation of type and degree of the myometrial involvement
L. Lazzeri (Italy)

Influence of endometriomas and deep infiltrating endometriosis on pregnancy outcome and first and second trimester markers of impaired placentation
C. Scala (Italy)

Performance of the transvaginal sonographic ‘sliding sign’ in prediction of pouch of Douglas obliteration: does this improve over time?
B. Shakeri (Australia)

Follow-up of MRI deep infiltrative endometriotic lesions before and after pregnancy: does it change something?
A.E. Millischer (France)
P24: The challenge of evaluating the fetal brain

**L3 / L6 Hub 1**

**Chair:** E.A. Hernandez-Andrade (United States)

- Fetal brain anomalies detection during the first trimester: expanding the scope of antenatal sonography
  E. Katorza (Israel)
- Prenatal detection of central nervous system defects at 11–13+6 weeks’ ultrasound scan
  E. Andreeva (Russian Federation)
- Outcome of fetuses with prenatal diagnosis of isolated severe ventriculomegaly
  S. Carta (United Kingdom)
- The many faces of prenatal imaging diagnosis of ventriculomegaly related to aqueduct obstruction
  L. Guibaud (France)
- Differential cortical development in fetuses with isolated non-severe ventriculomegaly assessed by magnetic resonance imaging
  N.M. Hahner (Spain)
- Isolated complete short corpus callosum in fetuses: prevalence and pregnancy short-term outcome
  F. Fuchs (France)
- Posterior fossa imaging features enabling diagnosis of PHACE syndrome in utero
  H. Bakry (Israel)
- Prenatal sonographic diagnosis of congenital arachnoid cyst: clinical outcomes in a tertiary care centre
  Y. Jung (Republic of Korea)
- Neurosonographic findings in fetal tuberous sclerosis complex
  F. Correa (Portugal)
- The first case of Zika virus related microcephaly in the Netherlands
  R. de Heus (Netherlands)
- Fetal neurosonographic aspects of the Zika virus infection
  H.J. Milani (Brazil)

P25: Fetal growth Doppler and hemodynamics

**L3 / L6 Hub 2**

**Chair:** F. da Silva Costa (Australia)

- Assessment of placental vascularisation using three-dimensional power Doppler angiography (3D PDA) in normal fetuses and fetuses affected by fetal growth restriction (FGR)
  A. Rossi (Italy)
- An objective system to evaluate the quality of middle cerebral artery Doppler images
  S. Ruiz-Martinez (United Kingdom)
- Fetal umbilical/middle cerebral artery pulsatility indices and the cerebroplacental ratio (CPR) normograms at 16–40 weeks of gestation by polynomial regression analysis
  T. Dias (Sri Lanka)
- Stillbirth and fetal growth restriction from umbilical artery and ductus venosus diastolic waveform assessment: a systematic review and meta-analysis
  R.J. Martinez-Portilla (Spain)
- Uterine Doppler, cerebroplacental ratio and fetal growth in the late third trimester: association with adverse outcome
  G. Albaiges Baiget (Spain)
- Clinical impact of the Doppler reference charts used for the management of fetal growth restriction: the need for standardisation
  S. Ruiz-Martinez (Spain)
- Three-dimensional power Doppler ultrasound examination in pregnancies complicated by intrauterine growth restriction
  A. Molnár (Hungary)
Maternal hemodynamic profile in pregnancies complicated by intrauterine growth restriction
T. Izzo (Italy)

CPR 2 as a new Doppler parameter to assess the well-being in fetal growth-restricted fetuses
A. Rossi (Italy)

Maternal hemodynamics in pregnancies complicated by hypertensive disorders
F. Fuso (Italy)

Usefulness of computerised cardiotocography-based short-term variation in late-onset fetal growth-restricted (FGR) fetuses
O. Graupner (Germany)

P26: Ultrasound, reproductive medicine and IVF  L3 / L6  Hub 3
Chair: W. Froyman (Belgium)

Interobserver variability of uterine measurements in congenital uterine anomalies with
three-dimensional ultrasound
B. Graupera (Spain)

Objective assessment of uterine peristalsis outside pregnancy by high-order texture analysis of
ultrasound images
C. Caresio (Italy)

Perinatal outcomes in singleton pregnancies conceived by natural cycle as compared with conventional
IVF and spontaneously conceived pregnancies
H. Ayuso (Spain)

To appraise the current evidence comparing double and single intrauterine insemination (IUI) on the
reproductive outcomes in subfertile couples
C. O. Nastri (Brazil)

The possible effect of HPV infection on IVF outcomes: a systematic review and meta-analysis
W. P. Martins (Brazil)

Evaluating tubal patency using three different ultrasound techniques: interobserver reliability
agreement and diagnostic accuracy
I. Ludwin (Poland)

Androgen levels in female offspring of PCOS and non-PCOS women
M. Kollmann (Austria)

Screening for congenital uterine anomalies by three-dimensional transvaginal ultrasound in
premenopausal women: the online added information
S. Tudorache (Romania)

Image quality of the coronal plane of the uterus by 3D ultrasound: comparison of four techniques
based on the opinion of several experts
W. P. Martins (Brazil)

Normal/arcuate vs septate uterus: agreement among experts’ subjective impression evaluating the
coronal plane of the uterus on 3D ultrasound
A. Ludwin (Poland)

P27: Techniques for fetal cardiac diagnosis  L3 / L6  Hub 1
Chair: H. Gardiner (United States)

Additional cardiac views for 76811 billing do not increase detection of congenital heart disease, despite
increased number of ultrasound exams
V. Fratto (United States)

Accuracy of early fetal echocardiography within 16 weeks of gestation in the diagnosis of outflow tracts
anomalies in a high-risk population
V. De Robertis (Italy)

Improving detection of severe fetal pulmonary stenosis
V. Jowett (United Kingdom)
Evaluation of PLAS index (post LA space index) in normal fetus

Y. Kawazu (Japan)

Prenatal diagnosis of total anomalous pulmonary venous connections (TAPVC): multicentre cohort study and meta-analysis

D. Paladini (Italy)

Use of ‘coumadin ridge’: an easy sign to rule out TAPVC

U. Singh (India)

Feasibility of basic fetal heart imaging during first trimester

A. Gerede (Greece)

First trimester cardiac screening for major CV anomalies performance using transabdominal simplified fetal echocardiography protocol

M. Colomfirescu (Romania)

Diagnostic accuracy of basic fetal heart examination at 11–13 weeks’ gestation of pregnancy

T. Loureiro (Portugal)

Barriers to prenatal detection of critical congenital heart disease: lessons learned from review of false-negative anatomy ultrasounds

D. Goff (United States)

Perinatal outcome of pulmonary atresia with intact ventricular septum (PAIVS) depending on time of diagnosis

R. Axt-Fliedner (Germany)

P28: References, standards and markers

Chair: S. Yagel (Israel)

Congenital lung malformations: correlation between pre- and postnatal imaging

A.E. Millischer (France)

Establishment of ultrasound references value for fetal anogenital distance and perineal muscular complex measurements: could it be a future prospect in our antenatal anorectal malformation ultrasound diagnosis?

A. Ayachi (Tunisia)

Reference curves for fetal urinary bladder and renal pelvis volumes in the second and third trimester of pregnancy

F. Fontanella (Netherlands)

Antenatal renal pelvis dilatation: is it a wee problem? Long-term outcome in male and female children

S. Sankaran (United Kingdom)

The prenatal diagnosis and outcomes of fetal lung cystic lesions: 100 cases at a single centre

R. Sugibayashi (Japan)

Perinatal management in cases of fetal abdominal wall defects (fAWD): retrospective survey on predictors of final outcome

U. Schneider (Germany)

Ultrasound markers in fetal hydronephrosis to predict postnatal surgery

D. Wertaschnigg (Austria)

Thorax-to-head ratio and defect diameter-to-head ratio in giant omphaloceles as predictor for fetal outcome

J. Braun (Germany)

P29: Improving our management of twin pregnancies

Chair: K. Hecher (Germany)

Maternal hemodynamic changes and complications following intrauterine interventions for monochorionic twin pregnancies

P. Greimel (Austria)
Maternal hemodynamics in monochorionic twin pregnancy: hypodynamic circulation and reduced cardiac power
D. Farsetti (Italy)

Assessment of fetal myocardial performance index in routine follow-up of twin pregnancy: feasibility study
M. Massoud (France)

The roles of superficial anastomoses with Twin–twin transfusion syndrome
H. Konno (Japan)

Placental cord insertion site and adverse pregnancy outcome in twin pregnancy
E. Kolafat (Turkey)

Outcomes of monochorionic diamniotic twin pregnancies in tertiary fetal medicine centre with new access to invasive fetal therapy
K. Behavkova (Czech Republic)

Short-term and long-term outcome of spontaneous twin anemia-polycythemia sequence
S. Han (Republic of Korea)

Acute feto-fetal transfusion simulation in monochorionic diamniotic twins
L. Haslik (Czech Republic)

The use of long-term indomethacin stabilises cervical length in twin pregnancies
O.M. Turan (United States)

**P30: How to use imaging to manage oncology patients**

**Chair:** I. Timor-Tritsch (United States)

Neuroendocrine tumours of the female genital tract: a small case series
H. Mehra (United Kingdom)

Accuracy of different risk prediction models and subjective ultrasound assessment to diagnose extraovarian primary peritoneal cancer
M. Stukan (Poland)

Imaging in gynecological disease: clinical and ultrasound features of ovarian endometrioid carcinoma
F. Moro (Italy)

Does rectal enema improve the accuracy of ultrasonography in predicting rectosigmoid infiltration in patients with ovarian cancer?
S. Ferrero (Italy)

MRI and ultrasound fusion imaging for endometrial cancer
M. Allanche (France)

Accuracy of different risk prediction models and subjective ultrasound assessment to diagnose colon cancer metastases in the ovaries
M. Stukan (Poland)

Prospective evaluation of ultrasound implementation into preoperative evaluation of cervical cancer patients
M. Zikan (Czech Republic)

Imaging in gynecological disease: clinical and ultrasound characteristics of ovarian metastasis from low-grade appendiceal mucinous neoplasms (LAMNs)
A.C. Testa (Italy)

MRI and ultrasound fusion imaging for cervical cancer
C. Théodore (France)

Ultrasound and clinical features of uterine carcinosarcoma
S. Giunchi (Italy)

Gastrointestinal stromal tumours: can they be correctly diagnosed by ultrasound during gynecologic evaluation? A report of five cases
N. Rams (Spain)
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**EP - Electronic posters**

**EP01: Fetal brain and CNS anomalies: cavum septum pellucidum, corpus callosum, choroid plexus and intracranial cysts**

Reliability of cavum septum pellucidum volume measurements during second trimester ultrasonography in structurally normal fetuses  
*M. Sezik (Turkey)*

Abnormal cavum septi pellucidi (CSP): experience of a tertiary centre  
*D.G. Iliescu (Romania)*

Fetal cavum septum pellucidum: tentorium angle measured with three-dimensional ultrasonography and its clinical value  
*G. Lyu (China)*

Prenatal diagnosis and postnatal outcome of agenesis of the corpus callosum: a retrospective multicentre study  
*K. Yusupov (Russian Federation)*

OmniView: a useful tool for early evaluation of fetal cortex abnormal sulcation associated with dysgenesis of corpus callosum — a case report  
*E.Q. Barreto (Brazil)*

Isolated absence of septum pellucidum: a report of two cases  
*H. Boo (Republic of Korea)*

Fetal intracranial space occupying lesions: MRI versus ultrasound  
*K. Chen (China)*

Fetal choroid plexus at 11–13 weeks: a predictor of handedness?  
*R.S. Abu-Rustum (Lebanon)*

Fetal choroid plexus cysts and aneuploidy  
*S. Pashaj (Albania)*

Prenatal diagnosis and prognosis of fetal arachnoid cysts  
*L. Yin (China)*

A case of large prenatally-diagnosed arachnoid cyst  
*S. Wavrant (Canada)*

Magnetic resonance imaging of fetal brain in confirming the diagnosis of supra- and infratentorial arachnoid cysts seen in routine antenatal ultrasound  
*M.R. Louis (Egypt)*

Prenatal diagnosis of Aicardi syndrome: a case report  
*C.T. Hsieh (Taiwan)*

**EP02: Fetal brain and CNS anomalies: ventriculomegaly, posterior fossa and neural tube defects**

Fetal mild ventriculomegaly: the correlation between the degree of dilatation and other fetal biometric parameters  
*E. Katorza (Israel)*

Ventricular wall morphology in cases with mild/moderate ventriculomegaly at 18–21 weeks  
*R.K. Pooh (Japan)*

Isolated non-severe ventriculomegaly is associated with poorer early neurodevelopment  
*N.M. Hahner (Spain)*

WITHDRAWN
Spontaneous resolution of a ventriculomegaly
A.K. Kesrouani (Lebanon)

Ventriculomegaly related to genetic disorders of differentiation
Y. Nieto Jimenez (Spain)

Differential diagnosis of hydrocephalus caused by intracranial hemorrhage and congenital brain tumours: a study of three cases
E. Soga (Japan)

WITHDRAWN

Occipital cephalocele: diagnosis, obstetric and postnatal management
R. Radulescu-Boica (Romania)

WITHDRAWN

Posterior encephalocele with cerebellar displacement and hypoplasia
A.K. Kesrouani (Lebanon)

Hypoplasia of the cerebellar vermis in fetuses from 45 to 84 mm Crown–rump length
R. Altmann (Austria)

Neurosonography and Doppler analysis of the brain and cerebellum in fetal rats with spina bifida: a novel marker for Arnold-Chiari type II malformation
E. Gil Guevara (United States)

Correlation between ultrasound and MRI measurements of the fetal cerebellum performed on the same day
R.E. Parad (United States)

First trimester imaging in Dandy-Walker syndrome with vermian agenesis
A.K. Kesrouani (Lebanon)

Case of hypoplasia cerebellar vermis with dynamic ventriculomegaly change
R. Matsuoka (Japan)

EP03: Improving the prenatal diagnosis of fetal brain and CNS anomalies

Reproducibility of the intracranial anatomy assessment during second trimester sonographic scan
E. Kalafat (Turkey)

Impact of fetal magnetic resonance imaging of the brain in assessment of fetal CNS anomalies
M.R. Louis (Egypt)

Fetal neurosonography: experience and correlation with magnetic resonance images (MRI) in T2 weighted images (WI) at Hospital Italiano of Buenos Aires
D. Covini (Argentina)

The cerebral third ventricle in fetuses with normal anatomy and CNS malformations: a high-resolution 3D ultrasound (3DUS) study of the mid-sagittal view
D. Paladini (Italy)

Central nervous system ultrasound characterisation in triploid fetuses in the first trimester
T. Loureiro (Portugal)

12 weeks’ ultrasound diagnostic of hemivertebrae
R.E. Bohiltea (Romania)

Prenatal diagnosis of 22q11.2 microdeletion: minor cardiac finding detected in mid-trimester scan associated with severe bilateral perisylvian polymicrogyria in late gestation
H. Bakry (Israel)

Fetal neuronal migration disorder with megalencephaly at 18 weeks related to paternal UPD mosaicism with PTEN mutation
R.K. Pooh (Japan)

Prenatal diagnosis of ultrasound and MRI in the Vein of Galen aneurysmal malformation
X. Chen (China)

A very rare case of fetal brainstem disconnect
N. Jackson (United Kingdom)
Dichorionic diamniotic twin pregnancy with central nervous system anomalies in both fetuses

M.W. Serafin (Poland)

A comparison between prenatal and postnatal radiologic findings of prenatally diagnosed lissencephaly cases

H. Cho (Republic of Korea)

EP04: Fetal echocardiography

Systematic evaluation of the fetal subclavian arteries in mid-trimester scan (CASSEAL protocol in a multicentric study)

C. Bravo (Spain)

Outcomes with fetal immune mediated congenital atrioventricular block (CAVB)

K.M. Lional (Singapore)

Ultrasonic diagnosis to pathological types of fetal complete transposition of the great arteries (CTGA) and combined malformations

J. Li (China)

Detection of congenital heart defects at 11–13+6 weeks’ scan using only 4 chamber view and combination of 4 chamber and 3 vessel views of the heart

E.S. Nekrasova (Russian Federation)

Applicability of ISUOG practice guidelines on second trimester sonographic screening examination of fetal heart

A. Gerede (Greece)

High SVC/Ao ratio in 3 vessel view can be one of the indicators for the placental insufficiency

J. Matsumoto-Runser (Japan)

Comparative study between early fetal echocardiography performed at 13–13+6 weeks’ and at 16 weeks’ gestation

I. Ortega Cárdenes (Spain)

Quantification of mechanical dyssynchrony in growth-restricted fetuses and normal controls using speckle-tracking echocardiography (STE)

R. Schmitz (Germany)

Prenatal ultrasound diagnosis on fetal absent pulmonary valves

T. Zhu (China)

Absent pulmonary valve syndrome: the earlier the operation, the better the results?

K. Zych Krekora (Poland)

M-mode vs 2D echocardiography for measuring of fetal myocardial wall thickness

A. Sepúlveda-Martínez (Spain)

Parameters affecting imaging accuracy on sonographic screening examination of fetal heart during second trimester according to ISUOG practice guidelines

A. Gerede (Greece)

Fetal right aortic arch can be screened with three vessel view in the second or third trimester ultrasound screening

E. Inoue (Japan)

Does the fetal echosonographic index of infection have an impact on the newborn’s condition?

J. Murlewska (Poland)

Postnatal clinical course of the fetal vascular ring

N. Imaoka (Japan)

Perinatal outcome in fetuses with heterotaxy syndrome

A. Mabuchi (Japan)

The use of early fetal echocardiography in fetuses with ultrasound soft markers

Q. Pan (China)

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R. Gasnier (Israel)
The estimation of the prognosis for fetal critical aortic stenosis with the left atrium area and the Doppler pattern in pulmonary veins  
S. Sukegawa (Japan)  

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K. Oelmeier de Murcia (Germany)  

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C. Marginean (Romania)  

The fetal case of right isomerism with infracardiac total anomalous pulmonary venous drainage and agenesis of the ductus venosus  
K. Kim (Japan)  

The role of ultrasound in fetal Graves’ disease: a case report  
M. Theodora (Greece)  

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J. Park (Republic of Korea)  

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Y. Peng (China)  

A case of Long QT syndrome screened by 2:1 AV block and confirmed by fetal ECG  
M. Kawataki (Japan)  

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H. Moczulska (Poland)  

Fetal echocardiography in the third trimester a new obligation to save fetal/neonatal life? A new approach based on 4 cases from a tertiary centre  
M. Respondek-Liberska (Poland)  

Prenatal diagnosis of Turner syndrome in a case of isolated aberrant right subclavian artery  
A. Corbacioglu Esmer (Turkey)  

Fetal dilated cardiomyopathy: genetic susceptibility?  
K. Kuo (United States)  

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A. Idelson (Israel)  

Left atrial isomerism (LAI) without serious heart defect: first trimester diagnosis and delayed postnatal development of the heart block at the age of 11 months  
S. Milovanova (United Kingdom)  

Idiopathic intermittent dilated cardiomyopathy: in the fetal and the postnatal periods  
K. Kuo (United States)  

Significance of an abnormal venous return on the prenatal morphology scan  
A.K. Kesrouani (Lebanon)  

Prenatal diagnosis of fetal idiopathic ventricular tachycardia treated with maternal intravenous magnesium: a case report  
J. Park (Republic of Korea)  

Fetal sinus bradycardia as the symptom of previously undiagnosed familial form of Long QT syndrome type 1 caused by mutation of KCNQ1 gene (c.926C>T)  
M. Lubusky (Czech Republic)  

Fetal persistent left superior vena cava: a case report and review of the literature  
L.J. Ewington (United Kingdom)  

Prenatal diagnosis of a fetal Uhl anomaly  
S.S. Kabra (India)  

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Y. Nakamura (Japan)  
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S. Ge (United States)  
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S. Ge (United States)  
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K.E. Diderich (Netherlands)  
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K.Y. Leung (Hong Kong)  
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D. Markov (Bulgaria)

Impact of “no call result” in NIPT in a single centre
G. Alboiges Baiget (Spain)

Performance of the 13-week gross-anatomy survey in a primary care centre in the Netherlands
F. Bardi (Netherlands)

Why do patients refuse invasive prenatal testing?
P. Sadlecki (Poland)

Fetal situs evaluation at the first trimester screening scan
N. Feldman Leidner (Israel)

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M. Schmid (United States)

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M. Podobnik (Croatia)

Preliminary study on the consequences of the implementation of the DNAf technique for the screening of Trisomy 21 in a hospital of the public network of Madrid, Spain
C. Martínez-Payo (Spain)

First trimester diagnosis of cystic hygroma by transvaginal ultrasound and cytogenetic evaluation
M. Podobnik (Croatia)

Current prenatal screening efficacy of Trisomy 21, 18, 13 in the Taiwan: a 6-year national registry study
C. Hsiao (Taiwan)

Discordant NIPT in a pregnant women with breast cancer
P. Moore (Chile)

Choroid plexus morphology and size anomalies: a Trisomy 22 feature?
M.M. Martins (Portugal)

First trimester growth delay: an early marker of triploidy
K. Kuo (United States)

Little sonographic findings and numeric chromosome aberrations
Y. Nieto Jimenez (Spain)

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T.F. Oluymi-Obj (Canada)

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A.K. Kesrouani (Lebanon)

A case of chondrodysplasia punctata in a lupic mother
S. Wavrant (Canada)

Prenatal diagnosis of arthrogryposis multiplex congenital
Y. Nagayasu (Japan)

A fetus with isolated unilateral lower limb hypertrophy: a case report
A. Kulia (United Kingdom)

Prenatal radial malformation with cleft lip and palate, tetralogy of Fallot
J. Park (Republic of Korea)

The value of prenatally quantitative evaluation the severity of clubfoot by sonography
G. Lyu (China)

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Real-time VCI-A with a 4D electronic probe facilitates the evaluation of fetal extremities in mid-trimester sonograms
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Talipes equinovarus: prenatal diagnosis and outcome in the centre Gennet 2007–2016, Czech Republic
D. Smetanova (Czech Republic)

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L. Vygivska (Ukraine)

Overview of the role of urological fetal MRI in Evelina Children’s Hospital
C.E. Lovegrove (United Kingdom)

Prevalence of major congenital anomalies in a tertiary care hospital in Oman (5 years’ retrospective study)
T.R. Al-Dughaishi (Sultanate of Oman)

Contribution of ultrasound in the diagnosis and management of twin pregnancies with single fetal malformation
D. Chelli (Tunisia)

Fetal anomalies detected in Sri Lankan tertiary fetal medicine referral centre
T. Dias (Sri Lanka)

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Y. Gilboa (Israel)

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P.C. Brugger (Austria)

Prenatal diagnosis of a voluminous facial rapidly involuting congenital hemangioma (RICH): a case report
S. Wavrant (Canada)

Solitary median maxillary central incisor syndrome (SMMCI) in association with agenesis of the corpus callosum
J. Ortega Cárdenes (Spain)

Familial aplasia cutis congenita on the scalp complicated with unexplained persistent mild hydrocephalus and polyhydramnios on prenatal ultrasonography: “like father, like daughter”
K. Lee (Republic of Korea)

Sagging renal artery: clue to prenatal diagnosis of horseshoe kidney
D. Singh (India)

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A. Weichert (Germany)

Laryngeal atresia associated with esophageal fistula
J. Ortega Cárdenes (Spain)

A case of unilateral choanal atresia
S. Brezina (Czech Republic)

Agenesis of peroné: a case report
L. Javier (Chile)
Relationship between absent or hypoplastic fetal nasal bone at 20–23+6 weeks of gestation and chromosomal defects in an unselected Chinese population
L. Cao (China)
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E. de Jong-Pleij (Netherlands)
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Added value of prenatal MR in the evaluation of fetal cleft lip, cleft palate and micrognathia
S.L. Laifer-Narin (United States)
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Look at the fetal nose 2: the nasal height
E. de Jong-Pleij (Netherlands)
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The frontal fetal facial (FFF) angle in the second trimester measured by 3D ultrasound in normal fetuses and fetuses with Trisomy 18
E. Merz (Germany)
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Sonographic evaluation of the fetal thymus using the thy-box technique between 18 and 22 weeks’ gestation in a multicentric study
C. Bravo (Spain)
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Clinical management of fetal goiter: case series and review of the literature
M.A. Gembicki (Germany)
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Fetal cleft lip and palate: improved diagnostic accuracy by combined sonography (US) and magnetic resonance imaging (MRI)
J.A. Estroff (United States)
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A new sign to demonstrate the presence of a cleft palate: the rolling stone sign!
J. Develay-Morice (France)
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C. Martínez-Payo (Spain)
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T. Sarac Sivrikoz (Turkey)
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C. De Bruyn (Belgium)
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Streeter syndrome 3D observation of amnion dysmorphism
Y. Nieto Jimenez (Spain)
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A case with non-reassuring fetal status due to obstruction of unilateral umbilical artery
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A. Omoto (Japan)
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J. Javier (Chile)
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Bronchopulmonary sequestration with hydrops in monochorionic twins treated with multiple courses of Betamethasone
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Ultrasound appearance of fetal giant thymus
R.E. Bohiltea (Romania)

Cyst of the seminal vesicle as a rare cause of a prenatal diagnosed Douglas cyst by male fetus
R. Gatina (Germany)

Meconium peritonitis from the first trimester
Y. Nieto Jimenez (Spain)

Herlyn–Werner–Wunderlich syndrome: performance of MRI findings compared to ultrasound imaging and intraoperative assessment during Caesarean section
F. Presti (Italy)

An unusual localisation of lymphangioma
Y. Nieto Jimenez (Spain)

Cantrell’s Pentalogy: gestational ultrasound imaging
C. Martinez-Payo (Spain)

Prenatal ultrasound diagnosis of megalourethra associated with enterolithiasis
N. Sabry (Egypt)

Two cases of prenatally diagnosed autosomal recessive polycystic kidney disease treated with intensive respiratory management
A. Kanai (Japan)

A case of partial urorectal septum malformation sequence with a very small lower abdominal cyst and review of literature
F. Liu (China)

Discordant monochorionic monoamniotic twin malformation: omphalocele-extrophy-imperforate anus-spinal (OEIS) defect complex
R.A. Moreira de Sa (Brazil)

Prenatal diagnosis and outcome of congenital aortic aneurysm: a case report
E.S. Nekrasova (Russian Federation)

Fetal ascites: when the mesentery beckons
D. Singh (India)

Fetal adrenal gland enlargement: prenatal and postnatal management
A. Cunderlik (Slovakia)

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Diagnosis by ultrasound of omphalocele during first trimester of pregnancy
C. Martinez-Payo (Spain)

Evaluation, natural history and fetal outcome in renal pelvis dilatation
R.E. Bohiltea (Romania)

Fetal small bowel volvulus: ultrasound and MRI findings – which is the best?
J. Faure (France)

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Application of 3D multislice ultrasound in analysis of fetal urinary tract abnormalities
Z. Jurisic (Serbia)

Fetal abdominal cystic masses: three-year experience of a tertiary centre
D.G. Iliescu (Romania)

Fetal spontaneous resolution of small bowel volvulus: prenatal ultrasound and MRI diagnosis and neonate issue
J. Faure (France)

The prenatal sonographic diagnosis and value assessment of fetal abdominal cystic echo
Q. Wu (China)

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Antenatally diagnosed abdominal cysts: 11 years’ experience
F. Sanna (Italy)
Significance and outcome of simple renal cysts detected antenatally
E. Sanna (Italy)

Prenatal prognosis markers in congenital diaphragmatic hernia
E. Gómez Montes (Spain)

Fetal megacystis: prenatal detection, neonatal outcome and follow-up in 25 consecutive cases observed in a tertiary referral centre
L. Masini (Italy)

Acidosis predictive factors in fetal gastroschisis
P. Moore (Chile)

Postnatal outcomes of antenatally diagnosed abdominal cysts
E. Sanna (Italy)

Reliability of prenatal diagnosis on neonatal outcome in isolated left-sided congenital diaphragmatic hernia: the results of the perinatal centre in the years 2003–2015
P. Hanulíková (Czech Republic)

Prenatal diagnosis of anterior urethral valve: a rare cause for fetal hydronephrosis
S. Perlman (Israel)

The value of 2D and 3D bladder volume measurement in the prediction of spontaneous resolution of prenatal hydronephrosis
M.S. Daly (United Kingdom)

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HDlive Studio for antenatal diagnosis of Apert syndrome
K. Yamamoto (Japan)

Prenatal diagnosis of Emanuel syndrome: a case report
D. Kilijanova (Czech Republic)

Pierre Robin sequence resulting from 1q21.1 deletion in a neonate
S. Kim (Republic of Korea)

Prenatal diagnosis of Pallister–Killian syndrome by 2D/3D ultrasound in second trimester
V. Frisova (Czech Republic)

Upper limbs malformation and mutation in RECQL4 gene first trimester prenatal diagnosis
C. Martínez-Payo (Spain)

Prenatal diagnosis of Ellis-van Creveld syndrome (EVCS): a case report
K. Tsurane (Japan)

Pathological findings in the study of prenatal arrays by structural ultrasound anomalies
B. Herrero (Spain)

Prenatal diagnosis of Holt-Oram syndrome
K. Maeda (Japan)

Conradi-Hünermann-Happle syndrome, prenatal diagnosis and family generational report
I. Javier (Chile)

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Gestational age estimator based on MRI data: a user-friendly graphical user interface
S. Sefidbakht (Islamic Republic of Iran)

The prediction study of fetal growth restriction with universal third trimester ultrasonic measurements and Doppler parameters
C. Zhi (China)

Fetal renal artery Doppler in a healthy population
S. Contag (United States)

Prediction of small-for-gestational-age neonates at term by second and third trimester fetal biometry using INTERGROWTH-21st and high altitude charts at 3,400m above sea level
W. Villamonte Calanche (Peru)
Intra- and interobserver reproducibility of fetal measurements in third trimester ultrasound: does maternal weight matter?  
C. Policiano (Portugal)

Correlation of 3D fractional limb volumes with birth weight in fetuses with gastroschisis  
S. Tuburan (United States)

3D ultrasound measurement of volume and blood flow in normal fetal kidney  
J. Wang (China)

An unfavourable intrauterine environment may determine renal functional capacity in adulthood: systematic review and meta-analysis  
M.A. Carvalho (Brazil)

A hypercoiled cord can cause an atypical ductus venosus Doppler in cases of fetal growth restriction  
S. Iwagaki (Japan)

The impact of recurrent genital herpes on the state of fetus  
L. Vygivska (Ukraine)

The normal range of fetal abdominal circumference velocity between 20 and 36 weeks of gestation  
S. Vannuccini (United Kingdom)

Echographic morphometry of the pancreas of the fetus in uncomplicated pregnancy and IUGR  
I.V. Ignatko (Russian Federation)

The association between fetal abdominal circumference growth velocity and placental biomarkers in appropriate-for-gestational-age neonates  
M. Hendrix (Netherlands)

Application of the fetal ultrasound imaging for fetal malformation detection in early and mid-pregnancy  
M. Liu (China)

Which Doppler parameter during the second trimester ultrasound should be assessed as predictor for small-for-gestational-age fetus?  
E. Cosmi (Italy)

Doppler changes and management in late onset IUGR  
T.F. Oluyomi-Obi (Canada)

Fetal abdominal circumference in the second trimester and prediction of small-for-gestational age at birth  
G. Doulaveris (United States)

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N.C. Dimaano (Philippines)

Pentaerithrityl tetranitrate (PETN) for secondary prevention of intrauterine growth restriction (PETN-Trial-DFG GR 1955 4-1)  
U. Schneider (Germany)

Longitudinal comparison of two techniques for non-invasive measurement of cardiac output from pre-conception to postpartum  
G. Masini (United Kingdom)

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Human long bone development in intrauterine growth restriction: in vivo analysis of the distal femoral epimetaphysis on prenatal MR imaging  
U. Nemec (Austria)

Early and late fetal growth restriction: changes in fetal Doppler flow and correlation with pregnancy outcome in China  
L. Sun (China)

Placental weight and volume related to birthweight and third trimester maternal blood sample in normal and IUGR pregnancies  
A. Suranyi (Hungary)
Ketanserin can reduce vascular resistance in umbilical and placental veins but not in arteries both in IUGR and control pregnancies

A. Suranyi (Hungary)

Outcome comparison of the pregnancies with undetected macrosomia with known macrosomia

S. Farrakh (United Kingdom)

Correlation of various fetal sonographic parameters to the gestational age in early pregnancy

H. Wong (Australia)

Assessment of normal renal function in second trimester ultrasound screening

M. Ditte (Slovakia)

Monitoring of fetuses with intrauterine growth restriction: sonographic biometric assessment – abdominal circumference vs EFW

E. Pirnareva (Bulgaria)

Does clinical and ultrasonography estimation of fetal weight predict fetal birthweight at term?

E. Zohav (Israel)

Analysis of fetal respiratory movement

F.M. Andrade (Brazil)

Assessment of the blood flow of kidney in growth-restricted fetuses using quantitative three-dimensional power Doppler ultrasound

P. Tsai (Taiwan)

Psychosocial stress and placenta vascular malperfusion across pregnancy

S. Kim (Republic of Korea)

The influence of fetal gender on the antenatal detection of small-for-gestational-age fetuses

G. Volpe (United Kingdom)

Correlation between ultrasound images and pathological findings of placenta with early-onset severe fetal growth restriction

M. Ohashi (Japan)

Cerebroplacental ratio for the prediction of placental vascular malperfusion in normally grown fetuses

J. Yim (Republic of Korea)

Three-dimensional prenatal diagnosis of true knots of the umbilical cord: a five-year experience

I. Markova (Bulgaria)

Should we consider prenatal diagnosis of Silver–Russell syndrome?

S. Wavrant (Canada)

Abnormal chromosomes 18 on microarray: SNP-array analysis with normal band G karyotype in a severe growth-restricted fetus

F.M. Andrade (Brazil)

Right ventricle diastolic function assessment improved diagnosis of a high risk IUGR fetus with normal umbilical artery Doppler and without a wave reversal in ductus venosus

P. Moore (Chile)

Fetal cerebrorenal ratio and cerebroplacental ratio to evaluate the small fetus

S. Contag (United States)

Accuracy of fetal weight estimated on scan at 40 weeks and beyond: a retrospective cohort study

V. White (United Kingdom)

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Placenta vascular malperfusion and their relationship with fetal Doppler in overweight/obese pregnant women

J. Shin (Republic of Korea)

Prenatal diagnosis of abnormally invasive placenta

M. Tsankova (Bulgaria)

Does a short cervix predict antepartum massive hemorrhage in patients with placenta previa?

A. Togo (Japan)
Developing expertise in diagnosis of abnormally invasive placenta: a comparison of MRI and ultrasound assessment with surgery or histology findings
K. Rademan (South Africa)
Velamentous placenta with separation the vessels umbilical cord and vasa previa
L. Gotovtseva (Russian Federation)
A case of abnormally invasive placentation in a nulliparous woman following uterine artery embolisation for uterine fibroids
W. Almeida (Australia)
Positive result of first trimester combined screening as a first sign of coexistence of normal and molar pregnancy: case report
M. Szubert (Poland)
Reducing the risk of bleeding in hypervascular malformations of the uterus
B. Csapo (Austria)
True umbilical cord hemangioma with significant hemodynamic alterations: case report
A.S. Castellanos Gutierrez (Germany)
Observation of a uterine septum and hammock-like placenta: a case report
V. Schiffer (Netherlands)
Partial hydatiform mole: a case report
F. Presti (Italy)
Diagnosis and management of abnormal placentation in tertiary care centre in Sri Lanka
J.P. Jayasinghe (Sri Lanka)
A suspected case of placental adhesive disorder in the first trimester
S.L. Malone (Australia)
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S. Hong (Republic of Korea)
Amniotic band constriction of umbilical cord in third trimester causing stillbirth: a case report
E.Q. Barreto (Brazil)

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Effect of a new method of assessment and onsite training on the reproducibility of the measurement of uterine artery Doppler
L. Poon (Hong Kong)
A novel approach for first trimester uterine artery Doppler assessment: the transverse technique
J.M. Johnson (Canada)
The role of middle cerebral artery Doppler in the detection of fetal anemia in pregnancy with decreased perception of fetal movements
F. Bellussi (Italy)
The value of uterine artery Doppler at 18–24 weeks' gestation in predicting adverse pregnancy outcomes among pregnant women with chronic hypertension
S.L. Suplido (Philippines)
Effect of curcumin in decreasing MDA level in pre-eclampsia-induced human umbilical vein endothelial cell (HUVEC)
C. Yeni (Indonesia)
Pravastatin improves placental perfusion and decreases umbilical artery vascular resistance in singleton pregnancies
A. Jurisic (Serbia)
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M. Nakamura (Japan)
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G. Albaiges Baiget (Spain)
Prediction of adverse outcomes in women with hypertensive disorders of pregnancy near term utilising the uterine artery pulsatility index
J.R. Duncan (United States)
Umbilical artery notch: appearance and timing may be explained by pulse wave reflection and propagation
M. Gonser (Germany)
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The correlation of nuchal translucency and maternal serum aneuploidy markers with placental dysfunction
H. Lee (Republic of Korea)
First trimester screening of circulating C19MC microRNAs and the evaluation of their potential to predict the onset of pre-eclampsia and IUGR
I. Hromadnikova (Czech Republic)
Correlation between different methods for mean arterial pressure measurement and possible bias effects on early pre-eclampsia screening risk model
H. Oviedo-Cruz (Mexico)
Does the first trimester screening of uterina flow changes correlate with a genetic predisposition to pre-eclampsia development?
N. Vedmedovska (Latvia)
Contribution of uterine artery Doppler in the prediction of uteroplacental insufficiency
D. Chelli (Tunisia)
Pregnancy association of abnormal Doppler indices with inherited thrombophilia
R.E. Bohiltea (Romania)
Transient angiogenic improvement after nitric oxide precursor intake as endothelial therapy for pre-clinical pre-eclampsia
H. Oviedo-Cruz (Mexico)

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Perinatal management and pregnancy outcome in pregnant women with congenital heart disease
S. Ge (United States)
Third trimester non-invasive evaluation of maternal cardiac function in gestational diabetes
C. Migliavacca (Italy)
Effectiveness of a 2-weekly HIG protocol in first trimester CMV infection
K.O. Kogan (Germany)
The impact of placental cord insertion on pregnancy outcome
C. Rouse (United States)
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Ultrasound evaluation of maternal visceral adiposity tissue (VAT) during pregnancy and the impact in maternal glycemic levels (preliminary results)
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First trimester maternal visceral adipose tissue thickness is independently associated with postpartum maternal adiposity
H. Berger (Canada)
The association between maternal vitamin B12 insufficiency and obesity: a systematic review
N. Khan (United Kingdom)
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F. Ajibade (United Kingdom)
Evaluation of self-testing of urine by patient during pregnancy

**F. Ajibade** (United Kingdom)
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Increased incidence of obstetric complications in women carrying mitochondrial DNA mutations

**L.J. Salomon** (France)
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Obstetric ultrasound of patients in prison.

**F.M. Andrade** (Brazil)

Fetomaternal transfusion: a case with antenatal diagnosis

**M. Yamamoto** (Chile)

Risks factors for congenital CMV infection following primary and non-primary maternal infection: a prospective neonatal screening study using PCR in saliva

**Y. Ville** (France)

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**EP18: Preterm birth**

Role of cervical length and birthweight in women with history of previous Caesarean section: prediction of early onset of labour before 39 weeks of gestation

**J. Wie** (Republic of Korea)

The association between elastogram of the cervix and preterm delivery among parturients at risk for preterm delivery: a prospective study

**R. Boldes** (Israel)

The evolution of cervical length during pregnancy in singletons and twins and analysis of influencing factors

**V. Serra** (Spain)

Spontaneous preterm birth and cervical length in a pregnant Asian population

**S. Thain** (Singapore)

Cervical elastography in high-risk pregnancy for preterm birth treated with cervical cerclage

**T. Dias** (Sri Lanka)

Maternal interleukin-6 as a predictor of histological chorioamnionitis in patients with premature rupture of membranes

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L. Bonino (Italy)
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Experience the U/S Mentor VR immersive training simulator experience. The U/S Mentor is known for its virtual reality clinical cases and focused clinical scenarios with real ultrasound scans for OB/GYN transabdominal and transvaginal scanning. Designated skill tasks, diverse diagnostic scenarios and captured metrics help promote proficiency by providing residents, fellows, and practicing physicians to acquire and improve their sonography-related skills. These capabilities are now enhanced via VR goggles that help learners gain diagnostic proficiency.

Fatou Lo is an artist who creates cast bronze sculptures that combine parts of our anatomy with abstract aspects. Her project “LOOK INSIDE” demonstrates the incredibly rich and diverse relationship between the visual arts and anatomy. At ISUOG 2017 she will be showcasing her first finished cast bronze patinated fetus sculpture.

Clarius is the only Handheld Wireless Ultrasound Scanner that doesn’t compromise on image quality. It produces high resolution ultrasound images and transmits them to most iOS or Android smart devices. With automated gain and frequency settings, Clarius is almost as easy to use as the camera on your smart phone. Clarius L7 linear array ultrasound scanners are ideal for guiding procedures. Starting price for a basic Clarius Scanner in the United States is $6900.

ContextVision is a medical technology company specializing in image analysis and artificial intelligence. Its technology helps clinicians accurately interpret medical images, a crucial foundation for better diagnosis and treatment. An industry pioneer for more than 30 years, ContextVision is taking a lead position within deep learning, the latest artificial intelligence technology. The present product portfolio includes state-of-the-art image enhancement software for 2D/3D/4D ultrasound, MRI, x-ray and mammography which is used by leading equipment manufacturers worldwide.
GE Healthcare provides transformational medical technologies and services to meet the demand for increased access, enhanced quality and more affordable healthcare around the world. GE (NYSE:GE) works on things that matter – great people and technologies taking on tough challenges. From medical imaging, software and IT, patient monitoring and diagnostics to drug discovery, biopharmaceutical manufacturing technologies and performance improvement solutions, GE Healthcare helps medical professionals deliver great healthcare to their patients.

Hitachi Medical Systems Europe is the European headquarters of Hitachi Healthcare Business Unit, which is part of the global Hitachi Ltd., Japan. We support accurate diagnosis throughout pregnancy by a sophisticated range of advanced functions. We provide reassurance to parents by 3D/4D ultrasound, STIC, high-resolution B-mode, eFLOW, specialized tools for examining the early pregnancy, fetal heart and the innovative real-time Image Fusion (RVS) for multimodality imaging. Various transducers facilitate treatment of infertility, gynecological diseases and applications for therapy assistance.
The International Society for Prenatal Diagnosis (ISPD) brings together a global multidisciplinary group of medical and scientific professionals with interests and expertise in a diverse array of clinical and research aspects of prenatal diagnosis and fetal care. We focus on all relevant topics in this field, with a unique emphasis on reproductive and prenatal genetic screening and testing and their integration with other disciplines of prenatal diagnosis.

ExEm Foam

Delftechpark 26, 2628 XH Delft, The Netherlands
+31 653140968
Eric Reep: Reep@iq-medicalventures.com
www.iq-medicalventures.com

IQ Medical Ventures is a medical device revolving Incubator Company. We develop bright ideas from physicians into simple, affordable and safe products for the daily practice. Medical Ventures currently markets two products in the field of gynecological ultrasound imaging (hysterosalpingo foam sonography and gel instillation sonohysterography). The basis for these two products is ExEm® gel, of which ExEm foam Kit is the product we present at ISUOG 2017.

ISUOG

122 Freston Road, London, W10 6TR, UK
+44 (0)20 7471 9955
Cora Siebert: info@isuog.org
www.isuog.org

ISUOG is a charity and membership association encouraging exceptional research and education in ultrasound and related imaging within the field of obstetrics and gynecology. ISUOG has been in existence since 1991 and, with over 13,000 members in 127 countries, it is the leading international society representing professionals in ultrasound for obstetrics and gynecology. All fully paid delegates are now enrolled as members of ISUOG for 2018 and can immediately access many member benefits including On Demand (platform to view recordings and lectures from our World Congresses) and over 500 web lectures. Visit the ISUOG Lounge to find out more about membership and browse your benefits.
Karl Storz GmbH & Co. KG  
Mittelstrasse 8, Tuttingen, 78532, Germany  
+49 7461 708 0  
info@karlstorz.com  
www.karlstorz.com

KARL STORZ is a renowned manufacturer that is well established in all fields of endoscopy. The still family held company has grown to one with a worldwide presence and 7100 employees. KARL STORZ offers a range of both rigid and flexible endoscopes for a broad variety of applications.

Malopolskie Warsztaty Ultrasonografii SP. Z o.o.  
UL. Felinskiego 20A, 31-236, Malopolska, Poland  
+48 730 740 402  
Piotr Latala: info@malopolskieusg.pl  
www.ultrasoundcracow.com

Lesser Poland Workshops in Ultrasound is a unique educational project aimed at medical professionals interested in developing ultrasound skills in terms of theory and practice. We guarantee that our vision for education in ultrasound is unique and we ensure that it is worthwhile to compare it with other experiences. During our courses we use innovative teaching tools like 3D models of Fetal Heart.

MedaPhor Ltd  
Cardiff Medicentre, Heath Park, Cardiff, CF14 4UJ, UK  
+44 (0)2920 756534  
sales@medaphor.com  
www.medaphor.com

ScanTrainer is recognized globally as a leading simulation system for education in transvaginal and transabdominal ultrasound. Developed by leading clinicians at the University Hospital of Wales, it is considered to be the most effective, self-directed simulation solution for realistic training in ultrasound. MedaPhor is proud to work closely with healthcare educators from around the world to develop market-leading educational simulators that will help better prepare and support clinicians in the care of their patients.

MIDES GMBH  
Weinholdstrasse 33, 8010 Graz, Austria  
+43 31642650010  
Lucijana Manovic: lucijana.manovic@mides.com  
www.mides.com


Mindray Medical  
Mindray Building, Keji 12th Road South, High-tech Industrial Park, Nanshan, Shenzhen 518057, P.R. China  
+86 755 8188 7663  
Ellen Mok: ellen.hmmo@mindray.com  
www.mindray.com/en

Mindray, as one of the leading global providers of medical devices and solutions, dedicates to making better healthcare more accessible to humanity. With over decades of experience, Mindray has worked out a wide range of ultrasound imaging solutions including cart-based and portable systems. With a sound global R&D, the ultrasound solution by Mindray is evolving with the cutting-edge technologies to improve diagnosis confidence and efficiency.

Parker Laboratories  
Bedrijvenpark Twente 305, Almelo, 7602 KL, The Netherlands  
+31 546 549 107  
Dennis Wessels: europe@parkerlabs.com  
www.parkerlabs.com

Parker Laboratories is a leading global medical products company that develops, manufactures and sells ultrasound and electromedical contact media, as well as leading lines of institutional cleaners and disinfectants.
Parsagen
Louise Dumont Strasse 25, Dusseldorf, 40211, Germany
+49 211 54224949
Derya Bercin: derya.bercin@partosure.com
www.partosure.de

Parsagen Diagnostics, Inc. is the manufacturer of PartoSure™, a novel bedside test to aid in the assessment of preterm delivery in patients with symptoms of preterm labour. Based on the detection of PAMG-1, PartoSure has been shown in published studies to have a higher positive predictive value compared to current methods, while maintaining an equally high negative predictive value. The PartoSure test is CE marked and is currently investigational use only in the United States.

PerkinElmer
Mustionkatu 6, 20750 Turku, Finland
+358 40 771 1683
Tarja Ahola: tarja.ahola@perkinelmer.com
www.perkinelmer.com/MaternalFetalHealth

PerkinElmer is a global company focused on improving the health and safety of people and their environment. Within the field of fetal and maternal healthcare, PerkinElmer offers complete screening solutions including instrumentation, reagents and risk calculation software for early detection of pregnancy related anomalies.

Maternal fetal products availability and claims may differ from country to country based on regulations and product approvals. Please check availability with your local distributor.

Philips
Veenpluis 6, Best, PO Box 80019, Eindhoven, The Netherlands
+31 6466 37805
Dolores Cantelli: dolores.cantelli@philips.com
www.philips.com

At Philips, we look beyond technology to the experiences of patients, providers and caregivers across the health continuum from healthy living to prevention, diagnosis, treatment, and home care. We unlock insights leading to innovative solutions that help deliver better care at lower costs. It’s a unique perspective empowering us all to create a healthier future.

Roche Sequencing Solutions
5945 Optical Court, San Jose CA 95138, USA
+1 408 887 0703
Marissa Pelagio: marissa.pelagio@roche.com
www.harmonytest.com

Headquartered in Pleasanton, California, the Roche Sequencing Unit is focused on developing novel sequencing technologies and products to support innovation in clinical research applications. Our goal is to develop assays for sequencing, and refine sequencing techniques to advance sequencing technologies that will deliver truly differentiated clinical value.
TrueVue with TouchVue

Photorealistic 3D fetal imaging

Provides photorealistic 3D fetal imaging at your fingertips. With the EPIQ and Affiniti, TrueVue adds a new interactive interface called TouchVue. The TouchVue interface utilizes the touch panel to allow fingertip control of both volume rotation and position of the internal light source directly on the TrueVue 3D image.

See more at www.philips.com/isuog
Samsung’s Commitment to Life-long Healthcare for Women

CRYSTAL CLEAR CYCLE™ provides ultrasound diagnostics for women’s health by life stage, from family planning to healthy birth, and gynecological and breast health.

Please visit the SAMSUNG booth for more information!

Visit http://www.samsunghealthcare.com to learn more
Samsung

SAMSUNG

+82 2 2194 1131
Pia Park: hm11.park@samsungmedison.com
www.samsunghealthcare.com

Samsung Healthcare : Combining leading technology to improve the quality of people’s lives.

Samsung is committed to create a new future for medical professionals and patients with a mission to bring health and well-being to people’s lives. Integrating its leading expertise in display, IT, mobile and electronics, our vision is to bring confident diagnosis, cost-effective solutions and improved workflow to customers.

Shenzhen Talecare Technologies

Shenzhen Talecare Technologies has researched and developed some total solutions for certain departments in hospitals, for instance,”Ultrasound Total Solutions”, “Total Solutions for Obstetrics and Gynecology”, and “Total Solutions for Endoscopy Lab” to show our advanced technology and products that have disseminated our service concept of “Health through Care” around the world.

Society for Maternal-Fetal Medicine

The Society for Maternal-Fetal Medicine (SMFM) was established in 1977 to give MFM physicians and scientists a place to share knowledge, research and clinical best practices in order to improve care for pregnant women and babies. We are the high-risk pregnancy experts specializing in the un-routine. To learn more about the Society and the benefits of membership visit www.smfm.org/join.

SonoSim Inc.

SonoSim, Inc. is dedicated to improving and transforming medical care by serving as a global leader in ultrasound education and training. With its staff of leading ultrasound educators, instructional designers, content editors, scientists, and software developers, SonoSim has created the easiest way to learn ultrasonography in over 35 countries globally, The SonoSim® Ultrasound Training Solution.
Toshiba Medical Systems

Toshiba Medical offers a full range of diagnostic imaging systems. As of December 2016, Toshiba Medical became a member of the Canon Group. In line with our continued Made for Life philosophy, patients are at the heart of everything we do. Our mission is to provide medical professionals with solutions that support their efforts in contributing to the health and wellbeing of patients worldwide so that together our industry-leading solutions deliver an enriched quality of life.

Trice Imaging

Trice Imaging offers a web based service called Tricefy™ that enables health care providers to securely store, convert, distribute, and access DICOM medical images and reports anywhere, anytime on any device – in seconds. Images can be shared anonymously with patients and in their original DICOM format with medical professionals, either directly from the modality or from their Tricefy™ account.

Tristel

Tristel is a manufacturer of of Infection Prevention and contaminating control products. Its lead technology is a chlorine dioxide formulation, which has been a ground breaking innovation in the world of infection control. Visit our stand to find out about Tristel products particularly suitable for Ultrasound.

Versandbuchhandlung Stefan Schuldt

WATOG

The World Association of Trainees in Obstetrics & Gynecology (WATOG) is a non-profit organization that represents the first worldwide network of young obstetricians and gynecologists. It was founded in 2012 under the auspices of the FIGO. WATOG wishes to promote the foundation and sustainment of OB/GYN trainee associations on national and regional level, to improve education and training, and to potentiate trainees’ involvement in global women’s health issues.

Wisepress Medical Bookshop

Wisepress.com, Europe’s leading conference bookseller, attend around 200 conferences every year.

We have an extensive range of books and journals relevant to the themes of this conference available at our booth. We also have a comprehensive range of STM titles available on our online bookshop. Follow us on Twitter @WisepressBooks
Together, we help you see more.

Made For life

Delivering superior image quality lies at the heart of everything we do, because we believe that only the best images can give you the confidence to make the most critical decisions during early stage pregnancy and beyond. From our unique SMI technology that reveals minute microvascular flow never seen before with ultrasound, to advanced 4D applications that add true clinical value to your diagnosis, we equip you with the best tools to help you see more.

Visit our educational sessions at ISUOG 2017 and learn about how our Women's Health solutions can support you in providing the best care for your patients.
## Hospitality and education suites

### CRYSTAL LOUNGE

**HALL N**

**Saturday**

13:00-13:45  
Secret of the masters I

**Sunday**

12:45-13:30  
Secret of the masters II

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**ROOM 0.11-12**

**Saturday - Tuesday**

Samsung lounge

---

**ROOM 0.96-98**

**Saturday**

10:30-11:00  
Automated fetal weight estimation  
L. Mack

15:00-15:30  
Premature Birth (Cervical Elastography)

**Sunday**

09:50-10:20  
The clinical value of Crystal Vue™ in the second trimester  
C. Lees (UK)

13:00-13:30

The ADNEX risk prediction model  
M. Al-Memar (UK)

**Monday**

15:10-15:40  
“Virtual” cardiac volume acquisition training  
L. Yeo (USA)

**Tuesday**

The use of anatomical landmarks for CNS examination  
L. Guibaud (France)

---

**ROOM 0.95**

**Saturday**

12:45-13:15  
New Insights to right arch, double arch and vascular rings  
J. Carvalho (UK)

15:05-15:30  
The use of anatomical landmarks for CNS examination  
L. Guibaud (France)

**Sunday**

09:50-10:20  
Pre-eclampsia screening in the first trimester  
J. Hyett (Australia)

12:45-13:15  
First trimester structural abnormalities  
J. Cruz (Portugal)

15:10-15:40  
Gynecological quiz: improve your skills for a correct ultrasound diagnosis  
F. Moro (Italy)

**Monday**

CNS anatomy in the first trimester  
E. Krampl-Bettelheim (Austria)

**Tuesday**

Ultrasound of the reproductive cycle and early pregnancy assessment  
B. Smith (UK)
**ROOM 0.14**

**Sunday**
12:00-13:30
Quiz, clips and tricks in prenatal diagnosis
M. Hoopman

12:00-13:00
**Monday**
Fetal Echo using advanced techniques
R. Axt-Fliedner

**Tuesday**
Screening for and prevention of Fetal head-, face- and brain-defects at 11-13 weeks
Screening and prevention of iatrogenic and Non-iatrogenic premature birth at 11-13 weeks
R. Lachmann

---

**ROOM L8**

**Sunday**
12:00-13:30
ARIETTA 850 Live Scanning ‘Fetal Brain and Heart with new advanced Hitachi techniques’
G. Rizzo, Italy
Sharing Experience with Fusion Imaging in cervical cancer: a new multimodality imaging method J.M. Levaillant
Q&A
Sandwich Lunch for attendees

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**ROOM 0.91**

**Sunday**
11:00
HyFoSy Workshops: How to easily test tubal patency with ExEm Foam
12:30
Gel - presentation and hands on training using UltraSound Dr Helmy
14:00
Hands on session with use of TVUS ultrasound, ExEm Foam and hysterosalpingo phantom, will start after each workshop.

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**ROOM 0.80**

**Monday**
Experience the future of connected ultrasound
Tricefy archiving, sharing and collaboration
Tricefy for clinical study management
Tricefy data security and compliance

Please visit Trice imaging at stand 16 for more details
Satellite symposia - HALL F

Saturday 12:30-13:30
Philips ultrasound: Delivering superior technology to the clinician and patient
"The fetal profile in the first trimester - diagnostic potential beyond nuchal translucency" M. Hoopman
"Precision made simple: The way to early advanced morphological scans" G. Gorincour
Hypoplastic left heart and variants: Prenatal diagnosis and outcomes R. Axt Fliedner
Advances in Fetal Imaging: Automation and Enhanced 3D Obstetric Ultrasound M. Ruma

Sunday
Fetal and Maternal Heart Abnormality Screening
12:15-13:15
Please see GE at stand 4 for more details
A. Abuhamad
B. Beniot
D. Jurkovic

Monday 12:15-13:15
Ancillary Solution in Predicting Preterm Delivery
17:15-17:35
Cervical elastography in OB: what, why, and how J.Y. Kwon (Republic of Korea)
17:35-17:55
E-cervix™: Results from multicenter study by Korean Society of Ultrasound in Obstetrics and Gynecology Research Group S.Y. Oh (Republic of Korea)
17:55-18:15
Predicting premature birth in high risk population P. Bennett (United Kingdom)

Tuesday 12:15-13:15
Chair: Caterina Bilardo
Novel tools for the evaluation of the fetus & placenta in early gestation
A. Abuhamad (United States)
Tips and tricks in screening for fetal heart defects: a problem based approach
M. Haak (The Netherlands)
New approaches in gynecological oncology: the use of ultrasound to guide invasive procedures
A. Testa (Italy)
Industry acknowledgements

ISUOG gratefully acknowledges the following industry support for our live scan sessions.*

**Sunday 08:15** Updates: optimal evaluation of fetal growth and size
**Sunday 13:30** FINE: novel features with value in clinical practice
**Sunday 10:20** How I perform a mid-trimester scan
**Monday 10:20** How I look at the fetal brain
**Tuesday 13:50** How I optimise detection of anomalies at 12 weeks
**Saturday 14:45** How to scan deep infiltrating endometriosis - the surgeon and sonographer view
**Monday 14:10** Optimising imaging in the overweight patient
**Monday 15:40** Effective screening for outflow tract abnormalities: tips and tricks

**Hall A**

* Scientific content of sessions is defined by the Scientific Committee; ultrasound systems and technical support are provided by sponsors.
#ISUOG2017

## ISUOG Board and Committee meetings

<table>
<thead>
<tr>
<th>Date</th>
<th>Start</th>
<th>End</th>
<th>Meeting</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday</td>
<td>12:00</td>
<td>13:30</td>
<td>Executive Committee &amp; Finance Committee</td>
<td>Suite E, 0.61</td>
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<tr>
<td></td>
<td>14:00</td>
<td>17:00</td>
<td>Bids Committee</td>
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<tr>
<td>Friday</td>
<td>08:30</td>
<td>17:30</td>
<td>ISUOG Board meeting (1)</td>
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<td>Saturday</td>
<td>07:30</td>
<td>08:30</td>
<td>Chairpersons briefing</td>
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<td>09:50</td>
<td>10:35</td>
<td>AGM and Awards</td>
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<tr>
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<td>12:30</td>
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<td>Scientific Committee (1)</td>
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<td>12:15</td>
<td>13:45</td>
<td>Advisory Members lunch</td>
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<td>14:00</td>
<td>16:00</td>
<td>Journal Editors meeting</td>
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<td>14:00</td>
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<td>Patient Information SIG</td>
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<td>Sunday</td>
<td>09:20</td>
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<td>ISUOG-FIGO Collaboration</td>
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<td>Clinical Standards Committee</td>
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<td>10:45</td>
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<td>Nominations Committee</td>
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<td>Editorial Board meeting</td>
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<td>IOTA meeting</td>
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<td>WATOG-ISUOG meeting</td>
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<td>14:30</td>
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<td>CME Task Force</td>
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<td>Gold Medal Awards Committee</td>
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<td>16:40</td>
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<td>Online Education Content Task Force</td>
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<td>Basic Training Task Force</td>
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<td>Courses Task Force</td>
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<td>Young Investigators lunch</td>
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<td>VISUOG Task Force</td>
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<td>Outreach Committee</td>
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<td>12:15</td>
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<td>Ambassadors lunch</td>
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<td>12:30</td>
<td>14:00</td>
<td>Scientific Committee meeting (2)</td>
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</table>
28th World Congress on Ultrasound in Obstetrics and Gynecology
20 – 24 October 2018, Singapore
Incorporating ASUM 2018

Join us in Singapore at the leading event in obstetric and gynecological ultrasound.

Critical dates 2018

January
9 April
Registration opens*

Abstract submission and presenter registration deadline

20 August
Early bird registration deadline

20 October
Pre-Congress courses and Basic Training

21 October
Congress opens

Travel grants available: isuog.org/worldcongress/2018/travelgrant

For full details visit isuog.org/worldcongress/2018
congress@isuog.org | +44 (0)20 7471 9955

* Discounts apply to ISUOG and ASUM members, trainees and sonographers and endorsing partner organisations members.
Organised by the International Society of Ultrasound in Obstetrics and Gynecology.
ISUOG would like to thank the following industry partners for their support of the 27th World Congress:

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GE Healthcare

SAMSUNG

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Bronze

clarius

ultrasound anywhere