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.

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D. Prayer, Austria

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T. Helbich, Vienna
S. Helmy, Vienna
G. Hudelist, Vienna
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G. Saunders, Event Manager
I. Hanley, Event Assistant
W. Holloway, Operations Manager

Christoph Brezinka
Congress Chair
Daniela Prayer
Congress Chair
GENERAL INFORMATION

ISUOG 2017

Venue floor plans

Level 2

Level 1

Level 0

Hall A

Hall B

Hospitality suite

Speaker preparation

Exhibition

E-posters

Crystal lounge

Hubs 1-4 L3 / 6

L1

L2

L7

L8

Foyer A

Foyer B

Foyer M

Foyer N

Suite E

Registration

Business lounge & meeting point

ISUOG lounge & meeting point

Hospitality suites

Main Entrance

Prayer room
Opening times

**Registration**

<table>
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<tr>
<th>Date</th>
<th>Time</th>
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<tr>
<td>Friday 15 September</td>
<td>07:00 - 18:00</td>
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<tr>
<td>Tuesday 19 September</td>
<td>07:00 - 16:20</td>
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The registration desk is located in the main lobby.

**Exhibition**

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<td>Saturday 16 September</td>
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<tr>
<td>Tuesday 19 September</td>
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The exhibition is located in the main lobby and on the mezzanine.

**Speaker preparation room L1**

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<td>07:00 - 15:00</td>
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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/connector in the lecture halls except by prior arrangement.
AGM
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.

App
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.

Austrian award
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.

Cash machines
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.

Catering
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.

Certificates of attendance
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.

CME
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.amapra.com/internationalcme.

Co-authors
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.

Disclaimer
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.

Electronic Posters (EPs)
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](http://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

Canon

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


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. Accurti, B. Santacruz, M. N. Planas and K. H. Nicolaides*


Supplement your learning and earn CME via:

[www.isuog.org/worldcongress2017/supplement-your-learning](www.isuog.org/worldcongress2017/supplement-your-learning)
Invited faculty

A. Abuhamad (USA)
R. Abu-Rustum (Lebanon)
P. Acharya (India)
J.L. Alcázar (Spain)
M. Al-Memar (UK)
O. Ami (France)
E. Andreeva (Russian Federation)
W. Arnt (Austria)
G.A. Báez (Austria)
A. Bhide (UK)
C.M. Bilardo (Netherlands)
M. Blanchette Porter (USA)
S. Bobdiwala (UK)
P. Boukobza (France)
T. Bourne (UK)
P. Calda (Czech Republic)
S. Campbell (UK)
P. Caputo (Austria)
D. Bettelheim (France)
B. Benoit (UK)
B. Benacerraf (UK)
G.A. Báez (Austria)
W. Arzt (Sweden)
E. Andreeva (Norway)
O. Ami (France)
M. Al-Memar (UK)
J.L. Alcázar (Spain)
P. Acharya (USA)
R. Abu-Rustum (USA)
A. Abuhamad (USA)
C. Mitter (France)
E. Xilakis (UK)
G. Visser (Netherlands)
S. Seshadri (India)
S. Sentilhes (France)
P. Sladkevicius (Sweden)
G. Smith (UK)
T. Spector (UK)
H. Steiner (Austria)
J. Stirnemann (France)
F. Stuhr (Austria)
G. Szabo (Hungary)
A. Tabor (Denmark)
G. Ter Haar (UK)
A.C. Testa (Italy)
B. Thilanganathan (UK)
J. Thornton (UK)
D. Timmerman (Belgium)
I. Timor-Tritsch (USA)
A. Toi (Canada)
G. Tulzer (Austria)
B. Tutschek (Switzerland)
D. Twickler (USA)
F. Ushakov (UK)
L. Valentim (Sweden)
B. Van Calster (Belgium)
T. Van den Bosch (Belgium)
D. Van Schoubroek (Belgium)
S. Verloren (Germany)
Y. Ville (France)
G. Visser (Netherlands)
N. Vrachnis (Greece)
J. Weichert (Germany)
S. Westerway (Australia)
L. Wilkins-Haug (USA)
C. Wohlmuth (Austria)
B. Wohrmann (Germany)
S. Yagel (Israel)
M. Yamamoto (Chile)
G. Yeo (Singapore)
L. Yeo (USA)
A. Youssef (Italy)
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  
Uses images from their machines

K.O. Kagan  
Poster about Cytotect (Immunglobine 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 (EP22.10, 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:
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.
Keynote speakers

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 Baillie-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 is 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.

Saturday 16 September 2017

<table>
<thead>
<tr>
<th>Time</th>
<th>GE 1</th>
<th>GE 2</th>
<th>Samsung 3</th>
<th>Philips 4</th>
<th>Hitachi 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30 - 09:00</td>
<td>Biometry</td>
<td>3D surface</td>
<td>Uterine &amp; ombilical dopplers</td>
<td>Corpus callosum</td>
<td>Cerebral Doppler &amp; ductus venosus</td>
</tr>
<tr>
<td>09:15 - 09:45</td>
<td>Corpus callosum</td>
<td>Hard palate</td>
<td>3 Vessels &amp; trachea</td>
<td>Cerebral Doppler &amp; ductus venosus</td>
<td>Posterior fossa</td>
</tr>
<tr>
<td>10:00 - 10:30</td>
<td>Hard palate</td>
<td>3 Vessels and trachea</td>
<td>4 Chambers</td>
<td>Uterine &amp; ombilical dopplers</td>
<td>Great vessels</td>
</tr>
<tr>
<td>10:30 - 11:00</td>
<td>Coffee break</td>
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<td></td>
<td></td>
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<tr>
<td>11:00 - 11:30</td>
<td>Posterior fossa</td>
<td>Oesophagus</td>
<td>Corpus callosum</td>
<td>Great vessels</td>
<td>Kidneys Spleen Liver Thyroid</td>
</tr>
<tr>
<td>11:45 - 12:15</td>
<td>Great vessels</td>
<td>4 Chambers</td>
<td>Hard palate</td>
<td>Posterior fossa</td>
<td>Biometry</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>
<td>Great vessels</td>
<td>Cerebral Doppler &amp; ductus venosus</td>
<td>3 Vessels &amp; trachea</td>
<td>Uterine &amp; ombilical dopplers</td>
</tr>
<tr>
<td>14:30 - 15:00</td>
<td>3D Surface</td>
<td>Cerebral Doppler &amp; ductus venosus</td>
<td>Biometry</td>
<td>Hard palate</td>
<td>4 Chambers</td>
</tr>
<tr>
<td>15:00 - 15:30</td>
<td>Coffee break</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>15:30 - 16:00</td>
<td>3 Vessels &amp; trachea</td>
<td>Biometry</td>
<td>Posterior fossa</td>
<td>4 Chambers</td>
<td>Hard palate</td>
</tr>
<tr>
<td>16:15 - 16:45</td>
<td>Cerebral Doppler &amp; ductus venosus</td>
<td>Posterior fossa</td>
<td>Great vessels</td>
<td>Kidneys Spleen Liver Thyroid</td>
<td>Corpus callosum</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.

---

**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
### 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>
</tr>
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</table>

### Saturday 16.09.2017

<table>
<thead>
<tr>
<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>
<td></td>
<td></td>
</tr>
<tr>
<td>08:30-09:50</td>
<td>Plenary 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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## Sunday 17.09.2017

<table>
<thead>
<tr>
<th>Time</th>
<th>Hall A</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: 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>
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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 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</td>
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<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>
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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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### Monday 18.09.2017

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<thead>
<tr>
<th>Time</th>
<th>Hall A</th>
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<tr>
<td>07:00</td>
<td>Registration open</td>
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</tr>
<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>
<td></td>
</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>
</tr>
<tr>
<td>09:50-10:20</td>
<td>Coffee and electronic poster viewing</td>
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</tr>
<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>
<td>Lunch and electronic poster viewing / Satellite Symposia (12:15-13:15)</td>
<td></td>
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</tr>
<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>
<td>Coffee and electronic poster viewing</td>
<td></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>
</tr>
<tr>
<td>17:15-18:15</td>
<td>Company sponsored symposia</td>
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## Tuesday 19.09.2017

<table>
<thead>
<tr>
<th>Time</th>
<th>Hall A</th>
<th>Hall E</th>
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<tbody>
<tr>
<td>07:00</td>
<td>Registration open</td>
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<td></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, cTTS 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 placentation</td>
<td>OP: Solving problems in urogynecology using ultrasound</td>
<td></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>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>
<td></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>
<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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## Masterclasses

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

## 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*. 
## Short oral presentations

<table>
<thead>
<tr>
<th>Session</th>
<th>Room</th>
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<tbody>
<tr>
<td><strong>Sunday</strong></td>
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<tr>
<td><strong>09:20-10:00</strong></td>
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</tr>
<tr>
<td>OP01 Placental and maternal factors in IUGR</td>
<td>Hall A</td>
</tr>
<tr>
<td>OP02 Fetal cardiac function</td>
<td>Hall E</td>
</tr>
<tr>
<td>OP03 Using ultrasound to solve old and diagnose new problems in reproductive medicine</td>
<td>Hall F</td>
</tr>
<tr>
<td>OP04 Fetal anomalies: from the diaphragm up</td>
<td>Hall B</td>
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<tr>
<td><strong>10:20-11:00</strong></td>
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<tr>
<td>OP05 Ultrasound meets MRI: form and function</td>
<td>Hall B</td>
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<tr>
<td><strong>11:25-12:05</strong></td>
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<tr>
<td>OP06 Fetal growth: anatomy and measurements</td>
<td>Hall A</td>
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<tr>
<td>OP07 Hot topics around the fetal brain</td>
<td>Hall E</td>
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<tr>
<td>OP08 Ultrasound and genetics</td>
<td>Hall B</td>
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<tr>
<td><strong>14:35-15:15</strong></td>
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</tr>
<tr>
<td>OP09 Detection of fetal heart anomalies I</td>
<td>Hall A</td>
</tr>
<tr>
<td>OP10 Babies born too early or too small</td>
<td>Hall E</td>
</tr>
<tr>
<td>OP11 Complications in early pregnancy: using imaging and biomarkers to provide new insights</td>
<td>Hall F</td>
</tr>
<tr>
<td>OP12 Screening</td>
<td>Hall B</td>
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<tr>
<td><strong>Monday</strong></td>
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<tr>
<td><strong>09:20-10:00</strong></td>
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<tr>
<td>OP13 Small-for-gestational age</td>
<td>Hall A</td>
</tr>
<tr>
<td>OP14 Fetal brain and CNS anomalies</td>
<td>Hall E</td>
</tr>
<tr>
<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>
</tr>
<tr>
<td>OP16 Detection of fetal heart anomalies II</td>
<td>Hall B</td>
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<tr>
<td><strong>10:20-11:20</strong></td>
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<tr>
<td>OP17 Hypertensive disease in pregnancy: screening to diagnosis</td>
<td>Hall B</td>
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<tr>
<td><strong>11:25-12:05</strong></td>
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<tr>
<td>OP18 Fetal growth and the brain</td>
<td>Hall A</td>
</tr>
<tr>
<td>OP19 Ultrasound in the labour ward</td>
<td>Hall E</td>
</tr>
<tr>
<td>OP20 How using ultrasound can inform the management of patients with gynecological malignancy</td>
<td>Hall F</td>
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<tr>
<td>OP21 Fetal development in maternal conditions</td>
<td>Hall B</td>
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<tr>
<td><strong>14:35-15:15</strong></td>
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<tr>
<td>OP22 NIPT: issues and implementation</td>
<td>Hall A</td>
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<tr>
<td>OP23 Invasive procedures: new data</td>
<td>Hall E</td>
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<tr>
<td>OP24 Uterine and endometrial problems: from elastography to using ultrasound to monitor treatment response</td>
<td>Hall F</td>
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<tr>
<td>OP25 Clinical challenges in chorionicity</td>
<td>Hall B</td>
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<tr>
<td><strong>Tuesday</strong></td>
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<tr>
<td><strong>09:20-10:00</strong></td>
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<tr>
<td>OP26 Managing TTTS</td>
<td>Hall A</td>
</tr>
<tr>
<td>OP27 How to diagnose and manage abnormal placentation</td>
<td>Hall E</td>
</tr>
<tr>
<td>OP28 Solving problems in urogynecology using ultrasound</td>
<td>Hall F</td>
</tr>
<tr>
<td><strong>11:25-12:05</strong></td>
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<tr>
<td>OP29 Education, simulation and safety</td>
<td>Hall A</td>
</tr>
<tr>
<td>OP30 Fetal brain novel applications of ultrasound and MRI (11:30-12:10)</td>
<td>Hall E</td>
</tr>
<tr>
<td>OP31 Using ultrasound to assess pelvic pain and diagnose endometriosis</td>
<td>Hall F</td>
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</tbody>
</table>
# Poster discussions

<table>
<thead>
<tr>
<th>Session</th>
<th>Room L3 / L6</th>
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<tbody>
<tr>
<td><strong>Sunday</strong> 09:20-10:00</td>
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<tr>
<td>P01</td>
<td>Preterm birth: maternal and fetal assessment</td>
</tr>
<tr>
<td>P02</td>
<td>New tools to evaluate the fetal brain and CNS</td>
</tr>
<tr>
<td>P03</td>
<td>Clinical consequences of abnormal placentation</td>
</tr>
<tr>
<td>11:25-12:05</td>
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<tr>
<td>P04</td>
<td>Ultrasound in the labour ward I</td>
</tr>
<tr>
<td>P05</td>
<td>Pre-eclampsia</td>
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<tr>
<td>P06</td>
<td>Fetal echocardiography I</td>
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<tr>
<td>P07</td>
<td>Using ultrasound in urogynecology patients</td>
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<tr>
<td>14:35-15:15</td>
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<tr>
<td>P08</td>
<td>Fetal growth</td>
</tr>
<tr>
<td>P09</td>
<td>Head, neck and bones</td>
</tr>
<tr>
<td>P10</td>
<td>Placenta, umbilical cord and amniotic fluid</td>
</tr>
<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>
</tr>
<tr>
<td><strong>Monday</strong> 09:20-10:00</td>
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<tr>
<td>P12</td>
<td>Cysts and other abdominal features</td>
</tr>
<tr>
<td>P13</td>
<td>Ultrasound in the labour ward II</td>
</tr>
<tr>
<td>P14</td>
<td>Uterine and endometrial problems: from elastography to using ultrasound to monitor treatment response</td>
</tr>
<tr>
<td>P15</td>
<td>Improving the outcome of fetal procedures</td>
</tr>
<tr>
<td>11:25-12:05</td>
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</tr>
<tr>
<td>P16</td>
<td>Screening for fetal anomalies</td>
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<tr>
<td>P17</td>
<td>Maternal and fetal assessment in complicated pregnancies</td>
</tr>
<tr>
<td>P18</td>
<td>Techniques related to using ultrasound to assess pelvic pain and diagnose superficial endometriosis and DIE</td>
</tr>
<tr>
<td>P19</td>
<td>Fetal echocardiography II</td>
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<tr>
<td>14:35-15:15</td>
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<tr>
<td>P20</td>
<td>The prognostic value of growth parameters</td>
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<tr>
<td>P21</td>
<td>Predicting pregnancies at risk</td>
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<tr>
<td>P22</td>
<td>Fetal echocardiography III</td>
</tr>
<tr>
<td>P23</td>
<td>Managing early pregnancy complications</td>
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<tr>
<td><strong>Tuesday</strong> 09:20-10:00</td>
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<tr>
<td>P24</td>
<td>The challenge of evaluating the fetal brain</td>
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<tr>
<td>P25</td>
<td>Fetal growth Doppler and hemodynamics</td>
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<tr>
<td>P26</td>
<td>Ultrasound, reproductive medicine and IVF</td>
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<tr>
<td>11:25-12:05</td>
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<tr>
<td>P27</td>
<td>Techniques for fetal cardiac diagnosis</td>
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<tr>
<td>P28</td>
<td>References, standards and markers</td>
</tr>
<tr>
<td>P29</td>
<td>Improving our management of twin pregnancies</td>
</tr>
<tr>
<td>P30</td>
<td>How to use imaging to manage oncology patients</td>
</tr>
</tbody>
</table>
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.

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.

Join the Congress conversation #ISUOG2017
#ISUOG2017

## Hubs at a glance

### Sunday

<table>
<thead>
<tr>
<th>Time</th>
<th>HUB 1</th>
<th>HUB 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:15-09:15</td>
<td>In conversation with B. Benacerraf</td>
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</tr>
<tr>
<td>09:20-10:00</td>
<td>Preterm birth: maternal and fetal assessment</td>
<td>New tools to evaluate the fetal brain and CNS</td>
</tr>
<tr>
<td>10:20-11:20</td>
<td>In conversation with M. Blanchette Porter</td>
<td>WATOG: In conversation with trainees</td>
</tr>
<tr>
<td>11:25-12:05</td>
<td>Ultrasound in the labour ward I</td>
<td>Pre-eclampsia</td>
</tr>
<tr>
<td>12:20-13:20</td>
<td>In conversation with A. Testa</td>
<td>Join the conversation: ISUOG and FIGO</td>
</tr>
<tr>
<td>13:30-14:30</td>
<td>In conversation with H.P Dietz</td>
<td>In conversation with FIGO</td>
</tr>
<tr>
<td>14:35-15:15</td>
<td>Fetal growth</td>
<td>Head, neck and bones</td>
</tr>
<tr>
<td>15:40-16:40</td>
<td></td>
<td>Patientenselbsthilfegruppen und gynaekologischer Ultraschall – ein Austausch</td>
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</table>

### Monday

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>09:20-10:00</td>
<td>Cysts and other abdominal features</td>
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<tr>
<td>10:20-11:20</td>
<td></td>
<td>In conversation with T. Van den Bosch and D. Van Schoubroeck</td>
</tr>
<tr>
<td>11:25-12:05</td>
<td>Screening for fetal anomalies</td>
<td>Fetal echocardiography II</td>
</tr>
<tr>
<td>13:30-14:30</td>
<td></td>
<td>In conversation with N.J. Raine-Fenning.</td>
</tr>
<tr>
<td>14:35-15:15</td>
<td>The prognostic value of growth parameters</td>
<td>Predicting pregnancies at risk</td>
</tr>
<tr>
<td>15:40-16:40</td>
<td>Guidelines Chinese</td>
<td>Guidelines Spanish</td>
</tr>
</tbody>
</table>

### Tuesday

<table>
<thead>
<tr>
<th>Time</th>
<th>HUB 1</th>
<th>HUB 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:15-09:15</td>
<td>In conversation with E. Kirk</td>
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<tr>
<td>09:20-10:00</td>
<td>The challenge of evaluating the fetal brain</td>
<td>Fetal growth Doppler and hemodynamics</td>
</tr>
<tr>
<td>10:20-11:20</td>
<td>In conversation with D. Fischerová and E. Epstein</td>
<td>References, standards and markers</td>
</tr>
<tr>
<td>11:25-12:05</td>
<td>Techniques for fetal cardiac diagnosis</td>
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<tr>
<td>12:30-13:20</td>
<td></td>
<td>★ MRI certificate exam</td>
</tr>
<tr>
<td>13:30-14:30</td>
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</tbody>
</table>
## PROGRAM AT A GLANCE

### Monday
- **09:20-10:00**
  - Cysts and other abdominal features
  - Ultrasound in the labour ward II
- **10:20-11:20**
  - In conversation with T. Van den Bosch and D. Van Schoubroeck
  - SIG: Heart
  - Join the conversation: how do I avoid medico legal issues
- **11:25-12:05**
  - Screening for fetal anomalies
  - Fetal echocardiography II
  - Maternal and fetal assessment in complicated pregnancies
  - Techniques related to using ultrasound to assess pelvic pain and diagnose superficial endometriosis and DIE
- **12:20-13:20**
  - In conversation with G. Condous and S. Guerriero
  - In conversation with the CFEF
  - In conversation with L. Sentilhes and R. Romero
- **13:30-14:30**
  - In conversation with N.J. Raine-Fenning
  - Join the conversation: UOG - Your Journal
  - Join the conversation: Live reporting – fetal MRI
- **14:35-15:15**
  - The prognostic value of growth parameters
  - Predicting pregnancies at risk
  - Fetal echocardiography III
  - Managing early pregnancy complications

### Tuesday
- **08:15-09:15**
  - In conversation with B. Benacerraf
  - SIG: Doppler
  - Clinical consequences of abnormal placentation

- **09:20-10:00**
  - Preterm birth: maternal and fetal assessment
  - New tools to evaluate the fetal brain and CNS
  - Clinical consequences of abnormal placentation
  - Gynecology oncology case discussion
- **10:20-11:20**
  - In conversation with M. Blanchette Porter
  - WATOG: In conversation with trainees
  - SIG: MRI
  - The principles of ultrasound imaging
- **11:25-12:05**
  - Ultrasound in the labour ward I
  - Pre-eclampsia
  - Fetal echocardiography I
  - Using ultrasound in urogynecology patients
- **12:20-13:20**
  - In conversation with A. Testa
  - Join the conversation: ISUOG and FIGO
  - SIG: 3D
  - In conversation with B. Van Calster and J. Stirnemann
- **13:30-14:30**
  - In conversation with H.P Dietz
  - In conversation with FIGO
  - Join the conversation: Aspirin in pre-eclampsia
  - Join the conversation: How to properly design a study
- **14:35-15:15**
  - Fetal growth
  - Head, neck and bones
  - Placenta, umbilical cord and amniotic fluid
  - Using ultrasound to characterise and manage ovarian masses

### Sunday
- **08:15-09:15**
  - In conversation with B. Benacerraf
  - SIG: Doppler
  - Clinical consequences of abnormal placentation

- **09:20-10:00**
  - Preterm birth: maternal and fetal assessment
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  - WATOG: In conversation with trainees
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  - Fetal echocardiography I
  - Using ultrasound in urogynecology patients
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  - Join the conversation: ISUOG and FIGO
  - SIG: 3D
  - In conversation with B. Van Calster and J. Stirnemann
- **13:30-14:30**
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  - In conversation with FIGO
  - Join the conversation: Aspirin in pre-eclampsia
  - Join the conversation: How to properly design a study
- **14:35-15:15**
  - Fetal growth
  - Head, neck and bones
  - Placenta, umbilical cord and amniotic fluid
  - Using ultrasound to characterise and manage ovarian masses

### HUB 3
- **SIG: Doppler**
- Clinical consequences of abnormal placentation
- **SIG: MRI**
- Fetal echocardiography I
- **SIG: 3D**
- Join the conversation: Aspirin in pre-eclampsia
- Placenta, umbilical cord and amniotic fluid
- Uterine and endometrial problems
- Maternal and fetal assessment in complicated pregnancies
- In conversation with the CFEF
- Join the conversation: UOG - Your Journal
- Fetal echocardiography III
- Guidelines French

### HUB 4
- **The principles of ultrasound imaging**
- Gynecology oncology case discussion
- The principles of ultrasound imaging
- Using ultrasound in urogynecology patients
- In conversation with B. Van Calster and J. Stirnemann
- Join the conversation: How to properly design a study
- Using ultrasound to characterise and manage ovarian masses
- The principles of ultrasound imaging

### HUB 5
- Ultrasound, reproductive medicine and IVF
- In conversation with D. Jurkovic
- Improving our management of twin pregnancies
- How to use imaging to manage oncology patients
- WATOG: Join the conversation on issues for trainees worldwide
- 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

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

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

15:55  First trimester scan is still useful in the era of cffDNA
        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
## PRE-CONGRESS COURSES

### HALL B

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

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speakers</th>
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<tbody>
<tr>
<td>09:00</td>
<td>Introduction to the course and the fetal MRI certification</td>
<td>D. Prayer (Austria)</td>
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<tr>
<td>09:15</td>
<td>Basic methods of fetal MRI: tips and tricks</td>
<td>P.C. Brugger; F. Stuhr (Austria)</td>
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<tr>
<td>09:45</td>
<td>Advanced application of fetal MRI including application of contrast media</td>
<td>A.E. Millischer (France)</td>
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<tr>
<td>10:15</td>
<td>3T or 1.5T: which field strength is more appropriate for fetal MRI?</td>
<td>P.C. Brugger; D. Prayer (Austria)</td>
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<tr>
<td>10:45</td>
<td>Coffee</td>
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<tr>
<td>11:15</td>
<td>Normal supratentorial fetal brain development: ultrasound and MRI</td>
<td>D. Pugash (Canada); L. Guibaud (France)</td>
</tr>
<tr>
<td>12:00</td>
<td>Abnormal development of cerebral commissures: ultrasound and MRI</td>
<td>D. Paladini (Italy); G. Kasprian (Austria)</td>
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<tr>
<td>12:45</td>
<td>Lunch</td>
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<tr>
<td>13:45</td>
<td>The fetal normal and pathological posterior fossa: ultrasound and MRI</td>
<td>L. Guibaud (France); G. Kasprian (Austria)</td>
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<tr>
<td>14:30</td>
<td>Lissencephalies ultrasound and MRI</td>
<td>D. Paladini (Italy); C. Mitter (Austria)</td>
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<tr>
<td>15:00</td>
<td>Ventriculomegaly and the FLAIR sequence: is it helpful?</td>
<td>M. Cardoso Diogo (Portugal)</td>
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<tr>
<td>15:15</td>
<td>Acquired brain anomaly: ultrasound and MRI</td>
<td>D. Pugash (Canada); D. Prayer (Austria)</td>
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<tr>
<td>15:45</td>
<td>Coffee</td>
<td></td>
</tr>
<tr>
<td>16:15</td>
<td>Postmortem MRI: when, why and how?</td>
<td>G.M. Gruber (Austria)</td>
</tr>
<tr>
<td>16:45</td>
<td>Brain malformation: ultrasound and MRI of complex syndromes</td>
<td>All speakers</td>
</tr>
<tr>
<td>17:15</td>
<td>What would you have done? Interactive case session</td>
<td>All speakers</td>
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</table>
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20-22 April 2018
Athens, Greece

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T. Bourne (UK) B. Thilaganathan (UK)
J. Carvalho (UK) D. Timmerman (Belgium)
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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 personalised 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

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

**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

13:45-15:05  
**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)*  

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

13:45-15:05  
**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  

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)*  
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17:30-18:00  
Opening ceremony  

18:00-19:30  
Welcome reception
Scientific content of sessions is defined by the Scientific Committee; ultrasound systems and technical support are provided by sponsors.

**HALL F**

**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

*I. 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

**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)*

**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**

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<th>Session</th>
<th>Chair(s)</th>
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<tr>
<td>07:30-08:10</td>
<td><strong>Masterclass</strong> &lt;br&gt; Screening and prevention of stillbirth: possibilities and pitfalls &lt;br&gt; <em>G. Smith (United Kingdom)</em></td>
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<tr>
<td>08:15-09:15</td>
<td><strong>Fetal growth: consequences of being too big or too small</strong> &lt;br&gt; <em>Chairs: A.T. Papageorghiou (United Kingdom); E. Krampl-Bettelheim (Austria)</em></td>
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<td><strong>08:15</strong> &lt;br&gt; LIVE SCAN: updates – optimal evaluation of fetal growth and size [industry supported*] &lt;br&gt; <em>W. Lee (United States)</em></td>
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<td><strong>08:35</strong> &lt;br&gt; <strong>OC02.01</strong> Short-term fetal cardiovascular effects of maternal betamethasone versus dexamethasone: nested study from the blinded, randomised A*STEROID trial &lt;br&gt; <em>A. Henry (Australia)</em></td>
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<td><strong>08:43</strong> &lt;br&gt; <strong>OC02.03</strong> Distal right coronary arterial flow in growth-restricted fetuses: a feasible sign of heart-sparing effect with reserved heart function? &lt;br&gt; <em>S. Miyashita (Japan)</em></td>
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<td><strong>08:51</strong> &lt;br&gt; <strong>OC02.04</strong> Small head circumference at the 2nd trimester anomaly scan following a normal 1st trimester screening: association to chromosomal anomalies and adverse outcome &lt;br&gt; <em>N. Lund (Denmark)</em></td>
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<td><strong>08:59</strong> &lt;br&gt; <strong>OC02.05</strong> MR-based brain volumetry in fetuses with congenital diaphragmatic hernia &lt;br&gt; <em>F. Prayer (Austria)</em></td>
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<td><strong>09:07</strong> &lt;br&gt; <strong>OC02.02</strong> Cardiometabolic biomarkers are associated with fetal overgrowth and adiposity &lt;br&gt; <em>C.M. O’Brien (Australia)</em></td>
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**HALL E**

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<th>Chair(s)</th>
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<tbody>
<tr>
<td></td>
<td><strong>Masterclass</strong> &lt;br&gt; The heart of the matter (Ian Donald Gold Medal lecture) &lt;br&gt; <em>G.R. DeVore (United States)</em></td>
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<tr>
<td></td>
<td><strong>Fetal heart: what’s new</strong> &lt;br&gt; <em>Chairs: J.A. Copel (United States); K. Maršíl (Sweden)</em></td>
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<tr>
<td>08:15</td>
<td>INVITED: Fetal heart: just images &lt;br&gt; <em>R. Chaoui (Germany)</em></td>
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<tr>
<td>08:35</td>
<td><strong>OC03.01</strong> Abnormal cardiovascular 24-segment sphericity index of the right and left ventricles in fetuses with growth restriction &lt;br&gt; <em>G.R. DeVore (United States)</em></td>
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<tr>
<td>08:43</td>
<td><strong>OC03.02</strong> Prenatal detected isolated right aortic arch: insignificant or significant knowledge? &lt;br&gt; <em>V. Gjørup (Denmark)</em></td>
<td></td>
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<tr>
<td>08:51</td>
<td><strong>OC03.03</strong> Annular plane systolic excursion z-score in evaluation of heart systolic function of fetus with heart failure &lt;br&gt; <em>X. Guo (China)</em></td>
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<tr>
<td>08:59</td>
<td><strong>OC03.04</strong> Fetal cardiac tumour: genomic sequencing, echocardiography characteristics, clinical manifestations and outcomes &lt;br&gt; <em>S. Ge (United States)</em></td>
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<tr>
<td>09:07</td>
<td><strong>OC03.05</strong> Mitochondrial toxicity and fetal cardiac remodelling in HIV-infected pregnancies &lt;br&gt; <em>F. Crispi (Spain)</em></td>
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</table>

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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
*I. 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)*

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)*

**HALL E**

09:50-10:20

Coffee and e-poster viewing

10:20-11:20

**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)
#ISUOG2017

**HALL A**

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  
*L. 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

13:30-14:30  **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

13:30  **For**: M. Norton (United States)

13:37  **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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* Scientific content of sessions is defined by the Scientific Committee; ultrasound systems and technical support are provided by sponsors.

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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 YI 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)

YI 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)

Lunch and e-poster viewing

Lunch and e-poster viewing
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)

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

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

Coffee and e-poster viewing

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

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)

16:10 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)*

**Workshop**

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

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>15:40</td>
<td>The MERIDIAN study in the eyes of the radiologist</td>
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<td><em>Speaker to be confirmed</em></td>
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<tr>
<td>16:00</td>
<td>The MERIDIAN study in the eyes of the ultrasonologist</td>
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<td><em>D. Paladini (Italy)</em></td>
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<td>16:20</td>
<td>Why I don’t need MRI in my practice</td>
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<td><em>G. Malinger (Israel)</em></td>
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<tr>
<td>16:40</td>
<td>The additional value of MRI in current clinical practice</td>
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<td><em>M. Sanz Cortes (Spain)</em></td>
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### HALL B

**Short oral presentation (OP)**

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

**Workshop**

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

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>15:40</td>
<td>Do we scan too many women too early? A practical validated approach...</td>
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<td>...to managing women with pregnancy of unknown location</td>
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<td></td>
<td><em>S. Bobdiwala (United Kingdom)</em></td>
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<tr>
<td>15:55</td>
<td>What should we do when we find enhanced myometrial vascularity?</td>
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<td><em>T. Van den Bosch (Belgium)</em></td>
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<tr>
<td>16:10</td>
<td>Diagnosing Caesarean scar pregnancy: over the scar; into the scar?</td>
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<td>Can we link ultrasound features to prognosis yet?</td>
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<td><em>I. Timor-Tritsch (United States)</em></td>
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<tr>
<td>16:25</td>
<td>Managing Caesarean scar pregnancy: is this a surgical problem in all...</td>
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<td>...cases?</td>
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<td><em>D. Jurkovic (United Kingdom)</em></td>
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<tr>
<td>16:40</td>
<td>Case discussions</td>
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<td><em>All speakers</em></td>
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## Hubs

### HUB 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Type</th>
<th>Event</th>
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<tbody>
<tr>
<td>08:15-09:15</td>
<td>Interactive</td>
<td>In conversation with B. Benacerraf: Gynecology cases: tips and tricks</td>
</tr>
</tbody>
</table>
| 09:20-10:00   | Poster discussion (P) | P01: Preterm birth: maternal and fetal assessment  
Chair: H. Feltovich (United States) |
| 10:20-11:20   | Interactive         | In conversation with M. Blanchette Porter: How do I use ultrasound to assess women with abnormal uterine bleeding? |
| 11:25-12:05   | Poster discussion (P) | P04: Ultrasound in the labour ward I  
Chair: A. Gagnon (Canada) |
| 12:20-13:20   | Interactive         | In conversation with A. Testa: Diagnosing less common types of ovarian tumour          |
| 13:30-14:30   | Interactive         | In conversation with H. P. Dietz: How to examine the pelvic floor with ultrasound      |
| 14:35-15:15   | Poster discussion (P) | P08: Fetal growth  
Chair: G. Rizzo (Italy) |
| 15:40-16:40   | Interactive         | Patientenselbthilfegruppen und gynaekologischer Ultraschall – ein Austausch  
Moderator: C. Brezinka (Austria) |

### HUB 2

<table>
<thead>
<tr>
<th>Time</th>
<th>Type</th>
<th>Event</th>
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</table>
|               | Poster discussion (P) | P02: New tools to evaluate the fetal brain and CNS  
Chair: J. Deng (United Kingdom) |
|               | Interactive         | WATOG: In conversation with trainees: Exploring the doctor patient relationship  
Moderator: P. Gabor (France)  
Opinion leaders: A. Gagnon (Canada); N. Vrochnis (Greece); O. Ami (France); Y. Copado Mendoza (Mexico); K. Dimassi (Tunisia) |
|               | Poster discussion (P) | P05: Pre-eclampsia  
Chair: L. Poon (Hong Kong) |
|               | Interactive         | Join the conversation: ISUOG and FIGO—what is the trouble with established techniques and technologies in underserved regions?  
Moderators: T. M. Eggebø (Norway); G. Visser (Netherlands)  
Opinion leaders: H. Feltovich (United States); A. Abuhamad (United States); S. Eik-Nes (Norway) |
|               | Interactive         | Join the conversation: Aspirin in pre-eclampsia  
Moderator: F. da Silva Costa (Australia)  
Opinion leaders: L. Poon (Hong Kong); E. Bujold (Canada) |
|               | Interactive         | How to properly design a study  
Moderators: G. Smith (United Kingdom); J. Thornton (United Kingdom); A. Odibo (United States) |

**Flim launch**

- The principles of ultrasound imaging (collaboration of MAF & ISUOG)
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
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)

Flim launch
The principles of ultrasound imaging

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

Poster discussion (P)
P07: Using ultrasound in urogynecology patients
Chair: A. Youssef (Italy)

Poster discussion (P)
P11: Using ultrasound to characterise and help manage ovarian masses: experience of using the IOTA ADNEX model and simple rules
Chairs: T. Bourne (United Kingdom); D. Timmerman (Belgium)

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

**Hall A**

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

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

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

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

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

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

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

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

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

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

**WITHDRAWN**

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

- Maternal hemodynamic in pregnancies complicated by intrauterine growth restriction and hypertensive disorders  
  **T. Izzo (Italy)**  
  OP01.11

**OP02: Fetal cardiac function**

**Hall E**

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

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

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

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

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

- Ventricular remodelling in fetuses with aortic coarctation  
  **F. Crispi (Spain)**  
  OP02.05
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)

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**  
**INVITED**  
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 Catte (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)  

Ultrasonic 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

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
F. 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

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.O. 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? J. Tjon (Netherlands)

Neurosonographic evaluation of corpus callosum and cortical development in small-for-gestational age and growth-restricted fetuses L. Miranda (Spain)

CSP dilation in mid-trimester fetuses with DiGeorge syndrome: a case-control study C. Pylypiuk (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. Voitini (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 I. 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. Mongghan (United Kingdom)

How good are we in predicting low birthweight with third trimester ultrasound scan?
K.M. Motsym (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?  
*L. 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. Moran** (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**  
*L3 / L6 Hub 3*

*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 accreta 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**  
*L3 / L6 Hub 1*

*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. Kahrs (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  
*L. 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)*
  - P05.01
- **Changes in BOLD MRI in a STOX1 pre-eclamptic mouse model**
  *H. Collinot de Chanoud (France)*
  - P05.02
- **Correlation between placental vascularisation indices and histological findings of placentas in pregnancy hypertension**
  *A. Suranyi (Hungary)*
  - P05.03
- **Placental histology and sFlt-1/PlGF in pregnancies complicated by hypertensive disorders**
  *F. Fuse (Italy)*
  - P05.04
- **sFlt-1/PlGF ratio in clinical practice: reassessment of cut-off values for predicting pre-eclampsia in our cohort of patients**
  *K. Markova (Czech Republic)*
  - P05.05
- **The assessment of the role of (sFlt-1 / PLGF) ratio in pregnancy complicated by early severe pre-eclampsia**
  *M.A. Parra-Saavedra (Spain)*
  - P05.06
- **Three-dimensional power Doppler of uteroplacental vascularisation in third trimester: comparison between normal and placental insufficiency pregnancies (EVUPA study)**
  *A. Chabot-Lecoanet (France)*
  - P05.07
- **Differences in pre-pregnancy stress response between healthy and PE/FGR pregnancies**
  *J. Man (United Kingdom)*
  - P05.08
- **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)*
  - P05.09
- **Assessment of maternal cerebrovascular Doppler indices in pregnancies complicated by pre-eclampsia**
  *S. Han (Republic of Korea)*
  - P05.10
- **Cardiovascular function in women after experiencing a hypertensive disorder in pregnancy**
  *Z.N. Saumtally (United Kingdom)*
  - P05.11
- **The prognostic value of highly sensitive cardiac troponin I in pregnancies with pre-eclampsia: bicentric prospective study**
  *A. Ayachi (Tunisia)*
  - P05.12

**P06: Fetal echocardiography I**

*Chair: J.S. Carvalho (United Kingdom)*

- **WITHDRAWN**
  - P06.01
- **Perinatal outcome of tetralogy of Fallot depending on time of diagnosis**
  *C. Enzensberger (Germany)*
  - P06.02
- **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)*
  - P06.03
- **First trimester screening for major congenital heart diseases: the septal-truncus angle**
  *S. Tudorache (Romania)*
  - P06.04
- **Automation of the fetal right myocardial performance index (RMPI) to optimise repeatability**
  *H. Avent (Australia)*
  - P06.05
- **CASSEAL: fetal cardiovascular system sonographic evaluation algorithm – multicentric study on its clinical application for prenatal diagnosis**
  *C. Bravo (Spain)*
  - P06.06
- **Multicentric study for prenatal diagnosis of congenital cardiovascular anomalies in second trimester using CASSEAL (Cardiovascular System Sonographic Evaluation Algorithm)**
  - P06.07
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**

**Chair:** A. Youssef (Italy)

Correlation and reliability of translabial B-mode and 3D ultrasonographic scan in evaluating transobturatory 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**

**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. Chen (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**

*Chair: T. Cohen-Overbeek (Netherlands)*

Barter syndrome: a rare cause of refractory severe polyhydramnios

A. Fatma (United Kingdom)

Idiopathic polyhydramnios and antenatal Barter syndrome: diagnostic criteria?

J. Thomas (Australia)

Prenatal diagnosis of multiple umbilical vein varices associated with massive thrombosis and velamentous cord insertion

H. Kang (Republic of Korea)

Amniotic band syndrome: first trimester diagnosis and classification

C. Liq (United Kingdom)

Prenatal diagnosis of an umbilical artery aneurysm in a dichorionic-diamniotic twin gestation with fetal growth discordance

E. Pschirrer (United States)

Congenital fetal anomalies are associated with placental pathologic change

X. Chen (China)

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

*Chairs: T. Bourne (United Kingdom); D. Timmerman (Belgium)*

Diagnostic accuracy of IOTA ADNEX and IOTA LR2 model compared with subjective assessment (SA) in differentiating benign and malignant ovarian masses

M. Pietryga (Poland)

Performance of IOTA ADNEX model in differentiating histological subtypes of borderline ovarian tumours

A. Gaurilcikas (Lithuania)

Ultrasound features of ovarian carcinoma in patients with BRCA 1 or BRCA 2 mutation

S. Giunchi (Italy)

Ultrasound evaluation of adnexal masses during pregnancy

E. Rabiej (Poland)

Subjective ultrasound assessment and the ADNEX model to differentiate between benign and malignant ovarian tumours

S. Ferrero (Italy)

Could LARP1 be a driving force in ovarian cancer transformation?

A. Coosemans (Belgium)

Applying IOTA simple rules and ADNEX model in daily routine

D.R. Horte (Germany)

AOUI Verona gynecology oncology centre ultrasound experience using IOTA model to study adnexal masses: management and outcome prediction

F. Presti (Italy)

A case of mature teratoma with strumal foci mimicking borderline ovarian cancer in pregnancy

R. Heremans (Belgium)

Primary retroperitoneal mucinous tumours diagnosed in pregnancy: a case report and literature review

F. Tahmasebi (United Kingdom)
# ISUOG2017

## Monday 18.09.2017

### HALL A

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
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<tbody>
<tr>
<td>07:30-08:10</td>
<td><strong>Masterclass</strong>&lt;br&gt;Fetal neurosonography: tips and tricks&lt;br&gt;<em>R. Chaoui</em> (Germany)</td>
</tr>
<tr>
<td>08:15-09:15</td>
<td><strong>Abnormal fetal growth: causation, detection and long-term effects</strong>&lt;br&gt;<em>Chairs: C.M. Bilardo</em> (Netherlands); <em>G. Tulzer</em> (Austria)</td>
</tr>
<tr>
<td>08:15</td>
<td><strong>INVITED</strong>: Physiological effects of IUGR&lt;br&gt;<em>F. Figueras</em> (Spain)</td>
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<tr>
<td>08:25</td>
<td><strong>OC09.01</strong> Transgenerational effect of fetal growth restriction&lt;br&gt;<em>A. Sepúlveda-Martínez</em> (Spain)</td>
</tr>
<tr>
<td>08:33</td>
<td><strong>OC09.02</strong> Maternal hemodynamics in SGA fetuses that turn to IUGR and the potential efficacy of treatment&lt;br&gt;<em>G. Tiralongo</em> (Italy)</td>
</tr>
<tr>
<td>08:41</td>
<td><strong>OC09.03</strong> Pattern of placental stromal-vascular lesions in small fetuses with and without pre-eclampsia&lt;br&gt;<em>L. Youssef</em> (Spain)</td>
</tr>
<tr>
<td>08:49</td>
<td><strong>OC09.04</strong> Ductus venosus waveforms in expectant management of early IUGR fetuses and risk of adverse neonatal outcome: a survival analysis&lt;br&gt;<em>E. Cosmi</em> (Italy)</td>
</tr>
<tr>
<td>08:57</td>
<td><strong>OC09.05</strong> The effect of introducing umbilical artery Doppler examination on the management of fetal growth restriction in a low-income country&lt;br&gt;<em>B.K. Parmar</em> (Nepal)</td>
</tr>
<tr>
<td>09:05</td>
<td><strong>OC09.06</strong> Placental ageing in term small-for-gestational age and growth-restricted fetuses&lt;br&gt;<em>F. Crispi</em> (Spain)</td>
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### HALL E

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<tbody>
<tr>
<td>07:30-08:10</td>
<td><strong>Masterclass</strong>&lt;br&gt;New frontiers in preterm labour&lt;br&gt;<em>R. Romero</em> (United States)</td>
</tr>
<tr>
<td>08:15-09:15</td>
<td><strong>The fetal brain exposed to Zika and CMV virus</strong>&lt;br&gt;<em>Chairs: M. Herrera</em> (Colombia); <em>G. Kasprian</em> (Austria)</td>
</tr>
<tr>
<td>08:15</td>
<td><strong>INVITED</strong>: From maternal infection to fetal brain lesion: the natural history of congenital infection&lt;br&gt;<em>Y. Ville</em> (France)</td>
</tr>
<tr>
<td>08:35</td>
<td><strong>OC10.01</strong> The Zika virus epidemic in French Guiana: proposition of an ultrasound-based score for the diagnosis of fetal congenital Zika virus syndrome&lt;br&gt;<em>L. Pomar</em> (French Guiana)</td>
</tr>
<tr>
<td>08:43</td>
<td><strong>OC10.02</strong> Prevalent and incident cases of CNS anomalies in fetuses of pregnant women with symptoms of ZIKV infection: ZEN Initiative, Bucaramanga, Colombia&lt;br&gt;<em>L.A. Gutierrez Rojas</em> (Colombia)</td>
</tr>
<tr>
<td>08:51</td>
<td><strong>OC10.03</strong> Additional prognostic value of third trimester MRI following reassuring mid-trimester assessment of congenital CMV infection&lt;br&gt;<em>Y. Ville</em> (France)</td>
</tr>
<tr>
<td>08:59</td>
<td><strong>OC10.04</strong> The echogenic caudate nucleus: a sign for the identification of brain involvement in fetuses with CMV infection?&lt;br&gt;<em>J. Har-Toov</em> (Israel)</td>
</tr>
<tr>
<td>09:07</td>
<td><strong>OC10.05</strong> Middle cerebral artery pulsatility index may predict fetal cerebral injury in pregnancy complicated by cytomegalovirus infection&lt;br&gt;<em>E. Cosmi</em> (Italy)</td>
</tr>
</tbody>
</table>
**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. Stoelcklein (Germany)*  
10:48  
**OC12.02** The accuracy of fetal fiber tracking: a postnatal MRI correlation  
*S. 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. Helmy (United Kingdom)*

**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)*

*Scientific content of sessions is defined by the Scientific Committee; ultrasound systems and technical support are provided by sponsors.  
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
J. Qin (China)

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

10:56 OC14.04 Role of intraoperative ultrasound to extend minimally invasive surgery for treatment of recurrent gynecological cancer
A.C. 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 cervices
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)
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)

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

** 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.

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

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P. Glanc (Canada)

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)

* Scientific content of sessions is defined by the Scientific Committee; ultrasound systems and technical support are provided by sponsors.
Short oral presentation (OP)

**OP20** How using ultrasound can inform the management of patients with gynecological malignancy
*Chairs: D. Fischarová (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
*D.A. 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.J. Milani (Brazil)*

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

**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-TU 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**

14:35-15:15  
Short oral presentation (OP)  
*OP22* NIPT: issues and implementation  
*Chairs:* J. Stirnemann (France); B. Tutschek (Switzerland)

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

15:40-17:00  
Workshop  
**Understanding outflow tract abnormalities**  
*Chairs:* A. Abuhamad (United States); J.S. Carvalho (United Kingdom)  
15:40  
**LIVE SCAN:** effective screening for outflow tract abnormalities – tips and tricks  
*J.S. Carvalho* (United Kingdom)  
16:00  
Tetralogy of Fallot: from anatomy to ultrasound  
*G. Rizzo* (Italy)  
16:20  
Transposition of the great arteries: from anatomy to ultrasound  
*G.R. DeVore* (United States)  
16:40  
Image quiz  
*A. Abuhamad* (United States)

17:15-18:15  
Industry sponsored satellite symposia**

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**HALL E**

14:35-15:15  
Short oral presentation (OP)  
*OP23* Invasive procedures: new data  
*Chairs:* A. Gagnon (Canada); M. Yamamoto (Chile)

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

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**Workshop**  
**Complications of twins: how to image, how to manage**  
*Chairs:* A. Khalil (United Kingdom); E. Gratacós (Spain)  
15:40  
Twin–twin transfusion syndrome  
*Y. Ville* (France)  
16:00  
Selective fetal growth restriction  
*E. Gratacós* (Spain)  
16:20  
Twin reversed arterial perfusion  
*K. Hecher* (Germany)  
16:40  
How to avoid stillbirth in twins  
*A. Khalil* (United Kingdom)

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17:15-18:15  
Industry sponsored satellite symposia**

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* Scientific content of sessions is defined by the Scientific Committee; ultrasound systems and technical support are provided by sponsors.  
**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

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)
## Hubs

### HUB 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Chair(s)</th>
<th>Details</th>
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<tbody>
<tr>
<td>09:20-10:00</td>
<td>Poster discussion (P)</td>
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<td>P12: Cysts and other abdominal features</td>
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<td>S. Seshadri (India)</td>
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<tr>
<td>10:20-11:20</td>
<td>Interactive</td>
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<td>In conversation with T. Van den Bosch and D. Van Schoubroeck:</td>
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<td>How to carry out a one-stop fertility scan: using contrast in the uterus and tubes</td>
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<td>11:25-12:05</td>
<td>Poster discussion (P)</td>
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<td>P16: Screening for fetal anomalies</td>
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<td>K.O. Kogan (Germany)</td>
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<td>12:20-13:20</td>
<td>Interactive</td>
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<td>Are you practicing safe sonography?</td>
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<td>Moderator: S. Westerway (Australia)</td>
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<td>Opinion leaders: E. Merz (Germany); G. Ter Haar (United Kingdom); C. Brezinka (Austria)</td>
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<td>Moderators: B. Thilaganathan; R. Hutchinson (United Kingdom)</td>
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<td>14:35-15:15</td>
<td>Poster discussion (P)</td>
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<td>P20: The prognostic value of growth parameters</td>
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<td>C. Brezinka (Austria)</td>
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<td>15:40-17:00</td>
<td>Guidelines</td>
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<td>Q. Wu (China)</td>
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### HUB 2

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<tr>
<td>09:20-10:00</td>
<td>Poster discussion (P)</td>
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<td>P13: Ultrasound in the labour ward II</td>
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<tr>
<td>10:20-11:20</td>
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<td>In conversation with G. Condous and S. Guerriero: Practical approach to ultrasound diagnosis of endometriosis</td>
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<tr>
<td>11:25-12:05</td>
<td>Poster discussion (P)</td>
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<td>P19: Fetal echocardiography II</td>
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<td>W. Lee (United States)</td>
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<td>12:20-13:20</td>
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<td>Opinion leaders: E. Merz (Germany); G. Ter Haar (United Kingdom); C. Brezinka (Austria)</td>
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<td>Moderators: B. Thilaganathan; R. Hutchinson (United Kingdom)</td>
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<tr>
<td>14:35-15:15</td>
<td>Poster discussion (P)</td>
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<td>P21: Predicting pregnancies at risk</td>
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<td>B. Thilaganathan (United Kingdom)</td>
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<td>15:40-17:00</td>
<td>Guidelines</td>
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<td>Moderator: M. Herrera (Columbia)</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 CFEF  
*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)*

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

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

*Hall A*

**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**
  - E. Cosmi (Italy)

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

- **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)

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**OP14: Fetal brain and CNS anomalies**

*Hall E*

**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. Borzilay (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?

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. Gabaldon-Las (Philippines)

Use of Crystal Vue technique for imaging of adnexal masses: a pilot study

S. Saso (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

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. Mbonyiina (Rwanda)
OP18: Fetal growth and the brain

Chair: A. Ngu (Australia); D. Prayer (Austria)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Sonographic prediction of length of vacuum deliveries: a multicentre, prospective cohort study
B.H. Kåhrs (Norway)

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

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

Longitudinal changes of subpubic arch angle during pregnancy
A. Youssef (Italy)

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**

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

**INVITED**

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**

*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. Delmeier 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. Hunsawongsakul (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  

*L. 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 photocoagulation 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 bichorionic 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)
P - Monday 18.09.2017

**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. Marooosi (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. Dias (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. Yagel (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
F. 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)
Amniotic band syndrome: literature review of prenatal therapy  
M. Yamamoto (Chile)  
P15.02

Antenatal diagnosis of lower urinary tract obstructions (LUTO): a prediction model to improve the diagnostic accuracy  
F. Fontanella (Netherlands)  
P15.03

Non-invasive in utero treatment of twin reversed arterial perfusion sequence by improved high-intensity focused ultrasound systems  
K. Ichizuka (Japan)  
P15.04

Predicting intruterine transfusion interval in isoimmunised pregnancies that undergo fetal therapy  
J. Snelgrove (Canada)  
P15.05

The relationship between perioperative cervical dynamics and the interval to delivery after fetoscopy  
J.L. Miller (United States)  
P15.06

Fetoscopic tracheal occlusion for congenital diaphragmatic hernia in Japan: the feasibility and preliminary results of lung volume analyses  
H. Sago (Japan)  
P15.07

Preliminary application of biplane mode using real time electronic 4D technology for fetal intervention  
Y. Takahashi (Japan)  
P15.08

The impact of operative fetoscopy on the cervical length  
J.L. Miller (United States)  
P15.09

Embryo reduction in trichorionic triplets: effect on time to delivery and birthweight discordance  
E. Kalafat (Turkey)  
P15.10

P16: Screening for fetal anomalies  L3 / L6  Hub 1  
Chair: K.O. Kagan (Germany)

The value of prenatal chromosomal microarray analysis in fetuses with structural ultrasound abnormalities and a normal karyotype in China  
Q. Wu (China)  
P16.01

Detecting aneuploidies and subchromosomal abnormalities by use of circulating fetal trophoblast cells in maternal blood  
O.B. Petersen (Denmark)  
P16.02

Alterations in placental development in Down’s syndrome fetuses mirror differences of miRNA profiles  
P. Calda (Czech Republic)  
P16.03

Prevalence of submicroscopic chromosome aberrations in pregnancies without increased risk for structural chromosome aberrations: a systematic review of the literature  
M. Joosten (Netherlands)  
P16.04

The influence of chromosomal microarray and NIPT on the diagnostic yield in 6,811 high-risk pregnancies without ultrasound anomalies  
M.J. Srebnik (Netherlands)  
P16.05

First trimester ultrasound screening for Trisomy 21 based on maternal age, fetal nuchal translucency and different methods of ductus venosus assessment  
K.O. Kagan (Germany)  
P16.06

Screening for fetal aneuploidy and major abnormalities at 11–13 weeks’ gestation, local particularities  
D. Nemesu (Romania)  
P16.07

Non-mosaic Trisomy 21 from CVS and subsequent normal karotype from amniocentesis: a rare case of fetoplacental discordance  
E. Thia (Singapore)  
P16.08

Optimal genetic testing for failed cell-free DNA results: a tricky task  
J. Miguelez (Brazil)  
P16.09

False-negative NIPT and the role of placental mosaicism  
A.M. Adno (Australia)  
P16.10
**P17: Maternal and fetal assessment in complicated pregnancies**  
**Chair:** M. Herrera (Colombia)  
**L3 / L6  Hub 3**

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**  
**Chairs:** G. Condous (Australia); G. Hudelist (Austria)  
**L3 / L6  Hub 4**

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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Outreach Sudan
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155 patients
58 Approved courses
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Guidelines in 17 languages
SCIENTIFIC PROGRAM

Tuesday 19 September 2017

### Tuesday 19.09.2017

#### HALL A

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>07:30-08:10</td>
<td><strong>Masterclass</strong>&lt;br&gt;The first trimester anomaly scan&lt;br&gt;<strong>C.M. Bilardo</strong> (Netherlands)</td>
</tr>
<tr>
<td>08:15-09:15</td>
<td><strong>State-of-the-art techniques to image the fetus</strong>&lt;br&gt;<em>Chairs: K.O. Kogan</em> (Germany); <em>F. da Silva Costa</em> (Australia)</td>
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<td><strong>08:15</strong> INVITED: What you can do with ultrasound in 2017&lt;br&gt;<em>B. Benoit</em> (France)</td>
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<td></td>
<td><strong>08:35</strong> OC18.01 Fetal enhanced tridimensional and translational anatomical landscape: FETTAL Project&lt;br&gt;<em>A. Lamouroux</em> (France)</td>
</tr>
<tr>
<td></td>
<td><strong>08:43</strong> OC18.02 Magnetic resonance imaging (MRI) T1 relaxation properties of fetal blood in normal and in suspected anemic fetuses&lt;br&gt;<em>D. Jørgense</em> (Denmark)</td>
</tr>
<tr>
<td></td>
<td><strong>08:51 OC18.03</strong> Superb microvascular imaging of the fetus, placenta and umbilical cord&lt;br&gt;<em>K. Yamamoto</em> (Japan)</td>
</tr>
<tr>
<td></td>
<td><strong>08:59 OC18.04</strong> Ultrasound-based computer-aided tracking technique of fetal breathing movement analysis for intrauterine growth restriction&lt;br&gt;<em>L. Mendicioglu</em> (Turkey)</td>
</tr>
<tr>
<td>09:07</td>
<td><strong>OC18.05</strong> Echogenicity of the fetal bowel using histogram gray-scale analyser: a comparison between normal fetuses and fetuses with echogenic bowel (EB)&lt;br&gt;<em>L. Maggio</em> (Netherlands)</td>
</tr>
<tr>
<td>09:20-10:00</td>
<td><strong>Short oral presentation (OP)</strong>&lt;br&gt;<strong>OP26</strong> Managing TTTS&lt;br&gt;<em>Chair: K. Hecher</em> (Germany)</td>
</tr>
</tbody>
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#### HALL E

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
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<tbody>
<tr>
<td>08:15</td>
<td><strong>INVITED</strong> Placenta accreta: screening, diagnostic and management options&lt;br&gt;<em>A. Bhide</em> (United Kingdom)</td>
</tr>
<tr>
<td>08:35</td>
<td><strong>OC19.01</strong> Comparison of ultrasound descriptors of abnormally invasive placenta (AIP) in second versus third trimester: is an increase verifiable?&lt;br&gt;<em>M.E. Gorczyca</em> (Austria)</td>
</tr>
<tr>
<td>08:43</td>
<td><strong>OC19.02</strong> The natural development of low-lying placentas diagnosed in the second trimester&lt;br&gt;<em>A. Kaelin Agten</em> (United Kingdom)</td>
</tr>
<tr>
<td>08:51</td>
<td><strong>OC19.03</strong> Evaluating the accuracy of ultrasonography in predicting morbidity adherent placenta using a scoring system&lt;br&gt;<em>B.S. Albaqawi</em> (Saudi Arabia)</td>
</tr>
<tr>
<td>08:59</td>
<td><strong>OC19.04</strong> Validation of the placenta accreta index by ultrasound to predict morbidity adherent placenta&lt;br&gt;<em>D.M. Twickler</em> (United States)</td>
</tr>
<tr>
<td>09:07</td>
<td><strong>OC19.05</strong> The tramline sign for abnormally invasive placenta using Crystal Vue with flow&lt;br&gt;<em>A. Dall’Asta</em> (Italy)</td>
</tr>
</tbody>
</table>

### Short oral presentation (OP)

| OP27 | How to diagnose and manage abnormal placenta<br>*Chairs: P. Calda* (Czech Republic); *D.M. Twickler* (United States) |

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

Masterclass
Examining women with pelvic pain: how I do it (case examples)
B. Benacerraf (United States)

Solving problems in urogynecology including data from the OASIS trial
Chairs: S. Yagel (Italy); I. Geiss (Austria)

08:15  **OC20.01, OC20.02, OC20.03** Pelvic ultrasound examination to predict labour outcome
A. Youssef (Italy)

08:38  **OC20.04** The effect of a repeat delivery on long-term outcome in women with obstetric anal sphincter injury (OASIS): a prospective longitudinal ultrasound study
V.H. Eisenberg (Israel)

08:46  **OC20.05** Changes in urethral mobility and kinking after prolapse repair
H.P. Dietz (Australia)

08:54  **OC20.06** Are we getting better at diagnosing, treating and managing obstetric anal sphincter injuries (OASIS)?
V.H. Eisenberg (Israel)

09:02  **OC20.07** Is there an association between imaging and urodynamic findings after suburethral sling?
H.P. Dietz (Australia)

Short oral presentation (OP)
**OP28** Solving problems in urogynecology using ultrasound
Chairs: A. Youssef (Italy); I. Geiss (Austria)

HALL B

Masterclass
Computerised fetal heart rate analysis in high-risk pregnancy
C. Redman (United Kingdom)

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
*L. 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  Rebutter (speaker 1)
10:37  Rebutter (speaker 2)
10:45  Audience vote and results

3D/4D specific artefacts: how to recognise, minimise and avoid them
*J. Deng (United Kingdom)*

3D uterine malformations: clinical classifications old and new
*B. Benacerraf (United States)*

3D and 4D pelvic floor exploration
*A. Youssef (Italy)*

11:00-12:00  Short oral presentation (OP)
*OP30  Fetal brain novel applications of ultrasound and MRI (11:30-12:10)*
*Chairs: J. Hyett (Australia); A. Toi (Canada)*

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

**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 **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

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* This presentation is eligible for the Young Investigator award (to be presented in the closing plenary).
#ISUOG2017

**HALL A**

13:30-14:50  
**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)*

**HALL E**

13:30-14:50  
**Workshop**

**Pre-eclampsia in 2017**  
*Chairs: J. Hyett (Australia); E. Gratacós (Spain)*

13:30 It’s all in the heart  
*B. Thilaganathan (United Kingdom)*

13:40 No way, it’s the placenta!  
*S. Verlohren (Germany)*

13:50 Nature’s transplant placentation and the complex pre-eclampsia tango  
*C. Redman (United Kingdom)*

14:10 The state of prevention  
*F. da Silva Costa (Australia)*

14:30 Practical assessment of maternal cardiovascular risk in pregnancy  
*A. Khalil (United Kingdom)*

**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)

* Scientific content of sessions is defined by the Scientific Committee; ultrasound systems and technical support are provided by sponsors.
#ISUOG2017

## Hubs

### 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>Interactive</td>
<td>In conversation with E. Kirk: Diagnosing and managing ectopic pregnancy: expectant, medical or surgical</td>
</tr>
<tr>
<td>09:20-10:00</td>
<td>Poster discussion (P)</td>
<td>P24: The challenge of evaluating the fetal brain</td>
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<td><em>Chair: E.A. Hernandez-Andrade (United States)</em></td>
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<tr>
<td>10:20-11:20</td>
<td>Interactive</td>
<td>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>
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<td><em>Chair: H. Gardiner (United States)</em></td>
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<tr>
<td>12:20-13:20</td>
<td>Interactive</td>
<td>MRI certificate exam</td>
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<td><em>Moderators: G. Kasprian; D. Prayer (Austria)</em></td>
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### HUB 2

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<td>Poster discussion (P)</td>
<td>P25: Fetal growth Doppler and hemodynamics</td>
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<tr>
<td></td>
<td></td>
<td><em>Chair: F. da Silva Costa (Australia)</em></td>
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<tr>
<td>09:20-10:00</td>
<td>Poster discussion (P)</td>
<td>P26: Ultrasound, reproductive medicine and IVF</td>
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<td>*Chair: W. Froyman (Belgium)</td>
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<td>11:25-12:05</td>
<td>Poster discussion (P)</td>
<td>P28: References, standards and markers</td>
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<tr>
<td></td>
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<td><em>Chair: S. Yagel (Israel)</em></td>
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<tr>
<td>13:30-14:30</td>
<td>Interactive</td>
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</table>
### HUB 3

**Poster discussion (P)**
- P26: Ultrasound, reproductive medicine and IVF
  *Chair: W. Frayman (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 M. Herrera and G. Malinger:
  The status of the Zika crisis

**Poster discussion (P)**
- P27: Techniques for fetal cardiac diagnosis
  *Chair: H. Gardiner (United States)*

**Interactive**
- WATO: Join the conversation on issues for trainees worldwide
  *Moderator: K. Dimassi (Tunisia)*
  *Opinion leaders: N. Vrachnis (Greece); G. Szabo (Hungary); Y. Mendoza Copado (Mexico); P. Gabor (France); O. Ami (France)*

**Interactive**
- In conversation with D. Fischerová and E. Epstein:
  Using ultrasound to assess the oncology patient including staging

**Poster discussion (P)**
- P30: How to use imaging to manage oncology patients
  *Chair: I. Timor-Tritsch (United States)*
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)
L. Shih (Taiwan)
Ultrasound: a valuable tool to face the epidemy 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. Schwad (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 Omniview-volume contrast imaging (VCI)

E. Montaguti (Italy)

The effect of Kristeller manoeuvre 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)  
WATOG 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  
Hall E

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

**Chair:** E.A. Hernandez-Andrade (United States)

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<thead>
<tr>
<th>Presentation</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>Fetal brain anomalies detection during the first trimester: expanding the scope of antenatal sonography</td>
<td>E. Katorza (Israel)</td>
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<tr>
<td>Prenatal detection of central nervous system defects at 11–13+6 weeks’ ultrasound scan</td>
<td>E. Andreeva (Russian Federation)</td>
</tr>
<tr>
<td>Outcome of fetuses with prenatal diagnosis of isolated severe ventriculomegaly</td>
<td>S. Carta (United Kingdom)</td>
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<tr>
<td>The many faces of prenatal imaging diagnosis of ventriculomegaly related to aqueduct obstruction</td>
<td>L. Guibaud (France)</td>
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<tr>
<td>Differential cortical development in fetuses with isolated non-severe ventriculomegaly assessed by magnetic resonance imaging</td>
<td>N.M. Hahner (Spain)</td>
</tr>
<tr>
<td>Isolated complete short corpus callosum in fetuses: prevalence and pregnancy short-term outcome</td>
<td>F. Fuchs (France)</td>
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<tr>
<td>Posterior fossa imaging features enabling diagnosis of PHACE syndrome in utero</td>
<td>H. Bakry (Israel)</td>
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<tr>
<td>Prenatal sonographic diagnosis of congenital arachnoid cyst: clinical outcomes in a tertiary care centre</td>
<td>Y. Jung (Republic of Korea)</td>
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<tr>
<td>Neurosonographic findings in fetal tuberous sclerosis complex</td>
<td>F. Correa (Portugal)</td>
</tr>
<tr>
<td>The first case of Zika virus related microcephaly in the Netherlands</td>
<td>R. de Heus (Netherlands)</td>
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<tr>
<td>Fetal neurosonographic aspects of the Zika virus infection</td>
<td>H.J. Milani (Brazil)</td>
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### P25: Fetal growth Doppler and hemodynamics

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

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Assessment of placental vascularisation using three-dimensional power Doppler angiography (3D PDA) in normal fetuses and fetuses affected by fetal growth restriction (FGR)</td>
<td>A. Rossi (Italy)</td>
</tr>
<tr>
<td>An objective system to evaluate the quality of middle cerebral artery Doppler images</td>
<td>S. Ruiz-Martinez (United Kingdom)</td>
</tr>
<tr>
<td>Fetal umbilical/middle cerebral artery pulsatility indices and the cerebroplacental ratio (CPR) normograms at 16–40 weeks of gestation by polynomial regression analysis</td>
<td>T. Dias (Sri Lanka)</td>
</tr>
<tr>
<td>Stillbirth and fetal growth restriction from umbilical artery and ductus venosus diastolic waveform assessment: a systematic review and meta-analysis</td>
<td>R.J. Martinez-Portilla (Spain)</td>
</tr>
<tr>
<td>Uterine Doppler, cerebroplacental ratio and fetal growth in the late third trimester: association with adverse outcome</td>
<td>G. Albaiges Baiget (Spain)</td>
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<tr>
<td>Clinical impact of the Doppler reference charts used for the management of fetal growth restriction: the need for standardisation</td>
<td>S. Ruiz-Martinez (Spain)</td>
</tr>
<tr>
<td>Three-dimensional power Doppler ultrasound examination in pregnancies complicated by intrauterine growth restriction</td>
<td>Á. Molnár (Hungary)</td>
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</table>
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. Fuse (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
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<td>A.J. Sigue</td>
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<td>Diagnosis of uterine arteriovenous malformation by 3D colour Doppler and conservative management with a gonadotropin-releasing hormone agonist</td>
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<td>Venous thromboembolism secondary to massive uterine leiomyoma</td>
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<td>Survey on selecting patients with postmenopausal bleeding (PMB) for hysteroscopy: current practice and future clinical effectiveness.</td>
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<td>PALM-COEIN classification of submucosal myomas using 3D saline contrast sonohysterography: intermethod agreement</td>
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<td>Ultrasound preoperative evaluation in the prediction of laparoscopic myomectomy complications</td>
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<td>Ultrasonic images might be able to inform regarding the benignity or malignancy of endometrial lesions</td>
<td>E. Domali</td>
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Thick uterine endometrium with “honeycomb” appearance in transvaginal ultrasonography revealed various gynecologic conditions: presented with flexible hysteroscopic findings

S. Lee (Republic of Korea) [WITHDRAWN]

Descriptive study on PMB patients, who referred to RAC (rapid access clinic) in Queen Elizabeth Hospital, Gateshead

J.P. Jayasinghe (United Kingdom)

Gynecological ultrasound of patients in prison

F.M. Andrade (Brazil)

Study on the clinical symptoms of leiomyoma uteri based on diagnostic sonography

A. Suranyi (Hungary)

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**EP29: Imaging in oncology patients**

The value of transvaginal elastography in the diagnosis of uterine fibroids

Y. Ren (China) [EP29.01]

Superb Micro-vascular Imaging in cervical carcinoma: monitoring treatment response to neoadjuvant chemotherapy

K. Uno (Japan) [EP29.02]

Accuracy of 2D ultrasonography in detecting lymph node metastasis in uterine and cervical malignancies at the Philippine General Hospital: a five-year retrospective study

K.N. Reforma (Philippines) [EP29.03]

Feasibility of a transthoracic ultrasound scanning of diaphragm and pleural cavity for staging in patient suspected for advanced ovarian cancer

M. Stukan (Poland) [EP29.04]

Importance of an adequate study in patients with primary amenorrhea and pelvic tumour

I. Javier (Chile) [EP29.05]

Metabolic syndrome and risk of endometrial carcinoma among asymptomatic, postmenopausal, urban Sri Lankan females: a community cohort follow-up study

T. Dias (Sri Lanka) [EP29.06]

The predictive value of advanced transvaginal sonography in patients with endometrial neoplasia

E.M. Levine (United States) [EP29.07]

The efficacy of Superb Micro-vascular Imaging on diagnosing endometrial cancer

T. Takeda (Japan) [EP29.08]

Preoperative power Doppler score in predicting depth of myometrial invasion in endometrioid type of endometrial carcinoma

F. Moretti (Canada) [EP29.09]

Evaluation of myometrial infiltration in endometrial cancer using three different US techniques: expert vs untrained operator – preliminary results

M. Rolla (Italy) [EP29.10]

Giant pedunculated leiomyosarcoma of the uterus: case report

M.D. Bernardo (Portugal) [EP29.11]

Pelvic pathology diagnosed with transvaginal ultrasound

L. Bonino (Italy) [EP29.12]

The role of uterine artery pulsatility index and a new ultrasound-guided approach to uterine biopsy in the pre-operative evaluation of placental site trophoblastic tumour

P.L. Cavoretto (Italy) [EP29.13]

Ultrasound appearance of an ovarian metastasis from a primary lung cancer: case report

A. Meira (Portugal) [EP29.14]

Uterine sarcomas: clinical presentation and imaging features

D. Chelli (Tunisia) [EP29.15]
EP30: Imaging and the urogynecology patient

Ureter stone at the ureterovesical junction diagnosed with three-dimensional transvaginal ultrasonography
*S. Lee* (Republic of Korea)

Transperineal 3D sonography: how to define a well positioned suburethral sling?
*P. Capmas* (France)

Pelvic floor biometry ultrasound findings among primiparous women: a cross-sectional study
*G.C. Pascual* (Philippines)

EP31: Innovations in gynecologic imaging

Comparison between transvaginal ultrasound with water contrast (TVUWC) and computed tomography-based virtual colonoscopy (CTC) in detecting rectosigmoid DIE
*M. Rolla* (Italy)

Assessment of targeted ultrasound contrast agent on vasculogenic mimicry in ovarian cancer
*H. Xiang* (China)

Ultrasound-based strain mapping for quantitative characterisation of uterine activity outside pregnancy
*Y. Huang* (Netherlands)

Dyslipidemia, arteriosclerosis and osteoporosis in primary ovarian insufficiency
*S. Igarashi* (Japan)

Implementation of gynecological ultrasound examination report (software REGU) based on consensus of international specialised groups
*R.E. Bohiltea* (Romania)

Role of ultrasound examination for optimisation of young surgeon’s learning curve in tertiary health care centre
*L. Bonino* (Italy)
Expect the best for your patients. That’s why Voluson is the only choice.

At GE Women’s Health Ultrasound, we’re committed to creating a healthier future for women.

Voluson’s ultrasound solutions enhance the relationship between you and your patients, and work relentlessly to break new ground and advance innovation. And we do it all with the goal of empowering you to provide the kind of exceptional care that will exponentially improve women’s lives, and ensure better health for generations.

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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.

Anatomy Art

Booth: 23

Zurich, 8032 Switzerland
+41 7653 692 06
Fatou Lo: Fatou.lo@hotmail.com
www.anatomy-art.com

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 Mobile Health

Booth: 25

GF9 Systems House, The Alba Campus, Rosebank, Livingston, EH54 7EG, UK
+44 (0)203 865 4695 or +1 778 800 9975
sales@clarius.me
www.clarius.me

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 AB

Booth: 35

Klara Norra Kyrkogatan 31, Stockholm, 111 22, Sweden
+46 700019355
Markus Norén: Markus.noren@contextvision.se
www.contextvision.com

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

Tienfenbach 15, Zipf 4871, Austria
+43 7682 38000
Heleen van Weel: heleen.vanweel@ge.com
www.voluson.com

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

Sumpfstrasse 13, CH - 6300 Zug, Switzerland
+41 41 748 63 33
Romea Wallnoefer: marcom@hitachi-medical-systems.com
www.hitachi-medical-systems.com

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.

IMAGINE WHAT COMES NEXT IN OB/GYN

JOIN US AS WE UNVEIL OUR NEW PREMIUM ARIETTA FAMILY MEMBER SATURDAY, SEPT 16TH, 15.00 AT BOOTH 9

AND JOIN OUR EDUCATIONAL PROGRAMME SUNDAY, SEPT 17TH AND MONDAY, SEPT 18TH, 12.00 TO 13.30, ROOM L8, 1ST FLOOR AS WELL AS OUR LIVE SCANNING SESSION MONDAY, SEPT 18TH, 15.40 TO 15.55, AUDITORIUM, HALL A
International Society for Prenatal Diagnosis (ISPD)
Suite 201, 154 en Road, VA, Charlottesville, 22911, USA
+1 434 979 4773
info@ispdhome.org
www.ispd.org

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
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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.

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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

MIDES Healthcare technology - specialist in ultrasound as imaging representation. Sales in 54 countries worldwide

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.

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+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
Booth: 19
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
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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.

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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

**Booth: 21**

5th Floor, Building 712 West, Shenzen, China
+86 755 2399 1200
Anson He: Anson.he@talecare.com
www.talecare.com

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

**Booth: 33**

409 12th Street, SW, Suite 601, Washington, DC 20024, USA
+1 202 517 6353
Tim Heinle: theinle@smfm.org
www.smfm.org

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.

**Booth: 37**

1738 Berkeley St., Santa Monica, 90404, USA
+1 323 473 3800
Lisa Ivey: lisa@sonosim.com
www.sonosim.com

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 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 offers a web based service called Tricely 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 Tricely account.

Tristel is a manufacturer 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.

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.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.
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

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
“Virtual” cardiac volume acquisition training
*L. Yeo (USA)*

**Monday**
15:05-15:30
The ADNEX risk prediction model
*M. Al-Memar (UK)*

**Tuesday**
12:45-13:15
First trimester structural abnormalities
*J. Cruz (Portugal)*

09:50-10:20
Pre-eclampsia screening in the first trimester
*J. Hyett (Australia)*

12:45-13:15
A new practical approach to the assessment of cardiac function
*M. Geijtenbeek (Netherlands)*

15:10-15:40
Gynecological quiz: improve your skills for a correct ultrasound diagnosis
*F. Moro (Italy)*

**Saturday**

15:00-15:30
Premature Birth (Cervical Elastography)

**Monday**

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)*

Please visit GE Healthcare at Stand 4 for more details
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

**Monday**
Fetal Cardiology Workshop
Back to Basics: ISUOG Cardiac Guidelines
J. Carvalho
Going beyond the basics: how to do it – additional structures and ultrasound views and other modalities J. Carvalho
Q&A
Light Lunch

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.

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 12:15-13:15**
Fetal and Maternal Heart Abnormality Screening

Fetal Intelligent Navigation Echocardiography (FINE): complexity made simple

FINE/SD Heart™: novel features with value in clinical practice L. Yeo (United States)

Maternal heart screening B. Thilaganathan (United Kingdom)

**Monday 12:15-13:15**
Please see GE at stand 4 for more details

A. Abuhamad

B. Beniot

D. Jurkovic

**Monday 17:15-18:15**
Ancillary Solution in Predicting Preterm Delivery

Cervical elastography in OB: what, why, and how J.Y. Kwon (Republic of Korea)

E-cervix™: Results from multicenter study by Korean Society of Ultrasound in Obstetrics and Gynecology Research Group S.Y. Oh (Republic of Korea)

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 Basic Training:

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Session</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friday</td>
<td>08:30-16:45</td>
<td>Fetal anatomy: normal or abnormal? The Basic Training approach</td>
<td>L2</td>
</tr>
</tbody>
</table>

ISUOG gratefully acknowledges the following industry support for our hands-on workshops:

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Workshop</th>
<th>Sponsor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saturday</td>
<td>08:30-16:45</td>
<td>CFEF Workshops - hands-on training</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>GE Healthcare, Hitachi Medical Systems Europe Holding AG, Samsung, Philips, Trice</td>
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ISUOG gratefully acknowledges the following industry support for our simulation workshops:

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Workshop</th>
<th>Sponsor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saturday</td>
<td>08:30-13:30</td>
<td>Basic Training simulation workshops</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Medaphor, 3D Systems, SonoSim, CAE Medical Technologies, Parker, Sonosite, Toshiba Medical, Canon Group, Hitachi Medical Systems Europe Holding AG, Samsung, Philips, Trice</td>
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</tbody>
</table>

Live scan ultrasound gel kindly sponsored by Parker.

ISUOG gratefully acknowledges the following industry support for our live scan sessions.*

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Session</th>
<th>Sponsor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunday</td>
<td>08:15</td>
<td>Updates: optimal evaluation of fetal growth and size</td>
<td>Samsung</td>
</tr>
<tr>
<td>Sunday</td>
<td>13:30</td>
<td>FINE: novel features with value in clinical practice</td>
<td></td>
</tr>
<tr>
<td>Sunday</td>
<td>10:20</td>
<td>How I perform a mid-trimester scan</td>
<td>Toshiba</td>
</tr>
<tr>
<td>Monday</td>
<td>10:20</td>
<td>How I look at the fetal brain</td>
<td></td>
</tr>
<tr>
<td>Tuesday</td>
<td>13:50</td>
<td>How I optimise detection of anomalies at 12 weeks</td>
<td></td>
</tr>
<tr>
<td>Saturday</td>
<td>14:45</td>
<td>How to scan deep infiltrating endometriosis - the surgeon and sonographer view</td>
<td>Philips</td>
</tr>
<tr>
<td>Monday</td>
<td>14:10</td>
<td>Optimising imaging in the overweight patient</td>
<td></td>
</tr>
<tr>
<td>Monday</td>
<td>15:40</td>
<td>Effective screening for outflow tract abnormalities: tips and tricks</td>
<td></td>
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* 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>
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<tbody>
<tr>
<td><strong>Thursday</strong></td>
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<tr>
<td></td>
<td>12:00</td>
<td>13:30</td>
<td>Executive Committee &amp; Finance Committee</td>
<td>Suite E, 0.61</td>
</tr>
<tr>
<td></td>
<td>14:00</td>
<td>17:00</td>
<td>Bids Committee</td>
<td>Suite E, 0.63</td>
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<tr>
<td><strong>Friday</strong></td>
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<tr>
<td></td>
<td>08:30</td>
<td>17:30</td>
<td>ISUOG Board meeting (1)</td>
<td>Hall M</td>
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<tr>
<td><strong>Saturday</strong></td>
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<tr>
<td></td>
<td>07:30</td>
<td>08:30</td>
<td>Chairpersons briefing</td>
<td>Hall B</td>
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<tr>
<td></td>
<td>09:50</td>
<td>10:35</td>
<td>AGM and Awards</td>
<td>Hall A</td>
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<tr>
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<td>12:30</td>
<td>13:30</td>
<td>Scientific Committee (1)</td>
<td>Suite E, 0.63</td>
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<tr>
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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></td>
<td>14:00</td>
<td>14:45</td>
<td>Patient Information SIG</td>
<td>Suite E, 0.61</td>
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<td><strong>Sunday</strong></td>
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<td></td>
<td>09:20</td>
<td>10:20</td>
<td>ISUOG-FIGO Collaboration</td>
<td>Suite E, 0.61</td>
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<td></td>
<td>10:20</td>
<td>11:20</td>
<td>Clinical Standards Committee</td>
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<td></td>
<td>10:45</td>
<td>11:45</td>
<td>Nominations Committee</td>
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<td>12:00</td>
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<td>Editorial Board meeting</td>
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<td>13:00</td>
<td>14:30</td>
<td>IOTA meeting</td>
<td>L2</td>
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<td>13:30</td>
<td>14:30</td>
<td>WATOG-ISUOG meeting</td>
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<td>15:30</td>
<td>CME Task Force</td>
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<td>14:35</td>
<td>15:35</td>
<td>Gold Medal Awards Committee</td>
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<td>15:10</td>
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<td>Singapore Local Organising Committee</td>
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<td>Online Education Content Task Force</td>
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<td><strong>Monday</strong></td>
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<td>08:00</td>
<td>09:30</td>
<td>Basic Training Task Force</td>
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<td>08:15</td>
<td>09:15</td>
<td>Safety Committee</td>
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<td></td>
<td>09:50</td>
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<td>Courses Task Force</td>
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<td>11:25</td>
<td>12:55</td>
<td>IETA meeting</td>
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<td>Young Investigators lunch</td>
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<td>14:30</td>
<td>VISUOG Task Force</td>
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<td>14:35</td>
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<td>Outreach Committee</td>
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<td>16:00</td>
<td>17:30</td>
<td>Education Committee</td>
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<td>17:00</td>
<td>18:00</td>
<td>IDEA meeting</td>
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<tr>
<td><strong>Tuesday</strong></td>
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<tr>
<td></td>
<td>08:15</td>
<td>10:15</td>
<td>ISUOG Board meeting (2)</td>
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<tr>
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<td>11:00</td>
<td>12:00</td>
<td>Exhibitors’ Closing meeting</td>
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<td>12:15</td>
<td>13:15</td>
<td>Ambassadors lunch</td>
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<td>12:30</td>
<td>14:00</td>
<td>Scientific Committee meeting (2)</td>
<td>Suite E, 0.63</td>
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</table>
### Critical dates 2018

<table>
<thead>
<tr>
<th>January</th>
<th>Registration opens*</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 April</td>
<td>Abstract submission and presenter registration deadline</td>
</tr>
<tr>
<td>20 August</td>
<td>Early bird registration deadline</td>
</tr>
<tr>
<td>20 October</td>
<td>Pre-Congress courses and Basic Training</td>
</tr>
<tr>
<td>21 October</td>
<td>Congress opens</td>
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</tbody>
</table>

**Travel grants available:** [isuog.org/worldcongress/2018/travelgrant](https://isuog.org/worldcongress/2018/travelgrant)

For full details visit [isuog.org/worldcongress/2018](https://isuog.org/worldcongress/2018)  
[congress@isuog.org](mailto: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:

Diamond

GE Healthcare

SAMSUNG

Platinum

TOSHIBA MEDICAL

Canon

Gold

HITACHI

Inspire the Next

Bronze

clarius

ultrasound anywhere