Final Program

Up to 29 CME credits
Welcome to ISUOG!

As a paid Congress delegate, you receive ISUOG membership for one year. Become an active member of our growing community of 13,300 members from across 128 countries. Take advantage of ISUOG member benefits:

**Online learning**
- 400+ web lectures and webcasts from ISUOG education courses
- 70+ online CME activities
- World Congress presentations from ISUOG On Demand
- visuog a visual encyclopedia for ultrasound in obstetrics and gynecology

**Reduced fees to ISUOG events**
- 27th World Congress in Vienna, 16 - 19 September 2017
- 13th International Symposium in Cape Town, 20 - 22 March 2017
- ISUOG’s 2017 intensive education courses

**Regional education**
- Opportunities to participate in ISUOG Outreach projects
- Support for local education through ISUOG’s Approved courses program
- ISUOG’s expanding collection of translated practice guidelines

**Journal**
- Download the UOG App to browse free content
- Become a Journal online member for complete access to Ultrasound in Obstetrics and Gynecology, the leading peer reviewed journal in its field

Have questions about your membership?
Visit the ISUOG lounge to explore the online learning site, enquire about your member benefits or share your ISUOG membership experience with us!

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The International Society of Ultrasound in Obstetrics and Gynecology  Limited company: 2722770  Registered charity: 1030406

Be part of our growing community and join the global conversation
#LoveUltrasound
# Contents

## Essential information
- Invited faculty
- Welcome to Rome
- Speaker declarations and CME accreditation
- Dates and times
- Social program
- Travel grants
- General information
- Supplement your learning
- Participate in Rome

## Orientation
- Venue floor plans
- Program orientation
- Program at a glance
  - Masterclasses
  - Short oral presentations (OP)
  - Hubs
  - Poster discussion Hubs (P)
  - Electronic posters (EP)

## Saturday
- Pre-Congress courses and ISUOG basic training

## Sunday
- Program
- Keynote speaker biographies

## Monday
- Program
- Short oral presentations
- Poster discussion Hubs

## Tuesday
- Program
- Short oral presentations
- Poster discussion Hubs

## Wednesday
- Program
- Short oral presentations
- Poster discussion Hubs

## Electronic posters (EP)
- Electronic poster listings

## Exhibition
- Exhibition floor plan and list of exhibitors
- Exhibitor profiles
- Sponsor activities
- Industry acknowledgements
- FAQs
- ISUOG meetings
<table>
<thead>
<tr>
<th>Invited Faculty</th>
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<tbody>
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<td>I. Aboujaoude (Lebanon)</td>
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Some of the ISUOG faculty during the Montréal Congress in 2015.
Benvenuti a Roma!

On behalf of ISUOG, its Board of Trustees and the Congress Organising Committees, it is our pleasure to welcome you back to Italy. We will be inaugurating the Rome Congress with our Opening Ceremony and Welcome Reception on Sunday evening, featuring a special performance by local sand artist Paola Saracini and opera singers Francesca Pierpaoli and Marco Frusoni.

The ISUOG Congress offers an extraordinary opportunity to participate in our state-of-the-art scientific program. It is a platform for the latest advances for clinical practice and research in obstetric and gynecological imaging presented by ISUOG’s outstanding international faculty and renowned invited speakers. As well as the scientific oral communication sessions and networking hubs, the masterclasses from our experts and didactic workshops will give you the opportunity to enhance your professional practice and our new hands on sessions will allow you to further enhance your practical skills.

We are very proud to welcome our first travel grant winners this year to the Congress. The travel grant supports education and research in underserved regions of the world and has been awarded to five researchers who are committed to the improvement of services in their own regions.

We encourage you to enjoy our beautiful host city of Rome. Rome is a cosmopolitan city steeped in 3,000 years of history and culture, an eternal showcase of art and architecture where the ancient and the modern reside alongside each other. Our social program includes a guided tour of the iconic Vatican Museums and Sistine Chapel which will be a memorable addition to your visit and we hope you will take advantage of all that Rome has to offer!

Thank you for joining us on this 26th 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 Rome.

Antonia Testa
Congress Chair
Speaker declarations

The following declarations of interest have been received:

A. Arechvo  Has an association with Philips (P22.08; EP22.05)
V. Berghella  Lumara provides support for a pessary randomized trial
P. Capmas  Consults with Ulipristal Acetate - Gedeon Richter (P23.01)
A. David  Consults for Magnus Growth and receives a nominal consultancy fee
B. Cuneo  Is an educational consultant for Philips ultrasound and teaches their fetal echo courses (OP06.02)
H.P. Dietz  Received unrestricted educational grants from GE Healthcare.
H. Feltovich  Siemens Ultrasound USA provides us with technical (engineering) support (OC21.06; EP22.03)
I. Herrera  I.H. and A.G. have received lecture fees from Roche Diagnostics (manufacturer of the sFlt-1/PIGF biomarkers) (OP12.08; OP12.09)
W. Lee  Research support for this investigation was provided by the Samsung Medison Co., Ltd (Seoul, Korea) (OP28.02). He will be demonstrating 5D Limb Vol imaging technology by Samsung for fetal weight estimation.
C. Lees  Has relationships with: Toshiba (research grant application as a commercial partner; sponsoring educational events); Samsung/MIS (loan ultrasound equipment, occasional honoraria, contribution to research funds, sponsor of educational courses); Siemens (loan of ultrasound equipment for research; sponsoring study evenings); GE Healthcare (evaluation of new ultrasound software and hardware; sponsoring study evenings).
G. Malinger  Paid counselling regarding 3D Simbionix's new neurosonography module.
R. Napolitano  ATP (Chief Medical Officer), MY and JAN (Chief Technology Officer) are members of the team of Intelligent Ultrasound (OP15.01)
S. Rottem  Intellision Director, Inventor and Chief Scientist (EP07.08; EP07.11)
S. Siva  Anoisa, Harmony - we use their product in our practice (OC06.01)
B. Thilaganathan  His talk 'Understanding NIPT: a case based presentation' involves discussion of a wide range of predominantly commercial NIPT services
N. Uldbjerg  I help Arcedi with: medical advice, collection of biological material, laboratory facilities. I do not receive personal support or other personal support from Arcedi (OC06.03)
J. Vermeesch  Analysis approach is licensed to Agilent who is marketing the approach as OneSight
A. Youssef  On his talk 'Ultrasound in the assessment of pelvic floor injury' he will be presenting GE software to analyse 3D data. GE Healthcare partially sponsors some of the courses organised at his Hospital.

The following presentations will include discussion of commercial products/services: OC04.03, OC04.05, OC06.01, OC06.03, OC10.02, OC18.02, OC21.06, OC22.02, OC23.04, OP04.02, OP05.06, OP06.03, OP06.06, OP06.08, OP11.04, OP12.10, OP15.01, OP18.01, OP19.03, OP21.04, OP22.02, OP22.03, OP27.01, OP28.02, OP30.04, P01.04, P04.05, P08.01, P11.01, P14.08, P16.04, P16.06, P19.01, P23.01, P23.06, P23.08, P24.03, P24.09, P24.11, P26.03, P26.07, P27.02, P28.02, P10.28, EP12.06, EP16.08, EP16.16, EP16.20, EP17.01, EP17.17, EP19.02, EP22.02, EP22.03, EP25.08, EP27.05, EP28.04, EP32.07.


The following presentations will include discussion of clinical studies: OC01.04, OC01.05, OC02.01, OC02.06, OC04.02, OC04.04, OC04.05, OC06.02, OC08.01, OC08.04, OC08.05, OC10.05, OC11.05, OC13.02, OC13.04, OC15.01, OC18.02, OC21.04, OC21.06, OC22.04, OC23.05, OC25.01, OC26.02, OC26.04, OP01.05, P03.04, P03.06, P04.05, P05.05, P08.01, P08.02, P08.08, P08.10, P08.11, P08.12, P08.13, P09.06, P11.03, P11.04, P12.04, P12.05, P12.06, P12.07, P12.10, P13.09, P14.07, P14.10, P15.01, P15.05, P16.05, P16.06, P16.07, P16.12, P17.10, P17.11, P18.05, P19.03, P20.02, P20.06, P21.04, P22.02, P22.03, P23.02, P26.04, P26.10, P27.06, P27.07, P28.08, P30.04, P31.05, P31.06, P32.09, P34.06, P34.07, P01.04, P01.06, P01.08, P02.08, P05.02, P07.09, P08.01, P08.05, P09.02, P09.03, P10.04, P11.10, P13.09, P14.04, P14.07, P16.01, P16.03, P16.07, P16.09, P20.12, P21.01, P23.04, P23.05, P23.06, P23.08, P24.08, P24.11, P26.08, P27.01, P27.04, P27.05, P28.13, EP04.03, EP05.06, EP10.02, EP10.28, EP11.08, EP14.03, EP14.04, EP15.06, EP15.09, EP15.22, EP16.08, EP16.15, EP16.20, EP17.01, EP17.02, EP17.08, EP17.12, EP17.13, EP17.14, EP20.04, EP21.20, EP22.03, EP25.02, EP25.07, EP27.05, EP27.06, EP27.08, EP28.04.

CME accreditation

Up to 29 CME credits are available for the Congress

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), www.uems.net.

The ‘26th World Congress on Ultrasound in Obstetrics and Gynecology’ is designated for a maximum of (or ‘for up to’) 29 hours of European external CME credits. Each medical specialist should claim only those hours of credit that he/she actually spent in the educational activity.

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

**Registration opening hours**

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<td>Saturday 24 September</td>
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<td>Tuesday 27 September</td>
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<td>Wednesday 28 September</td>
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The registration area is located in the main hotel lobby.

**Exhibition opening hours**

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<td>Wednesday 28 September</td>
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The exhibition is located in the main hotel lobby and the Tiziano foyer on the ground floor of the hotel.

**Scientific program hours**

Please refer to the program for the exact location and timings of each session. Sessions will take place during the following times:

**Pre-Congress courses**

- Saturday 24 September
  - Transvaginal ultrasound in gynecological oncology | 08:30 - 17:30 |
  - Emerging technologies in early prenatal diagnosis | 08:30 - 16:45 |

**ISUOG basic training course**

- Saturday 24 September | 08:00 - 18:00 |

**Main program**

- Sunday 25 September | 08:45 - 17:30 |
  (followed by an exclusive performance by local sand artist Paola Saracini and opera singers Francesca Pierpaoli and Marco Frusoni and welcome reception, 18:00 - 20:00)

- Monday 26 September | 08:00 - 17:00 |
- Tuesday 27 September | 08:00 - 17:00 |
- Wednesday 28 September | 07:00 - 16:50 |
  (followed by leaving drinks and welcome to Vienna 2017, 16:50 - 18:00)

**ISUOG Annual General Meeting (AGM)**

All fully paid delegates are ISUOG members for 2017 and are invited to attend the AGM.

Sunday 25 September 2016 at 10:05
Michelangelo Ballroom, Rome Marriott Park

**ISUOG meetings**

For details of scheduled ISUOG Committee meetings, please refer to page 158.

**CME accreditation**

All delegates’ badges will be scanned at the door of session halls. In order to qualify for Italian CME, Italian delegates must ensure they visit the Bluevents CME desk in the main hotel lobby for each day they wish to claim.
Social program

Accompanying person’s program

Cost per person: €200 (Euro)
The accompanying person’s fee includes:

- Admission to the Congress opening ceremony and welcome drinks
- Admission to the Congress exhibition area and catering breaks
- Admission to the Congress leaving drinks
- Lonely Planet Rome city guide
- 3 day Roma pass which includes:
  - Free entry to 2 museums of your choice
  - Travel on metro, buses and trams
  - Discounts and reduced price ticketing for events, exhibitions and tourist services

ISUOG Visitor’s Guide to Rome

Be sure to make the most of the ISUOG Visitor’s Guide to Rome, prepared by our Local Organising Committee which can be found online at: isuog.org/WorldCongress/2016/Social+and+tours/Things+to+do.

The guide will give you a local view on where to go and what to see in your spare time, including our Local Organising Committee’s favourite restaurants, cafes and bars.

Opening ceremony

Sunday 25 September, Rome Marriott Park Hotel

All registered delegates, accompanying persons and exhibitors are invited to attend the Congress opening program starting with the Chair’s welcome at 17:30 on Sunday. The opening ceremony will be followed by complimentary welcome drinks and canapes by the pool.

Please note you will not be allowed entry without your Congress badge.

17:30 Welcome from the Congress Chair
17:40 Exclusive, bespoke performance by renowned sand artist Paola Saracini and opera singers Francesca Pierpaoli and Marco Frusoni
18:00 Welcome drinks by the pool
20:00 End

Kindly supported by a grant from
Vatican Tour

We are delighted to make the most of the beautiful city of Rome with an ISUOG private tour of the Vatican Museums and Sistine Chapel, which will take place on Tuesday 27 September 2016 from 19:00 to 21:00. Please note tickets must be pre-booked; you will not be allowed entry to the Vatican tour without your ticket. Transport tickets must also be pre-booked.

17:00 - 18:00    Drinks on the ground floor of the Rome Marriott Park Hotel
18:00 - 18:30    Coaches will depart from Rome Marriott Park Hotel
19:00 - 21:00    Two hour guided tour (max 35 per guide) exclusively for ISUOG Congress attendees
21:00 - 21:30    Coaches return to the Rome Marriott Park Hotel

Closing plenary, awards ceremony and leaving drinks

Join us on Wednesday 28 September at 15:20 for the final plenary and Congress awards in Michelangelo A.

Our last session will include topical presentations and a lively debate, followed by drinks and snacks to celebrate our 2017 destination city, Vienna!

Complimentary to all fully registered delegates and accompanying persons.
Travel grant winner biographies

We’d like to welcome our first travel grant winners to Rome! These grants are for researchers, who will be presenting at the Congress, from underserved regions committed to research and improvement of services in their own regions.

Arij Bouzid
Dr Arij Bouzid is a fifth year resident and trainee in gynecology and obstetrics and prenatal diagnosis at Tunis El Manar University, Tunisia. Research interests: ultrasound, fetal imaging and intervention, congenital disorders.

Ehigha Enabudoso
Dr Ehigha Enabudoso practices Obstetrics [Fetal Medicine and Obstetric Ultrasound] and Gynecology, at the University of Benin, Nigeria. He has actively promoted ultrasound training and facilitates the now renowned annual sub-regional ISUOG approved training workshop in Fetal Medicine & Obstetric Ultrasound.

Nosakhare Osasere Enaruna
Dr Nosakhare Osasere Enaruna is a Senior Lecturer in Obstetrics and Gynecology at the University of Benin, and an honorary Consultant Obstetrician and Gynecologist with the University of Benin Teaching Hospital in Benin City, Nigeria. His subspecialty is Maternofetal Medicine and he has specific interest in preeclampsia.

Jesmin Pervin
Dr Jesmin Pervin is a medical doctor with a Masters in Public Health. She is working as Assistant Scientist in Maternal and Child Health Division in Dhaka, Bangladesh. Her main areas of research are reproductive health, preterm and stillbirth issues, quality of care during pregnancy, delivery and post-partum periods, and also implementation research related to improving the perinatal health.

Sikolia Wanyonyi
Dr Sikolia Wanyonyi MBChB, MMed, MRCOG is a consultant in obstetrics/gynecology and fetal medicine at the Aga Khan University Hospital, Nairobi. His main area of interest is in prenatal diagnosis and fetal growth.

Apply for a 2017 Congress travel grant
Supporting education and research in underserved regions.

ISUOG is again inviting young researchers from underserved regions to apply in 2017 to participate at the Congress in Vienna, Austria.

Travel, accommodation and registration will be offered to 5 successful applicants who submit an abstract for the Vienna Congress and meet the eligibility criteria. All applications must be accompanied by a submitted abstract. Abstract submission will open in January 2017.

Full terms, conditions and application criteria are available online at: isuog.org/WorldCongress/2017
General information

The hotel's concierge desk will be able to provide directions and general information.

Cash machines

Banks in Rome are normally open Monday to Friday from 09.00 to 18.00. There is a cash point located in the hotel lobby. Banks are located nearby and the hotel's concierge desk will be able to guide you to the nearest location.

Catering

Tea, coffee and lunches will be served in the exhibition areas, Sunday to Wednesday. The last coffee break of the Congress will take place in the Michelangelo foyer. Delegate or accompanying persons badge required for service.

Certificates of attendance

Your badge will be scanned at session hall entrances for CME accreditation. To receive your certificate of attendance please complete your Congress evaluation form which will be emailed to your registered email address. If you have any questions please ask at the registration desk.

Communication

Mobile telephones work well within the venue; however we ask that they are kept on silent during Congress sessions.

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.

Recordings / duplications

All sessions are available to delegates and ISUOG members 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 and the speakers involved.

First aid

Should you require assistance during the Congress hours, please contact the registration desk.

Future meetings

Literature regarding future meetings of interest to participants is 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.

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 be understanding if you are asked to return to the registration desk. Name badges have been colour coded as follows:

- Clear: Full delegates
- Purple: ISUOG Board
- Blue: ISUOG Faculty
- Yellow: Exhibitors (access to exhibition areas only)
- Red: Staff (with wording STAFF on badge)
- Clear: Day delegate (with day printed)
- Clear: Accompanying persons (no access to scientific sessions)
- Clear: Pre-Congress course
- Clear: Basic training course

Official language

The official language of the Congress is English. Translation facilities are only available for ISUOG’s basic training course.

Parking

There is car parking available at the venue.

Smoking policy

Smoking is not permitted in the building.

WIFI

Complimentary WIFI is available in some areas of the Rome Marriott Park Hotel.

WIFI network: **ISUOG2016**
Password: **Rome2016**

* Please note that Hubs will not be recorded.
Does a particular aspect of the program interest you?

Are you looking for further information around a topic featured at the Congress? Would you like to gain further CME points?

Supplement Congress sessions with free UOG articles available to Congress delegates until the end of October or earn related education points via ISUOG’s CME Platform!

Focus on pre-eclampsia and fetal growth

**Sunday 25 September**
- Plenaries and top abstracts: 3 talks on fetal growth
- Awards and plenaries: Detecting small-for-gestational age (SGA) near term; E. Gratacós

**Monday 26 September**
- IUGR: prediction and outcomes
- Fetal growth: normal and abnormal
- Pre-eclampsia: screening and prevention
- Pre-eclampsia: basic science to clinical practice
- Preterm birth

**Tuesday 27 September**
- Fetal growth and biometry
- Fetal growth assessment

**Wednesday 28 September**
- IUGR: pathophysiology and therapy
- Sonographic surveillance in growth restriction
- Stillbirth and other late complications

**UOG top pick**: Contingent screening for preterm pre-eclampsia; Wright, D. et al. Vol. 47, Issue 5

Explore 2 more recent articles on pre-eclampsia and fetal growth at:
[isuog.org/worldcongress/2016/supplementarylearning](isuog.org/worldcongress/2016/supplementarylearning)

**CME platform theme**: 10 CME modules on pre-eclampsia and fetal growth, including ‘Predicting and preventing pre-eclampsia’ from ISUOG’s 2015 World Congress with J. Hyett, E. Bujold, A. Khalil, A. Baschat, as well as 8 Journal Club CME modules on growth and pre-eclampsia, including: Uterine artery Doppler and sFlt-1/PIGF ratio: prognostic value in early-onset pre-eclampsia; Gómez-Arriaga, P. I. et al.

Access these UOG October articles and more via:
[isuog.org/worldcongress/2016/supplementarylearning](isuog.org/worldcongress/2016/supplementarylearning)
Pelvic pain and endometriosis

- Tuesday workshop: Using imaging to diagnose and guide the management of endometriosis
- 3 Congress sessions throughout Tuesday and Wednesday
- 10 CME modules online
- 10 UOG articles

**UOG top pick:** Transvaginal ultrasound examination of the endometrium in postmenopausal women without vaginal bleeding; Jokubkiene, L. et al. V48, pp390-396

Gynecological oncology

- Saturday course: Transvaginal ultrasound in gynecological oncology
- Sunday workshop: Classifying ovarian masses: the IOTA study & more
- Monday masterclass: Gynecology case examples - Harvard; B. Benacerraf
- Tuesday Masterclass: Recognising the IOTA features needed to classify an ovarian mass including case examples; L. Valentin
- 3 Congress sessions throughout Monday and Tuesday
- 6 CME modules online
- 6 UOG articles

**UOG top pick:** Quality assurance and its impact on ovarian visualization rates in the multicenter United Kingdom Collaborative Trial of Ovarian Cancer Screening (UKCTOCS); Sharma, A. et al. V47, pp228-235

DNA-based prescreening and diagnosis

- Saturday course: Emerging technologies in early prenatal diagnosis
- Monday workshop: Managing NIPT results in daily practice
- 5 Congress sessions throughout Monday, Tuesday and Wednesday
- 17 CME modules online
- 9 UOG articles

**UOG top pick:** Detection of fetal copy number variants by non-invasive prenatal testing for common aneuploidies; Li, R. et al. V47, pp53-57

Fetal echocardiography

- Sunday Plenaries and top abstracts: Morales Rosello, J
- Monday masterclass: Expert assessment of the fetal heart, R. Chaoui
- Monday workshop: The heart looks structurally normal but…
- 3 Congress sessions throughout Monday and Tuesday
- 13 CME modules online
- More than 20 UOG articles

**UOG top pick:** Fetuses with right aortic arch: a multicenter cohort study and meta-analysis; Li, R. et al. V47, pp423-432

Gain further CME online: isuog.community360.net/login
Participate in Rome

Visit the ISUOG Membership Lounge in the main lobby at any time during the Congress to meet the team and explore your ISUOG member benefits.

Membership activities include:
- Meet the team: everything you need to know about your ISUOG membership
- Test the UOG Journal App and download it to access online journal articles
- View e-posters and the scientific program on ISUOG’s OnDemand viewing terminals

Play the ISUOG Social Media Challenge or #LoveUltrasound Scavenger Hunt to win prizes

#ISUOG2016... Social Media Challenge
Share your “When in Rome...” highlights from #ISUOG2016! What was your favourite moment from this year’s Congress? Which speakers inspired you? Who did you meet? What new concepts did you learn?

Post on Twitter or Facebook and tag #ISUOG2016 or @ISUOG.
The 5 authors who reach the most people through social media will win an ISUOG gift bag.

ISUOG Rome #LoveUltrasound Scavenger Hunt
Complete the #LoveUltrasound Scavenger Hunt to win an ISUOG prize!
Play on the Congress App and visit the ISUOG Lounge to download the UOG App and enter a lottery to win an iPad.

Be part of our growing community and join the global conversation
#LoveUltrasound
Program orientation

The program at a glance gives you an outline to each day’s events including session titles, times and refreshment breaks. The full program pages give you the detailed chronological listing of all events. Please note that most sessions run in parallel so you will need to read through sessions taking place at the same time to decide which best suits your needs.

The full program and itinerary planner is available online at: isuog.org/WorldCongress/2016 or on the ISUOG2016 app.

Session types explained...

<table>
<thead>
<tr>
<th>Plenary sessions</th>
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<tbody>
<tr>
<td>Plenary sessions include invited talks and special lectures on Sunday 25 September and Wednesday 28 September.</td>
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<table>
<thead>
<tr>
<th>Scientific sessions</th>
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<tbody>
<tr>
<td>Scientific sessions run in parallel rooms on Monday to Wednesday. Oral sessions include invited talks, oral communication presentations (OC) and short oral presentations (OP). Poster discussions (P) take place in the Hubs spaces and electronic posters (EP) are viewable on the On Demand platform.</td>
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<table>
<thead>
<tr>
<th>Invited talks</th>
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</thead>
<tbody>
<tr>
<td>ISUOG faculty members have been invited to present the state of the art on topics as overviews in scientific sessions or in more detail within the daily workshops.</td>
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<thead>
<tr>
<th>Oral communication (OC)</th>
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<tr>
<td>Presented within 3 main parallel sessions, OC abstract authors are allocated 5 minutes for their presentation (of no more than 5 slides), plus 3 minutes for discussion.</td>
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<tr>
<th>Short oral presentation (OP)</th>
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<tbody>
<tr>
<td>OPs are poster submissions considered suitable for short oral presentation. OP abstract authors are allocated 2 minutes to summarise their poster on 1 slide. Discussion will follow after each presentation.</td>
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<thead>
<tr>
<th>Electronic posters (EP)</th>
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<tbody>
<tr>
<td>Abstracts accepted as view only posters are available for viewing throughout the Congress on the On Demand stations located at the ISUOG Lounge and in the foyers as single PowerPoint slides. Authors may be contacted for discussion through the integrated email facility. \n<em>All OC, OP, P &amp; EP presentations are supported by printed abstracts, which are listed by number and can be located in the abstract book.</em></td>
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<thead>
<tr>
<th>Poster discussions (P)</th>
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<tbody>
<tr>
<td>A number of abstracts accepted as posters are grouped together by topic for chaired discussions.</td>
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<table>
<thead>
<tr>
<th>Masterclasses</th>
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<tbody>
<tr>
<td>Masterclasses are focused, specialist seminars providing an overview on cutting-edge topics and insight from key experts in the field.</td>
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<table>
<thead>
<tr>
<th>Workshops</th>
</tr>
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<tbody>
<tr>
<td>Educational workshops take place each day and run in parallel from 14:00 - 15:20 (Sunday), 15:40 - 17:00 (Monday &amp; Tuesday) and 13:30 - 14:50 (Wednesday). They consist of between 3 and 4 didactic lectures on key special interest areas and in some cases live scan demonstrations where appropriate. Anyone can attend these popular sessions on a first come, first served basis.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Live scan</th>
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</thead>
<tbody>
<tr>
<td>Some scientific and workshop sessions include live scan** demonstrations. Some are quite general and the aim is to give background to the session. In others, faculty will have been asked to demonstrate a particular new technique or technology. ISUOG has determined the content for these sessions, while our sponsors kindly support them by providing technical equipment.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Awards</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Young Investigator prize and awards for the best presentations in each topic area will be announced at the closing session on Wednesday 28 September and formally acknowledged in our journal, Ultrasound in Obstetrics and Gynecology. \nThis year SIEOG will also award a prize for the best abstract from an Italian institution. \nAll OC and OP presentations will be judged within their subject categories by the session chairpersons and the ISUOG Scientific Committee.</td>
</tr>
</tbody>
</table>

** Industry supported: Scientific content of sessions is defined by the Scientific Committee; ultrasound systems and technical support are provided by sponsors.
Interactive session Hubs

ISUOG’s interactive Hubs in the Botticelli Room will host a variety of research discussions, workshops and networking opportunities. Delegates are encouraged to attend as many of the unique, informal ‘drop-in’ sessions as they wish. For the full Hubs program, see page 24.

Communications hubs

Join us in our first ever social media and communications Hub to discuss new and innovative ways for ultrasound professionals to use social media for research and clinical purposes.

ISUOG guidelines

As one of ISUOG’s most valuable member resources, many of our clinical guidelines have now been translated. ISUOG’s guideline Hubs will allow delegates to discuss some of these standards in their own language as well as to network with other physicians practising in their regions. ISUOG guidelines in:
1) English  2) French  3) Italian  4) Spanish

Just images

The presentation of images in a specialist area for comment and discussion. These informal Hubs may include discussions of cases and techniques and will give you a chance to engage with some of ISUOG’s renowned faculty up close. First come, first served.

Meet the Professor

Our professors present informal educational discussions focused on their specialist topic and delegates are encouraged to come with questions too. Interested delegates should take a seat at the Hub hosting the Professor of their choice. First come, first served.

Outreach workshop

Join the Outreach team as they discuss “Teaching Ultrasound in the Field”, debating issues relevant to the use of ultrasound in rural and remote regions and ensuring sustainable development. All delegates welcome.

Poster discussions (P)

Join any poster discussion Hub you wish and even move between those running in parallel. Poster authors will be in attendance to answer any questions, comment on their work and to meet delegates interested in their research.

Special Interest Groups

ISUOG’s Special Interest Groups discuss research and educational initiatives and collaborative opportunities as well as updates on the latest developments in clinical practice in their specialist areas (all delegates welcome):
1) 3D  2) Doppler  3) Fetal heart  4) MRI

Additional hands-on training

Simulation: hands-on

Cutting edge, hands-on training workshops utilising the latest in simulation technology on the afternoon of Monday 26 September and morning of Tuesday 27 September.*

Ultrasound guided needle procedures in Obstetrics; Wake Forest University School of Medicine, Université de Montréal and Mayo Clinic School of Medicine. Director: Brian Brost (USA)

Hands-on training

Basic training hands-on simulation workshop

One-to-one training using simulators with world experts.*

Intimate hands-on training

Focused, intimate hands-on training in collaboration with CFEF.*

* Places are extremely limited. Pre-booking essential.

Chairperson / speaker guidelines

If you are chairing or speaking in a session, please refer to our chairperson, speaker and presenter guidelines online at isuog.org/worldcongress/2016/scientific+program/speaker+information

On Demand

View Congress presentations any time on OnDemand, thanks to an unrestricted educational grant from:

PHILIPS
### Saturday 24 September 2016 - Pre-Congress courses

<table>
<thead>
<tr>
<th>Botticelli Room</th>
<th>Bramante 6 &amp; 7</th>
<th>Bramante 8 &amp; 9</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>07:30 (onwards)</strong></td>
<td><strong>REGISTRATION</strong></td>
<td><strong>REGISTRATION</strong></td>
</tr>
<tr>
<td><strong>08:00-18:00</strong></td>
<td>Transvaginal ultrasound in gynecological oncology LIVE SCAN (08:30-17:30)</td>
<td>Emerging technologies in early prenatal diagnosis (08:30-16:45)</td>
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</table>

### Sunday 25 September 2016

<table>
<thead>
<tr>
<th>Michelangelo</th>
<th>Tiziano A</th>
<th>Tiziano B</th>
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</thead>
<tbody>
<tr>
<td><strong>07:30 (onwards)</strong></td>
<td><strong>REGISTRATION</strong></td>
<td><strong>REGISTRATION</strong></td>
</tr>
<tr>
<td><strong>08:45-10:05</strong></td>
<td>Keynote lectures</td>
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<tr>
<td><strong>10:05-10:45</strong></td>
<td>AGM</td>
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<tr>
<td><strong>10:45-11:15</strong></td>
<td>COFFEE &amp; EP VIEWING</td>
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<tr>
<td><strong>11:15-12:25</strong></td>
<td>Plenaries and top abstracts (OC01)</td>
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<tr>
<td><strong>12:25-14:00</strong></td>
<td>LUNCH &amp; EP VIEWING</td>
<td></td>
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<tr>
<td><strong>14:00-15:20</strong></td>
<td>Workshop Fetal Biometry LIVE SCAN</td>
<td>Workshop Classifying ovarian masses: the IOTA study and more</td>
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<tr>
<td><strong>15:20-15:50</strong></td>
<td>COFFEE &amp; EP VIEWING</td>
<td></td>
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<tr>
<td><strong>15:50-17:30</strong></td>
<td>Awards and plenaries</td>
<td></td>
</tr>
<tr>
<td><strong>17:30-20:00</strong></td>
<td>Opening Ceremony and Welcome Reception</td>
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</table>

**Program key:**

- Obstetrics sessions
- Workshops
- Short oral presentations
- Masterclasses
- Gynecology sessions
- Satellite symposia**
- Electronic poster viewing
- Hubs
- Plenary sessions
- Pre-Congress courses*
- Social

*See p.29-31 for exact timings including coffee and lunch breaks for pre-Congress courses

**See p.154 for our industry satellite program
## PROGRAM AT A GLANCE

### Monday 26 September 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>Michelangelo A</th>
<th>Michelangelo B</th>
<th>Tiziano A</th>
<th>Tiziano B</th>
<th>Botticelli</th>
</tr>
</thead>
<tbody>
<tr>
<td>07:30-08:10</td>
<td>W. Grobman</td>
<td>A. Abuhamad</td>
<td>B. Benacerraf</td>
<td>R. Chaoui</td>
<td></td>
</tr>
<tr>
<td>08:15-09:15</td>
<td>OC03 Anomalies of the great vessels and venous return</td>
<td>OC02 IUGR: prediction and outcomes</td>
<td>OC04 Urogynecology</td>
<td>OP01 CNS anomalies: what the data shows</td>
<td></td>
</tr>
<tr>
<td>09:20-10:00</td>
<td>OP02 The fetal venous system</td>
<td>OP03 IUGR: prediction and outcomes</td>
<td>OP04 Urogynecology</td>
<td>OP05 CNS anomalies: the relevance of new ultrasound and MRI tools</td>
<td>Poster Discussion Hubs P01 - P04</td>
</tr>
<tr>
<td>09:50-10:20</td>
<td></td>
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<td></td>
<td>COFFEE &amp; EP VIEWING</td>
</tr>
<tr>
<td>10:20-11:20</td>
<td>OC05 CNS anomalies: diagnosis to outcome</td>
<td>OC06 New developments in DNA based prenatal diagnosis</td>
<td>OC07 Managing ovarian masses</td>
<td>OP06 New strategies for fetal cardiac evaluation</td>
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</tr>
<tr>
<td>11:25-12:05</td>
<td>OP07 CNS anomalies: midline and posterior fossa</td>
<td>OP08 First trimester screening in the era of NIPT</td>
<td>OP09 Managing ovarian masses</td>
<td>OP10 Fetal growth: normal and abnormal</td>
<td>Poster Discussion Hubs P05 - P08</td>
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<tr>
<td>12:00-13:30</td>
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<td></td>
<td>LUNCH &amp; EP VIEWING</td>
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<td></td>
<td>ISUOG Guidelines Hubs (12:15-13:15)</td>
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<tr>
<td>13:30-14:30</td>
<td>OC08 Pre-eclampsia: screening and prevention</td>
<td>OC09 Twin pregnancies: what is new?</td>
<td>OC10 Using ultrasound in gynecological oncology</td>
<td>OP11 Preterm birth</td>
<td>Special Interest Group Hubs</td>
</tr>
<tr>
<td>14:35-15:15</td>
<td>OP12 Pre-eclampsia: basic science to clinical practice</td>
<td>OP13 Growth and hemodynamics in twins</td>
<td>OP14 Ultrasound in gynecological oncology</td>
<td>OP15 Simulation and education in obstetric ultrasound</td>
<td>Poster Discussion Hubs P09 - P12</td>
</tr>
<tr>
<td>15:10-15:40</td>
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<td></td>
<td>COFFEE &amp; EP VIEWING</td>
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<tr>
<td>15:40-17:00</td>
<td>Workshop The heart looks structurally normal but...</td>
<td>SMFM Workshop Managing NIPT results in daily practice</td>
<td>Workshop Practical management of early pregnancy and acute gynecology</td>
<td>Workshop Preterm birth</td>
<td>Interactive Hubs</td>
</tr>
<tr>
<td>Time</td>
<td>Michelangelo A</td>
<td>Michelangelo B</td>
<td>Tiziano A</td>
<td>Tiziano B</td>
<td>Botticelli</td>
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<tr>
<td>07:30-08:10</td>
<td>R. Romero</td>
<td>L. Guibaud</td>
<td>L. Valentin</td>
<td>Z. Alfirevic</td>
<td></td>
</tr>
<tr>
<td>08:15-09:15</td>
<td><strong>OC11</strong> Fetal growth and biometry <strong>LIVE SCAN</strong></td>
<td>OC12 Outcomes of laser therapy for TTTS</td>
<td>OC13 Miscarriage, ectopic pregnancy and other complications in early pregnancy</td>
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<tr>
<td>09:20-10:00</td>
<td><strong>OP16</strong> Fetal growth assessment</td>
<td>OP17 New data in multiple pregnancies</td>
<td>OP18 Early pregnancy complications</td>
<td>OP19 The good and the bad of obstetrical ultrasound</td>
<td><strong>Poster Discussion Hubs P13 - P15</strong></td>
</tr>
<tr>
<td>10:20-11:20</td>
<td><strong>OC14</strong> Screening for congenital heart defects <strong>LIVE SCAN</strong></td>
<td><strong>OC15</strong> Fetal therapy</td>
<td><strong>OC16</strong> Ultrasound in reproductive medicine</td>
<td></td>
<td><strong>Poster Discussion Hubs P16 - P19</strong></td>
</tr>
<tr>
<td>11:25-12:05</td>
<td><strong>OP20</strong> Screening and clinical outcome of fetuses with CHD</td>
<td><strong>OP21</strong> Fetal interventions</td>
<td><strong>OP22</strong> Improving outcomes in reproductive medicine</td>
<td><strong>OP23</strong> Advances in ultrasound and new technologies</td>
<td><strong>Poster Discussion Hubs P20 - P23</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Industry sponsored satellite symposium (12:15-13:15)</strong></td>
<td></td>
<td><strong>Meet the Professor Hubs</strong></td>
<td><strong>Meet the Professor Hubs</strong></td>
<td><strong>Meet the Professor Hubs</strong></td>
</tr>
<tr>
<td>13:30-14:30</td>
<td><strong>OC17</strong> This newborn will need a pediatric surgeon!</td>
<td><strong>OC18</strong> Can we predict the future on the labour ward?</td>
<td><strong>Workshop Reproductive medicine</strong></td>
<td><strong>Workshop Reproductive medicine</strong></td>
<td><strong>Workshop Reproductive medicine</strong></td>
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<td>14:35-15:15</td>
<td><strong>OP25</strong> Advances in first trimester scanning</td>
<td><strong>OP26</strong> Ultrasound system: a necessity on the labour ward?</td>
<td><strong>OP24</strong> Imaging in reproductive medicine</td>
<td><strong>OP27</strong> Sonographic prediction of morbidly adherent placenta</td>
<td><strong>Poster Discussion Hubs P20 - P23</strong></td>
</tr>
<tr>
<td>15:40-17:00</td>
<td><strong>Workshop Maternal hemodynamic assessment</strong></td>
<td><strong>Workshop Zika virus (OC19)</strong></td>
<td><strong>Workshop Using imaging to diagnose and guide the management of endometriosis</strong></td>
<td><strong>Workshop Abnormally invasive placenta</strong></td>
<td><strong>Workshop Is there a future for cell-free DNA in cancer screening? (OC20)</strong></td>
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<td><strong>Vatican tour</strong></td>
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## Wednesday 28 September 2016

<table>
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<tr>
<th>Time</th>
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<th>Tiziano A</th>
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<th>Botticelli</th>
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<tbody>
<tr>
<td>07:30-08:10</td>
<td>D. Prayer</td>
<td>C. Bilardo</td>
<td>H.P. Dietz</td>
<td>D. Paladini</td>
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<tr>
<td>08:15-09:15</td>
<td>OC21 Advances in ultrasound and new technologies</td>
<td>OC22 IUGR: pathophysiology and therapy</td>
<td>OC23 How to evaluate women with abnormal uterine bleeding</td>
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<td>Interactive Hubs</td>
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<td>09:20-10:00</td>
<td>OP28 Advances in ultrasound and new technologies</td>
<td>OP29 IUGR: pathophysiology and therapy</td>
<td>OP30 Using ultrasound to evaluate abnormal bleeding</td>
<td>OP31 Stillbirth and other late complications</td>
<td>Poster Discussion Hubs P24 - P27</td>
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<tr>
<td>10:20-11:20</td>
<td>OC24 Fetal anomalies in our daily practice LIVE SCAN</td>
<td>OC25 The placenta and brain of fetuses with congenital heart defects</td>
<td>OC26 Using ultrasound to diagnose causes of pelvic pain and endometriosis</td>
<td>Social media for scientific information on ultrasound Hubs</td>
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<tr>
<td>11:25-12:05</td>
<td>OP32 Fetal anomalies: diagnosis and implications</td>
<td>OP33 The placenta and brain of fetuses with CHD</td>
<td>OP34 Using ultrasound to diagnose causes of pelvic pain and endometriosis</td>
<td>Poster Discussion Hubs P28 - P30</td>
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<td>12:00-13:30</td>
<td>Industry sponsored satellite symposium (12:15-13:15)</td>
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<td>13:30-14:50</td>
<td>Workshop 3D workshop</td>
<td>Workshop Sonographic surveillance in growth restriction</td>
<td>Workshop Abnormal placental implantation in the first trimester of pregnancy</td>
<td>Workshop MRI and ultrasound working together in pregnancy</td>
<td>Outreach workshops (13:50-14:50)</td>
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<tr>
<td>14:50-15:20</td>
<td>COFFEE &amp; EP VIEWING</td>
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<td>15:20-16:50</td>
<td>Closing plenary</td>
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<tr>
<td>16:50</td>
<td>Leaving drinks and welcome to Vienna 2017</td>
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### Program key:

- Obstetrics sessions
- Gynecology sessions
- Plenary sessions
- Workshops
- Satellite symposia
- Short oral presentations
- Masterclasses
- Electronic poster viewing
- Hubs
- Social

**See p.154 for our industry satellite program**
Masterclasses at a glance

<table>
<thead>
<tr>
<th>Day &amp; time</th>
<th>Session</th>
<th>Presenter</th>
<th>Room</th>
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</thead>
<tbody>
<tr>
<td>Monday 07:30 - 08:10</td>
<td>How to predict successful trial of labour after Caesarean section</td>
<td>W. Grobman (USA)</td>
<td>Michelangelo A</td>
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<td></td>
<td>Ultrasound and placental abnormalities: is it really useful?</td>
<td>A. Abuhamad (USA)</td>
<td>Michelangelo B</td>
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<td></td>
<td>Gynecology case examples from Harvard</td>
<td>B. Benacerraf (USA)</td>
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<td></td>
<td>Expert assessment of the fetal heart</td>
<td>R. Chaoui (Germany)</td>
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<tr>
<td>Tuesday 07:30 - 08:10</td>
<td>Prediction and prevention of preterm birth</td>
<td>R. Romero (USA)</td>
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<td>Posterior fossa anomalies</td>
<td>L. Guibaud (France)</td>
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<td></td>
<td>Recognising the IOTA features needed to classify an ovarian mass including case examples</td>
<td>L. Valentin (Sweden)</td>
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<tr>
<td></td>
<td>How to turn your ideas into research projects</td>
<td>Z. Alfirevic (UK)</td>
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<tr>
<td>Wednesday 07:30 - 08:10</td>
<td>Fetal MRI, when, why and how</td>
<td>D. Prayer (Austria)</td>
<td>Michelangelo A</td>
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<td>First trimester ultrasound: anomalies and markers of abnormal development</td>
<td>C. Bilardo (Netherlands)</td>
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<td></td>
<td>How to evaluate the endometrium using ultrasound: what can you ignore and when do you have to act</td>
<td>H.P. Dietz (Australia)</td>
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<td>Optimising detecting congenital anomalies</td>
<td>D. Paladini (Italy)</td>
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</tr>
</tbody>
</table>

Meet some of our expert faculty face to face!

Masterclasses offer insight from key experts in their subject of choice. Join them each Congress morning for these exciting state-of-the-art sessions!
# Short oral presentations at a glance

<table>
<thead>
<tr>
<th>Day &amp; time</th>
<th>Short oral presentation</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Monday</strong></td>
<td></td>
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<td>08:15 - 09:15</td>
<td>OP01 CNS anomalies: what the data shows</td>
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<td>09:20 - 10:10</td>
<td>OP02 The fetal venous system</td>
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<td></td>
<td>OP03 IUGR: prediction and outcomes</td>
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<td>OP04 Urogynecology</td>
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<td></td>
<td>OP05 CNS anomalies: the relevance of new ultrasound and MRI tools</td>
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<td>10:20 - 11:20</td>
<td>OP06 New strategies for fetal cardiac evaluation</td>
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<td>11:25 - 12:05</td>
<td>OP07 CNS anomalies: focus on the midline and posterior fossa</td>
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<td></td>
<td>OP08 First trimester screening in the era of NIPT</td>
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<td>OP09 Managing ovarian masses</td>
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<tr>
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<td>OP10 Fetal growth: normal and abnormal</td>
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<tr>
<td>13:30 - 14:30</td>
<td>OP11 Preterm birth</td>
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<td>14:35 - 15:15</td>
<td>OP12 Pre-eclampsia: basic science to clinical practice</td>
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<td>OP13 Growth and hemodynamics in twins</td>
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<td>OP14 Ultrasound in gynecological oncology</td>
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<td>OP15 Simulation and education in obstetric ultrasound</td>
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<tr>
<td><strong>Tuesday</strong></td>
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<td>09:20 - 10:00</td>
<td>OP16 Fetal growth assessment</td>
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<td>OP17 New data in multiple pregnancies</td>
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<td>OP18 Early pregnancy complications</td>
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<td>OP19 The good and the bad of obstetrical ultrasound</td>
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<td>OP20 Screening and clinical outcome of fetuses with CHD</td>
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<td>OP21 Fetal interventions</td>
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<td>OP22 Improving outcomes in reproductive medicine</td>
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<td>OP23 Advances in ultrasound and new technologies: focus on ultrasound</td>
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<tr>
<td>14:35 - 15:15</td>
<td>OP24 Imaging in reproductive medicine (14:30 - 15:10)</td>
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<td>OP25 Advances in first trimester scanning</td>
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<td>OP26 Ultrasound system: a necessity on the labour ward?</td>
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<td>OP27 Sonographic prediction of morbidly adherent placenta</td>
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<td><strong>Wednesday</strong></td>
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<td>09:20 - 10:00</td>
<td>OP28 Advances in ultrasound and new technologies: focus on other modalities</td>
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<td>OP29 IUGR: pathophysiology and therapy</td>
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<td>OP30 Using ultrasound to evaluate abnormal bleeding</td>
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<td>OP31 Stillbirth and other late complications</td>
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<td>OP32 Fetal anomalies: diagnosis and implications</td>
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<td>OP33 The placenta and brain of fetuses with CHD</td>
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<td>OP34 Using ultrasound to diagnose causes of pelvic pain and endometriosis</td>
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## Hubs at a glance

<table>
<thead>
<tr>
<th>Day &amp; time</th>
<th>Hub 1</th>
<th>Hub 2</th>
<th>Hub 3</th>
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<tr>
<td><strong>Monday</strong></td>
<td>Poster discussions</td>
<td></td>
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</tr>
<tr>
<td>09:20 - 10:00</td>
<td>P01</td>
<td>P02</td>
<td>P03</td>
<td>P04</td>
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<td>11:25 - 12:05</td>
<td>P05</td>
<td>P06</td>
<td>P07</td>
<td>P08</td>
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<td>12:15 - 13:15</td>
<td>ISUOG Guidelines</td>
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<td>English</td>
<td>French</td>
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<td>13:30 - 14:30</td>
<td>Special Interest Groups</td>
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<td>MRI</td>
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<td>P10</td>
<td>P11</td>
<td>P12</td>
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<td>15:40 - 17:00</td>
<td>Interactive Hubs</td>
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<td>SIEOG: Obstetrics</td>
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<td>09:20 - 10:00</td>
<td>P13</td>
<td>Why knowing your anatomy will improve your scanning?</td>
<td>P14</td>
<td>P15</td>
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<tr>
<td>11:25 - 12:05</td>
<td>P16</td>
<td>P17</td>
<td>P18</td>
<td>P19</td>
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<tr>
<td>13:30 - 14:30</td>
<td>Meet the Professors</td>
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<td>R. Chaoui</td>
<td>Y. Ville</td>
<td>D. Arduini</td>
<td>B. Thilaganathan</td>
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<td>F. Ushakov</td>
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<td>L. Savelli</td>
<td>R. Romero</td>
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<td>P21</td>
<td>P22</td>
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<td>Workshop</td>
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<td>Is there a future for cell-free DNA in cancer screening?</td>
<td>Gynecologists and patients associations face to face</td>
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<td><strong>Wednesday</strong></td>
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<td>08:15 - 09:15</td>
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<td>SIEOG: Young Investigator discussion (Gynecology)</td>
<td>How to interpret incidental findings on the gynecological scan</td>
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<td>P24</td>
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<td>10:20 - 11:20</td>
<td>Communications Hubs</td>
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<td>Social media for scientific information on ultrasound</td>
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<tr>
<td>P28</td>
<td>P29</td>
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<td>13:50 - 14:50</td>
<td>Outreach workshops</td>
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<td>Tricks of the trade</td>
<td>Ultrasound quality control between countries</td>
<td>Theory vs. practice</td>
<td>How to strengthen relationships between trainer and trainee</td>
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## Posters at a glance

<table>
<thead>
<tr>
<th>Day &amp; time</th>
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<tbody>
<tr>
<td><strong>Monday</strong></td>
<td></td>
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<tr>
<td>09:20 - 10:00</td>
<td>P01 From NT to NIPT</td>
<td>Hub 1</td>
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<td>P02 Maternal and fetal complications in multiple pregnancy</td>
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<td>P03 Fetal anomalies: from head to toes</td>
<td>Hub 3</td>
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<td>P04 Ultrasound in gynecological oncology</td>
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<td>11:25 - 12:05</td>
<td>P05 Fetal interventions</td>
<td>Hub 1</td>
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<td>P06 Peculiar and interesting fetal cardiac anomalies</td>
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<td>P07 Fetal neck and chest</td>
<td>Hub 3</td>
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<td>P08 Just images: case reports in obstetrics and gynecology</td>
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<tr>
<td>14:35 - 15:15</td>
<td>P09 Biometry in fetal growth aberrations</td>
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<td>P10 Neurosonography: focus on the ventricles and brain</td>
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<td>P11 Screening for Trisomy 21</td>
<td>Hub 3</td>
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<tr>
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<td>P12 Managing ovarian masses</td>
<td>Hub 4</td>
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<td><strong>Tuesday</strong></td>
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<td>09:20 - 10:00</td>
<td>P13 Fetal cardiac function</td>
<td>Hub 1</td>
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<td>P14 Predicting preterm and term birth</td>
<td>Hub 3</td>
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<tr>
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<td>P15 Using ultrasound to diagnose causes of pelvic pain and endometriosis</td>
<td>Hub 4</td>
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<td>11:25 - 12:05</td>
<td>P16 Hypertension in pregnancy</td>
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<td>P18 Pathophysiology of growth abnormalities</td>
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<td>P19 Using ultrasound to manage early pregnancy complications</td>
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<td>14:35 - 15:15</td>
<td>P20 Early screening of congenital heart defects and anomalies of the great vessels</td>
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<td>P21 Fetal face</td>
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<td>P22 Advances in ultrasound and new technologies</td>
<td>Hub 3</td>
</tr>
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<td>P23 Abnormal uterine bleeding</td>
<td>Hub 4</td>
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<tr>
<td><strong>Wednesday</strong></td>
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<tr>
<td>09:20 - 10:00</td>
<td>P24 New parameters to evaluate the fetal cardiac function</td>
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<td>P25 Fetal urinary system</td>
<td>Hub 2</td>
</tr>
<tr>
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<td>P26 The cervix and other challenges in multiple pregnancies</td>
<td>Hub 3</td>
</tr>
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<td>P27 Innovations in gynecological imaging</td>
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<tr>
<td>11:25 - 12:05</td>
<td>P28 Screening for pregnancy outcomes</td>
<td>Hub 1</td>
</tr>
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<td>P29 Doppler in IUGR management</td>
<td>Hub 2</td>
</tr>
<tr>
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<td>P30 Neurosonography: focus on the brain and the neural tube</td>
<td>Hub 3</td>
</tr>
</tbody>
</table>
### Electronic posters at a glance

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

<table>
<thead>
<tr>
<th>EP01</th>
<th>CNS I</th>
<th>EP17</th>
<th>Predicting hemodynamics and hypertension in pregnancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP02</td>
<td>CNS II</td>
<td>EP18</td>
<td>Predicting preterm and term birth</td>
</tr>
<tr>
<td>EP03</td>
<td>Fetal cardiac function</td>
<td>EP19</td>
<td>Ultrasound supporting the labour ward</td>
</tr>
<tr>
<td>EP04</td>
<td>Great vessels and venous return</td>
<td>EP20</td>
<td>Multiple pregnancy</td>
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<tr>
<td>EP05</td>
<td>Peculiar cases of cardiac anomalies</td>
<td>EP21</td>
<td>Fetal interventions</td>
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<tr>
<td>EP06</td>
<td>Screening for congenital heart defects I</td>
<td>EP22</td>
<td>Advances in ultrasound and new technologies</td>
</tr>
<tr>
<td>EP07</td>
<td>Screening for congenital heart defects II</td>
<td>EP23</td>
<td>Improving maternal and fetal safety</td>
</tr>
<tr>
<td>EP08</td>
<td>The fetal heart and obstetric complications</td>
<td>EP24</td>
<td>Simulation and education in obstetric ultrasound</td>
</tr>
<tr>
<td>EP10</td>
<td>Fetal anatomy and aneuploidy: case reports</td>
<td>EP26</td>
<td>Managing ovarian masses</td>
</tr>
<tr>
<td>EP11</td>
<td>Fetal anomalies</td>
<td>EP27</td>
<td>Pelvic pain and endometriosis</td>
</tr>
<tr>
<td>EP12</td>
<td>Screening and genetics</td>
<td>EP28</td>
<td>Reproductive medicine</td>
</tr>
<tr>
<td>EP13</td>
<td>Fetal growth: outcomes</td>
<td>EP29</td>
<td>Abnormal bleeding</td>
</tr>
<tr>
<td>EP14</td>
<td>Sonographic prediction of morbidly adherent placenta</td>
<td>EP30</td>
<td>Gynecological oncology</td>
</tr>
<tr>
<td>EP15</td>
<td>Growth</td>
<td>EP31</td>
<td>Urogynecology</td>
</tr>
<tr>
<td>EP16</td>
<td>Predicting adverse outcome in late pregnancy</td>
<td>EP32</td>
<td>Innovations in imaging</td>
</tr>
</tbody>
</table>
Pre-Congress courses

08:00 - 18:00  **ISUOG basic training**  
Bramante 8 & 9
A theoretical introduction to the basic principles of ultrasound in obstetrics and gynecology. The program is aimed at entry level trainees of any profession or residents/trainees looking to refresh their knowledge and gain CME.

08:30 - 16:45  **Emerging technologies in early prenatal diagnosis**  
Bramante 6 & 7
Upon completion of this course, the participant will understand the principles behind cell free DNA testing and be better able to evaluate the test results.

Secondly the participant will be able to identify the difference between non-invasive prenatal testing for aneuploidy and diagnosis for other genetic disorders and know when these tests could be offered.

Thirdly the participant will get more insight into the counselling of patients about use of cell free DNA and karyotyping.

Presented in partnership with:  

08:30 - 17:30  **Transvaginal ultrasound in gynecological oncology**  
Botticelli Room
Upon completion of this course, the participant will know how gynecological ultrasound examination can be used to identify abnormal pelvic pathology, how to differentiate between benign and malignant pelvic lesions and the role of ultrasound in optimising clinical management of gynecological patients with pathological conditions in the pelvis. Includes live scan demonstrations.*

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

- Practical workshops with patients
- Small, focused groups
- Invasive procedures
- Live scans*

**Sunday 25 September**
Pre-booking required
Sign up at the registration desk

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

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Basic training simulation

- One-to-one training using simulators with world experts
- Transvaginal gynecological imaging
- Transabdominal second trimester obstetric imaging

**Sunday 25 September**
Pre-booking required
Sign up at the registration desk

Supported by CAE and MedaPhor.

---

Ultrasound-guided needle procedures

- Transabdominal CVS & amniocentesis model
- Transcervical CVS model
- In-utero stenting model

**Monday & Tuesday 26 / 27 September**
Pre-booking required
Sign up at the registration desk

In partnership with Wake Forest University, Université de Montréal and Mayo Clinic.
Supported by GE and Parker Laboratories.
## Program - Saturday 24 September 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
</table>
| 08:00 - 18:00 | **ISUOG basic training**  
  *Chairs: T. Chudleigh (United Kingdom); T.E. Cohen-Overbeek (Netherlands)*  
  08:00  
  Pre-course test  
  *T.E. Cohen-Overbeek (Netherlands)*  
  08:15  
  Physical principles of ultrasound including safety  
  *M.C. Haak (Netherlands)*  
  08:55  
  Transducers, image production, knobology and scanning planes  
  *T.E. Cohen-Overbeek (Netherlands)*  
  09:15  
  The “6-steps approach”  
  *A. Abuhamad (United States)*  
  09:45 - 10:15 | Coffee  
  10:15  
  Examining the uterus, cervix, ovaries and adnexae: normal findings  
  *L. Valentin (Sweden)*  
  11:00  
  Examining the uterus, cervix, ovaries and adnexae: abnormal findings  
  *L. Valentin (Sweden)*  
  11:45  
  Assessing the normal and abnormal findings between 4 and 10 weeks in singleton and twin pregnancies  
  *M.C. Haak (Netherlands)*  
  12:30 - 13:30 | Lunch  
  13:30  
  Assessing the normal and abnormal findings between 10 and 14 weeks in singleton and twin pregnancies  
  *A. Youssef (Italy)*  
  14:00  
  Fetal biometry: dating, assessing size and estimating fetal weight  
  *T. Chudleigh (United Kingdom)*  
  14:30  
  Assessing the placenta and amniotic fluid in singleton and twin pregnancies  
  *A. Johnson (United States)*  
  15:00 - 15:30 | Coffee  
  15:30  
  Distinguishing between normal and abnormal appearances of the fetal anatomy  
  *T. Chudleigh (United Kingdom)*  
  16:00  
  Distinguishing between normal and abnormal fetal size and growth patterns in singleton and twin pregnancies  
  *T.E. Cohen-Overbeek (Netherlands)*  
  16:45  
  An introduction to ultrasound in labour and postpartum  
  *T.M. Eggebø (Norway)*  
  17:15  
  Post-course test  
  *T.E. Cohen-Overbeek (Netherlands)*  
  17:45  
  Ask the experts: quiz and Q&A  
  *T.E. Cohen-Overbeek (Netherlands); A. Abuhamad (United States); T. Chudleigh (United Kingdom); A. Johnson (United States)*  

### Sunday 25 September 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
</table>
| 08:30 - 13:30 | **ISUOG basic training simulation workshops**  
  *Bramante 12*  
  Pre-booking essential |
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30</td>
<td>Welcome, aims and objectives</td>
</tr>
<tr>
<td>08:40</td>
<td>Understanding the principles of screening</td>
</tr>
<tr>
<td>08:55</td>
<td>Cell-free DNA: understanding the basics, biology and techniques</td>
</tr>
<tr>
<td>09:25</td>
<td>NIPT in special situations: what is the evidence?</td>
</tr>
<tr>
<td>09:40</td>
<td>The latest data on clinical effectiveness</td>
</tr>
<tr>
<td>10:00</td>
<td>Cell-free DNA testing: beyond aneuploidy</td>
</tr>
<tr>
<td>10:30</td>
<td>Coffee</td>
</tr>
<tr>
<td>11:00</td>
<td>Array-CGH</td>
</tr>
<tr>
<td>11:30</td>
<td>Exome sequencing and genome sequencing</td>
</tr>
<tr>
<td>12:00</td>
<td>Indications for NIPT, karyotype and array-CGH</td>
</tr>
<tr>
<td>12:30</td>
<td>Why we still need first trimester ultrasound for early prenatal diagnosis</td>
</tr>
<tr>
<td>13:00</td>
<td>Lunch</td>
</tr>
<tr>
<td>14:00</td>
<td>CfDNA Counselling</td>
</tr>
<tr>
<td>14:30</td>
<td>ROLE PLAY: counselling your patient in practice: before NIPT</td>
</tr>
<tr>
<td>14:50</td>
<td>ROLE PLAY: counselling your patient in practice after testing: explaining VOUS</td>
</tr>
<tr>
<td>15:10</td>
<td>Coffee</td>
</tr>
<tr>
<td>15:40</td>
<td>Ethical dilemmas illustrated through cases</td>
</tr>
<tr>
<td>16:25</td>
<td>Summary and evaluation</td>
</tr>
<tr>
<td>Time</td>
<td>Event</td>
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</tr>
<tr>
<td>08:00</td>
<td>Pre-course test</td>
</tr>
<tr>
<td>08:30</td>
<td>Anatomical landmarks to guide ultrasound examination of the pelvis</td>
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<tr>
<td></td>
<td><strong>A. Di Legge</strong> (Italy)</td>
</tr>
<tr>
<td>08:40</td>
<td>LIVE SCAN: anatomical landmarks to guide ultrasound examination of</td>
</tr>
<tr>
<td></td>
<td>the pelvis [industry supported*]</td>
</tr>
<tr>
<td></td>
<td><strong>Scanned by: L. Valentin</strong> (Sweden); <strong>Facilitated by: A. Di Legge</strong> (Italy)</td>
</tr>
<tr>
<td>09:00</td>
<td>The technique and applications for Doppler in gynecology including</td>
</tr>
<tr>
<td></td>
<td>case examples</td>
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<tr>
<td></td>
<td><strong>L. Savelli</strong> (Italy)</td>
</tr>
<tr>
<td>09:10</td>
<td>LIVE SCAN: the technique and applications for Doppler in gynecology</td>
</tr>
<tr>
<td></td>
<td>including case examples [industry supported*]</td>
</tr>
<tr>
<td></td>
<td><strong>Scanned by: L. Valentin</strong> (Sweden); <strong>Facilitated by: L. Savelli</strong> (Italy)</td>
</tr>
<tr>
<td>09:30</td>
<td>How to assess ovarian tumours in clinical practice including</td>
</tr>
<tr>
<td></td>
<td>LIVE SCAN [industry supported*]</td>
</tr>
<tr>
<td></td>
<td><strong>W. Froyman</strong> (Belgium)</td>
</tr>
<tr>
<td>10:00 - 10:30</td>
<td>Coffee</td>
</tr>
<tr>
<td>10:30</td>
<td>Should we ask for CA125, HE4 or other markers?</td>
</tr>
<tr>
<td></td>
<td><strong>D. Franchi</strong> (Italy)</td>
</tr>
<tr>
<td>11:00</td>
<td>VIDEO DEMONSTRATION: how to use Tru-cut biopsy to assess oncology</td>
</tr>
<tr>
<td></td>
<td>patients</td>
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<tr>
<td></td>
<td><strong>E. Epstein</strong> (Sweden)</td>
</tr>
<tr>
<td>11:30</td>
<td>How I use ultrasound to evaluate endometrial cancer prior to surgery</td>
</tr>
<tr>
<td></td>
<td><strong>E. Epstein</strong> (Sweden)</td>
</tr>
<tr>
<td>11:50</td>
<td>LIVE SCAN: [industry supported*]</td>
</tr>
<tr>
<td></td>
<td><strong>L. Savelli</strong> (Italy)</td>
</tr>
<tr>
<td>12:00</td>
<td>LIVE SCAN: using ultrasound to guide the management of cervical cancer</td>
</tr>
<tr>
<td></td>
<td>[industry supported*]</td>
</tr>
<tr>
<td></td>
<td><strong>D. Franchi</strong> (Italy)</td>
</tr>
<tr>
<td>12:30 - 13:30</td>
<td>Lunch</td>
</tr>
<tr>
<td>13:30</td>
<td>Sonographic features of non-epithelial ovarian tumours</td>
</tr>
<tr>
<td></td>
<td><strong>J. Alcázar</strong> (Spain)</td>
</tr>
<tr>
<td>14:00</td>
<td>Ovarian malignancy</td>
</tr>
<tr>
<td></td>
<td><strong>A. Savasneh</strong> (United Kingdom)</td>
</tr>
<tr>
<td>14:10</td>
<td>LIVE SCAN: ovarian malignancy [industry supported*]</td>
</tr>
<tr>
<td></td>
<td><strong>Scanned by: D. Franchi</strong> (Italy); <strong>Facilitated by: A. Savasneh</strong> (United Kingdom)</td>
</tr>
<tr>
<td>14:30</td>
<td>Sonography in the follow-up of gynecologic neoplasm after treatment:</td>
</tr>
<tr>
<td></td>
<td>evaluating possible tumour recurrences</td>
</tr>
<tr>
<td></td>
<td><strong>M. Ludovisi</strong> (Italy)</td>
</tr>
<tr>
<td>14:40</td>
<td>LIVE SCAN: sonography in the follow-up of gynecologic neoplasm</td>
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<tr>
<td></td>
<td>after treatment: evaluating possible tumour recurrences [industry</td>
</tr>
<tr>
<td></td>
<td>supported*]</td>
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<tr>
<td></td>
<td><strong>Scanned by: L. Savelli</strong> (Italy), <strong>Facilitated by: M. Ludovisi</strong> (Italy)</td>
</tr>
<tr>
<td>15:00 - 15:30</td>
<td>Coffee</td>
</tr>
<tr>
<td>15:30</td>
<td>Assessment of benign and malignant myometrial lesions (MUSA)</td>
</tr>
<tr>
<td></td>
<td><strong>T. Van den Bosch</strong> (Belgium)</td>
</tr>
<tr>
<td>16:00</td>
<td>A critical appraisal of screening for ovarian cancer</td>
</tr>
<tr>
<td></td>
<td><strong>L. De Blasis</strong> (Italy)</td>
</tr>
</tbody>
</table>

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

Phillip Bennett is Professor of Obstetrics and Gynaecology and Director of the Institute for Reproductive and Developmental Biology at Imperial College London. He is also Director of Research for Women’s and Children’s Health for Imperial Healthcare NHS Trust. Phillip Bennett studied medicine at St Georges Hospital Medical School London, obtained an MD at the Royal Postgraduate Medical School and a PhD in molecular biology at RPMS. He became a Member of the Royal College of Obstetricians and Gynaecologists in 1988 and a Fellow in 2000. He was appointed to a chair in Obstetrics and Gynaecology at RPMS in 1995. The great majority of his research activity over the past 30 years has concerned the biology of parturition and in particular, the central role of inflammatory mediators and interactions with steroid hormones in the onset of labour and the basic science and clinical aspects of preterm birth. More recently he has established a systems medicine based approach to understanding miscarriage, preterm labour and other pregnancy complications involving studies of genomics, transcriptomics, metabolomics, miromics and especially the role of the pregnancy microbiome.

Marcus Davey

Dr Marcus Davey, Associate Professor University of Pennsylvania, is an investigator with The Center for Fetal Research, an extension of Center for Fetal Diagnosis and Treatment at The Children’s Hospital of Philadelphia (CHOP). Dr Davey completed his PhD in fetal lung physiology at Monash University, Melbourne, Australia in 1999 and was recruited to CHOP to continue his groundbreaking research on neonatal pulmonary function following in utero tracheal occlusion for diaphragmatic hernia. Following his post-doctoral research, Dr Davey established himself as an independent investigator and led a NIH-funded research project which focused upon genetic therapies for lethal lung diseases including surfactant protein deficiency, bronchopulmonary dysplasia and cystic fibrosis. Since 2013, Dr Davey has served as the co-investigator on the ESPI Research Program at CHOP. Through perseverance, resourcefulness, and a unique bioengineering skillset, Dr Davey has developed a womb-like incubator to provided prolonged (up to 4 weeks) physiologic support for extreme prematurity.

Paolo de Coppi

Paolo De Coppi is the NIHR Professor of Paediatric Surgery and Consultant Paediatric Surgeon at the Great Ormond Street Hospital for Children and the Head of Stem Cells & Regenerative Medicine Section, Developmental Biology & Cancer Programme at the UCL Institute of Child Health, London, UK. He has a special interest in congenital malformation and their treatment using minimally invasive techniques. He has focused his research interests on stem cells and tissue engineering, trying to find new modalities for the treatment of complex congenital anomalies. He identified a new source of cells for therapeutic applications showing the possibility of using stem cells from amniotic fluid. He has also described methods to decellularised several organs and tissue such as the intestine, liver, pancreas, kidney and lung. In 2010 he was part of the team that performed the first successful transplantation of a tissue-engineered trachea on a child at the Great Ormond Street Hospital. He has published more than 200 peer-reviewed articles in journals; supervised more than 30 research fellow and Ph.D. students; and has been awarded various national and international grants in excess of £23 million. As of 2011 he has been the senior associate editor for Stem Cell Translational Medicine.
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:45 - 10:45</td>
<td>Plenary</td>
<td>Michelangelo</td>
</tr>
<tr>
<td>10:05 - 10:45</td>
<td>AGM</td>
<td></td>
</tr>
<tr>
<td>11:15 - 12:25</td>
<td>Plenaries and top abstracts</td>
<td>Michelangelo</td>
</tr>
<tr>
<td>12:45 - 13:45</td>
<td>Industry sponsored satellite symposium</td>
<td></td>
</tr>
<tr>
<td>14:00 - 15:20</td>
<td>Workshops</td>
<td>Michelangelo</td>
</tr>
<tr>
<td></td>
<td>Fetal biometry</td>
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<tr>
<td></td>
<td>Classifying ovarian masses: the IOTA study and more</td>
<td>Tiziano A</td>
</tr>
<tr>
<td></td>
<td>Ultrasound in labour and delivery</td>
<td>Tiziano B</td>
</tr>
<tr>
<td>15:50 - 17:30</td>
<td>Awards and Plenaries</td>
<td>Michelangelo</td>
</tr>
<tr>
<td>17:30 - 18:00</td>
<td>Opening ceremony</td>
<td>Michelangelo</td>
</tr>
<tr>
<td>18:00 - 20:00</td>
<td>Welcome reception</td>
<td></td>
</tr>
</tbody>
</table>

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Join the Congress conversation #ISUOG2016
Have your say in Rome!

Attend the ISUOG AGM
All ISUOG members (including all delegates) are warmly invited to join us & vote on ISUOG business during the Annual General Meeting (AGM).

Sunday 25 September
10:05 - 10:45
Michelangelo Ballroom

The agenda and accompanying documents are available at: isuog.org/membership/AGM

Special Interest Groups
Monday 26 September
13:30 - 14:30
Botticelli Room

- 3D SIG
- Doppler SIG
- Fetal Heart SIG
- MRI SIG

Tell us why you #LoveUltrasound
Share your pictures and testimonials with us. Tag @ISUOG and #LoveUltrasound and we will feature them on our social media platforms!

Join the Global Conversation on Social media
Keep up to date on new UOG Journal articles, ISUOG guidelines, education courses and more! Follow International Society of Ultrasound in Obstetrics and Gynecology (ISUOG) on Facebook, LinkedIn, Instagram or Twitter.

Play the CME Challenge every Friday on our Facebook page. Test your knowledge with multiple choice questions brought to you by renowned experts in the field.
Program - Sunday 25 September 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
<th>Chairs</th>
<th>Presenters</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:45</td>
<td>Plenary: Keynote lectures and ISUOG AGM</td>
<td>Michelangelo</td>
<td>A. Ngu (Australia); T. Bourne (United Kingdom)</td>
<td></td>
</tr>
<tr>
<td>08:45</td>
<td>Welcome from the ISUOG President</td>
<td></td>
<td>A. Ngu (Australia)</td>
<td></td>
</tr>
<tr>
<td>08:50</td>
<td>The pregnancy microbiome</td>
<td></td>
<td>P. Bennett (United Kingdom)</td>
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</tr>
<tr>
<td>09:15</td>
<td>The artificial placenta</td>
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<td>M. Davey (United States)</td>
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</tr>
<tr>
<td>09:40</td>
<td>Regenerative medicine to treat structural anomalies</td>
<td></td>
<td>P. De Coppi (United Kingdom)</td>
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<tr>
<td>10:05</td>
<td>ISUOG AGM</td>
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<tr>
<td>10:45</td>
<td>Coffee and e-poster viewing (EP)</td>
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<tr>
<td>11:15</td>
<td>Plenaries and top abstracts</td>
<td>Michelangelo</td>
<td>A.T. Papageorghiou (United Kingdom); D. Timmerman (Belgium)</td>
<td></td>
</tr>
<tr>
<td>11:15</td>
<td>Stuart Campbell lecture: changes in fetal Doppler indices as a marker of failure to reach growth potential at term</td>
<td></td>
<td>J. Morales-Roselló (Spain)</td>
<td>INVITED</td>
</tr>
<tr>
<td>11:35</td>
<td>Fetal growth restriction induces different phenotypes of cardiac remodelling</td>
<td></td>
<td>M. Rodriguez-Lopez; M. Cruz-Lemini; B. Valenzuela-Alcaraz; L. Garcia-Otero; M. Sitges; B. Bijnens; E. Gratacós; E. Crispi (Spain)</td>
<td>OC01.01</td>
</tr>
<tr>
<td>11:42</td>
<td>Discussion</td>
<td></td>
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<tr>
<td>11:45</td>
<td>Clinical history of asymptomatic endometrial polyps in postmenopausal women: a 10-year follow-up study</td>
<td></td>
<td>F. Leone1; C. Marciante1; C. Lanzani2; T. Bignardi2; E. Ferrazzi2 1,2(Italy); 3(Australia)</td>
<td>OC01.02</td>
</tr>
<tr>
<td>11:52</td>
<td>Discussion</td>
<td></td>
<td></td>
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<tr>
<td>11:55</td>
<td>Relationship between oxygen saturation and blood flow distribution in the late gestation human fetus by MRI</td>
<td></td>
<td>P. Ricci1,2; M. Zhu1; F. Ventriglia2; E. Messina2; M. Seed1 1(Canada); 2(Italy)</td>
<td>YI OC01.03</td>
</tr>
<tr>
<td>12:02</td>
<td>Discussion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:05</td>
<td>Contingent model for the prediction of delivery of small-for-gestational age neonates</td>
<td></td>
<td>L. Poon1,2; S. Bakalis2; D.M. Gallo2; C. Fadigas2; K. Nicolaides2 1(Hong Kong); 2(United Kingdom)</td>
<td>OC01.04</td>
</tr>
<tr>
<td>12:12</td>
<td>Discussion</td>
<td></td>
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</tr>
</tbody>
</table>

YI This presentation is eligible for the Young Investigator award (to be presented in the closing plenary).
**José Morales-Roselló**

José Morales-Roselló finished his medical degree at Valencia University Medical School with an average of “excellent”, spending the last year at Bristol Medical School, UK, with an ECTS/Erasmus grant. Afterwards, he did his residency in Obstetrics and Gynecology at the General University Hospital of Valencia, Spain. During this period, he obtained a Medical Doctorate and completed a Master in Science (MSc). Later, he obtained the Extraordinary Doctorate Prize of the University of Valencia and the Doctorate Prize of the Valencia College of Doctors, both in regard with the merits of the MD/PhD. Subsequently, he worked in several hospitals and health centers, in the area of Valencia and in 1999 he got a consultant position in a regional hospital. Afterwards, in 2012, he obtained a second MSc and a new consultant position in a tertiary center: Hospital Universitario y Politécnico La Fe, Valencia, where he currently works. He became Associate Professor of Obstetrics and Gynecology at the University of Valencia in 2015 and has been awarded this year’s Stuart Campbell lecture for the most cited paper in UOG.

**Stuart Campbell**

Professor Stuart Campbell is a pioneer of Ultrasound Diagnosis in medicine and has introduced many new techniques such as the routine pregnancy scan, the early diagnosis of fetal abnormalities, the assessment of fetal growth and wellbeing, screening for pre-eclampsia by uterine artery Doppler and ultrasound screening for ovarian cancer. He holds numerous international honours and has recently introduced 3D scanning to the UK and set up the first 4D Ultrasound Clinic. Professor Campbell is the former Academic Head of the Department of Obstetrics and Gynaecology at Kings College Hospital and St George’s Hospital Medical School, London. He was the first President of the International Society of Ultrasound in Obstetrics and Gynaecology (ISUOG) and was foundation Editor-in-Chief of the Medical Journal ‘Ultrasound in Obstetrics and Gynecology’. Professor Campbell is an Honorary Fellow of the American College of Obstetricians and Gynaecologists.

**Bernhard-Joachim Hackelöer**

Dr Hackelöer is a teaching Professor of Obstetrics, Gynecology and Prenatal Medicine at the Semmelweis University Budapest. He studied medicine at the university of Marburg and has worked at a number of prestigious organisations. He is the former President of the German Ultrasound Society and a former Board Member of the German Society of Obs/Gyne and Prenatal Medicine as well as an Honorary Member of a number of International Obs/gyne/Ultrasound Societies. He is co-founder and actual Vice president of the German Fetal Medicine Foundation since 2004.

He has written a number of text books on Obstetrics and on Prenatal/Gyn and Breast Ultrasound, more than 200 national and international scientific papers and given more than 500 scientific presentations at national and international meetings.
Multiclass characterisation of ovarian masses before surgery using the ADNEX model: a prospective multicentre external validation study

A. Sayasneh\textsuperscript{1}; L. Ferrara\textsuperscript{1,2}; B. De Cock\textsuperscript{3}; S. Saso\textsuperscript{1}; M. Al-Memar\textsuperscript{1}; S. Johnson\textsuperscript{1}; J. Kaijser\textsuperscript{3}; J. Carvalho\textsuperscript{1}; R. Husicka\textsuperscript{1}; A. Smith\textsuperscript{1}; C. Stalder\textsuperscript{1}; M. Blanco\textsuperscript{2}; G. Ettore\textsuperscript{2}; B. Van Calster\textsuperscript{3}; D. Timmerman\textsuperscript{3}; T. Bourne\textsuperscript{1}

\textsuperscript{1}(United Kingdom); \textsuperscript{2}(Italy); \textsuperscript{3}(Belgium)

Discussion

12:25 - 14:00 Lunch and e-poster viewing (EP)

12:45 - 13:45 Industry sponsored satellite symposium**

14:00 - 15:20 Workshop: Fetal biometry

**Chairs: L.J. Salomon (France); T. Todros (Italy)**

14:00 Quality of existing references

\textit{R. Napolitano} (United Kingdom)

14:15 References versus standards of fetal growth

\textit{A.T. Papageorghiou} (United Kingdom)

14:30 Impact of the choice of charts: practical recommendations

\textit{L.J. Salomon} (France)

14:45 Assessing growth not size

\textit{J. Stirnemann} (France)

15:00 - 15:20 Live scans including audience participation: the perfect views

[industry supported\textsuperscript{*}]

15:00 \textit{L.J. Salomon} (France)

15:20 \textit{A.T. Papageorghiou} (United Kingdom)

14:00 - 15:20 Workshop: Classifying ovarian masses: the IOTA study and more

**Chairs: T. Bourne (United Kingdom); L. Manganaro (Italy)**

14:00 How IOTA simple rules can now be used to assign a risk of cancer to all patients with an adnexal mass

\textit{L. Valentin} (Sweden)

14:20 The development of the IOTA ADNEX model to classify ovarian masses as benign or malignant and how to interpret the use of the model to classify subtypes of malignancy

\textit{D. Timmerman} (Belgium)

14:40 How MRI can help you to classify an ovarian mass – which masses do you need it for and how do you interpret the images?

\textit{I. Thomassin-Naggar} (France)

15:00 - 15:20 Interactive case examples: how to classify case example of masses using IOTA approaches

15:00 \textit{A.C. Testa} (Italy)

15:10 \textit{W. Froyman} (Belgium)

* 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 154 for our satellite program.
KEYNOTE SPEAKERS

Kjell Lindström
Dr Lindström is Professor emeritus and former chairman of Electrical Measurements, Lund Institute of Technology, as well as Professor emeritus of Biomedical Engineering, Skåne University Hospital, Malmö, Sweden.

Dr Lindström is a member of several national and international organizations in Ultrasound or Biomedical Engineering and has held offices as chairman of the Swedish Society for Ultrasound in Medicine and Biology and chairman of “Teknik i sjukvård”, The Swedish Society of Biomedical Engineering and Physics.

For his scientific work, Professor Lindström has received numerous awards, including History of Medical Ultrasound Pioneer Award from World Federation of Ultrasound in Medicine and Biology and American Institute of Ultrasound in Medicine.

William Grobman
After receiving his BA from Amherst College and his MD from Harvard Medical School, Dr. Grobman trained in Obstetrics and Gynecology as well as Maternal-Fetal Medicine at Northwestern University, during which time he completed an MBA in Health Services Administration and Decision Sciences at Northwestern’s Kellogg School of Management. After completing his training, Dr. Grobman continued as faculty at the Feinberg School of Medicine, Northwestern University, where he presently holds the Arthur Hale Curtis Professorship with appointments in the Departments of Obstetrics and Gynecology, Preventive Medicine, and at the Center for Health Care Studies. His research has focused on health services and prevention of adverse obstetric outcomes, and he has been involved in multiple NIH funded studies, including those related to preterm birth, fetal growth, and labor induction.

Partnering with

Eduard Gratacós
Eduard Gratacós is director and professor at the Obs&Gyn, Maternal-Fetal and Neonatal Center of the Hospitals Clínic and Sant de Deu, University of Barcelona. His main research interests have been fetal growth, pre-eclampsia, fetal surgery, and fetal programming. Director of the Erasmus Mundus European Doctorate in Fetal Medicine. Editor-in-Chief of Fetal Diagnosis and Therapy. ISUOG Fellow and past Board Member (2006-14) and Scientific Chair (2009-14). Dr Gratacós has published over 350 peer reviewed papers, co-edited several books in Fetal Medicine and directed over 25 doctoral theses.
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
<th>Chairs</th>
<th>Speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00 - 15:20</td>
<td>Workshop: Ultrasound in labour and delivery Tiziano B</td>
<td></td>
<td><em>Chairs: T.M. Eggebø (Norway); T. Ghi (Italy)</em></td>
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<tr>
<td>14:00</td>
<td>The added value of ultrasound in the modern delivery suite</td>
<td></td>
<td>K. Kalache (Germany)</td>
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<tr>
<td>14:15</td>
<td>Fetal Doppler in early labour: admission test</td>
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<td>C. Lees (United Kingdom)</td>
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<tr>
<td>14:30</td>
<td>The role of ultrasound in the diagnosis and management of obstructed labour</td>
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<td>T. Ghi (Italy)</td>
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<td>14:45</td>
<td>Ultrasound in the assessment of pelvic floor injury</td>
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<td>A. Youssef (Italy)</td>
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<tr>
<td>15:00</td>
<td>Discussion</td>
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<tr>
<td>15:50 - 17:30</td>
<td>Awards and plenaries Michelangelo</td>
<td></td>
<td><em>Chairs: J. Copel (United States); A.C. Testa (Italy)</em></td>
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</tr>
<tr>
<td>15:50</td>
<td>Presentation of the Ian Donald Gold Medal 2016 to J. Hackelöer</td>
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<td>S. Campbell (United Kingdom)</td>
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<td>15:55</td>
<td>Ian Donald Gold Medal acceptance and lecture: breast imaging in 2016</td>
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<td>J. Hackelöer (Germany)</td>
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</tr>
<tr>
<td>16:15</td>
<td>Presentation of the Ian Donald Technical Development Award 2016 to K. Lindstrom</td>
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<td>K. Maršál (Sweden)</td>
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<tr>
<td>16:20</td>
<td>Ian Donald Technical Development Award acceptance and lecture: the future of imaging in obstetrics and gynecology</td>
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<td>K. Lindstrom (Sweden)</td>
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<tr>
<td>16:40</td>
<td>The third trimester fetus: assessment for all or universal elective delivery</td>
<td></td>
<td>W. Grobman (United States)</td>
<td>In partnership with SMFM</td>
</tr>
<tr>
<td>17:05</td>
<td>Detecting small-for-gestational age (SGA) near term</td>
<td></td>
<td>E. Gratacós (Spain)</td>
<td></td>
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<tr>
<td>17:30 - 18:00</td>
<td>Opening ceremony Michelangelo</td>
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<tr>
<td>18:00 - 20:00</td>
<td>Welcome reception</td>
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</tbody>
</table>
13th ISUOG International Symposium
Cape Town International Convention Centre
Cape Town, South Africa
20 - 22 March 2017

The 13th ISUOG International Symposium will be held at the RCOG World Congress 2017.

Join colleagues from around the world to hear from leading experts and attend cutting edge sessions, whilst enjoying the beautiful surroundings of Cape Town’s golden beaches and world-famous Table Mountain.

Speakers
Caterina Bilardo, The Netherlands
Basky Thilaganathan, UK
Nick Raine-Fenning, UK
Karim Kalache, Germany
Tom Bourne, UK

Latest updates in the rapidly changing and expanding field on Ultrasound in Obstetrics and Gynecology

For more information and to register please visit: rco2017.com
### Program - Monday 26 September 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Description</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>07:30 - 08:10</td>
<td>Masterclasses</td>
<td></td>
</tr>
<tr>
<td>08:15 - 09:15</td>
<td>Parallel sessions (OC)</td>
<td></td>
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<tr>
<td></td>
<td>IUGR: prediction and outcomes</td>
<td><strong>Michelangelo B</strong></td>
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<td></td>
<td>Anomalies of the great vessels and venous return</td>
<td><strong>Michelangelo A</strong></td>
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<td></td>
<td>Urogynecology</td>
<td><strong>Tiziano A</strong></td>
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<td>CNS anomalies: what the data shows (OP)</td>
<td><strong>Tiziano B</strong></td>
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<tr>
<td>09:20 - 10:00</td>
<td>Short oral presentations (OP)</td>
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<tr>
<td></td>
<td>The fetal venous system</td>
<td><strong>Michelangelo A</strong></td>
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<td>IUGR: prediction and outcomes</td>
<td><strong>Michelangelo B</strong></td>
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<td><strong>Tiziano A</strong></td>
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<td>CNS anomalies: the relevance of new ultrasound and MRI tools</td>
<td><strong>Tiziano B</strong></td>
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<tr>
<td>09:20 - 10:00</td>
<td>Poster discussion Hubs (P)</td>
<td></td>
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<tr>
<td>10:20 - 11:20</td>
<td>Parallel sessions (OC)</td>
<td></td>
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<td></td>
<td>CNS anomalies: from early diagnosis to long-term outcome</td>
<td><strong>Michelangelo A</strong></td>
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<td>New developments in DNA-based prenatal diagnosis</td>
<td><strong>Michelangelo B</strong></td>
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<td>Managing ovarian masses</td>
<td><strong>Tiziano A</strong></td>
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<td>New strategies for fetal cardiac evaluation (OP)</td>
<td><strong>Tiziano B</strong></td>
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<tr>
<td>11:25 - 12:05</td>
<td>Short oral presentations (OP)</td>
<td></td>
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<td></td>
<td>CNS anomalies: focus on the midline and posterior fossa</td>
<td><strong>Michelangelo A</strong></td>
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<tr>
<td></td>
<td>First trimester screening in the era of NIPT</td>
<td><strong>Michelangelo B</strong></td>
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<tr>
<td></td>
<td>Managing ovarian masses</td>
<td><strong>Tiziano A</strong></td>
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<tr>
<td></td>
<td>Fetal growth: normal and abnormal</td>
<td><strong>Tiziano B</strong></td>
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<tr>
<td>11:25 - 12:05</td>
<td>Poster discussion Hubs (P)</td>
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</tr>
<tr>
<td>12:15 - 13:15</td>
<td>Industry sponsored satellite symposium</td>
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<tr>
<td>12:15 - 13:15</td>
<td>Interactive Hubs</td>
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<tr>
<td>13:30 - 14:30</td>
<td>Parallel sessions (OC)</td>
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<td></td>
<td>Pre-eclampsia: screening and prevention</td>
<td><strong>Michelangelo A</strong></td>
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<td>Twin pregnancies: what is new?</td>
<td><strong>Michelangelo B</strong></td>
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<td></td>
<td>Using ultrasound in gynecological oncology</td>
<td><strong>Tiziano A</strong></td>
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<td>Preterm birth (OP)</td>
<td><strong>Tiziano B</strong></td>
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<td>13:30 - 14:30</td>
<td>Interactive Hubs</td>
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<td>Short oral presentations (OP)</td>
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<td>Pre-eclampsia: basic science to clinical practice</td>
<td><strong>Michelangelo A</strong></td>
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<td>Growth and hemodynamics in twins</td>
<td><strong>Michelangelo B</strong></td>
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<td></td>
<td>Ultrasound in gynecological oncology</td>
<td><strong>Tiziano A</strong></td>
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<tr>
<td></td>
<td>Simulation and education in obstetric ultrasound</td>
<td><strong>Tiziano B</strong></td>
</tr>
<tr>
<td>14:35 - 15:15</td>
<td>Poster discussion Hubs (P)</td>
<td></td>
</tr>
<tr>
<td>15:40 - 17:00</td>
<td>Workshops</td>
<td></td>
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<tr>
<td></td>
<td>The heart looks structurally normal but...</td>
<td><strong>Michelangelo A</strong></td>
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<tr>
<td></td>
<td>Managing NIPT results in daily practice</td>
<td><strong>Michelangelo B</strong></td>
</tr>
<tr>
<td></td>
<td>Practical management of early pregnancy and acute gynecology</td>
<td><strong>Tiziano A</strong></td>
</tr>
<tr>
<td></td>
<td>Preterm birth</td>
<td><strong>Tiziano B</strong></td>
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<tr>
<td>15:40 - 17:00</td>
<td>Interactive Hubs</td>
<td></td>
</tr>
</tbody>
</table>
ISUOG Education 2016/17

ISUOG delivers regular, high quality education courses in ultrasound in obstetrics and gynecology, providing up-to-date knowledge and clinical guidance in a range of topics. Our courses present dynamic, interactive clinical updates and are now available face to face and live online.

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  - 4 November 2016
  - London, UK and live streaming worldwide
- 3D in obstetrics and gynecology: tips & tricks
  - 5 November 2016
  - London, UK and live streaming worldwide

**Coming soon:**

- Fetal medicine: prenatal diagnosis of congenital anomalies *(This course will be delivered in English and Spanish)*
  - 23 - 25 February 2017
  - Miami, USA and live streaming worldwide
- 13th ISUOG International Symposium *(incorporated into the RCOG World Congress)*
  - 20 - 22 March 2017
  - Cape Town, South Africa
- Multiple pregnancy
  - 1 - 2 April 2017
  - London, UK and live streaming worldwide

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## Program - Monday 26 September 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>07:30 - 08:10</td>
<td><strong>Masterclasses</strong></td>
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<tr>
<td></td>
<td>How to predict successful trial of labour after</td>
</tr>
<tr>
<td></td>
<td>Caesarean section</td>
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<tr>
<td></td>
<td><em>Michelangelo A</em></td>
</tr>
<tr>
<td></td>
<td>Ultrasound and placental abnormalities: is it really useful?</td>
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<tr>
<td></td>
<td><em>Michelangelo B</em></td>
</tr>
<tr>
<td></td>
<td>Gynecology case examples from Harvard</td>
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<tr>
<td></td>
<td><em>Tiziano A</em></td>
</tr>
<tr>
<td></td>
<td>Expert assessment of the fetal heart</td>
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<td></td>
<td><em>Tiziano B</em></td>
</tr>
<tr>
<td>08:15 - 09:15</td>
<td><strong>IUGR: prediction and outcomes</strong></td>
</tr>
<tr>
<td></td>
<td>Chairs: <em>C. Lees</em> (United Kingdom); <em>T. Frusca</em> (Italy)</td>
</tr>
<tr>
<td>08:15</td>
<td>Fetal growth restriction and cardiometabolic risk at preadolescent age</td>
</tr>
<tr>
<td>08:20</td>
<td>Discussion</td>
</tr>
<tr>
<td>08:23</td>
<td>Persistence of cardiac remodelling in preadolescents who suffered fetal growth restriction</td>
</tr>
<tr>
<td>08:31</td>
<td>Persistent alteration in myocardial deformation and cardiac geometry and function in growth restricted and diabetic pregnancies from term fetus to neonate</td>
</tr>
<tr>
<td>08:36</td>
<td>Discussion</td>
</tr>
<tr>
<td>08:39</td>
<td>Is fetal Doppler assessment at term related to fetal heart rate short-term variation and adverse pregnancy outcome?</td>
</tr>
<tr>
<td>08:44</td>
<td>Discussion</td>
</tr>
<tr>
<td>08:47</td>
<td>Ductus venosus velocity ratios for prediction of neonatal cardiac dysfunction in early severe fetal growth restriction</td>
</tr>
<tr>
<td>08:52</td>
<td>Discussion</td>
</tr>
<tr>
<td>08:55</td>
<td>Longitudinal placental growth factor (PIGF) in pregnancies complicated by hypertension with or without pre-existing diabetes</td>
</tr>
<tr>
<td>09:00</td>
<td>Discussion</td>
</tr>
<tr>
<td>09:03</td>
<td>Stepwise diagnosis and management of intrauterine growth restriction</td>
</tr>
</tbody>
</table>

*Michelangelo* A

*Michelangelo* B

*Tiziano* A

*Tiziano* B

*E. Gratacós* (Spain)
08:15 - 09:15  Anomalies of the great vessels and venous return  

**Michelangelo A**

**Chairs:** R. Chaoui (Germany); P. Volpe (Italy)

08:15
Live scan: assessing the vessels and venous return  
[industry supported*]

J.S. Carvalho (United Kingdom)

08:35
Application of fetal echocardiography in the diagnosis of anomalous pulmonary venous connection  

P. Xu; J. Li; Z. Wang; Y. Wang; S. Pang; T. Zhu (China)

08:40
Discussion

08:43
Agenesis of the ductus venosus: pathway of umbilical venous return  

Z. Tian; L. Sun; J. Rychik (United States)

08:48
Discussion

08:51
Predicting the postnatal course of fetuses with type-1 transposition of great arteries by echocardiography  

K. Kim; N. Inamura; M. Kawataki; Y. Kawazu; H. Ueda (Japan)

08:56
Discussion

08:59
Pulmonary vein flow in prenatal prediction of the urgent Rashkind procedure in the first 24 hours of postnatal life based on prenatal diagnosis in dextrotransposition of the great arteries (d-TGA).  

M. Slodki; R. Axt-Fliedner; A. Wolter; A. Kawecki; K. Zych-Krekora; J. Degenhardt; M. Respondek-Liberska (Poland); (Germany)

09:04
Discussion

09:07
Impact of prenatal diagnosis of transposition of the great arteries in short-term mortality and morbidity  

P. Domínguez-Manzano; I. Herraiz; E. Gómez Montes; A. Mendoza; D. Escibano; A. Galindo (Spain)

09:12
Discussion

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08:15 - 09:15  Urogynecology  

**Tiziano A**

**Chairs:** J. Deprest (Belgium); S. Yagel (Israel)

08:15
How to use ultrasound to assess pelvic floor anatomy after delivery  

H.P. Dietz (Australia)

08:35
Does fundal pressure in the second stage (Kristeller manoeuvre) increase the risk of pelvic floor damage? A prospective case-control study  

A. Youssef; G. Salsi; M. Paganotto; F. Bellussi; I. Cataneo; G. Pacella; C. Azzarone; G. Morganelli; J. Krsmanovic; L. Cariello; E. Montaguti; N. Rizzo; G. Pilu (Italy)

08:40
Discussion

08:43
What is a ‘significant defect’ of the anal sphincter?  

N. Subramaniam; H.P. Dietz (Australia)

08:48
Discussion

08:51
Is a narrow subpubic arch angle associated with an increased risk of pelvic floor damage?  

G. Salsi; G. Carrara; C. Randazzo; M. Paganotto; S. Ciarliariello; M. Cavalera; C. Gasperoni; N. Rizzo; G. Pilu; A. Youssef (Italy)

08:56
Discussion

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* Scientific content of sessions is defined by the Scientific Committee; ultrasound systems and technical support are provided by sponsors.
08:59  Accuracy of clinical diagnosis of anal sphincter defect: clinical evaluation versus 3D-transperineal ultrasound (3D-TPUS)  
**OC04.04**

_F. Capanna; N. Kimmich; C. Haslinger; M. Kreft; J. Wisser (Switzerland)_

09:04  Discussion

09:07  Does patient posture affect the sonographic evaluation of pelvic organ prolapse?  
**OC04.05**

_M. Braverman; F. Turel; T. Friedman; I. Kamisan Atan; H.P. Dietz (Australia)_

09:12  Discussion

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**08:15 - 09:15** Short oral presentation (OP)

**OP01: CNS anomalies: what the data shows**  
Chairs: F. D’Antonio (Norway); D. Prayer (Austria)

---

**09:20 - 10:00** Short oral presentations (OP)

**OP02: The fetal venous system**  
Chairs: H. Gardiner (United States); M. Lanna (Italy)

**OP03: IUGR: prediction and outcomes**  
Chairs: F. Crispi (Spain); R. Napolitano (United Kingdom)

**OP04: Urogynecology**  
Chairs: G. Perniola (Italy); S. Yagel (Israel)

**OP05: CNS anomalies: the relevance of new ultrasound and MRI tools**  
Chairs: V. D’Addario (Italy); D. Pugash (Canada)

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**09:20 - 10:00** Poster discussion Hubs (P)

**P01: From NT to NIPT**  
Chair: J. Hyett (Australia)

**P02: Maternal and fetal complications in multiple pregnancy**  
Chair: A. Gagnon (Canada)

**P03: Fetal anomalies: from head to toes**  
Chair: A. Ngu (Australia)

**P04: Ultrasound in gynecological oncology**  
Chairs: I. De Blasis (Italy); D. Timmerman (Belgium)

---

**10:20 - 11:20** CNS anomalies: from early diagnosis to long-term outcome  
Chairs: G. Malinger (Israel); L. Guibaud (France)

10:20  Spina bifida: outcome and long-term follow-up of 222 prenatally diagnosed cases in a third level centre  
**OC05.01**

_L. Masini; M. De Santis; G. Noia; C. Rendeli; M. Caldarelli; L. Massimi; G. Tamburrini; A. Lanzoni; A. Caruso (Italy)_

10:25  Discussion

10:28  Abnormal radial architecture of the fetal brain predicts cerebral migrational abnormalities  
**OC05.02**

_D. Pugash; C. Mayer (Canada)_

10:33  Discussion
<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Authors/Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:36</td>
<td>Malformations of cortical development: early prenatal ultrasound diagnosis</td>
<td>S. Shinar; K.K. Haratz; Y. Salemnick; J. Har-Toov; Z. Leibovitz; L. Gindes; T. Lerman-Sagie; G. Malinger (Israel)</td>
</tr>
<tr>
<td>10:41</td>
<td>Prenatal and postnatal neuroimaging for the prediction of outcome in fetuses with congenital cytomegalovirus infection</td>
<td>B. Tassis; G.C. Tiso; E. Scola; F. Triulzi; A. Righini; L. Pugni; M. Fumagalli; A. Ronchi; S.M. Boito; F. Mosca; L. Fedele (Italy)</td>
</tr>
<tr>
<td>10:49</td>
<td>Severe ventriculomegaly diagnosed at late gestation: etiology, prognosis and implications for counselling</td>
<td>A. Dall'Asta1,2; N. van Oostrum3; S. Basheer1; G. Paramasivam1; T. Ghi2; L. Galli2; I. Groenenberg3; T. Frusca2; A. Go3; C. Lees1,4 1(United Kingdom); 2(Italy); 3(Netherlands); 4(Belgium)</td>
</tr>
<tr>
<td>10:57</td>
<td>Live scan: advanced fetal brain scanning [industry supported*]</td>
<td>L. Guibaud (France)</td>
</tr>
</tbody>
</table>

**10:20 - 11:20** **New Developments in DNA-based prenatal diagnosis**

*Scientific content of sessions is defined by the Scientific Committee; ultrasound systems and technical support are provided by sponsors.*
11:02  DEBATE: NIPT should always include microdeletions and uncommon trisomies
        For: L.D. Platt (United States)
        Against: L.S. Chitty (United Kingdom)
        11:12  Rebuttal (speaker 1)
        11:17  Rebuttal (speaker 2) - Vote

10:45 - 12:05  Managing ovarian masses

**Chairs:** L. Savelli (Italy); A. Sayasneh (United Kingdom)

10:20  Which masses do we think can be managed expectantly? How do we select them and what is their long-term behaviour?
       D. Timmerman (Belgium)
10:40  Prospective validation of the ADNEX model without CA-125 in the differentiation between benign and malignant adnexal masses
       W. Froyman\(^1\); C. Landolfo\(^2\); B. De Cock\(^1\); D. Franchi\(^2\); L. Valentin\(^3\); P. Sladkevicius\(^4\); E. Epstein\(^3\); A.C. Testa\(^3\); R. Fruscio\(^2\); C. Van Holsbeke\(^1\); A. Knafel\(^4\); S. Guerriero\(^2\); D. Scardigno\(^2\); A. Czechierowski\(^4\); A. Rossi\(^2\); V. Chiappa\(^2\); J. Alcázar\(^6\); F. Buonomo\(^2\); T. Bourne\(^1\); I. Vergote\(^1\); J. Verbakel\(^6\); B. Van Calster\(^1\); D. Timmerman\(^4\)

10:48  Natural history of sonographically diagnosed ovarian dermoid cysts
       M. Pascual\(^1\); J. Alcázar\(^1\); B. Graupera\(^1\); S. Guerriero\(^2\); S. Ajossa\(^2\); L. Hereter\(^1\); C. Pedrero\(^1\); M. Herranz\(^1\) \(^{(Spain)}\); \(^2\)(Italy)
10:53  Discussion
11:01  Clinical and ultrasound characteristics of surgically removed adnexal tumours with a largest diameter < 2.5 cm: a pictorial essay
       A. Di Legge\(^1\); P. Pollastri\(^1\); R. Mancari\(^1\); M. Ludovisi\(^1\); F. Masclini\(^1\); F. Ciccarone\(^1\); D. Franchi\(^1\); D. Jurkovic\(^2\); M. Coccia\(^1\); D. Timmerman\(^3\)
       G. Scambia\(^1\); A.C. Testa\(^3\); L. Valentin\(^4\)

11:04  Two-step strategy to preoperatively assess adnexal lesions not classifiable by EDs, using RMI, IOTA ADNEX or simple rules risk model
       C. Landolfo\(^1\); W. Froyman\(^1\); T. Bourne\(^1\); B. De Cock\(^1\); A.C. Testa\(^3\); L. Valentin\(^4\); D. Fischerová\(^5\); C. Van Holsbeke\(^1\); D. Franchi\(^2\); L. Savelli\(^2\); E. Epstein\(^3\); A. Czechierowski\(^4\); S. Guerriero\(^2\); R. Fruscio\(^2\); F. Leone\(^3\); I. Vergote\(^1\); J. Verbakel\(^6\); B. Van Calster\(^1\); D. Timmerman\(^4\)

11:17  Discussion
<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Speakers</th>
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<tbody>
<tr>
<td>10:20 - 11:20</td>
<td>Short oral presentation (OP)</td>
<td>Tiziano B</td>
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<td></td>
<td>OP06: New strategies for fetal cardiac evaluation</td>
<td>Chairs: N. Persico (Italy); B. Tutschek (Switzerland)</td>
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<tr>
<td>11:25 - 12:05</td>
<td>Short oral presentation (OP)</td>
<td>Michelangelo A</td>
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<td>OP07: CNS anomalies: focus on the midline and posterior fossa</td>
<td>Chairs: V. D'Addario (Italy); L. Guibaud (France)</td>
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<td>OP08: First trimester screening in the era of NIPT</td>
<td>Michelangelo B</td>
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<td>OP09: Managing ovarian masses</td>
<td>Tiziano A</td>
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<td>OP10: Fetal growth: normal and abnormal</td>
<td>Tiziano B</td>
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<tr>
<td></td>
<td>Poster discussion Hubs (P)</td>
<td>Botticelli</td>
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<td></td>
<td>P05: Fetal interventions</td>
<td>Hub 1</td>
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<td>P06: Peculiar and interesting fetal cardiac anomalies</td>
<td>Hub 2</td>
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<td>P07: Fetal neck and chest</td>
<td>Hub 3</td>
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<td>P08: Just images: case reports in obstetrics and gynecology</td>
<td>Hub 4</td>
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<td>12:00 - 13:30</td>
<td>Lunch and e-poster viewing (EP)</td>
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<td>12:15 - 13:15</td>
<td>Industry sponsored satellite symposium**</td>
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<td>12:15 - 13:15</td>
<td>Interactive Hubs</td>
<td>Botticelli</td>
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<td></td>
<td>ISUOG guidelines in English: invasive procedures</td>
<td>Hub 1</td>
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<td>ISUOG guidelines in French: multiple pregnancy</td>
<td>Hub 2</td>
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<td>ISUOG guidelines in Italian: fetal heart</td>
<td>Hub 3</td>
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<td></td>
<td>ISUOG guidelines in Spanish</td>
<td>Hub 4</td>
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<td></td>
<td>Pre-eclampsia: screening and prevention</td>
<td>Michelangelo A</td>
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<tr>
<td>13:30 - 14:30</td>
<td>Pre-eclampsia: how does aspirin work?</td>
<td>Invited</td>
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<td>Effective screening for pre-eclampsia by maternal factors and biomarkers at 11–13 weeks' gestation</td>
<td>OC08.01</td>
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<tr>
<td></td>
<td>Discussion</td>
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** 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 154 for our satellite program.
13:50 Altered maternal cardiac geometry and diastolic dysfunction in non-pregnant women as a risk factor for recurrent pre-eclampsia
D. Lo Presti; I. Pisani; G. Tiralongo; G. Gagliardi; D. Farsetti; G. Novelli; B. Vasapollo; H. Valensise (Italy)

13:55 Discussion

13:58 IUGR and obesity have a key role in maternal cardiac dysfunction in hypertensive disorders of pregnancy
E. Ferrazzi1; W. Gyselaers2; T. Stampalija1; D.D. Di Martino1
1(Italy); 2(Belgium)

14:03 Discussion

14:06 Maternal hemodynamic profile in hypertensive disorders of pregnancy (HDP) and intrauterine growth restriction (IUGR)
D. Di Martino; S. Zullino; D. Casati; A. Grimaldi; C. Mastroianni; G. Principato; E. Rosti; M. Garbin; E. Ferrazzi (Italy)

14:11 Discussion

14:14 A randomised trial of arginine supplementation to prevent pre-eclampsia
M. Parra-Cordero; A. Sepúlveda-Martínez; G.I. Rencoret; J. Figueroa; M. Rodríguez; P. Ahumada (Chile)

14:19 Discussion

14:22 Antiplatelet therapy before or after 16 weeks’ gestation for preventing pre-eclampsia: an individual participant data meta-analysis
S. Meher1; L. Duley1; K. Hunter2; L. Askie2
1(United Kingdom); 2(Australia)

14:27 Discussion

13:30 - 14:30 Twin pregnancies: what is new? Michelangelo B

13:30 The ISUOG twin pregnancy guidelines
A. Khalil (United Kingdom)

13:50 Longitudinal change in cardiac function of twin pregnant women
K. Shimizu; T. Takeda; K. Uno; S. Tano; M. Yoshihara; M. Mayama; M. Ukai; T. Harata; Y. Kishigami; H. Oguchi (Japan)

13:55 Discussion

13:58 Concordance rate of congenital malformation in twins according to the zygosity
Y. Jung; S. Lee; S. Oh; C. Park; J. Hong; J. Park; J. Jun (Korea (the Republic of))

14:03 Discussion

14:06 Metabolomic changes in amniotic fluid from Twin–twin transfusion syndrome recipient twins in relation to treatment and fetal cardiovascular risk
F.L. Mackie1; W.B. Dunn1; J.W. Allwood1; T. Van Mieghem2; R.K. Morris3; C.E. Fox3; M.D. Kilby1 1(United Kingdom); 2(Canada)

14:11 Discussion

14:14 Longitudinal reference ranges for serial measurements of myocardial performance index (MPI) by conventional and tissue Doppler in monochorionic diamniotic pregnancies at 17–26 weeks of gestation
C. Zanardini; A. Fichera; N. Fratelli; A. Valcamonico; F. Prefumo (Italy)

14:19 Discussion
14:22  Fetal brain injury in co-twin survivors after single fetal demise in monochorionic twin pregnancies: a large series at a single centre  
M. Lanna; S. Faiola; C. Parazzini; G. Conte; G. Izzo; D. Consonni; E. Ferrazzi; M. Rustico (Italy)  
14:27  Discussion

13:30 - 14:30  Using ultrasound in gynecological oncology  
Tiziano A

Chairs: G. Scambia (Italy); T. Bourne (United Kingdom)

13:30  The practical use and performance of ultrasound to assess the extent of abdominal and pelvic tumour spread in women with ovarian cancer: a prospective study of 578 patients  
D. Fischerová (Czech Republic)  
14:06  The role of ultrasound in lymph node staging in vulvar cancer  
P. Pinto1; F. Frühauf2; M. Zikan2; D. Cibula2; D. Fischerová2  
1(Portugal); 2(Czech Republic)  
13:50  Ultrasound in preoperative assessment of pelvis and abdominal spread in patients with ovarian cancer: a prospective study  
D. Fischerová; M. Zikan; R. Kocian; P. Dundr; A. Burgetova; L. Dusek; D. Cibula (Czech Republic)  
13:50  Detection rates of high grade serous ovarian cancers using a clinical non-invasive prenatal testing platform: potential for ovarian cancer screening  
P. Cohen; N. Flowers; M.D. Pertile; N. Hannan; S. Tong; L. Hui (Australia)  
13:55  Discussion

13:58  Sonographic features of uterine sarcomas: a multicentre retrospective study  
J. Alcázar1; S. Guerriero2; M. Pascual1; L. Juez1; M. Troncoso3; B. Graupera1; L. Hereter1; M. Perniciano2; A. Cappai2; M. Onnis2; V. Mais2 1(Spain); 2(Italy); 3(Chile)  
14:03  Discussion

14:11  Discussion

14:14  The additive value of transvaginal ultrasound in the assessment of the clinical staging of early cervical cancer  
Y. Goldberg; O. Lavie; Y. Siegler; E. Siegler; Y. Segev; R. Mandel; R. Kedar; R. Auslender (Israel)  
14:19  Discussion

14:22  Imaging in gynecological disease: clinical and ultrasound features of immature teratomas of the ovary  
C. Landolfo; W. Froyman; A.C. Testa; A. Czekierdowski; S. Guerriero; A. Coosemans; D. Franchi; C. Van Holsbeke; B. Van Calster; J. Verbakel; E. Van Nieuwenhuysen; I. Vergote; D. Timmerman; L. Valentini 1(Belgium); 2(Italy); 3(Poland); 4(United Kingdom); 5(Sweden)  
14:27  Discussion
12:15 - 13:15 Interactive Hubs

**Botticelli**

**SIG 3D**

*Chair: L. Gindes (Israel)*

**SIG Doppler**

*Chair: C. Lees (United Kingdom)*

**SIG Fetal heart**

*Chair: J. Carvalho (United Kingdom)*

**SIG MRI**

*Chair: G. Malinger (Israel)*

13:30 - 14:30 Short oral presentation (OP)

**OP11: Preterm birth**

*Tiziano B*

*Chairs: Z. Alfvevic (United Kingdom); V. Berghella (United States)*

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

**OP12: Pre-eclampsia: basic science to clinical practice**

*Michelangelo A*

*Chairs: E. Ferrazzi (Italy); E. Hernández-Andrade (United States)*

**OP13: Growth and hemodynamics in twins**

*Michelangelo B*

*Chairs: K. Hecher (Germany); F. Prefumo (Italy)*

**OP14: Ultrasound in gynecological oncology**

*Tiziano A*

*Chairs: L. Savelli (Italy); P. Sladkevicius (Sweden)*

**OP15: Simulation and education in obstetric ultrasound**

*Tiziano B*

*Chairs: G. Chalouhi (France); N. Chianchiano (Italy)*

14:35 - 15:15 Poster discussion Hubs (P)

**Botticelli**

**P09: Biometry in fetal growth aberrations**

*Hub 1*

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

**P10: Neurosonography: focus on the ventricles and brain**

*Hub 2*

*Chair: A. Youssef (Italy)*

**P11: Screening for Trisomy 21**

*Hub 3*

*Chair: S. Yeo (Singapore)*

**P12: Managing ovarian masses**

*Hub 4*

*Chairs: W. Froyman (Belgium); A.C. Testa (Italy)*

15:10 - 15:40 Coffee and e-poster viewing (EP)

15:40 - 17:00 Workshop: The heart looks structurally normal but...

*Michelangelo A*

*Chairs: J.S. Carvalho (United Kingdom); J. Copel (United States)*

15:40 Systematic assessment: how not to miss subtle anomalies

*A. Abuhamad (United States)*

15:55 Abnormalities of situs: how to be confident in your diagnosis

*J.S. Carvalho (United Kingdom)*

16:10 Abnormalities of the abdominal precordial veins

*S. Yagel (Israel)*

16:25 Abnormalities of pulmonary venous return

*J. Rychik (United States)*

16:40 - 17:00 Case presentations

*A. Abuhamad (United States)*

*J.S. Carvalho (United Kingdom)*

*J. Rychik (United States)*

*S. Yagel (Israel)
### Workshop: Managing NIPT results in daily practice  
**Michelangelo B**

**Chairs:** A. Tabor (Denmark); L. Hui (Australia)

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>15:40</td>
<td>State of the art</td>
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<tr>
<td></td>
<td>L. Hui (Australia)</td>
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<tr>
<td>16:00</td>
<td>What to do in case of positive results: CVS or amnio</td>
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<td>F. Grati (Italy)</td>
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<td>16:20</td>
<td>Invasive testing: is it really that dangerous? (Systematic review findings)</td>
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<td>F. D’Antonio (Norway)</td>
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<td></td>
<td>DEBATE: CMA in all invasive tests</td>
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<tr>
<td>16:35</td>
<td>For: B. Thilaganathan (United Kingdom)</td>
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<td>16:43</td>
<td>Against: J. Hyett (Australia)</td>
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<td>16:51</td>
<td>Rebuttle (speaker 1) Rebuttle (speaker 2)</td>
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### Workshop: Practical management of early pregnancy and acute gynecology  
**Tiziano A**

**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>Guidelines for diagnosing miscarriage: how cut-off values were derived and what to expect on repeat scans</td>
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<td>J. Preisler (Chile)</td>
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<td>16:00</td>
<td>Expectant management of ectopic pregnancy: which patients are appropriate, how long does it take, when should you give methotrexate?</td>
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<td>E. Kirk (United Kingdom)</td>
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<td>16:20</td>
<td>How I treat non-tubal ectopic pregnancy including Caesarean section scar pregnancy: clinical management and case examples</td>
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<td>I. Timor-Tritsch (United States)</td>
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<tr>
<td>16:40</td>
<td>Diagnosing and managing acute adnexal pathology: painful ovarian cysts, torsion and abscess</td>
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<td>G. Condous (Australia)</td>
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### Workshop: Preterm birth  
**Tiziano B**

**Chairs:** V. Berghella (United States); W. Grobman (United States)

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>15:40</td>
<td>How to run an ultrasound-based prematurity clinic</td>
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<td>V. Berghella (United States)</td>
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<td>16:00</td>
<td>Available strategies for reducing preterm birth</td>
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<td>R. Romero (United States)</td>
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<td>16:20</td>
<td>Is the data really conclusive?</td>
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<td>Z. Alfirevic (United Kingdom)</td>
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<td>16:40</td>
<td>Management of patients with preterm contraction</td>
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<td>W. Grobman (United States)</td>
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### Interactive Hubs  
**Botticelli**

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>15:40</td>
<td>SIEOG: Gynecology: review of the highlights</td>
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<tr>
<td></td>
<td>Chairs: D. Franchi (Italy); L. Savelli (Italy)</td>
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<tr>
<td></td>
<td>SIEOG: Obstetrics: review of the highlights</td>
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<td>Chairs: T. Ghi (Italy); F. Prefumo (Italy)</td>
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**SIEOG: Gynecology: review of the highlights**  
**Chairs:** D. Franchi (Italy); L. Savelli (Italy)

**SIEOG: Obstetrics: review of the highlights**  
**Chairs:** T. Ghi (Italy); F. Prefumo (Italy)
MONDAY SHORT ORAL PRESENTATIONS

OP - Monday 25 September 2016

OP01: CNS anomalies: what the data shows

Chairs: F. D’Antonio (Norway); D. Prayer (Austria)

Fetal biometric assessment in a prospective cohort of 129 patients with clinical symptoms of Zika virus infection during pregnancy in Colombia
M. Sanz Cortes (United States)

Fetal brain ultrasound findings in a prospective cohort of 129 patients with clinical symptoms of Zika virus infection during pregnancy in Colombia
M. Sanz Cortes (United States)

Brain MRI abnormalities in fetuses with congenital cytomegalovirus infection: systematic review and meta-analysis
C. Scala (Italy)

Ultrasound brain abnormalities in fetuses with congenital cytomegalovirus infection: systematic review and meta-analysis
C. Scala (Italy)

The role of neurosonography and brain MRI in cases of primary CMV infection in pregnancy
R. Birnbaum (Israel)

Etiology and outcome of congenital microcephaly diagnosed in the third trimester
M. Falco (United Kingdom)

Visualisation and measurement of fetal cerebral aqueduct: improving the US diagnosis of aqueductal stenosis
F. Correa (Portugal)

Prenatal longitudinal non-invasive biomarkers of cortical brain development in the small-for-gestational age fetus
S. Husen (Netherlands)

Fetal neuronal migration disorder between 15 and 26 weeks of gestation
R.K. Pooh (Japan)

Clinical significance of 3D HDlive silhouette/flow in neurosonoembryology and fetal neurosonography
R.K. Pooh (Japan)

OP02: The fetal venous system

Chairs: H. Gardiner (United States); M. Lanna (Italy)

Systematic review and meta-analysis on persistent left superior vena cava on prenatal ultrasound: associated anomalies, diagnostic accuracy and postnatal outcome
F. D’Antonio (Norway)

Normal, abnormal and aberrant fetal left brachiocephalic vein: a tool to depict superior vena cava anomalies, an aneuploidy marker to investigate
E. Varvarigos (Italy)

Left brachiocephalic vein: a tool to identify thymus edges
E. Varvarigos (Italy)

The fetal echocardiographic predictors for perinatal mortality of tricuspid valve malformation and Epstein’s anomaly
F. Torigoe (Japan)

Cardiothoracic area ratio as a potential predictive marker for severe pulmonary venous obstruction in a single ventricle with total anomalous pulmonary venous connection
E. Misugi (Japan)

Prevalence, type and outcome of absent ductus venosus in a population referred for fetal echocardiography
A. de Gennaro (Italy)

Congenital umbilico-porto-systemic shunt: prenatal diagnosis, management and postnatal evolution: a series of 49 patients
C. Colmant (France)

Colour-tissue Doppler imaging (CTDI) in right ventricular outflow tract obstruction in Twin–twin transfusion syndrome
S.J. Eschbach (Netherlands)
OP03: IUGR: prediction and outcomes

**Chairs:** F. Crispi (Spain); R. Napolitano (United Kingdom)

**Cerebroplacental ratio (CPR) at term as a marker of intrapartum placental reserve: results of a retrospective cohort**

*OP03.01*

A. Etchegaray (Argentina)

**Elevated uterine arteries resistances at 19–22 and 24–28 weeks’ gestation and fetal growth**

*OP03.02*

I. Herraiz (Spain)

**Most abnormal Doppler tracings in the umbilical artery of IUGR fetuses are intermittent: the progression is associated with abnormal perinatal outcome**

*OP03.03*

M. Garcia (United States)

**Added value of umbilical vein blood flow in identifying different type of intrauterine growth restriction and placental dysfunction**

*OP03.04*

D. Di Martino (Italy)

**Third trimester umbilical artery Doppler in low-risk pregnancies and its correlation to birthweight and EFW**

*OP03.05*

A. Sirico (Italy)

**Prediction of fetal growth restriction using estimated fetal weight versus a combined screening model at 34 weeks of gestation**

*OP03.06*

J. Miranda (Spain)

**Single and serial fetal biometry to detect preterm and term small-and large-for-gestational age neonates: a prospective longitudinal study**

*OP03.07*

E. Hernández-Andrade (United States)

**Prenatal detection of low birthweight in pregnancies past term**

*OP03.08*

T.M. Eggebø (Norway)

**Prediction of fetal growth restriction and adverse perinatal outcome by fetal echocardiography at 37 weeks’ gestation**

*OP03.09*

S. Triunfo (Spain)

**Vascular biopsy of the placenta using VOCAL2 ultrasound software in the prediction of IUGR**

*OP03.10*

C. Birdir (Germany)

OP04: Urogynecology

**Chairs:** G. Perniola (Italy); S. Yagel (Israel)

**Ultrasonographic evaluation of the urethral rhabdosphincter’s morphology in female patients with urodynamic stress incontinence**

*OP04.01*

E. Domali (Greece)

**Is a curved 3D ultrasound reconstruction needed to assess the “warped” pelvic floor plane?**

*OP04.02*

A. Youssef (Italy)

**Normal values of anal sphincter biometry by 4D pelvic floor ultrasound**

*OP04.03*

H.P. Dietz (Australia)

**Endoanal ultrasound assessment post repair of obstetrical anal sphincter injury (OASIS)**

*OP04.04*

S. The (Australia)

**Transperineal ultrasound visualisation of sacrocolpopexy meshes containing paramagnetic Fe-particles**

*OP04.05*

V.H. Eisenberg (Israel)

**Does a second vaginal birth matter for the anal sphincter?**

*OP04.06*

H.P. Dietz (Australia)

**The impact of subsequent pregnancies on pelvic floor functional anatomy**

*OP04.07*

H.P. Dietz (Australia)

**Pelvic floor ultrasound in the evaluation of post-partum perineal diseases: correlation with pelvic function tests**

*OP04.08*

F. D’Antonio (Norway)
OP05: CNS anomalies: the relevance of new ultrasound and MRI tools  

**Chairs: V. D’Addario (Italy); D. Pugash (Canada)**

The fourth ventricle index as a screening tool for Joubert syndrome and related disorders  

*OP05.01*

S. Leshem Shulevitz (Israel)

Allometric relationship between the transverse cerebellar diameter and the head circumference: impact on prenatal counselling  

*OP05.02*

M. Massoud (France)

Mid-trimester subchorionic hematoma; maternal and neonatal morbidity data  

*OP05.03*

N. Mitchell-Jones (United Kingdom)

Comparison between US and MRI findings in cases with mild ventriculomegaly  

*OP05.04*

T. Cheifetz (Israel)

Natural history of isolated fetal ventriculomegaly: agreement between pre- and postnatal imaging  

*OP05.05*

S. Perlman (Israel)

Reliability of 5DCNS+ approach for (semi-)automised evaluation of fetal cranial structures: a step toward to improve detection of CNS anomalies?  

*OP05.06*

J. Weichert (Germany)

Neurosonography at 11–13 weeks: five parallel axial views of the brain  

*OP05.07*

F. Ushakov (United Kingdom)

Is there an easier way to assess the fetal optic chiasm other than coronal or 3D?  

*OP05.08*

A reproducibility study comparing 2D versus 3D  

R. Birnbaum (Italy)

Intracranial hemorrhage in the fetal brain: prenatal diagnosis of 19 cases  

*OP05.09*

B. De Keersmaecker (Belgium)

Transabdominal B-mode versus V-mode: influence of operator experience on performance with fetal brain mid-sagittal scan assessment – 14 years’ experience  

*OP05.10*

E. Varvarigos (Italy)

OP06: New strategies for fetal cardiac evaluation  

**Chairs: N. Persico (Italy); B. Tutschek (Switzerland)**

Discordance in fetal and neonatal spectral tissue Doppler and speckle-tracking imaging measurements on different ultrasound platforms  

*OP06.01*

O. Patey (United Kingdom)

Heart sounds at home: preliminary results of an ambulatory fetal heart rhythm surveillance program for anti-SSA positive pregnancies  

*OP06.02*

B. Cuneo (United States)

Correlation between tissue Doppler imaging (TDI) and pulsed-wave Doppler (PWD) modalities for measurement of fetal myocardial performance index (MPI)  

*OP06.03*

H. Avnet (Australia)

Fetal and neonatal left ventricular torsion in normal, growth-restricted and diabetic pregnancies  

*OP06.04*

O. Patey (United Kingdom)

The global sphericity index (GSI) of the fetal heart: its association with abnormal cardiovascular and non-cardiovascular fetal findings  

*OP06.05*

G.R. DeVore (United States)

Evaluation of tissue Doppler imaging (TDI) for measurement of the right fetal myocardial performance index (MPI): an international online study  

*OP06.06*

H. Avnet (Australia)

Evaluation of fetal tricuspid and mitral annular plane systolic excursion (TAPSE and MAPSE) using spatiotemporal image correlation (STIC) M-mode  

*OP06.07*

H. Avnet (Australia)

5D heart approach for (semi-)automised evaluation of the fetal heart – ready for routine use? Data from >350 consecutive cases  

*OP06.08*

J. Weichert (Germany)
Performance of fetal intelligent navigation echocardiography (FINE) in congenital heart defects: experiences from a retrospective single centre study  
A. Weichert (Germany)

Cardiac colour-coded tissue Doppler imaging and perinatal outcome in prolonged pregnancies  
L. Herling (Sweden)

Is the short axis view of the heart useful in improving the antenatal diagnostic accuracy of subaortic ventricular septal defects?  
N. Volpe (Italy)

OP06: CNS anomalies: focus on the midline and posterior fossa  
Michelangelo A

Chairs: L. Guibaud (France); V. D’Addaro (Italy)

Spina bifida: incidence, prenatal detection rate and pregnancy outcome in a national cohort from the Danish fetal medicine database  
C.R. Bodin (Denmark)

WITHDRAWN

Prenatal evaluation of the conus medullaris position in normal fetuses and fetuses with closed spina bifida by using a new method: three-dimensional ultrasound skeletal render mode combined with horizontal central line  
L. Xie (China)

Choroid plexus / head area ratio in normal and in spina bifida cases at 11–13+6 weeks’ ultrasound  
A. Comanescu (Romania)

Sonoembryology of the fetal posterior fossa at 11+3 to 13+6 gestational weeks on three-dimensional transvaginal ultrasound  
R. Altmann (Austria)

Validation of in utero tractography with histology-based structure tensor analysis in the human fetal brain  
D. Prayer (Austria)

Outcome in fetuses with isolated agenesis of the corpus callosum: a systematic review and meta-analysis  
F. D’Antonio (Norway)

Added value of fetal MRI in the evaluation of fetal anomalies of the corpus callosum: a retrospective analysis of 78 cases  
M. Manevich-Mazor (Israel)

Detection of altered corpus callosum development using two-dimensional neuroimaging in growth-restricted fetuses: a potential indicator of fetal brain remodeling  
N. Mohammed (Pakistan)

Systematic algorithm for classification of posterior fossa anomalies by targeted 2D and 3D ultrasound  
A. Dall’Asta (United Kingdom)

OP08: First trimester screening in the era of NIPT  
Michelangelo B

Chairs: A. Ngu (Australia); F. Ushakov (United Kingdom)

The effect of a decision aid on informed decision making in the era of non-invasive prenatal testing: a randomised controlled trial  
M.N. Bekker (Netherlands)

The impact of non-invasive prenatal testing as a contingent approach on the prenatal diagnosis of Down’s syndrome in Chinese women  
K.Y. Leung (Hong Kong)

Contingent cell-free DNA test in routine prenatal aneuploidy screening  
M. Hynek (Czech Republic)
Non-invasive prenatal testing (NIPT) to screen Down's syndrome in France: a cost-effectiveness analysis
M. Blanquet (France)

Factors affecting fetal fraction in 5,103 cases of a mixed Australian population
F. da Silva Costa (Australia)

Differentially expressed miRNAs in Trisomy-21 placenta and their potential involvement in Down's syndrome pathologies
P. Calda (Czech Republic)

First trimester combined screening for Trisomy 21 in pregnancies conceived after gastric bypass: a Danish national cohort study
L.N. Nørgaard (Denmark)

WITHDRAWN

Rapid whole exome sequencing for the prenatal diagnosis sonographic abnormalities
L.S. Chitty (United Kingdom)

Modification of free-beta HCG and PAPP-A MoM in women with a previous miscarriage
F. Padula (Italy)

How changed the proportion of invasive prenatal diagnosis in 33,679 invasive procedures after the introduction of cfDNA
C. Coco (Italy)

OP09: Managing ovarian masses
Tiziano A

Chairs: J.L. Alcázar (Spain); L. Valentin (Sweden)
Natural history of benign appearing purely solid masses in asymptomatic postmenopausal women
J.L. Alcázar (Spain)

Clinical history of low-risk ovarian lesions in postmenopausal women
F. Leone (Italy)

Diagnostic performance of simple rules and ADNEX model by inexperienced examiners
E. Domali (Greece)

CA125, HE4 and ROMA score performance as second-line test in benign adnexal masses: a tertiary hospital centre’s 2 years’ experience
M. Enes (Portugal)

Clinical and ultrasound features of mucinous ovarian tumours
F. Moro (Italy)

Ultrasound-guided laparoscopic ovarian cystectomy: a novel surgical approach in the treatment of recurrent borderline ovarian tumours
S. Saso (United Kingdom)

Clinical and ultrasound features of different subclasses of serous ovarian tumours
F. Moro (Italy)

Expectant management of sonographically benign adnexal formations before and after the menopause: a prospective observational study
D. Djokovic (Portugal)

OP10: Fetal growth: normal and abnormal
Tiziano B

Chairs: K. Maršál (Sweden); J. Stirnemann (France)
Neurobehavioural outcomes in fetal growth restriction versus small-for-gestational age, as defined by estimated fetal weight centile, cerebropalacental ratio and uterine artery Doppler
C. Paules Tejero (Spain)

Should umbilical artery Doppler studies be performed in fetuses with both gastrochisis and IUGR?
S. Nyon (United States)
Doppler ultrasound correlates with MR quantification of placental perfusion in small fetuses exposed to acute maternal hyperoxygenation

**W. Lee (United States)**

Mode of delivery on late intrauterine growth-restricted fetuses: is induction of labour a feasible option?

**I. Herrera (Spain)**

Regional circulatory responses to acute maternal hyperoxygenation in growth-restricted fetuses: MR estimates of placental perfusion

**W. Lee (United States)**

Correlation between fetal Doppler indices and neonatal acid-base status at birth in healthy appropriate-for-gestational age term fetuses

**V. Gerosa (Italy)**

**OP11: Preterm birth**

**Chairs:** Z. Alfirevic (United Kingdom); V. Berghella (United States)

Prospective study on cervical length (CL) in the first and second trimester in a large Danish cohort

**C.B. Wulff (Denmark)**

Non-invasive prediction of preterm birth in women with cervical insufficiency or an asymptomatic short cervix: biomarkers in cervicovaginal fluid

**H. Yoo (Republic of Korea)**

Visceral adiposity in early pregnancy and the risk of pre-eclampsia and preterm birth

**H. Berger (Canada)**

Comparison of the fetal fibronectin (Rapid fFN) and placental alpha microglobulin-1 (PartoSure) tests for predicting imminent spontaneous preterm birth.

**C. Van Holsbeke (Belgium)**

Fingolimod against endotoxin-induced fetal brain injury in the rat mode

**A. Yavuz (Turkey)**

Outcomes of term born neonates after an episode of preterm labour

**J.M. Crane (Canada)**

**OP12: Pre-eclampsia: basic science to clinical practice**

**Chairs:** E. Ferrazzi (Italy); E. Hernández-Andrade (United States)

Correlation between cffDNA fraction and defective throphoblastic invasion markers

**G. Albaiges Baiget (Spain)**

Dysregulated circulating miRNAs in pre-eclampsia

**F. Chantraine (Belgium)**

Association of first trimester angiogenic factors with placental histological findings in late pre-eclampsia

**S. Triunfo (Spain)**

Lymphocytes and cytokines pattern as potential markers for screening of pre-eclampsia and fetal growth restriction during the first trimester of pregnancy

**M. Parra-Cordero (Chile)**

Adipocytokines as predictors for pre-eclampsia and other adverse outcomes in obese pregnant women

**I.N. Thagaard (Denmark)**

Maternal cardiac function in patients with severe pre-eclampsia

**K. Uno (Japan)**

Prediction of pre-eclampsia by maternal characteristic and biophysical markers during the first trimester of pregnancy

**M. Parra-Cordero (Chile)**
Clinical implementation of the sFlt-1/PIGF ratio at 24–28 weeks’ gestation to detect pre-eclampsia among high-risk women selected by risk factors and uterine artery Doppler
*I. Herraiz* (Spain)

Clinical implementation of the sFlt-1/PIGF ratio at 24–28 weeks’ gestation to detect intrauterine growth restriction among high-risk women selected by risk factors and uterine artery Doppler
*I. Herraiz* (Spain)

Added value of second trimester uterine artery Doppler in predicting pre-eclampsia and small-for-gestational age neonates in the general population
*M. N. Bekker* (Netherlands)

Epigenetic changes induced by pregnancy complications may initiate latter development of cardiovascular and cerebrovascular diseases in the mother
*I. Hromadnikova* (Czech Republic)

**OP13: Growth and hemodynamics in twins**

*Michelangelo B*

**Chairs: K. Hecher (Germany); F. Prefumo (Italy)**

Customised fetal growth curves in twin pregnancies: an Italian multicentre study
*T. Ghi* (Italy)

Ductus venosus alterations in Twin–twin transfusion syndrome: a useful tool for risk stratification
*C. Wohlmuth* (United States)

The roles of vascular anastomosis and umbilical cord insertion abnormalities in birthweight discordance in monochorionic-diamniotic twin pregnancies without Twin–twin transfusion syndrome
*H. Konno* (Japan)

Longitudinal twins’ growth pattern: when do twins reduce their growth?
*M. Yamamoto* (Chile)

Stage I Twin–twin transfusion syndrome: a North American Fetal Therapy Network (NAFTNet) retrospective cohort study
*A. L. Gagnon* (Canada)

Limb ischemia in monochorionic twins after laser treatment of Twin–twin transfusion syndrome
*M. Lanna* (Italy)

Prediction of adverse pregnancy outcome in twin pregnancies complicated by selective fetal growth restriction
*A. Khalil* (United Kingdom)

Fetal brain abnormalities in twin pregnancies complicated by Twin–twin transfusion syndrome: a prospective cohort study
*A. Khalil* (United Kingdom)

Associations of serum cytokines levels with fetal aortic intima-media thickness in twin pregnancies complicated by intrauterine growth restriction
*E. Cosmi* (Italy)

Fetal brain sparing before and after placental laser coagulation in Twin–twin transfusion syndrome (TTTS)
*A. Khalil* (United Kingdom)

Monochorionic diamniotic twin pregnancies with Twin–twin transfusion syndrome presenting without amniotic fluid discordance due to spontaneous inadvertent septostomy
*R. Cruz-Martinez* (Mexico)
OP14: Ultrasound in gynecological oncology

**Chairs: L. Savelli (Italy); P. Sladkevicius (Sweden)**

Early cervical cancer: can we consider TVUS an alternative to MRI in preoperative delineation of tumour extension?  
*D. Franchi* (Italy)

Efficient mini-invasive treatment of symptomatic lymphocele with ultrasound-guided drainage  
*M. Zikan* (Czech Republic)

Ultrasound features of uterine sarcomas  
*M. Ludovisi* (Italy)

Ultrasound features in ovarian and uterine lymphomas  
*S. Giunchi* (Italy)

Ultrasound morphometric and cytological combined preoperative assessment of inguinal lymph node status in women with invasive vulvar carcinoma  
*I. De Blasis* (Italy)

Role of transvaginal colour Doppler ultrasound in early diagnosis of ovarian cancer: our experience since 1999  
*M. Pascual* (Spain)

Performance of elastography for the evaluation of endometrial cancer  
*S. Ferrero* (Italy)

Sonovaginography: can improve the pre-treatment evaluation of mainly exophytic early stage cervical cancer?  
*D. Franchi* (Italy)

Ultrasound-guided radiolocalisation of inguinal lymph nodes in selected patients with gynecological cancers: a pilot study  
*V. Chiappa* (Italy)

Assessment of myometrial and cervical invasion in endometrial cancer by magnetic resonance imaging and 2D, 3D and HDlive ultrasonography  
*S. Ferrero* (Italy)

**OP15: Simulation and education in obstetric ultrasound**

**Chairs: G. Chalouhi (France); N. Chianchiano (Italy)**

Quality improvement programme for the routine anomaly scan using a dedicated quality control platform  
*R. Napolitano* (United Kingdom)

Teaching and training of fetal heart transverse sweep technique by cross-sectional images: database of common fetal congenital heart disease  
*Q. Pei* (China)

First trimester fetal heart assessment learning curve  
*S. Tudorache* (Romania)

Simulator-based obstetric ultrasound training: a prospective randomised single-blinded study  
*S. Ronzoni* (Canada)

Image scoring system for quality control of umbilical and uterine artery Doppler measurement  
*R. Napolitano* (United Kingdom)

Analysis of training formats for point of care obstetrics in the third trimester of pregnancy  
*S.C. Westerway* (Australia)

The effect of simulation training in clinical determination of fetal head position during the second stage of labour  
*J.G. Barros* (Portugal)

Fetal brain ultrasound tutor for interactive multiplanar navigation through the normal fetal brain  
*T. Ghi* (Italy)

Development of a video ultrasound simulator in Spanish language for teaching ultrasound technology  
*F.A. Guerra* (Chile)

**Tiziano A**

OP14.01

**Tiziano B**

OP15.01

OP15.02

OP15.03

OP15.04

OP15.05

OP15.06

OP15.07

OP15.08

OP15.09
P - Monday 26 September 2016

**P01: From NT to NIPT**

**Botticelli Hub 1**

**Chair: J. Hyett (Australia)**

Nuchal translucency and nasal bone measurements are becoming obsolete: new algorithm for first trimester screening – patients acceptance study

*B. Petrikovsky (United States)*

Women’s preference in further testing when screened high risk for fetal Down’s syndrome

*T. Leung (Hong Kong)*

Reasons for pregnant women to accept or decline prenatal diagnosis for Down’s syndrome

*C. Ingvoldstad (Sweden)*

Actual rates of referral for diagnostic testing following aneuploidy screen by first trimester screening versus cell-free DNA done on the same day

*P. Dat (United States)*

Screening for aneuploidies in a Spanish public setting: from the combined test to the cell-free DNA test

*M. Gil (Spain)*

False-positive and false-negative results of cell-free DNA testing

*R. Has (Turkey)*

The clinical utility of non-invasive prenatal testing in pregnancies with ultrasound anomalies

*M.N. Bekker (Netherlands)*

The 22q11 microdeletion syndrome: a review of prenatal ultrasonographic findings and the relation with diagnostic prenatal testing

*T. Sarac Sivrikoz (Turkey)*

Revelation of double segmental microduplications involving 11q23.3q25 and 22q11.1q11.21 by paralleled non-invasive prenatal testing and chromosome microarray in a fetus with growth restriction and multiple structural anomalies

*M. Chen (Taiwan)*

Pregnancy outcomes of late amniocentesis and array CGH

*S. Yagel (Israel)*


**P02: Maternal and fetal complications in multiple pregnancy**

**Botticelli Hub 2**

**Chair: A. Gagnon (Canada)**

Retrospective analysis of twin pregnancies in Institute for the Care of Mother and Child between 2012–2015

*K. Mackova (Czech Republic)*

Can placental measurements in first trimester predict adverse pregnancy outcomes in twin pregnancies?

*R. Okby (Canada)*

A prospective cohort study of maternal risk of hypertensive disorders in twin pregnancies at 36 weeks’ gestation or later

*R. Yamamoto (Japan)*

Fetal weight estimation in twins

*M. Yamamoto (Chile)*

Monochorionic pregnancies and single-twin demise: risk of brain injury in survivors

*I. Duyos (Spain)*
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors/Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selective intrauterine growth restriction in monochorionic diamniotic</td>
<td>K. Behavkova (Czech Republic)</td>
</tr>
<tr>
<td>twins in The Institute for the Care of Mother and Child (ICMC)</td>
<td></td>
</tr>
<tr>
<td>between 2012–2015</td>
<td></td>
</tr>
<tr>
<td>Early amniocentesis and array comparative genomic hybridisation</td>
<td>M. Chen (China)</td>
</tr>
<tr>
<td>(aCGH) analysis in discordant twin anomaly (DCDA) in the first</td>
<td></td>
</tr>
<tr>
<td>trimester</td>
<td></td>
</tr>
<tr>
<td>Perinatal outcomes of complicated monochorionic twin pregnancies</td>
<td>K.Y. Leung (Hong Kong)</td>
</tr>
<tr>
<td>managed in a specialised multiple pregnancy clinic</td>
<td></td>
</tr>
<tr>
<td>Uterine artery Doppler in the management of dichorionic twin</td>
<td>L. Franceschetti (Italy)</td>
</tr>
<tr>
<td>pregnancies discordant for intrauterine growth restriction</td>
<td></td>
</tr>
<tr>
<td>Twin anemia–polycythemia sequence: a clinical analysis of 7 cases</td>
<td>M. Chen (China)</td>
</tr>
</tbody>
</table>

**P03: Fetal anomalies: from head to toes**  
**Botticelli Hub 3**

**Chair: A. Ngu (Australia)**

<table>
<thead>
<tr>
<th>Title</th>
<th>Authors/Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy of advanced first trimester anomaly scan in the diagnosis of</td>
<td>A. Pinto (Italy)</td>
</tr>
<tr>
<td>fetal abnormalities</td>
<td></td>
</tr>
<tr>
<td>Perinatal and long-term outcome in fetuses diagnosed with isolated</td>
<td>C. Scala (Italy)</td>
</tr>
<tr>
<td>unilateral ventriculomegaly: systematic review and meta-analysis</td>
<td></td>
</tr>
<tr>
<td>Cerebral arteriovenous shunt regression in a preterm newborn</td>
<td>K. Lee (Republic of Korea)</td>
</tr>
<tr>
<td>complicated with IUGR: prenatally diagnosed case using Doppler</td>
<td></td>
</tr>
<tr>
<td>ultrasound and MRI</td>
<td></td>
</tr>
<tr>
<td>Umbilical cord ulcer and fetal congenital intestinal atresia.</td>
<td>N. Nakamura (Japan)</td>
</tr>
<tr>
<td>Change in the diagnosis and pregnancy outcome of prenatally diagnosed</td>
<td></td>
</tr>
<tr>
<td>defects of the anterior abdominal wall in Gennet, Prague, Czech</td>
<td>D. Smetanova (Czech Republic)</td>
</tr>
<tr>
<td>Republic</td>
<td></td>
</tr>
<tr>
<td>Prenatal diagnosis of congenital ichthyosis: lessons learned!</td>
<td>S. Al-Obaidly (Qatar)</td>
</tr>
<tr>
<td>Hypophosphatasia</td>
<td>I. Witters (Netherlands)</td>
</tr>
<tr>
<td>Prenatal ultrasonographic diagnosis of foot deformities using view</td>
<td>G. Lyu (China)</td>
</tr>
<tr>
<td>of five phalanx-metatarsale-calcaneus fetal pedis</td>
<td></td>
</tr>
<tr>
<td>Non-familial VACTERL-H syndrome in a dizygotic twin: prenatal</td>
<td>K. Lee (Republic of Korea)</td>
</tr>
<tr>
<td>ultrasound findings and postnatal 3D-CT findings</td>
<td></td>
</tr>
<tr>
<td>Progression of ultrasound findings of active fetal syphilis in delay</td>
<td>S. Choi (Republic of Korea)</td>
</tr>
<tr>
<td>treatment for maternal primary infection</td>
<td></td>
</tr>
<tr>
<td>Absent ductus venosus (ADV) with intra- and extrahepatic shunts</td>
<td>R. Choudhary (India)</td>
</tr>
<tr>
<td>demonstration using 4D STIC with power Doppler</td>
<td></td>
</tr>
</tbody>
</table>
P04: Ultrasound in gynecological oncology  
*Botticelli Hub 4*

**Chairs:** D. Timmerman (Belgium); I. De Blasis (Italy)

Discussion: pathological aspects of sarcomas

**W. Frojman (Belgium)**

Should we morcelate fibromas?

**W. Frojman (Belgium)**

Preoperative diagnosis of uterine sarcoma using tumour signal intensity at T2 weighted imaging and apparent diffusion coefficient (ADC) of magnetic resonance imaging (MRI)

**Y. Oka (Japan)**

Fusion imaging as a promising technique for a multidisciplinary approach to gynecological cancers: exploring possible applications

**V. Chiappa (Italy)**

Parametrial infiltration in locally advanced cervical cancer after neoadjuvant chemotherapy: diagnostic accuracy of 3D-transvaginal ultrasound

**G. Perniola (Italy)**

Optimal image parameters for diagnosis of endometrial cancers by transvaginal ultrasound

**M. Dueholm (Denmark)**

P05: Fetal interventions  
*Botticelli Hub 1*

**Chair:** E. Gratacos (Spain)

Management of complicated monochorionic twin pregnancies with radio-frequency ablation

**R. Has (Turkey)**

Doppler velocimetry for timing first and subsequent transfusions in fetuses with anemia due to Rh-isoimmunisation

**V. Dadhwal (India)**

Fetal surgery by full laser ablation of the feeding artery for cystic lung lesions with systemic arterial blood supply (hybrid lung lesions)

**R. Cruz-Martinez (Mexico)**

Neonatal alloimmune thrombocytopenia in recurrent pregnancies: does a good response to IVIG in one pregnancy predict success in the following one?

**L. Bastry (Israel)**

Predicting outcome in 42 fetuses with twin anemia polycythemia sequence – a multicentre experience

**R. Ruano (United States)**

Do fetal lower limb soft tissue parameters predict postnatal motor function in newborns with neural tube defect (NTD)?

**M. Sanz Cortes (United States)**

Cumulative risk adjusted assessment of diagnostic procedures loss rates

**D.S. Sahota (Hong Kong)**

Successful in utero treatment of primary fetal hypothyroidism with goiter and heart insufficiency

**M. Debska (Poland)**

Management of fetal megacystis with a balloon catheter: a report of two cases

**M. Debska (Poland)**
P06: Peculiar and interesting fetal cardiac anomalies

**Botticelli Hub 2**

**Chair: F. Crispi (Spain)**

Prenatal assessment of coronary artery anatomy using colour Doppler in cases of
D-transposition of the great arteries

**T. Kaji (Japan)**

Antenatal diagnosis of idiopathic infantile arterial calcification (IIAC): a single centre experience and review of the literature

**C.H. Mulcahy (Republic of Ireland)**

Fetal tachyarrhythmia: diagnosis, treatment and outcome

**C.A. Capuruço (Brazil)**

Perinatal management and cardiac outcome of fetuses with bradyarrhythmias

**C.A. Capuruço (Brazil)**

Right ventricular hypoplasia in the fetus

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

Prognosis of fetal "small left ventricle"

**K. Kim (Japan)**

The echodiagnostic value of double outlet right ventricle and combined malformation

**J. Li (China)**

Evaluation of right ventricular systolic and diastolic function in fetuses with Ebstein anomaly

**Y. He (China)**

Antenatal screening of tuberous sclerosis complex: fetal echocardiography and gene sequencing analysis correlations

**Y. He (China)**

Fetal cardiac tumours, diagnosis and prognosis

**H. Muñoz (Chile)**

Case report: fetal cardiac aneurysm

**H. Muñoz (Chile)**

Increased prevalence of bicuspid aortic valve in Turner syndrome links with karyotype: a crucial importance of detailed cardiovascular screening

**M. Lubusky (Czech Republic)**

---

P07: Fetal neck and chest

**Botticelli Hub 3**

**Chair: F. Ushakov (United Kingdom)**

The fetal thymus: determination of 2D and 3D ultrasound measurements in normal fetuses

**L. Cao (China)**

Assessment of fetal thymus in 22q11.2 deletion syndrome (22q11DS)

**A. Lamouroux (France)**

Prenatal ultrasound predictor factors in congenital cystic adenomatoid malformation

**E. Antolin (Spain)**

An audit of congenital pulmonary airway malformation (CPAM) or bronchopulmonary sequestration (BPS) in an Australian maternal-fetal medicine centre

**A. Henry (Australia)**

Multidisciplinary team approach for prenatal diagnosis of unilateral pulmonary agenesis, esophageal atresia and tracheoesophageal fistula

**A. Idelson (Israel)**

Should all newborns with antenatal diagnosis of polyhydramnios have nasogastric tube patency testing after delivery? A service review of approach to diagnose tracheoesophageal fistula in neonates born to mothers with polyhydramnios

**H. Mousa (United Kingdom)**

Survival prediction of fetuses with congenital diaphragmatic hernia in Chile.

**M. Yamamoto (Chile)**

Prenatal hemorrhage of fetal hemangiolympangioma

**N.W. Yokoi (Japan)**

---
P08: Just images: case reports in obstetrics and gynecology  

**Botticelli Hub 4**

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

Robert’s septate uterus: modern imaging techniques and ultrasound-guided hysteroscopic treatment without laparoscopy/laparotomy  
**A. Ludwin (Poland)**

Partial fallopian tube septum diagnosed during hysterosalpingo-foam-sonography (HyCoSy)  
**D. Van Schoubroeck (Belgium)**

A large uterine vein thrombosis misdiagnosed as a uterine myoma  
**J. Hoh (Republic of Korea)**

The fetus in mother’s bladder: a rare complication of vesicouterine fistula in woman with uterine scars after two Caesarean sections  
**I. Safonova (Ukraine)**

A case report of Müllerian adenosarcoma in a young female and ultrasound usefulness as a tool for evaluating residual mass of Müllerian adenosarcomas  
**H. Kim (Republic of Korea)**

Apparent heterotopic pregnancy created by mirror-image artefact  
**S. Cooper (Canada)**

Ultrasound aspect of serous surface papillary borderline ovarian tumour: case report  
**R. Bohiltea (Romania)**

Sonographic diagnosis and surgical repair of cervical tear in mid-trimester  
**M. Yamamoto (Chile)**

Placental chorioangioma: a twisted tale  
**S. Lee (Australia)**

Non-specific fetal ascites in a woman with active hepatitis C  
**G. Sciotti (Switzerland)**

Expression of placental infarction with avascular villous tree using SM  
**J. Hasegawa (Japan)**

P09: Biometry in fetal growth aberrations  

**Botticelli Hub 1**

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

Prenatal risk factors of SGA short stature in preterm SGA cohort: a Japanese multicentre study  
**K. Kiyoshi (Japan)**

Comparison of fetal biometry in singletons, dichorionic twins, and monochorionic twins in the third trimester  
**P.M. Doubilet (United States)**

Comparison of fetal growth in a rural Bangladeshi population to INTERGROWTH-21st (standardised) and NICHD (customised) curves: initial results  
**J. Pervin (Bangladesh)**

Validation of intergrowth curves for abdominal circumference in an Italian population at high risk for growth restriction  
**F. Bellussi (Italy)**

Perinatal outcomes on late intrauterine growth-restricted fetuses: is induction of labour a safe option?  
**I. Herraiz (Spain)**

Prenatal detection of macrosomia in pregnancies past term  
**T.M. Eggebø (Norway)**

Fetal biometry: contribution and limitations of the three-dimensional approach  
**O. Morel (France)**

The accuracy of sonographic prediction of birthweight in Chinese population and the associated factors that affect its accuracy  
**C. Kong (Hong Kong)**

Fetal biometry at 3400m above sea level compared with INTERGROWTH-21st standards  
**W. Villamonte Calanche (Peru)**
Role of ultrasound in detecting and managing large-for-gestational age fetuses in prolonged pregnancy  
A.A. Bati-Pa (United Kingdom)

The assessment of the intergrowth biometric charts in unselected Czech population  
M. Hynek (Czech Republic)

P10: Neurosonography: focus on the ventricles and brain  
Botticelli Hub 2

Chair: A. Youssef (Italy)

Cortical development assessed by neurosonography in fetuses with isolated non-severe ventriculomegaly  
N.M. Hahner (Spain)

Syntelencephaly: fetal diagnosis and outcome  
A. Kennedy (United States)

Isolated midline intracrani al cysts in the region of the quadrigeminal cistern are associated with benign postnatal outcome  
D. Pugash (Canada)

External hydrocephalus: a new entity in prenatal diagnosis  
J. Baron (Israel)

Fetal neurosonography and fetal behaviour: genesis of fetal movements and motor reflexes  
S. Rakic (Serbia)

Do we need to adjust for fetal gender when assessing the size of the fetal cerebral lateral ventricles?  
F. Correa (Spain)

The association between ventriculomegaly and CNS anomalies as seen in fetal MRI  
E. Barzilay (Israel)

Intracranial mass: have you checked the heart? SEGA as initial presentation of tuberous sclerosis complex in the fetus  
M. Fink (Australia)

Prenatal diagnosis and genetic discoveries of an intracranial mixed neuronal-glial tumour  
L. Sun (China)

Prenat ally diagnosis: a rapidly involuting congenital hemangioma  
A. Ozel (Turkey)

Second trimester prenasal and prefrontal skin thickening – association with Waardenburg syndrome  
Q. Thibaud (France)

P11: Screening for Trisomy 21  
Botticelli Hub 3

Chair: S. Yeo (Singapore)

Nuchal translucency at 16 weeks in fetuses with first trimester nuchal translucency >3.5mm and normal caryotype: what are the issues?  
Q. Thibaud (France)

Three-dimensional ultrasound for the evaluation of the bilateral nasal bones in the first trimester.  
S. Pashaj (Albania)

Fetal nasal bone length in chromosomally normal fetuses at 11–16 weeks of gestation in Indian population  
V. Kashyap (India)

The frontal fetal facial (FFF) angle in the first trimester measured by 3D ultrasound in normal fetuses and fetuses with Trisomy 21  
E. Merz (Germany)

Suspicious prenasal skin thickness-to-nasal bone length ratio: prevalence and correlation with other markers in second and third trimester fetuses with Down’s syndrome  
A. Hagen (Germany)
Abnormal liver echogenicity as a new second trimester ultrasound soft marker for Down's syndrome
J. Gevaerd Martins (United States)

Ultrasound screening for Down's syndrome during the second trimester in an unselected Chinese population
L. Cao (China)

Tricuspid regurgitation as a screening marker for Trisomy 21: systematic review and meta-analysis
C. Scala (Italy)

Are genetic findings always responsible for fetal sonographic findings?
C. Martínez-Payo (Spain)

First trimester detection of fetal abnormalities in aneuploidy-screened negative pregnancies
K. Leung (Hong Kong)

P12: Managing ovarian masses

Botticelli Hub 4

Chairs: W. Froyman (Belgium); A.C. Testa (Italy)

Diagnostic accuracy of IOTA – ADNEX model in differentiating benign, borderline, early and advanced stage invasive and secondary metastatic adnexal masses: a global South experience
M.U. De Vera (Philippines)

The role of acoustic shadow and tumour vascularity in preoperative prediction of malignancy in solid ovarian tumour
Y. Hazan (Israel)

Improvement GIRADS system in assessment of adnexal masses malignancy risk by CA 125 measurement.
M. Migda (Poland)

Can 4D STIC bi-directional power Doppler tissue evaluation help discriminate between normal ovaries and ovarian cancer tumours?
M.J. Kudla (Poland)

Evaluation of GIRADS system in assessment of adnexal masses malignancy risk in clinical practice- retrospective study
M. Migda (Poland)

Ovarian masses during pregnancy
A. Kotlarz (Poland)

Ovarian torsion: alteration in ovarian localisation could be used as the main ultrasonographical landmark
E. Domali (Greece)

Girads ovarian tumour classification: a meta-analysis
M. León (Chile)

Management of adnexal masses: integration of HE4 and simple rules
B. Cinzia (Italy)

Validation of the IOTA simple rules for discriminating between benign and malignant adnexal masses as performed by a trainee sonologist
C.V. Declarador (Philippines)
ISUOG now has more than 13,300 members across 128 countries! Find out how you can get involved locally in your region or explore the world with ISUOG.

**Guideline Hubs**

English, French, Italian and Spanish

**Meet the Professor in Italian**

Prof. D Arduini and L. Savelli

**Monday 26 September, 12:45 - 13:15**

*Botticelli Room*

**Tuesday 27 September, 13:30 - 14:30**

*Botticelli Room*

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**Wednesday 28 September, 12:15 - 13:15**

*Botticelli Room*

**Regions represented:** Latin America, Brazil, Australia, China, India, Central Asia, Eastern Europe, Russia and North America

* Limited spaces available
Program - Tuesday 27 September 2016

07:30 - 08:10 Masterclasses

08:15 - 09:15 Parallel sessions (OC)
- Fetal growth and biometry
- Outcomes of laser therapy for TTTS
- Miscarriage, ectopic pregnancy and other complications in early pregnancy

09:20 - 10:00 Short oral presentations (OP)
- Fetal growth assessment
- New data in multiple pregnancies
- Early pregnancy complications
- The good and the bad of obstetrical ultrasound

09:20 - 10:00 Poster discussion Hubs (P)

10:20 - 11:20 Parallel sessions (OC)
- Screening for congenital heart defects
- Fetal therapy
- Ultrasound in reproductive medicine

11:25 - 12:05 Short oral presentations (OP)
- Screening and clinical outcome of fetuses with CHD
- Fetal interventions
- Improving outcomes in reproductive medicine
- Advances in ultrasound and new technologies: focus on ultrasound

11:25 - 12:05 Poster discussion Hubs (P)

12:15 - 13:15 Industry sponsored satellite symposium

13:30 - 14:30 Parallel sessions (OC)
- This newborn will need a pediatric surgeon!
- Can we predict the future on the labour ward?
- Workshop: Reproductive medicine

13:30 - 14:30 Meet the Professor Hubs

14:35 - 15:15 Short oral presentations (OP)
- Advances in first trimester scanning
- Ultrasound system: a necessity on the labour ward?
- Imaging in reproductive medicine
- Sonographic prediction of morbidly adherent placenta

14:35 - 15:15 Poster discussion Hubs (P)

15:40 - 17:00 Workshops
- Is there a future for cell-free DNA in cancer screening?
- Pre-eclampsia: insights from maternal vascular assessment
- Zika virus
- Using imaging to diagnose and guide the management of endometriosis
- Abnormally invasive placenta
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# Program - Tuesday 27 September 2016

## 07:30 - 08:10 Masterclasses

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>07:30</td>
<td>Prediction and prevention of preterm birth</td>
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<tr>
<td></td>
<td><strong>Michelangelo A</strong></td>
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<tr>
<td></td>
<td><em>R. Romero (United States)</em></td>
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<tr>
<td>07:35</td>
<td>Posterior fossa anomalies</td>
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<td></td>
<td><strong>Michelangelo B</strong></td>
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<td></td>
<td><em>L. Guibaud (France)</em></td>
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<tr>
<td>08:00</td>
<td>Recognising the IOTA features needed to classify an ovarian mass</td>
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<td></td>
<td><strong>Tiziano A</strong></td>
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<tr>
<td></td>
<td><em>L. Valentin (Sweden)</em></td>
</tr>
<tr>
<td>08:15</td>
<td>How to turn your ideas into research projects</td>
</tr>
<tr>
<td></td>
<td><strong>Tiziano B</strong></td>
</tr>
<tr>
<td></td>
<td><em>Z. Alfievic (United Kingdom)</em></td>
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</tbody>
</table>

## 08:15 - 09:15 Fetal growth and biometry **Michelangelo A**

**Chairs: W. Lee (United States); G. Rizzo (Italy)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>08:15</td>
<td>Live scan: how can I improve my estimation of fetal size?</td>
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<td>[industry supported*]</td>
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<tr>
<td></td>
<td><strong>W. Lee (United States)</strong></td>
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<tr>
<td>08:35</td>
<td>Diabetic pregnancies promote increased umbilical flow to the fetal liver</td>
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<td>at the expense of ductus venosus shunting</td>
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<td></td>
<td><strong>OC1.01</strong></td>
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<td></td>
<td><em>A. Lund; C. Ebbing; S. Rasmussen; T. Kiserud; J. Kessler (Norway)</em></td>
</tr>
<tr>
<td>08:40</td>
<td>Discussion</td>
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<td>08:43</td>
<td>Ultrasound reproducibility for fetal biometry measurements: results</td>
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<td>from the INTERGROWTH-21st Project</td>
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<td><strong>OC1.02</strong></td>
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<td></td>
<td><em>A. Cavallaro; R. Napolitano; S. Ash; E.O. Ohuma; S.Z. Wanyonyi; M. Molloholli; J. Sande; I. Sarris; C. Ioannou; T. Norris; V. Donadono; M. Veglia; M. Carvalho; W. Al Jidjali; M. Purwar; E. Bertino; M. Gravett; Q. Wu; F. Barros; A.T. Papageorghiou</em></td>
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<td>1(United Kingdom); 2(Kenya); 3(Sultanate of Oman); 4(India); 5(Italy); 6(United States); 7(China); 8(Brazil)</td>
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<tr>
<td>08:48</td>
<td>Discussion</td>
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<tr>
<td>08:51</td>
<td>The impact of head circumference on obstetric outcomes: implications for</td>
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<td>management</td>
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<td></td>
<td><strong>OC1.03</strong></td>
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<td><em>S. Yagel; M. Lipschuetz; S.M. Cohen; O. Yagel; D. Kabiri; H. Amsalem; A. Ben-David; N. Cohen; L. Levitt; D. Hochner-Celnikier (Israel)</em></td>
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<tr>
<td>08:56</td>
<td>Discussion</td>
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<td>08:59</td>
<td>Third trimester scan in the identification of adverse outcomes in small-</td>
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<td>for-gestational age newborns by gestational age and antenatal identification</td>
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<td><strong>OC1.04</strong></td>
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<td><em>S. Triunfo; P.G. Lindqvist</em> (Spain); (Sweden)</td>
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<tr>
<td>09:04</td>
<td>Discussion</td>
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<td>09:07</td>
<td>Accuracy of sonographic estimated fetal weight in postdates pregnancies</td>
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<td>do weight estimates influence management?</td>
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<td><strong>OC1.05</strong></td>
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<td><em>T.J. Penney; A. Metcalfe; D. Sommerset; S. Cooper (Canada)</em></td>
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<td>09:12</td>
<td>Discussion</td>
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</tbody>
</table>

* Scientific content of sessions is defined by the Scientific Committee; ultrasound systems and technical support are provided by sponsors.
08:15 - 09:15 Outcomes of laser therapy for TTTS

**Michelangelo B**

**Chairs:** J. Deprest (Belgium); A. Johnson (United States)

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
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<tbody>
<tr>
<td>08:15</td>
<td>Cardiac function before and after fetoscopic laser photocoagulation in Twin–twin transfusion syndrome</td>
<td>C. Wohlmutti; D. Boudreauxi; K.J. Moises; A. Johnsoni; R. Papannai; M. Bebbingtoni; H. Gardineri (United States); ii(Austria)</td>
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<tr>
<td>08:20</td>
<td>Discussion</td>
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<tr>
<td>08:23</td>
<td>Placental abruption in monochorionic pregnancies complicated by Twin–twin transfusion syndrome treated with laser coagulation of placental vessels</td>
<td>M. Lanna; S. Faiola; D. Consonni; V. Schena; E. Rosti; E. Ferrazzi; M. Rustico (Italy)</td>
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<tr>
<td>08:28</td>
<td>Discussion</td>
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<tr>
<td>08:31</td>
<td>Outcomes following preterm premature rupture of the membranes after fetoscopic laser coagulation for Twin–twin transfusion syndrome</td>
<td>A. Kim; J. Stirneman; G.E. Chalouhi; I. Mediouni; A. Carrier; L.J. Salomon; Y. Ville (France)</td>
</tr>
<tr>
<td>08:36</td>
<td>Discussion</td>
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<tr>
<td>08:39</td>
<td>Perinatal outcome improvement after the introduction of Solomon technique for laser treatment of Twin–twin transfusion syndrome at a single centre</td>
<td>M. Lanna; S. Faiola; D. Consonni; V. Schena; L. Primerano; E. Ferrazzi; M. Rustico (Italy)</td>
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<tr>
<td>08:44</td>
<td>Discussion</td>
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<tr>
<td>08:47</td>
<td>Long-term neurodevelopmental outcomes of children in Twin–twin transfusion syndrome after fetoscopic laser photocoagulation</td>
<td>S. Matsushima; K. Ozawa; N. Nakamura; R. Sugibayashi; S. Wada; H. Sago (Japan)</td>
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<tr>
<td>08:52</td>
<td>Discussion</td>
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<tr>
<td>08:55</td>
<td>How to improve the management of monochorionic twins</td>
<td>J. Deprest (Belgium)</td>
</tr>
</tbody>
</table>

08:15 - 09:15 Miscarriage, ectopic pregnancy and other complications in early pregnancy

**Tiziano A**

**Chairs:** G. Condous (Australia); E. Kirk (United Kingdom)

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>08:15</td>
<td>The role of serum progesterone alone and prediction models using hCG and progesterone to rationalise the follow-up of women with a pregnancy of unknown location (PUL)</td>
<td>S. Bobdiwala (United Kingdom)</td>
</tr>
<tr>
<td>08:35</td>
<td>The role of progesterone for the prediction of viability in pregnancies of unknown location (PUL): a multicentre study</td>
<td>S. Bobdiwala; J. Farren; N. Mitchell-Jones; M. Al-Memar; F. Ayim; B. Chohan; B. Guruwadahyarhalli; M. Taheri; O. Abughazza; S. Guha; V. Vathanan; C. Bottomley; S. Ahmed; D. Gould; S. Sur; C. Stalder; D. Timmerman; T. Bourne (United Kingdom); (Belgium)</td>
</tr>
</tbody>
</table>

INVITED
Urine metabolomic changes by gestational age in early pregnancy and differences in the metabolome between viable pregnancies and those that miscarry

**M. Al-Memar**¹; **S. Cacciatore**¹; **S. Bobdiwala**¹; **S. Saso**¹; **J. Farren**¹; **D. Timmerman**²; **P. Bennett**¹; **D. MacIntyre**¹; **T. Bourne**¹

¹(United Kingdom); ²(Belgium)

Natural history of interstitial ectopic pregnancies after spontaneous or methotrexate-induced termination

**L. Savelli**; **M. Ambrosio**; **L. De Meis**; **M. Scifo**; **L. Ricci Maccarini** (Italy)

The value of activin B and fibronectin as biomarkers to predict outcome in pregnancies of unknown location and viability at 11–14 weeks’ gestation

**M. Al-Memar**¹; **S. Bobdiwala**¹; **S. Saso**¹; **M. Madhra**¹; **B. De Cock**²; **B. Van Calster**²; **J. Brown**¹; **C. Bottomley**¹; **A.T. Papageorghiou**¹; **D. Timmerman**²; **A. Horne**¹; **T. Bourne**¹

¹(United Kingdom); ²(Belgium)

Direct ultrasound guided intragestational sac injection of methotrexate and/or KCL for the treatment of early non-tubal ectopic pregnancies

**J.P. Lerner** (United States)

Predictive factors for the success of medical management of miscarriage

**V. Lusink**; **C. Wong**; **B. de Vries**; **J. Ludlow** (Australia)

## 09:20 - 10:00 Short oral presentations (OP)

**OP16: Fetal growth assessment**

Chair: **F. Figueras** (Spain); **P. Martinelli** (Italy)

**Michelangelo A**

**OP17: New data in multiple pregnancies**

Chair: **M. Rustico** (Italy); **L.J. Salomon** (France)

**Michelangelo B**

**OP18: Early pregnancy complications**

Chair: **T. Bourne** (United Kingdom); **I. Timor-Tritsch** (United States)

**Tiziano A**

**OP19: The good and the bad of obstetrical ultrasound**

Chair: **R. Chaoui** (Germany); **K. Maršál** (Sweden)

**Tiziano B**

## 09:20 - 10:00 Poster discussion Hubs (P)

**P13: Fetal cardiac function**

Chair: **A. Abuhamad** (United States)

**Hub 1**

**Why knowing your anatomy will improve your scanning?**

Chair: **P. Sladkevicius** (Sweden); **A.C. Testa** (Italy)

**Hub 2**

**P14: Predicting preterm and term birth**

Chair: **P. Acharya** (India)

**Hub 3**

**P15: Using ultrasound to diagnose causes of pelvic pain and endometriosis**

Chair: **A. Millischer** (France); **J. Alcázar** (Spain)

**Hub 4**
10:20 - 11:20 Screening for congenital heart defects  
**Michelangelo A**

**Chairs:** A. Abuhamad (United States); T. Todros (Italy)

10:20 Live scan: ‘give me five’: how never to miss a congenital heart defect [industry supported*]  
*J. Copel (United States)*

10:40 The three-vessels and trachea view as part of screening of congenital heart defects in a low-risk population during the first trimester screening  
V. De Robertis; G. Rembouskos; T. Fanelli; B. Muto; A. Tempesta; P. Volpe (Italy)

10:45 Discussion

10:48 Two planes for the first trimester major congenital heart diseases screening  
S. Tudorache; D.G. Iliescu; M. Florea; R. Dragusin; C. Patru; F. Burada; C. Simionescu; M. Cara (Romania)

10:53 Discussion

10:56 Prenatal diagnosis of congenital heart defects at the 11–13 weeks’ scan using 4-chamber, 3-vessel and trachea views  
E.S. Nekrasova; E. Porozova (Russian Federation)

11:01 Discussion

11:04 Understanding of congenital heart defects by STIC training and 3D-printed fetal heart models  
M. Wiechec; A. Nocun; A. Knafel (Poland)

11:09 Discussion

11:12 Accuracy of prenatal diagnosis and prenatal detection of congenital heart defects  
H. Fleurke-Rozema; I. Haveman; M. Bakker; R. de Heus; C.M. Bilardo (Netherlands)

11:17 Discussion

10:20 - 11:20 Fetal therapy  
**Michelangelo B**

**Chairs:** M. Bebbington (United States); F. Prefumo (Italy)

10:20 Fetal surgery: where are we going and should we be going there?  
Y. Ville (France)

10:40 *In utero* treatment of congenital cytomegalovirus infection with Valacyclovir in a multicentre, open-label, phase II study  
M. Leruez-Ville; I. Ghout; L. Bussières; J. Stirneman; J. Magny; S. Couderc; L.J. Salomon; T. Guilleminot; P. Aegerter; G. Benoist; N. Winer; O. Picone; F. Jacquemard; Y. Ville (France)

10:45 Discussion

10:48 Obstetric outcomes following non-invasive high intensity focused ultrasound (HIFU) occlusion of sheep placental vasculature  
C. Shaw; I. Rivens; J. Civale; K. Botting; D. Giussani; G. Ter Haar; C. Lees (United Kingdom)

10:53 Discussion

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

*Scientific content of sessions is defined by the Scientific Committee; ultrasound systems and technical support are provided by sponsors.
Vesicoamniotic shunting versus conservative management in fetal lower urinary tract obstruction: a 10-year registry
F. Fontanella; P. Adama Van Scheltema; V. Gracchi;
T.E. Cohen-Overbeek; C. Willekes; M.N. Bekker; E. Pajkrt; D. Oepkes;
C.M. Bilardo (Netherlands)

Discussion

Technical aspects of fetal cardiac interventions
M. Debska; A. Kolesnik; B. Rebizant; P. Kretowicz; R. Debski;
J. Dangel (Poland)

Discussion

Prenatal percutaneous valvuloplasty for critical aortic and pulmonary stenosis: 5 years’ experience in a single centre
J. Stirneman; G. Milani; L.J. Salomon; Y. Boudjemline; Y. Ville (France)

Discussion

10:20 - 11:20 Ultrasound in reproductive medicine

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

The features of endometriotic nodules and how to look for them: the Leuven protocol
T. Van den Bosch (Belgium)

What role does ultrasound now play in the diagnosis of PCOS and how do we interpret hormone profiles to compliment it
N. Raine-Fenning (United Kingdom)

Prospective evaluation of impact of adenomyosis on in vitro fertilisation outcome
T.K. Holland; M. Khalil; O. O’Donovan; D. Jurkovic; Y. Khalaf;
D. Mavrelos (United Kingdom)

Discussion

Which is the most accurate ultrasonographic mode to ascertain women ovarian reserve?
S. Cholvi Camarasa; C. Linares Valdecabres; C. Pascual Botia; F. Raga Baixauli; A. Cano Sánchez (Spain)

Discussion

Endometrial scratching for pregnancy: a systematic review and meta-analysis of randomised controlled trials
C.O. Nasti1; L.T. Polanski2; W.P. Martins1 1(Brazil); 2(United Kingdom)

Discussion

Hysterosalpingo-contrast-sonography with gel foam: methodology and feasibility to obtain 3D volumes of the uterus and tubal shape
A. Pizzo; C. Exacoustos; P. Raffaella; E. Zupi (Italy)

Discussion

3D-TVS criteria to diagnose T-shaped uterus
F. Leone; C. Personeni; R. Clauser; M. Mazzocco (Italy)

Discussion
11:25 - 12:05 Short oral presentations (OP)

OP20: Screening and clinical outcome of fetuses with CHD  
*Michelangelo A*
*Chairs: M. Herrera (Colombia); V. De Robertis (Italy)*

OP21: Fetal interventions  
*Michelangelo B*
*Chairs: N. Chianchiano (Italy); S. Yeo (Singapore)*

OP22: Improving outcomes in reproductive medicine  
*Tiziano A*
*Chairs: M. Coccia (Italy); W. Martins (Brazil)*

OP23: Advances in ultrasound and new technologies: focus on ultrasound  
*Tiziano B*
*Chairs: P. Acharya (India); S. Eik-Nes (Norway)*

11:25 - 12:05 Poster discussion Hubs (P)  
*Botticelli*

P16: Hypertension in pregnancy  
*Hub 1*
*Chair: F. da Silva Costa (Australia)*

P17: Ultrasound through the stages of labour  
*Hub 2*
*Chair: T. Ghi (Italy)*

P18: Pathophysiology of growth abnormalities  
*Hub 3*
*Chair: C. Lees (United Kingdom)*

P19: Using ultrasound to manage early pregnancy complications  
*Hub 4*
*Chairs: L. De Meis (Italy); N. Raine-Fenning (United Kingdom)*

12:00 - 13:30 Lunch and e-poster viewing (EP)

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

13:30 - 14:30 Meet the Professor hubs  
*Botticelli*

Making the most of your first trimester scan  
*Hub 1*
*R. Chaouki (Germany); F. Ushakov (UK)*

Fetal interventions  
*Hub 2*
*Y. Ville (France); L. Gabrielli (Italy)*

Medical legal issues  
*Hub 3*
*D. Arduini (Italy); L. Savelli (Italy)*

How to keep your Editor happy  
*Hub 4*
*B. Thilaganathan (UK); R. Romero (USA)*

13:30 - 14:30 This newborn will need a pediatric surgeon!  
*Michelangelo A*

** 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 154 for our satellite program.
<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Authors/Institutions</th>
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<tbody>
<tr>
<td>13:46</td>
<td>Proposal of a prenatal classification based on the severity of left</td>
<td>R. Ruano; S. Cruz; D. Cass; A. Nikahd; C. Cassady; A. Mehollin-Ray;</td>
</tr>
<tr>
<td></td>
<td>congenital diaphragmatic hernia using fetal magnetic resonance</td>
<td>S. Welty; C. Fernandes; M. Belfort; O. Olutoye (United States)</td>
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<td>imaging results</td>
<td></td>
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<td>13:51</td>
<td></td>
<td>Discussion</td>
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<tr>
<td>13:54</td>
<td>Differences in left heart morphometry associated with liver herniation</td>
<td>B. Yilmaz; C.C. Allen; J. Peiro; M. Habli; E.C. Michelfelder (United States)</td>
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<td></td>
<td>in fetuses and newborns with congenital diaphragmatic hernia</td>
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<tr>
<td>13:59</td>
<td></td>
<td>Discussion</td>
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<tr>
<td>14:02</td>
<td>Congenital diaphragmatic hernia: alterations in pregnancy management</td>
<td>S. Lee¹; J.E. Dickinson¹; W. Nembhard²; C. Bower¹ (Australia); ²(United States)</td>
</tr>
<tr>
<td></td>
<td>strategies over 15 years</td>
<td></td>
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<tr>
<td>14:07</td>
<td></td>
<td>Discussion</td>
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<tr>
<td>14:10</td>
<td>Sonographic bowel parameters predictive of postnatal outcomes in</td>
<td>S. Nyon; R. Nowrangi; H. Duong; E. Tagge; S. Tuburan (United States)</td>
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<td></td>
<td>fetuses with gastroschisis</td>
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<tr>
<td>14:15</td>
<td>Antenatal prediction of neonatal death in sacrococcygeal teratoma</td>
<td>S. Lee; D. Suh; S. Kim; S. Oh; S. Song; H. Kim; M. Kim; C. Park; J. Park; J. Jun (Republic of Korea)</td>
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<tr>
<td>14:23</td>
<td></td>
<td>Discussion</td>
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**13:30 - 14:30**  Can we predict the future on the labour ward?  *Michelangelo B*

**Chairs:** T.M. Eggebø (Norway); K. Kalache (Germany)

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<tr>
<th>Time</th>
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<tbody>
<tr>
<td>13:30</td>
<td>Clinical utility of ultrasound before and during labour</td>
<td>T. Ghi (Italy)</td>
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<td><strong>INVITED</strong></td>
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<tr>
<td>13:50</td>
<td>Correlation between subpubic arch angle (SPA) and mode of delivery</td>
<td>G. Rizzo; A. Suprani; C. Di Pietro; A. Musarò; M. Pietrolucci; A. Dall’Asta;</td>
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<tr>
<td></td>
<td>in large-for-gestational age fetuses</td>
<td>D. Arduini; T. Frusca; T. Ghi (Italy)</td>
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<tr>
<td>13:55</td>
<td></td>
<td>Discussion</td>
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<tr>
<td>13:58</td>
<td>Role of the sonographic parameters at term to predict successful</td>
<td>J. Wie; L. Young; I. Park; K. Kang; J. Shin (Republic of Korea)</td>
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<td></td>
<td>trial of labour after Caesarean in women with no prior vaginal</td>
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<td>delivery history</td>
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<td>14:03</td>
<td></td>
<td>Discussion</td>
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<tr>
<td>14:06</td>
<td>Serial intrapartum transperineal ultrasound to predict successful</td>
<td>C. Chor (Hong Kong)</td>
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<tr>
<td></td>
<td>vaginal delivery in 190 Chinese women</td>
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<tr>
<td>4:11</td>
<td>Prediction of delivery time in the second stage of labour using</td>
<td>N. Yonetani; R. Yamamoto; M. Murata; E. Nakajima; T. Taguchi;</td>
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<td></td>
<td>transperineal ultrasonography</td>
<td>S. Hayashi; K. Ishii; N. Mitsuda (Japan)</td>
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<tr>
<td>14:19</td>
<td></td>
<td>Discussion</td>
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<tr>
<td>14:22</td>
<td>Correlation between the angle of progression and complicated</td>
<td>I. Martins; R. Silva; S. Mendes; J.G. Barros; N. Clode (Portugal)</td>
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<td></td>
<td>operative vaginal delivery after prolonged second stage of labour</td>
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<tr>
<td>14:27</td>
<td></td>
<td>Discussion</td>
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</tbody>
</table>
**13:30 - 14:30  Workshop: Reproductive medicine  Tiziano A**

*Chairs: N. Raine-Fenning (United Kingdom); D. Van Schouboeck (Belgium)*

13:30  Saline/gel/foam for examining endometrial cavity and tubal patency including MRI fusion
*C. Exacoustos (Italy)*

13:50  Assessment of the functional ovarian reserve and anovulatory disorders
*W. Martins (Brazil)*

14:10  Defining tubal diseases and endometrioma
*S. Guerriero (Italy)*

14:30  Using ultrasound to assess endometrial receptivity
*N. Raine-Fenning (United Kingdom)*

**14:35 - 15:15  Short oral presentations (OP)**

**OP24: Imaging in reproductive medicine  Tiziano A**
*Chairs: F. Moro (Italy); N. Raine-Fenning (United Kingdom)*

**OP25: Advances in first trimester scanning  Michelangelo A**
*Chairs: C. Bilardo (Netherlands); C. Brezinka (Austria)*

**OP26: Ultrasound system: a necessity on the labour ward?  Michelangelo B**
*Chairs: T.M. Eggebø (Norway); G. Rizzo (Italy)*

**OP27: Sonographic prediction of morbidly adherent placenta  Tiziano B**
*Chairs: A. Bhide (United Kingdom); G. Cali (Italy)*

**14:35 - 15:15  Poster discussion Hubs (P)  Botticelli**

**P20: Early screening of congenital heart defects and anomalies of the great vessels  Hub 1**
*Chair: H. Gardiner (United States)*

**P21: Fetal face  Hub 2**
*Chair: L. Poon (United Kingdom)*

**P22: Advances in ultrasound and new technologies  Hub 3**
*Chair: M. Sanz Cortes (Spain)*

**P23: Abnormal uterine bleeding  Hub 4**
*Chairs: M. Al-Memar (United Kingdom); T. Van den Bosch (Belgium)*


**15:40 - 17:00  Workshop: Maternal hemodynamic assessment  Michelangelo A**

*Chairs: C. Lees (United Kingdom); H. Valensise (Italy)*

15:40  Cardiac output vascular resistance: how to measure it and its relation to pre-eclampsia
*H. Valensise (Italy)*

15:55  Arterial function as a predictor of pre-eclampsia
*A. Khalil (United Kingdom)*

16:10  Hemodynamics in early and late pre-eclampsia
*E. Ferrazzi (Italy)*

16:25  Cardiac function after pre-eclampsia
*B. Thilaganathan (United Kingdom)*

16:40  How to incorporate maternal hemodynamics in obstetric care
*C. Lees (United Kingdom)*
### Workshop: Zika virus

**Chairs:** G. Malinger (Israel); A.T. Papageorghiou (United Kingdom)

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>15:40</td>
<td>Cardiac output vascular resistance: how to measure it and its relation</td>
<td>L. Riley (United States)</td>
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<tr>
<td>15:40</td>
<td>The epidemiologist’s point of view</td>
<td>L. Riley (United States)</td>
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<tr>
<td>15:55</td>
<td>The virologist’s point of view</td>
<td>L. Gabrielli (Italy)</td>
</tr>
<tr>
<td>16:10</td>
<td>The sonologist’s point of view</td>
<td>G. Malinger (Israel)</td>
</tr>
<tr>
<td>16:25</td>
<td>ISUOG clinical guidelines: what to tell your patients</td>
<td>J. Copel (United States)</td>
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<tr>
<td>16:40</td>
<td>Experience on the ground: case examples</td>
<td>M. Herrera (Colombia)</td>
</tr>
<tr>
<td>16:55</td>
<td>Congenital Zika virus in Colombia</td>
<td>M. Herrera1; O. Lavalle1; J. Alvarado1; J.A. Benavides1; L. Gutierrez1; M. Beltran1; G. Malinger21 (Colombia); 2 (Israel)</td>
</tr>
</tbody>
</table>

### Workshop: Using imaging to diagnose and guide the management of endometriosis

**Chairs:** D. Timmerman (Belgium); R. Manfredi (Italy)

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>15:40</td>
<td>Cardiac output vascular resistance: how to measure it and its relation</td>
<td>G. Condous (Australia)</td>
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<tr>
<td>15:40</td>
<td>How I use ultrasound to guide my surgery for deep endometriosis</td>
<td>G. Condous (Australia)</td>
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<tr>
<td>16:00</td>
<td>MRI imaging and how it can help you assess the extent of endometriosis: where does MRI sit in relation to ultrasound?</td>
<td>I. Thomassin-Naggar (France)</td>
</tr>
<tr>
<td>16:20</td>
<td>What are the ultrasound features of adenomyosis and how do these relate to the clinical presentation and management?</td>
<td>C. Exacoustos (Italy)</td>
</tr>
<tr>
<td>16:40</td>
<td>How ultrasound can help you sort out the cause of pelvic pain: remember to consider the urinary tract and adhesions as well as endometriosis</td>
<td>D. Jurkovic (United Kingdom)</td>
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</table>

### Workshop: Abnormally invasive placenta

**Chairs:** A. Millischer (France); F. Chantraine (Belgium)

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>15:40</td>
<td>Introduction: the basics</td>
<td>F. Chantraine (Belgium)</td>
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<tr>
<td>15:50</td>
<td>Prenatal identification of invasive placentation using ultrasound</td>
<td>A. Bhide (United Kingdom)</td>
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<tr>
<td>16:00</td>
<td>Unifying AIP ultrasound terminology</td>
<td>S. Collins (United Kingdom)</td>
</tr>
<tr>
<td>16:15</td>
<td>The role of MRI</td>
<td>A. Millischer (France)</td>
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<tr>
<td>16:30</td>
<td>Management of AIP using the triple P procedure</td>
<td>E. Chandra-Haran (United Kingdom)</td>
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<tr>
<td>16:45</td>
<td>Perinatal management of AIP: conservative (primary non-surgical) versus surgical approach</td>
<td>L. Sentilhes (France)</td>
</tr>
</tbody>
</table>
15:40 - 16:20 Workshop: Is there a future for cell-free DNA in cancer screening? Botticelli Hub 1

Chairs: G. Scambia (Italy); L. Hui (Australia)

15:40 Is there a scientific basis for cell-free DNA in the detection of cancer?
- G. Scambia (Italy)

15:45 Can determination of immune cells help in the preoperative ultrasound assessment of ovarian cancer? A pilot study
- A. Coosemans; C. Landolfo; T. Baert; A. Vanderstichele; W. Froyman; P. Busschaert; I. Vergote; B. Van Calster; D. Timmerman (Belgium)

15:55 Abnormal NIPT result and the euploid fetus: false positive or cause for concern?
- L. Hui (Australia)

16:05 The view from industry
- S. Little (United Kingdom)

15:40 - 16:20 Gynecologists and patients associations face to face Botticelli Hub 4

Chair: Marina Caleffi (Italy)
OP - Tuesday 27 September 2016

OP16: Fetal growth assessment  
*Michelangelo A*

Chairs: F. Figueras (Spain); P. Martinelli (Italy)

Prediction of macrosomia using the gestation-adjusted projection method: a systematic review

**M. Mongelli** (Australia)

Fractional volume and subcutaneous thickness of the fetal limbs correlate better with the percentage of fat tissue in the newborn than standard biometric parameters

**H. Ahn** (United States)

The influence of a standard breakfast meal on fetal middle cerebral and umbilical artery pulsatility indices.

**G. Opheim** (Norway)

Estimation of fetal weight in pregnancies past term

**T.M. Eggebø** (Norway)

Determinants of birthweight multiple of the medians in term newborns

**M. Mongelli** (Australia)

Reproducibility of fetal head biometry measurements acquired in the transthalamic and the transventricular plane

**R. Napolitano** (United Kingdom)

Quality control of ultrasound biometry in a large-scale study: results from the INTERGROWTH-21st Project

**R. Napolitano** (United Kingdom)

Neonatal size in Clinica Santa Isabel in Lima, Peru

**G. Diez Chang** (Peru)

Fetal biometry for babies with “normal size” at birth

**G. Diez Chang** (Peru)

WHO’s fetal growth standards: a multinational longitudinal study of estimated fetal weight

**T. Kiserud** (Norway)

A multiple of the median approach to birthweight

**M. Mongelli** (Australia)

Second trimester fetal and maternal epicardial fat thickness in gestational diabetic pregnancies

**M. Sezik** (Turkey)

OP17: New data in multiple pregnancies  
*Michelangelo B*

Chairs: K. Hecher (Germany); L.J. Salomon (France)

Use of the fetal myocardial performance index (MPI) in monochorionic, diamniotic (MCDA) twin pregnancies

**A. Henry** (Australia)

Aortic isthmus shunt dynamics in normal and complicated monochorionic pregnancies

**V. Seravalli** (United States)

Better birthweight reference of small-for-gestational age in twin pregnancy

**S. Kim** (Republic of Korea)

Multifetal reduction of triplets to twins compared to non-reduced twins: a meta-analysis

**Y. Zipori** (Canada)

Clinical courses variability of monochorionic twins based on a different placental vascular architecture

**L. Haslik** (Czech Republic)

Incidence and outcome of chorioamniotic membrane separation after fetoscopic laser surgery in monochorionic twin pregnancy

**M. Nakata** (Japan)

Cervical length measurement at mid-gestation to predict spontaneous preterm birth in triplet pregnancies

**A. Fichera** (Italy)
Performance of Down’s syndrome screening in triplet pregnancy with combination of maternal age and nuchal translucency

M. Kim (Republic of Korea)

Maternal cardiac changes during uncomplicated twin pregnancy: does the chorionicity matter?

T. Ghi (Italy)

Neonatal complications and gestational age at delivery in twin pregnancy: a systematic review with meta-analysis

F. Prefumo (Italy)

Complicated monochorionic twin gestations: the added value of MRI for diagnosis of cerebral abnormalities

S.K. Goergen (Australia)

OP18: Early pregnancy complications

Chairs: T. Bourne (United Kingdom); I. Timor-Tritsch (United States)

Cardiovascular changes from pre-pregnancy to early pregnancy in relation to viability of pregnancy

G. Masini (United Kingdom)

A multicentre study to predict outcome in pregnancies of unknown location (PUL): the role of the bleeding score

S. Bobdiwala (United Kingdom)

Sensitivity and specificity of pretreatment hCG ratio in non-surgical management of tubal ectopic pregnancy

B. Nadim (Australia)

Single-visit strategy for women with pregnancies of unknown location

R. Ali (United Kingdom)

Expectant management of tubal ectopic pregnancy: a systematic review and meta-analysis

B. Nadim (Australia)

Should our Early Pregnancy Unit be open at the weekend?

E. Kirk (United Kingdom)

The potential use of urinary ßhCG for managing pregnancies of unknown location (PUL): correlating urinary and serum ßhCG levels using two immunoassays

S. Bobdiwala (United Kingdom)

Follow-up of gestational trophoblastic disease via quantification of circulating nucleic acids of placental origin

I. Hromadnikova (Czech Republic)

Can risk factors, clinical history and symptoms be used to predict the risk of ectopic pregnancy in women attending early pregnancy assessment units?

M. Al-Memar (United Kingdom)

OP19: The good and the bad of obstetrical ultrasound

Chairs: K. Maršál (Sweden); R. Chaoui (Germany)

Awareness of safety aspects of ultrasound among doctors in Russia according to an original survey

V. Makukhina (Russian Federation)

Acoustic power indices of 3D/4D ultrasound during the second trimester scan

E. Pavlova (Bulgaria)

Minimally invasive measuring fetal heart rate by AutoFHR: method and reliability

R. Nagai (Japan)

Assessment of the impact of prenatal colour Doppler on the brain cortex development in rats

V. Makukhina (Russian Federation)

Impact of Zika virus on maternal anxiety levels and fetal outcomes: a questionnaire survey of pregnant women with suspected of Zika virus infection

M.A. Parra-Saavedra (Colombia)
Effects of first trimester anomaly scan on maternal anxiety levels at the second trimester scan
S. Tudorache (Romania)
OP19.06
Late booking and late scanning – should it alter the pre-scan counselling?
S. Tudorache (Romania)
OP19.07
Exposure to traumatic medical litigation, patient’s complaints and post-traumatic stress
symptoms for misdiagnosed fetal congenital abnormalities
E.G. Yapar Eyi (Turkey)
OP19.08
Effect of bed rest during pregnancy on thicknesses of quadriceps femoris muscle in pregnant
and postpartum women
Y. Takahashi (Japan)
OP19.09
Point of care lung sonography in obstetrics: a case of pulmonary edema managed with lung
ultrasound in a patient with pre-eclampsia
S. Pachtman (United States)
OP19.10

OP20: Screening and clinical outcome of fetuses with CHD

Chairs: M. Herrera (Colombia); V. De Robertis (Italy)
Are first trimester cardiac fetal dynamic parameters related to nuchal translucency
thickness?
L. D’Emidio (Italy)
OP20.01
Long-term outcomes of congenital heart disease: a systematic review of literature
F. Prefumo (Italy)
OP20.02
Quantitative measurement of tracheal and complete vascular ring areas by fetal
echocardiography
Y. He (China)
OP20.03
Semilunar valve growth in fetal transposition of the great arteries – is pulmonary valve size
predictive of postoperative aortic root dilatation?
S.B. Clur (Netherlands)
OP20.04
Fetal tricuspid regurgitation as a screening marker for congenital heart disease in first-trimester
screening: systematic review and meta-analysis
C. Scala (Italy)
OP20.05
Application value of fetal echocardiography in diagnosing of congenital vascular ring
Y. Guo (China)
OP20.06
A prenatal detection rate of 85% is achieved for transposition of the great arteries after
introduction of the three-vessel view
M.C. Haak (Netherlands)
OP20.07
Examination of 16 prenatal neonates diagnosed with simple coarctation of the aorta
T. Tanaka (Japan)
OP20.08
Fetal biometry and Doppler changes in transposition of great arteries compared to left-sided
heart lesions
J. Binder (United Kingdom)
OP20.09
Prenatal diagnosis improve neonatal outcome only in severe coarctation of the aorta
M. Slodki (Poland)
OP20.10
Contribution of morphologic and biometric markers to detection of 22 congenital
heart defects (CHDs) by transvaginal sonography at 9–14 wks of gestation
S. Rottem (United States)
OP20.11

OP21: Fetal interventions

Chairs: N. Chianchiano (Italy); S. Yeo (Singapore)
Developing standard maternal and fetal adverse event severity grading criteria: building
a framework for obstetric and fetal therapy trials
R. Spencer (United Kingdom)
OP21.01
Acute impact of fetal surgery for myelomeningocele on placental and cerebrovascular
circulations
J. Rychik (United States)
OP21.02
Prediction for postnatal treatment of hydrocephalus in fetuses that underwent a neural tube defect (NTD) repair based on prenatal brain imaging

M. Sanz Cortes (United States)

Ultrasound guided intra-amniotic instillation of surfactant before preterm delivery for prevention of neonatal respiratory syndrome: a novel approach

N. Agarwal (India)


S. Faiola (Italy)

Perinatal outcome of thoracoamniotic shunting for fetal pleural effusion: a single-centre experience

S. Faiola (Italy)

Values of the lung volume and herniated liver volume related to the outcomes in fetuses with liver-up congenital diaphragmatic hernia

H. Sago (Japan)

Longitudinal ultrasound assessment of lung vasculature in fetuses with congenital diaphragmatic hernia treated by endoscopic tracheal occlusion and controls

R. Ruano (United States)

Risk factors for miscarriage after chorionic villus sampling

M. Hynek (Czech Republic)

Technical and safety considerations for high intensity focused ultrasound (HIFU) non-invasive placental vascular occlusion

C. Shaw (United Kingdom)

OP22: Improving outcomes in reproductive medicine

Tiziano A

Chairs: M. Coccia (Italy); W. Martins (Brazil)

Fixed versus flexible GnRH antagonist protocol in controlled ovarian stimulation for in vitro fertilisation performed with Corifollitropin α

N. Montik (Italy)

Accuracy of 2D/3D high-definition flow imaging HyFoSy and 2D/3D HyFoSy in comparison to 2D air/saline HyCoSy and laparoscopy

A. Ludwin (Poland)

The impact of routine use of a 3D silhouette mode for uterine cavity evaluation in a population trying to conceive

A. Khurana (India)

Follicular flushing during oocyte retrieval: systematic review and meta-analysis

C.O. Nastri (Brazil)

Impact of adenomyosis on obstetric outcome after in vitro fertilisation

D. Mavrellos (United Kingdom)

Elastography assessment of endometrial changes during the menstrual cycle of fertility treatment

R. Boldes (Israel)

Essure for women with hydrosalpinx before embryo transfer: a systematic review and meta-analysis

C.O. Nastri (Brazil)

Hysterosalpingo-foam sonography (HyFoSy) with tubal flushing increase chances of spontaneous pregnancy

C. Exacoustos (Italy)

The effect of short-term use of oral contraceptive pill on AFC and its accuracy in predicting ovarian response in women undergoing assisted reproduction

C.O. Nastri (Brazil)
OP23: Advances in ultrasound and new technologies: focus on ultrasound

Chairs: P. Acharya (India); S. Eik-Nes (Norway)

3D volume assessment of the corpus callosum and cerebellar vermis using various volume acquisition and post-processing protocols

V. Frisova (Czech Republic)

Prediction of Caesarean section before induction of labour at term, using an ultrasound-based system (LaborPro)

L.J. Salomon (France)

Visualisation of ureters on transvaginal scan in pregnancy: preliminary data of a feasibility study

P. D’Ajello (Italy)

Postmortem verification of cardiac ultrasound findings by micro-computed tomography of the fetal heart before 17 weeks’ gestation

S.M. Boito (Italy)

Mid-gestational fractional thigh volume as early marker for neonatal body composition

J. Roelants (Netherlands)

Prenatal diagnosis and prognosis of the unilateral cleft lip and palate (UCLP): interest of the three-dimensional axial view

F. Grosjean (France)

Pseudo-feeder” on fetal MRI: a new marker to predict outcome in vein of Galen aneurysmal malformations

G. Saliou (France)

Prenatal ultrasound screening of intestinal malrotation with a risk of volvulus: value of the relative position of the superior mesenteric vessels

J.M. Faure (France)

Antenatal automatic diagnosis of cleft lip via unsupervised clustering method relying on 3D facial soft tissue landmarks

F. Padula (Italy)

Fetal optic chiasm measurements: a simpler way!

J. Bault (France)

OP24: Imaging in reproductive medicine

Chairs: F. Moro (Italy); N. Raine-Fenning (United Kingdom)

A feasibility study of a new friendly and low-cost ovarian stimulation protocol for assisted reproduction

C.O. Nastri (Brazil)

Sonographic features of uterine cavity in patients with congenital adrenocortical dysfunction

K. Tokhunts (Armenia)

Three-dimensional sonography for the diagnosis of Müllerman duct anomaly cases: interobserver agreement

S. Tudorache (Romania)

The risk of fetal endothelial damage in IVF pregnancies

S. Vișentin (Italy)

Intraobserver variability of uterine measurements in congenital uterine anomalies with three-dimensional ultrasound

B. Graupera (Spain)

Accuracy of 3D sonography in the diagnosis of Müllerman duct anomalies

S. Tudorache (Romania)

Role of ultrasonography as a diagnostic tool for evaluating the uterine factors in women with recurrent pregnancy loss

V. Medarametla (India)

Magnetic resonance imaging of complications due to uterine anomalies

S.L. Laifer-Narin (United States)
Performances of sonography and interobserver reproducibility for diagnosis of Caesarean scar defect
P. Capmas (France)

Prevalence of congenital uterine anomalies in a consecutive series of rectosigmoid DIE
F. Leone (Italy)

OP25: Advances in first trimester scanning

Chairs: C. Bilardo (Netherlands); C. Brezinka (Austria)
The maternal age-related first trimester risks for Trisomy 21, 18 and 13 based on Danish first trimester data from 2005 to 2014
T.S. Hartwig (Denmark)

Comparison of nuchal translucency measurements obtained by different semi-automatic packages
G. Rizzo (Italy)

Maxillary gap as a first trimester marker of orofacial clefts
M. Hynek (Czech Republic)

The retronasal triangle view and maxillary gap at 11–13 weeks in the detection of cleft lip and palate with or without secondary palate involvement
C. Votino (Italy)

Abnormal sonographic appearance of posterior brain at 11–14 weeks and fetal outcome
T. Fanelli (Italy)

Right congenital diaphragmatic hernia: unusual transformation of the first trimester fetal intra-abdominal cyst
F. Ushakov (United Kingdom)

Spontaneous resolution of fetal megacystis: when and why?
F. Fontanella (Netherlands)

Prognostic value of umbilical cord cysts in fetal megacystis
F. Fontanella (Netherlands)

Abdominal wall defects: incidence, detection and outcome after ultrasound screening in the first and second trimester
C.K. Ekelund (Denmark)

Yield of early versus 20 weeks’ ultrasound investigation for the diagnosis of congenital structural anomalies
H. Fleurke-Rozema (Netherlands)

OP26: Ultrasound system: a necessity on the labour ward?

Chairs: T.M. Eggebø (Norway); G. Rizzo (Italy)

Transperineal evaluation of fetal head engagement in primiparous at term
D.G. Iliescu (Romania)

A contraction stress test before induction of labour for small–for-gestational age fetuses: does it decrease the rate of Caesarean during labour?
Q. Thibaud (France)

Fetal cardiac function during labour: increased myocardial performance index and reduced isovolumetric relaxation time in the right ventricle during the late active phase of labour
S. Luwan (United States)

Intrapartum echocardiographic monitoring for automatic assessment of labour progression
A. Verbeni (Italy)

Sonographic assessment of the lower uterine segment during active labour in women with or without a uterine scar: a prospective study
E. Barzilay (Israel)

Traditionally coached versus sonographically coached second stage of labour: a randomised control trial
F. Bellussi (Italy)
Fetal head station and angle of progression during second stage of labour: correlation and normal reference range  
Y. I. Gilboa (Israel)
Predictive values of angle of progression, fetal head presentation and cervical length measured at 41/0 weeks for the risk of Caesarean during labour  
Q. Thibaud (France)
Variation of the angle of progression after a pushing effort in the second stage of labour as a predictive factor of Caesarean delivery.  
Q. Thibaud (France)
Can intrapartum translabial ultrasound predict uterine tear during Caesarean section for prolonged second stage?  
Y.V. Chan (China)
Intrapartum quality Doppler profile predicting postpartum hemorrhage  
G. Urban (Italy)

**OP26.07**

**OP26.08**

**OP26.09**

**OP26.10**

**OP26.11**

**OP27: Sonographic prediction of morbidly adherent placenta**  
**Chairs: A. Bhide (United Kingdom); G. Cali (Italy)**

Prenatal prediction of the evolution of Caesarean scar pregnancy  
F. D’Antonio (Norway)
Assessment of fusion imaging: a new image scoring in the diagnosis of placenta accreta  
L. Gitz (France)
Cervical length as a predictor of placental adherence and massive hemorrhage in placenta previa  
A.A. Altraigey (Egypt)
Abnormally invasive placenta – prevalence, risk factors and antenatal suspicion: results from a large population-based study in the Nordic countries  
L. Thurn (Sweden)
Abnormally invasive placenta (AIP) diagnosis performance: comparison of ultrasound, 1.5T MRI and 3T MRI  
O. Morel (France)
AIP and perinatal outcome  
F. Foti (Italy)
The accuracy of diagnosing placenta previa on transvaginal ultrasound at 20–24 weeks’ gestation by distinguishing between the uterine isthmus and cervix  
J. Hasegawa (Japan)
Accuracy of placenta accreta prenatal diagnosis by ultrasound and MRI in a high-risk population  
K. Dimassi (Tunisia)
Risk of abnormal placentation with increasing number of Caesarean sections  
M. Yamamoto (Chile)
The clinical outcome of Caesarean scar pregnancies implanted on the scar versus in the niche  
A. Kaelin Agten (United States)
## P - Tuesday 27 September 2016

### P13: Fetal cardiac function

**Chair:** A. Abuhamad (United States)

#### P13.01
Postnatal persistence of cardiovascular remodelling in children conceived by assisted reproductive technologies

**F. Crispi** (Spain)

#### P13.02
Fetal cardiac axis in tetralogy of Fallot

**Y. Inoue** (Japan)

#### P13.03
Pulmonary vein pulsatility: an early predictor of cardiac dysfunction in intrauterine growth restriction

**N.J. Bravo-Valenzuela** (Brazil)

#### P13.04
Constriction of the fetal ductus arteriosus associate with high doses of paracetamol: two cases and review of the literature

**C.A. Capuruco** (Brazil)

#### P13.05
Premature birth and fetal demise rates in singleton pregnancies with isolated fetal heart defects

**M.C. Haak** (Netherlands)

#### P13.06
Does exogenous progesterone modify first trimester myocardial performance index (TEI) in euploid fetuses?

**F. Padula** (Italy)

#### P13.07
Cardiac dysfunction in small-for-gestational age and growth-restricted fetuses born at term

**F. Crispi** (Spain)

#### P13.08
Cardiomegaly in fetal growth restriction: new insights from heart and chest dimensions

**S. Salvi** (United Kingdom)

#### P13.09
Outcome of pulmonary stenosis and pulmonary atresia diagnosed *in utero*

**F. Bellusci** (Italy)

#### P13.10
Outcomes in fetuses with agenesis of ductus venosus

**H. Muñoz** (Chile)

#### P13.11
Assessment of third-trimester pregnancies complicated by decreased fetal movements (DFM) using the fetal myocardial performance index (MPI)

**A. Henry** (Australia)

### Why knowing your anatomy will improve your scanning?

**Chairs:** P. Sladkevicius (Sweden); A.C. Testa (Italy)

#### P13.1
All you need to know: an anatomical view of the pelvis.

**A. Ercoli** (Italy)

#### P13.2
How to locate and image ureters

**D. Jurkovic** (United Kingdom)

#### P13.3
The proctologists view of the rectum

**C. Ratto** (Italy)

#### P13.4
How MRI can be used to clarify pelvic anatomy

**B. Gui** (Sweden)

### P14: Predicting preterm and term birth

**Chair:** P. Acharya (India)

#### P14.01
Diagnostic accuracy of ultrasound elastography in predicting preterm labour: a systematic review and meta-analysis

**S. Visentin** (Italy)

#### P14.02
The effectiveness of serial transvaginal cervical length scans in preventing preterm birth: a prospective cross-sectional study

**S. Raouf** (United Kingdom)

#### P14.03
Feasibility of texture analysis of different regions of the cervix by quantitative ultrasound to evaluate cervical changes along pregnancy

**A. Perez-Moreno** (Spain)
Novice sonographers can be taught to obtain reliable transvaginal cervical length (TVCL) measurements
C. Rittenberg (United States)

The impact of universal cervical length screening on the optimal timing of antenatal corticosteroids
N. Neto (United States)

Sonographic location of cerclage stitch: does it matter?
M. Terrani (United States)

Twin pregnancy: screening test for spontaneous preterm delivery and pre-eclampsia during the first trimester of pregnancy
A. Sepulveda-Martínez (Chile)

Kinetic and potential cardiac energy assessment as a new risk factor in preterm delivery
I. Pisani (Italy)

Role of adrenal fetal zone and its vascularity to predict successful labour induction outcomes and also to predict preterm labour
V. Kashyp (India)

Performance of cervical length and cervical consistency index to predict spontaneous preterm birth in low-risk population
N. Baños (Spain)

Comparison of two transvaginal cervical cerclages for the prevention of preterm birth
C. Chen (Taiwan)

Can we predict delivery date with cervical length at term pregnancy?
S. Park (Republic of Korea)

Can cervical length monitoring and treatment affect prematurity rate?
M. Terrani (United States)

P15: Using ultrasound to diagnose causes of pelvic pain and endometriosis

Botticelli Hub 4

Chairs: J.L. Alcázar (Spain); A. Millischer (France)

Meta-analysis and systematic review to determine the optimum imaging modality for the detection of rectovaginal septum deep infiltrative endometriosis
B. Shakeri (Australia)

How accurate is ultrasound imaging in the diagnosis of deep infiltrating endometriosis?
J. Ludlow (Australia)

Ultrasonographic evaluation of the effects of dienogest on volume and features of ovarian endometriomas
C. Exacoustos (Italy)

Transvaginal ultrasound (TVS) versus MRI for diagnosing deep infiltrating endometriosis: a systematic review and meta-analysis
J.L. Alcázar (Spain)

Sonographic and Doppler findings in pelvic abscesses
L. Savelli (Italy)

Ileocaecal endometriosis: a role for magnetic resonance enterography to improve routine screening? A preliminary study
A. Millischer (France)

Meta-analysis and systematic review to determine the optimum imaging modality for the detection of torus uterinus deep infiltrative endometriosis
B. Shakeri (Australia)

Three-dimensional ultrasound of rectosigmoid endometriosis: intra and interobserver variation of lesion size
A.G. Egekvist (Denmark)

Multicentre retrospective study to assess diagnostic accuracy of ultrasound for superficial endometriosis: are we any closer?
K. Stone (Australia)

Ultrasound evaluation before and after the laparoscopic treatment of the Caesarean section scar syndrome
P. Calda (Czech Republic)
**P16: Hypertension in pregnancy**  
**Botticelli Hub 1**

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

- Maternal plasma nerve growth factor at 11–13 weeks as a novel angiogenic marker of pre-eclampsia  
  *A. Sepúlveda-Martínez (Chile)*

- Prevalence of abnormal uterine artery Doppler and flow-mediated dilation of brachial artery in pregnant Nigerian women  
  *N.O. Enaruna (Nigeria)*

- Role of mean blood pressure as screening test for small-for-gestational age without pre-eclampsia during the first trimester of pregnancy  
  *A. Sepúlveda-Martínez (Chile)*

- Hemodynamic, biophysical and biochemical assessment in the first trimester as early screening for patients at risk of pre-eclampsia  
  *I. Pisani (Italy)*

- First trimester measurement of uterine artery pulsatility index (PI) through transabdominal and transvaginal ultrasound  
  *M. Demers (Canada)*

- Gestational age dependant changes in endothelial glycocalyx layer in low and high-risk women of vascular complications in pregnancy  
  *N. Bertels (Netherlands)*

- Characterisation of immune patterns in pregnancies defined as high- or low-risk according to first trimester uterine artery Doppler  
  *M. Parra-Cordero (Chile)*

- Association of third trimester low-growth trajectory to pre-eclampsia in low-risk pregnancies  
  *M.A. Parra-Saavedra (Spain)*

- Effects of early aspirin therapy on uteroplacental hemodynamics of risk patients for pre-eclampsia  
  *C. Hofstaetter (Switzerland)*

- Third trimester model for prediction of late pre-eclampsia  
  *G. Albaiges Baiget (Spain)*

- First trimester measurement of subcutaneous and visceral adipose tissue thickness for the prediction of pre-eclampsia  
  *S. Dubé (Canada)*

- The use of arterial stiffness measurements in pregnancy to predict placenta-mediated disease  
  *H. Mousa (United Kingdom)*

**P17: Ultrasound through the stages of labour**  
**Botticelli Hub 2**

**Chair: T. Ghi (Italy)**

- Obstetric and neonatal outcomes after ultrasound indicated cerclage: cervical length before procedure can make a difference?  
  *L. Patané (Italy)*

- Predicting the success of labour induction: Bishop score versus ultrasound score  
  *K. Dimassi (Tunisia)*

- Transperineal ultrasound measurement of the cervical length during the latent phase of labour  
  *K. Dimassi (Tunisia)*

- Relevance of ultrasound cervical dilation measurements during labour  
  *K. Dimassi (Tunisia)*

- Cervical dilation assessment using transperineal ultrasound: which diameter should we consider during latent phase of labour?  
  *K. Dimassi (Tunisia)*

- Fetal middle cerebral artery and umbilical artery flow and cerebroplacental Doppler ratio in first and second stage of labour: a preliminary study  
  *A.L. Zimerman (Israel)*
Persistent occiput posterior position: impact of head circumference on obstetric outcomes

S. Yagel (Israel)

Can intrapartum ultrasound assessment of fetal spine and head position predict persistent occiput posterior position at delivery?

G. Tang (Hong Kong)

Diagnosis of fetal occiput position by transperineal sonography during the second stage of labour

K. Dimassi (Tunisia)

Is Mueller-Hillis manoeuvre correlated to angle of progression? An observational study

J.G. Barros (Portugal)

P18: Pathophysiology of growth abnormalities Botticelli Hub 3

Chair: C. Lees (United Kingdom)

IVF and fetal growth in first trimester

G. Monni (Italy)

Difference in blood flow velocity of spiral arteries in placental syndrome – compared to healthy pregnancies

V. Schiffer (Netherlands)

Human uterine artery blood flow velocity waveforms following maternal glucose loading related to fetal size: a cross-sectional observational study

G. Haugen (Norway)

Pattern of placental vascular and inflammatory lesions in small-for-gestational age cases

C. Paules Tejero (Spain)

Correlation between systolic and diastolic fetal aorta diameters and intima media thickness in intrauterine growth-restricted fetuses

S. Visentin (Italy)

A possible role for vaginal progesterone on uteroplacental perfusion

E. Contro (Italy)

Frontal lobe and cerebellar differences in IUGR and AGA fetuses

M. Park (Republic of Korea)

Is maternal arterial function impaired in pregnancies with fetal growth restriction?

J. Tay (United Kingdom)

P19: Using ultrasound to manage early pregnancy complications Botticelli Hub 4

Chairs: L. De Meis (Italy); N. Raine-Fenning (United Kingdom)

Gestation of pregnancy loss in an observational prospective preconception cohort

G. Masini (United Kingdom)

Sonographic findings among patients receiving methotrexate while having pregnancy of unknown location subsequently diagnosed with intrauterine pregnancy

D. Fridman (United States)

A multi-centre trial on the performance and complications of a two-step triage protocol based on initial serum progesterone and serial serum hCG to manage pregnancy of unknown location (PUL)

S. Bobdiwala (United Kingdom)

The role of expectant management of tubal ectopic pregnancies

C. Ross (United Kingdom)

Low-lying-implantation ectopic pregnancies treatment and outcomes

T. Makukhina (Russian Federation)

District General Hospital: how good are we at diagnosing ectopic pregnancy?

E. Kirk (United Kingdom)

Weak embryonic heart filling between 6 to 8 weeks of gestation as an early finding of pregnancy failure

J. Gevaerd Martins (United States)
Increased mean sac diameter/Crown–rump length relation in a live embryo as an early sign of pregnancy failure
J. Gevaerd Martins (United States)  P19.08
A 12-month audit of interstitial/cornual ectopic pregnancies managed at Queens Hospital: does 3D/4D ultrasound application add any value?  
M.O. Thompson (United Kingdom)  P19.09
Empty amnion as a definitive diagnostic criteria of early pregnancy failure  
J. Gevaerd Martins (United States)  P19.10

P20: Early screening of congenital heart defects and anomalies of the great vessels  
Botticelli Hub 1
Chair: H. Gardiner (United States)  P20.01
Perinatal management of congenital transposition of the great arteries (TGA) in the age of prenatal diagnosis  
L. Patanè (Italy)  P20.02
Fetal coarctation of aorta: echocardiographic predictor’s factors  
C.A. Capuruço (Brazil)  P20.03
Prenatal diagnosis value of echocardiographic in types and accompanied malformations of fetal persistent truncus arteriosus  
J. Li (China)  P20.04
Fetal double aortic arch: 2D and 4D echocardiography, associations and outcome  
V. De Robertis (Italy)  P20.05
Dilated coronary sinus due to persistent left superior vena cava: cause of coarctation of the aorta or ‘innocent’ associated finding?  
M. Bartsota (United Kingdom)  P20.06
Fetal echocardiography for detection of congenital heart diseases: prevalence and impact on fetus outcome  
C.A. Capuruço (Brazil)  P20.07
The “sailing-sign”: a marker of first trimester pulmonary outflow tract  
F. Padula (Italy)  P20.08
Critical heart defects in prenatal classification of congenital heart disease  
M. Slodki (Poland)  P20.09
Re-examination of cardiac axis in normal fetuses  
Y. Inoue (Japan)  P20.10
Branching of the aortic arch – normal variations as demonstrated on prenatal echocardiography  
L. Gindes (Israel)  P20.11
How often an isolated cardiac disproportion predicts a coarctation of the aorta? Single centre experience and systematic review of the literature  
A. Dall'Asta (Italy)  P20.12
Application of fetal echocardiography in the diagnosis of anomalous pulmonary venous connection (APVC)  
P. Xu (China)  P20.13

P21: Fetal face  
Botticelli Hub 2
Chair: L. Poon (United Kingdom)  P21.01
2D and 3D assessment of retronasal triangle view: a landmark for first trimester evaluation of nasal bone and cleft lip palate  
R. Choudhary (India)  P21.02
Verification of maxillary gap as a new marker in the detection of the cleft lip and palate during first trimester screening  
D. Matura (Czech Republic)
Can tomographic ultrasound imaging be used for assessment of the maxillary gap in fetuses between 11 and 14 weeks gestation?

W.W. To (Hong Kong)

Ultrasound evaluation of inferior facial angle (IFA) in population of normal fetuses at 11+0 -13+6 weeks of gestation

M. Orzechowski (Poland)

Reproducibility of facial maxillary angle measurement at 16<sup>st</sup> to 36<sup>st</sup> weeks by 2D and 3D ultrasound

J. Lu (Hong Kong)

Polyhydranmios in isolated oral cleft pregnancies: incidence and outcome in a retrospective study

A.L. Depla (Netherlands)

Preauricular tags

J. Bault (France)

Markers of orofacial clefts in early pregnancy: 3D assessment of the maxilla-mandible complex using retronasal triangle view and maxillary gap sign

M.A. Gembicki (Germany)

Diagnosis of congenital primary aphakia

J. Lee (Republic of Korea)

3D-embryology models from agnathia-otocephaly

G.A. Menezes (Brazil)

P22: Advances in ultrasound and new technologies

Botticelli Hub 3

Chair: M. Sanz Cortes (Spain)

Preliminary investigation of the utility of MRI for measuring the hematocrit in fetal anemia

A. Duan (Canada)

Postmortem high resolution (HR) magnetic resonance imaging (MRI) in fetuses with brain abnormalities and confirmation of in utero MRI findings

E. Scola (Italy)

Fetal speech movement response comparing the intravaginal emission of music and maternal speech

A. Garcia-Faura (Spain)

Fetal speech movement response comparing the intravaginal emission of monophonic and polyphonic music

A. Garcia-Faura (Spain)

Prediction of low birthweight: the placental T2* estimated by MRI versus the uterine artery pulsatility index

M. Sinding (Denmark)

The association between placental T2* measured by MRI in dichorionic twin pregnancies and intertwin birthweight differences

A. Sørensen (Denmark)

Prenatal ultrasound assessment of the relative position of the superior mesenteric artery and vein: a prenatal tool of intestinal malrotation diagnosis

J.M. Faure (France)

Fusion imaging technique: combining obstetric ultrasound and MRI in diagnosing placental and uterine wall abnormalities

A. Arechvo (Sweden)

Serial measurements of amniotic fluid volume in normal singleton pregnancies – an ongoing MRI and ultrasound study

D. Jørgensen (Denmark)

3D fractional moving blood volume to evaluate drug effects in the ex-vivo perfused cotyledon

A.W. Welsh (Australia)
**P23: Abnormal uterine bleeding**

*Chairs: M. Al-Memar (United Kingdom); T. Van den Bosch (Belgium)*

<table>
<thead>
<tr>
<th>Presentation Title</th>
<th>Authors/Institutions</th>
<th>Poster Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sonographic findings after ulipristal acetate treatment in women with uterine myoma</td>
<td>P. Capmas (France)</td>
<td>P23.01</td>
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<tr>
<td>Comparison of 2D and 3D-transvaginal sonography to assess endometrial thickness</td>
<td>F. Leone (Italy)</td>
<td>P23.02</td>
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<td>Change of uterus position after Caesarean section</td>
<td>A. Kaelin Agten (United States)</td>
<td>P23.03</td>
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<td>Sonographic features of Caesarean-induced isthmocele before and after resectoscopic correction in symptomatic non-pregnant women</td>
<td>L. Savelli (Italy)</td>
<td>P23.04</td>
</tr>
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<td>Accuracy of pelvic ultrasound in preoperative evaluation of uterine myomas: a prospective cohort study</td>
<td>G. Perniola (Italy)</td>
<td>P23.05</td>
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<td>The feasibility of uterine fibroid treatment with advanced ultrasound-guided HIFU system: preliminary report</td>
<td>R.B. Maksym (Poland)</td>
<td>P23.06</td>
</tr>
<tr>
<td>Improved strategy based on risk of endometrial cancer scoring in women with postmenopausal bleeding and endometrial thickness ≥4mm</td>
<td>M. Dueholm (Denmark)</td>
<td>P23.07</td>
</tr>
<tr>
<td>Sonographic changes of the volume of uterine myomas according to their topography after three-month treatment with ulipristal acetate</td>
<td>S. Ferrero (Italy)</td>
<td>P23.08</td>
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<td>Intraobserver reproducibility in the diagnosis of 2D sonographic signs of adenomyosis</td>
<td>V.H. Eisenberg (Israel)</td>
<td>P23.09</td>
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<td>07:30 - 08:10</td>
<td>Masterclasses</td>
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<td>08:15 - 09:15</td>
<td>Parallel sessions (OC)</td>
<td>Michelangelo A&lt;br&gt;Michelangelo B&lt;br&gt;Tiziano A</td>
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<td>Advances in ultrasound and new technologies</td>
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<td>IUGR: pathophysiology and therapy</td>
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<td>How to evaluate women with abnormal uterine bleeding</td>
<td>Tiziano A</td>
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<td>08:15 - 09:15</td>
<td>Interactive Hubs</td>
<td>Botticelli</td>
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<tr>
<td>09:20 - 10:00</td>
<td>Short oral presentations (OP)</td>
<td>Michelangelo A&lt;br&gt;Michelangelo B&lt;br&gt;Tiziano A&lt;br&gt;Tiziano B</td>
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<td>Using ultrasound to evaluate abnormal bleeding</td>
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<td>Stillbirth and other late complications</td>
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<tr>
<td>09:20 - 10:00</td>
<td>Poster discussion Hubs (P)</td>
<td>Botticelli</td>
</tr>
<tr>
<td>10:20 - 11:20</td>
<td>Parallel sessions (OC)</td>
<td>Michelangelo A&lt;br&gt;Michelangelo B&lt;br&gt;Tiziano A</td>
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<td></td>
<td>Fetal anomalies in our daily practice</td>
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<td>The placenta and brain of fetuses with congenital heart defects</td>
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<td>Using ultrasound to diagnose causes of pelvic pain and endometriosis</td>
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<td>Interactive Hubs</td>
<td>Botticelli</td>
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<td>11:25 - 12:05</td>
<td>Short oral presentations (OP)</td>
<td>Michelangelo A&lt;br&gt;Michelangelo B&lt;br&gt;Tiziano A</td>
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<td>The placenta and brain of fetuses with CHD</td>
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<td>Using ultrasound to diagnose causes of pelvic pain and endometriosis</td>
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<td>11:25 - 12:05</td>
<td>Poster discussion Hubs (P)</td>
<td>Botticelli</td>
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<tr>
<td>12:15 - 13:15</td>
<td>Industry sponsored satellite symposium</td>
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<tr>
<td>13:30 - 14:50</td>
<td>Workshops</td>
<td>Michelangelo A&lt;br&gt;Michelangelo B&lt;br&gt;Tiziano A&lt;br&gt;Tiziano B</td>
</tr>
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<td>3D workshop</td>
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<td>Sonographic surveillance in growth restriction</td>
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<td>Abnormal placental implantation in the first trimester of pregnancy</td>
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<td>MRI and ultrasound working together in pregnancy</td>
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<tr>
<td>13:30 - 14:50</td>
<td>Outreach workshops</td>
<td>Botticelli</td>
</tr>
<tr>
<td>15:20 - 16:50</td>
<td>Closing plenary</td>
<td>Michelangelo A&lt;br&gt;Tiziano B</td>
</tr>
<tr>
<td>16:50</td>
<td>Congress leaving drinks</td>
<td>Michelangelo foyer</td>
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Over the past 5 years, ISUOG’s Outreach model has been applied in 16 projects in 6 countries. As we plan for the future we want to hear from you! How should ISUOG contribute to the improvement of women’s health in under-served regions?

Join us for the ISUOG Outreach Workshop - teaching ultrasound on the field.

Wednesday 28 September 2016, 13:50 - 14:50, Botticelli Hubs

Much like last year, the aim will be to engage with audience members on key topics regarding ISUOG’s development work on the field and to provide a forum of discussion around innovating ways and methods to promote sustainable development in both women’s health and ultrasound training.

Introduction: ISUOG Outreach - where we are at and what has been done (A. Johnson and G. Baez)

Hub 1: Tricks of the trade
(A. Johnson)

Hub 2: From a distance - a method for ultrasound quality control between continents
(H. Feltovitch)

Hub 3: Theory vs. Practical - how much of each is needed and where?
(T. Cohen-Overbeek)

Hub 4: How to strengthen relationships between trainer and trainee
(T. Eggebø)

Get involved: isuog.org/Outreach
Program - Wednesday 28 September 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speakers</th>
</tr>
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<tbody>
<tr>
<td>07:30 - 08:10</td>
<td>Masterclasses</td>
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<tr>
<td></td>
<td>Fetal MRI, when, why and how</td>
<td><em>Michelangelo A</em></td>
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<td></td>
<td>D. Prayer (Austria)</td>
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<td></td>
<td>First trimester ultrasound: anomalies and markers of abnormal development</td>
<td><em>Michelangelo B</em></td>
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<td></td>
<td>C. Bilardo (Netherlands)</td>
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<td>How to evaluate the endometrium using ultrasound: what can you ignore and when do you have to act</td>
<td><em>Tiziano A</em></td>
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<td>H.P. Dietz (Australia)</td>
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<td>When you feel frustrated: unusual anomalies with unexpected outcome</td>
<td><em>Tiziano B</em></td>
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<td>D. Paladini (Italy)</td>
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<tr>
<td>08:15 - 09:15</td>
<td>Advances in ultrasound and new technologies</td>
<td><em>Michelangelo A</em></td>
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<td><strong>Chairs:</strong> L.J. Salomon (France); D. Prayer (Austria)</td>
<td>INVITED</td>
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<tr>
<td>08:15</td>
<td>Anatomy to function</td>
<td>D. Prayer (Austria)</td>
</tr>
<tr>
<td>08:27</td>
<td>Novel methodologies for MR spectroscopy detection of free lipids associated with neuroprogenitor cells in the human fetal brain in vivo</td>
<td>OC21.01</td>
</tr>
<tr>
<td></td>
<td>M. Sanz Cortes; A.N. Shetty; N. Park; X. Han;</td>
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<td></td>
<td>M. Maletic-Savatic; W. Lee (United States)</td>
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<tr>
<td>08:32</td>
<td>Discussion</td>
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<tr>
<td>08:35</td>
<td>Estimation of oxygen saturation, blood flow, and blood perfusion in the fetal brain of normally grown fetuses using ultrasound and MRI techniques</td>
<td>OC21.02</td>
</tr>
<tr>
<td></td>
<td>J. Neelavalli; E.A. Hernández-Andrade; B. Yadav; U. Krishnamurthy; H. Saker; P. Jella; H. Ahn; M. Garcia; L. Yeo; S. Hassan; R. Romero (United States)</td>
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<tr>
<td>08:40</td>
<td>Discussion</td>
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<tr>
<td>08:43</td>
<td>Is the conventional ultrasound speed of 1540 m/s appropriate for examinations of obese patients? The POWUS study of pregnant women</td>
<td>OC21.03</td>
</tr>
<tr>
<td></td>
<td>B. Chauveau; C. Auclair; A. Legrand; A. Lelong; H. Laurichesse; R. Mangione; L. Gerbaud; F. Vendittelli; L. Ouchchane; L. Boyer; D.J. Lemery (France)</td>
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<tr>
<td>08:48</td>
<td>Discussion</td>
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<td></td>
<td>L. Aboujaoude (Lebanon)</td>
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<tr>
<td>08:56</td>
<td>Discussion</td>
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<tr>
<td>08:59</td>
<td>Prenatal ultrasound diagnosis of cleft palate without cleft lip, the new ultrasound semiology</td>
<td>OC21.05</td>
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<tr>
<td></td>
<td>J.M. Faure; F. Grosjean; E. Mousty; G. Captier; P. Boulot; V. Letouzey; F. Fuchs (France)</td>
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<tr>
<td>09:04</td>
<td>Discussion</td>
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</tbody>
</table>

* This presentation is eligible for the Young Investigator award (to be presented in the closing plenary).
09:07  Quantifying cervical softening during pregnancy: preliminary results in the rhesus macaque  
_I. Rosado-Mendez; A. Santoso; S. Subramanian; Q. Guerrero; L. Drehfal; S. Kohn; M. Schotzko; M. Palmeri; H. Feltovich; T. Hall (United States)

09:12  Discussion

<table>
<thead>
<tr>
<th>08:15 - 09:15</th>
<th>IUGR: pathophysiology and therapy</th>
<th>Michelangelo B</th>
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</thead>
<tbody>
<tr>
<td>Chairs: E. Hernández-Andrade (United States); A.T. Papageorghiou (United Kingdom)</td>
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<tr>
<td><strong>08:15</strong></td>
<td>Live scan: assessing cardiac function and rhythm [industry supported*]</td>
<td>INVITED</td>
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<tr>
<td><strong>08:15</strong></td>
<td>Treatment of severe IUGR: are we any closer?</td>
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<tr>
<td><strong>08:27</strong></td>
<td>* Survival and neurodevelopment effects of Lactoferrin, Docosahexaenoic acid and environmental enrichment in an IUGR animal model</td>
<td>OC22.01</td>
</tr>
<tr>
<td>M. Illa; E. Eixarch; L. Pla; E. Muñoz-Moreno; G. Serrano; F. Figueras; E. Gratacós (Spain)</td>
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<tr>
<td><strong>08:32</strong></td>
<td>Discussion</td>
<td></td>
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<tr>
<td><strong>08:35</strong></td>
<td>* Evaluation of cardiovascular effects of nitric oxide donors in pregnancies complicated by fetal growth restriction</td>
<td>OC22.02</td>
</tr>
<tr>
<td>D. Lo Presti¹, G. Tiralongo²; I. Pisani³; B. Vasapollo³; A. Khallit³; D. Vinayagam³; B. Thilaganathan³; H. Valensise¹ ¹(Italy); ²(United Kingdom)</td>
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<tr>
<td><strong>08:40</strong></td>
<td>Discussion</td>
<td></td>
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<tr>
<td><strong>08:43</strong></td>
<td>Hemodynamic effects of corticosteroids in appropriate-for-gestational age and growth-restricted fetuses</td>
<td>OC22.03</td>
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<tr>
<td>L. Marchi¹; L. Pasquini¹; C.M. Bilardo² ¹(Italy); ²(Netherlands)</td>
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<tr>
<td><strong>08:48</strong></td>
<td>Discussion</td>
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<tr>
<td><strong>08:51</strong></td>
<td>MRI detects altered placental oxygenation in fetal growth-restricted pregnancies</td>
<td>OC22.04</td>
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<tr>
<td>E. Ingram; D.M. Morris; J. Naish; J. Myers; E. Johnstone (United Kingdom)</td>
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<td><strong>08:56</strong></td>
<td>Discussion</td>
<td></td>
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<tr>
<td><strong>08:59</strong></td>
<td>Comparison of fetal brain apparent diffusion coefficients according to abnormal Doppler grade in early onset intrauterine growth restriction</td>
<td>OC22.05</td>
</tr>
<tr>
<td>M.S. Kutuk; M. Sahin; S. Gorkem; S. Doganay; A. Ozturk (Turkey)</td>
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<tr>
<td><strong>09:04</strong></td>
<td>Discussion</td>
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<tr>
<td><strong>09:07</strong></td>
<td>Changes in placental MRI perfusion after maternal hyperoxygenation in small fetuses to discriminate the presence of placental insufficiency and IUGR</td>
<td>OC22.06</td>
</tr>
<tr>
<td>M. Sanz Cortes; A.N. Shetty; M. Yepez; A. Zarutskie; N. Park; L.M. Mack; R. Gandhi; E.J. Popek; W. Lee (United States)</td>
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<td><strong>09:12</strong></td>
<td>Discussion</td>
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* 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).
08:15 - 09:15  How to evaluate women with abnormal uterine bleeding  Tiziano A

Chairs: W. Martins (Brazil); E. Epstein (Sweden)

08:15
How good is ultrasound at characterising endometrial pathology?
Results from the first 6000 patients in the IETA study
T. Van den Bosch (Belgium)

08:35
Validation of risk of endometrial cancer (REC) score for diagnosis of endometrial cancer in women with postmenopausal bleeding.
M. Dueholm; I. Hjorth; K. Dahl; G. Ørtoft (Denmark)

08:40
Discussion

08:43  "The use of IETA terminology and other ultrasound features in the diagnosis of intracavitary fibroids and polyps
M. Condorelli; T. Van den Bosch; R. Lejeune; B. De Cock; A. Delbaere;
D. Timmerman (Belgium)

08:48
Discussion

08:51
Feasibility of endometrial echo visualisation by transvaginal sonography compared to saline infusion sonohysterography in postmenopausal women
O. Rotenberg; P. Escobar; D. Fridman; M. Hudson; P. Dar (United States)

08:56
Discussion

08:59  "Influence of ulipristal acetate therapy on uterine fibroid-related symptoms and on uterine and fibroids volume and vascularity indices assessed by ultrasound
S. Baggio; F. Galeone; F. Presti; P. Pomini (Italy)

09:04
Discussion

09:07
Risk factors for developing a niche in the uterine Caesarean section scar
L. van der Voet; M. Bij de Vaate; M. Heymans; H. Brolmann;
S. Veersema; J. Huime (Netherlands)

09:12
Discussion

08:15 - 09:15  Interactive Hubs  Botticelli

SIEOG Young Investigator discussion Hub (Obstetrics)  Hub 1
Chairs: G. Pagani; N. Volpe; S.Visentin (Italy)

SIEOG Young Investigator discussion Hub (Gynecology)  Hub 2
Chairs: C. Landolfo; M. Ludovisi (Italy)

How to interpret incidental findings on the gynecological scan  Hub 4
Chairs: C. Brezinka (Austria); G. Scambia (Italy)

09:20 - 10:00  Short oral presentations (OP)

OP28: Advances in ultrasound and new technologies: focus on other modalities  Michelangelo A
Chairs: H. Feltovich (United States); A. Righini (Italy)

OP29: IUGR: pathophysiology and therapy  Michelangelo B
Chairs: P. Acharya (India); A. David (United Kingdom)

OP30: Using ultrasound to evaluate abnormal bleeding  Tiziano A
Chairs: A. Lanzone (Italy); T. Van den Bosch (Belgium)

OP31: Stillbirth and other late complications  Tiziano B
Chairs: F. Figueras (Spain); A. Johnson (United States)

*This presentation is eligible for the Young Investigator award (to be presented in the closing plenary).*
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
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<tbody>
<tr>
<td>09:20 - 10:00</td>
<td>Poster discussion Hubs (P)</td>
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**Botticelli**

- **P24**: New parameters to evaluate the fetal cardiac function  
  *Chair: E. Hernández-Andrade (United States)*  
  **Hub 1**

- **P25**: Fetal urinary system  
  *Chair: A. Bhide (United Kingdom)*  
  **Hub 2**

- **P26**: The cervix and other challenges in multiple pregnancies  
  *Chair: M. Bebbington (United States)*  
  **Hub 3**

- **P27**: Innovations in gynecological imaging  
  *Chair: S. Yagel (Israel)*  
  **Hub 4**

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<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
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<tr>
<td>10:20 - 11:20</td>
<td>Fetal anomalies in our daily practice</td>
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</table>

**Michelangelo A**

- **Chairs**: S. Eik-Nes (Norway); P. Glanc (Canada)  

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
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<tbody>
<tr>
<td>10:20</td>
<td>Live scan: scanning the obese patient [industry supported*]</td>
<td>P. Glanc (Canada)</td>
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<tr>
<td>10:40</td>
<td>Is increased hydronephrosis kidney echogenicity related to a decreased differential renal function?</td>
<td>H. Cho; Y. Kim; J. Kwon (Republic of Korea)</td>
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<tr>
<td>10:45</td>
<td>Discussion</td>
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<tr>
<td>10:48</td>
<td>Combining ultrasound renal parameters and urinary biochemistry to predict outcomes in fetal lower urinary tract obstruction</td>
<td>A. Nassr; D. Sharhan; C. Koh; H. Sangi-Haghpeykar; D. Roth; M. Braun; M. Belfort; R. Ruano (United States)</td>
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<tr>
<td>10:53</td>
<td>Discussion</td>
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<tr>
<td>10:56</td>
<td>Outcome of fetal ovarian cysts: a systematic review and meta-analysis</td>
<td>F. Bascietto¹; M. Leombroni²; M. Liberati²; L. Marrone²; G. Pagani²; A. Khalil²; S. Gustapane²; D. Buca³; F. Giacci³; G. Rizzo³; G. Acharya³; F. D’Antonio³</td>
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<tr>
<td>11:01</td>
<td>Discussion</td>
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<td>11:04</td>
<td>Prenatal ano-genital distance is shorter in fetuses with hypospadias</td>
<td>S. Perlman; Z. Kivilevitch; B. Messing; R. Achiron; Y. Gilboa (Israel)</td>
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<tr>
<td>11:09</td>
<td>Discussion</td>
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<tr>
<td>11:12</td>
<td>Is widening of the proximal femoral angle specific to achondroplasia?</td>
<td>A. Khalil¹; L. De Catte²; M.M. Elnamoury³; A. Bhide¹; A.T. Papageorghiou¹; B. Thilaganathan¹</td>
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<td>11:17</td>
<td>Discussion</td>
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<tr>
<td>10:20 - 11:20</td>
<td>The placenta and brain of fetuses with congenital heart defects</td>
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**Michelangelo B**

- **Chairs**: J.S. Carvalho (United Kingdom); J. Rychik (United States)  

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<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>10:20</td>
<td>Counselling in CHD: more than just a heart problem?</td>
<td>D. Paladini (Italy)</td>
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<tr>
<td>10:40</td>
<td>Cerebral oxygen delivery, brain growth and white matter maturation are reduced in congenital heart disease fetuses</td>
<td>J. Lim; P. Muthusami; S. Madathil; M. Zhu; B. Saini; P. Porayette; V. Chau; S. Portnoy; C. Macgowan; J. Sled; J.C. Kingdom; M. Seed; S. Miller (Canada)</td>
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<tr>
<td>10:45</td>
<td>Discussion</td>
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</table>
10:48 Impaired uteroplacental circulation in pregnancies complicated by fetal congenital heart defects

S. Carta; J. Binder; B. Thilaganathan; A.T. Papageorghiou; A. Bhide; A. Khalil

1 (United Kingdom); 2 (Austria)

10:53 Discussion

10:56 Mechanical extracorporeal support of the premature fetal lamb: Doppler echocardiography suggests replication of normal cardiovascular physiology

J. Han; Z. Tian; M. Hornick; J. Rychik; A. Flake (United States)

11:01 Discussion

11:04 Fetal brain fissure measurements as markers for cortical development in fetuses with congenital heart defects compared to controls

I.V. Koning; A.W. van Graafeiland; I. Groenenberg; S. Husen; A. Go; J. Dudink; l. Reiss; R.P. Steegers-Theunissen (Netherlands)

11:09 Discussion

11:12 Fetal cerebral blood flow and neonatal brain white matter changes in human fetuses with complex congenital heart disease

L. Sun; B. Saini; P. Porayette; C. Macgowan; J. Sled; S. Yoo; L. Grosse-Wortmann; E. Jaeggi; B. McCrindle; J.C. Kingdom; E. Hickey; S. Miller; M. Seed 1 (China); 2 (Canada)

11:17 Discussions

10:20 - 11:20 Using ultrasound to diagnose causes of pelvic pain and endometriosis

Tiziano A

Chairs: G. Condous (Australia); S. Guerriero (Italy)

10:20 Adopting a systematic approach to the evaluation of pelvic endometriosis: the consensus opinion from the International Deep Endometriosis Analysis (IDEA) group

G. Condous (Australia)

10:40 Transvaginal ultrasonography in the diagnosis of rectosigmoid endometriosis: role of bowel preparation and correlation with histology

S. Ferrero (Italy)

10:45 Discussion

10:48 Pelvic floor dysfunction at three-dimensional transperineal ultrasound in women affected by deep infiltrating endometriosis

A. Youssef; D. Raimondo; S. del Forno; M. Mabrouk; V. Martelli; E. Montaguti; G. Pili; A. Benfenati; R. Seracchioli (Italy)

10:53 Discussion

10:56 Influence of adenomyosis on pregnancy outcome and first and second trimester markers of impaired implantation in women with endometriosis

S. Ferrero; U. Leone Roberti Maggiore; A. Racca; E. Tafi; P.L. Venturini; C. Scala (Italy)

11:01 Discussion

11:04 Reviews to determine the optimum imaging modality to detect D.I.E

B. Shakeri (Australia)

11:14 Discussion

* This presentation is eligible for the Young Investigator award (to be presented in the closing plenary).
<table>
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<tr>
<th>Time</th>
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| 10:20 - 11:20 | Interactive Hubs                            | Botticelli Hubs | Social media for ultrasound professionals  
Chair: G. Pagani (Italy)  
Social media for education and clinical purposes  
Chair: A. Aboujaoude (Lebanon)  
Social media for authors: kudos, altmetrics and increasing your impact  
Chair: C. Kennedy (United Kingdom) |
| 11:25 - 12:05 | Short oral presentations (OP)                | Michelangelo A | OP32: Fetal anomalies: diagnosis and implications  
Chairs: B. Benacerraf (United States); A. Youssef (Italy)  
OP33: The placenta and brain of fetuses with CHD  
Chairs: A. Khalil (United Kingdom); D. Paladini (Italy)  
OP34: Using ultrasound to diagnose causes of pelvic pain and endometriosis  
Chairs: C. Exacoustos (Italy); T. Van den Bosch (Belgium) |
| 11:25 - 12:05 | Poster discussion Hubs (P)                   | Botticelli Hub 1 | P28: Screening for pregnancy outcomes  
Chair: H. Feltovich (United States)  
P29: Doppler in IUGR management  
Chair: K. Maršál (Sweden)  
P30: Neurosonography: focus on the brain and the neural tube  
Chair: K. Kalache (Germany) |
| 12:00 - 13:30 | Lunch and e-poster viewing (EP)             |               | **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 154 for our satellite program.** |
| 12:15 - 13:15 | Industry sponsored satellite symposium**     |               | **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 154 for our satellite program.** |
| 13:30 - 14:50 | Workshop: 3D workshop                        | Michelangelo A | Chairs: L. Gindes (Israel); B. Tutschek (Switzerland)  
13:30 How to think in three dimensions  
L. Gindes (Israel)  
13:50 How to acquire volumes for palate, spine, skull and extremities  
B. Tutschek (Switzerland)  
14:10 How to optimise 4D settings for fetal echo: from theoretical to technical considerations  
J. Deng (United Kingdom)  
14:30 Volume manipulation: step-by-step “live” with the software  
L. Gindes (Israel)  
14:50 B. Tutschek (Switzerland) |
| 13:30 - 14:50 | Workshop: Sonographic surveillance in growth restriction | Michelangelo B | Chairs: C. Bilardo (Netherlands); E. Hernández-Andrade (United States)  
13:30 How to pick up an IUGR fetus from the first trimester to late pregnancy  
L. Poon (United Kingdom) |
13:45 Monitor the IUGR fetus  
**G. Rizzo (Italy)**

14:00 When to deliver the IUGR fetus  
**F. Figueras (Spain)**

14:15 What is the long-term outcome for the IUGR fetus  
**K. Maršál (Sweden)**

14:30 Discussion: interesting cases including twins  
**S.H. George Yeo (Singapore)**

### 13:30 - 14:50 Workshop: Abnormal placental implantation in the first trimester of pregnancy  
**Tiziano A**

**Chairs: L. Valentin (Sweden); S. Yagel (Israel)**

13:30 Lessons learnt from the diagnosis and surgical treatment of over 200 Caesarean scar pregnancies  
**D. Jurkovic (United Kingdom)**

13:50 Arteriovenous malformations (AVMs) or enhanced myometrial vascularity: what is the pathology and how do we manage it?  
**T. Van den Bosch (Belgium)**

14:10 Role of imaging in assessment of gestational trophoblastic neoplasia and transvaginal Doppler ultrasound versus pelvic dynamic contrast enhanced MRI  
**M. Rahmani; S. Foroozi; S. Akhavan; F. Yarandi; S. Aminimoghaddam (Islamic Republic of Iran)**

14:10 The diagnosis and subsequent follow-up of gestational trophoblastic disease  
**R. Fruscio (Italy)**

14:30 The natural history of implantations in Caesarean section scars: at what point can we diagnosis a placenta that will be pathologically adherent and what do we tell patients?  
**I. Timor-Tritsch (United States)**

### 13:30 - 14:50 Workshop: MRI and ultrasound working together in pregnancy  
**Tiziano B**

**Chairs: D. Pugash (Canada); L.J. Salomon (France)**

13:30 Selective versus routine use of MRI in pregnancy  
**A. Millischer (France)**

13:45 MRI in the management of fetal malformations: presentation of cases  
**A. Righini (Italy)**

14:00 MRI in the management of the IUGR fetus  
**M. Sanz Cortes (Spain)**

14:15 The ISUOG MRI guidelines  
**G. Malinger (Israel)**

14:30 Round table discussion  
**D. Pugash (Canada)**  
**L.J. Salomon (France)**
13:30 - 14:50  Outreach workshops  Botticelli

Tricks of the trade  Hub 1
Chair: A. Johnson (United States)

Image review and how it is done from a distance  Hub 2
Chair: H. Feltovich (United States)

Theory versus practice  Hub 3
Chair: T. Cohen-Overbeek (The Netherlands)

How to strengthen relationships between trainer and trainee  Hub 4
Chair: T.M. Eggebø (Norway)


15:20 - 16:50  Closing plenary  Michelangelo A

Chairs: D. Timmerman (Belgium); C. Brezinka (Austria)

15:20  Awards presentation: Top abstract, Young Investigator, SIEOG best oral communication
A.T. Papageorghiou (United Kingdom)
J. Hyett (Australia)
G. Rizzo (Italy)

15:30  Zika virus from pre-conception to infancy: when to worry, when to reassure
L. Riley (United States)

15:50  Does ovarian cancer screening save lives?
S. Campbell (United Kingdom)

16:05  Ovarian cancer screening: is the evidence conclusive?
L. Valentin (Sweden)

16:20  Potential usefulness of cell-free DNA in cancer detection
J. Vermeesch (Belgium)

16:35  Roundtable discussion
L.D. Platt (United States)

16:50  Congress leaving drinks

Join us in Vienna in 2017!
Laura Riley
Laura Riley, M.D., received her undergraduate education at Harvard University; her medical degree at the University of Pittsburgh and her residency in obstetrics and gynecology at the University of Pittsburgh-Magee Women’s Hospital. She completed subspecialty training in maternal-fetal medicine at Brigham and Women’s Hospital and in infectious disease at Boston University Medical Center. She is an Associate Professor of Obstetrics, Gynecology and Reproductive biology at Harvard Medical School. Dr. Riley joined the obstetrical service at Massachusetts General Hospital in 1995, where she focuses on high-risk pregnancy with an emphasis on infectious disease complications of obstetrics and she is the Vice Chair for Obstetrics. Dr. Riley serves as a consultant to the Centers for Disease Control on H1N1, Ebola virus and Zika virus guidelines; she is the first ob/gyn member of the Advisory Committee on Immunization Practice. She is also the chair of the Immunization Task Force at the American College of Obstetricians and Gynecologists (ACOG). She is the Immediate Past President of the Society for Maternal Fetal Medicine.

Lil Valentin
Professor in Obstetrics and Gynecology, Lund University, Sweden, since 2002. Major research interest: Obstetric and Gynecologic Ultrasound, Gynecologic Doppler in particular.

More than 200 scientific publications and invited speaker at more than 75 scientific meetings since 2005. Teacher at more than 100 national and international courses in obstetrics and gynecology (mainly ultrasound courses and course organizer of 30 postgraduate courses in ultrasound. Editor of Ultrasound in Obstetrics and Gynecology 2005 – 2011; Honorary officer of numerous scientific associations and committees over the years. Member of the ISUOG standards committee 2007-2015, the safety committee (ECMUS) of the European Federation of Ultrasound Societies in Medicine and Biology (EFSUMB) 2002-2012, and chairperson of the educational committee of EFSUMB 2002-2006. Fellow ad eundum of the Royal College of Obstetricians and Gynaecologists (UK).

Joris Vermeesch
Dr Joris R. Vermeesch is professor Molecular Cytogenetics and genome research at the University of Leuven, is heading the Constitutional Cytogenetics unit of the Center of Human Genetics and coordinating the genomic core at KU Leuven. The laboratory is involved in gene discovery of rare diseases, develops novel methods for single cell genomic analysis and partners in SymbioSys, the systems biology center of excellence in computational biology to mine high throughput data analysis tools and to identify novel gene functions through data fusion methods. He was president-elect of the Belgium Society of Human Genetics, is on the scientific board of the European Genetics and Cytogenetics association and the European human genetics association. He is faculty member of the European Genetics foundation, and board member of Molecular Cytogenetics. He published over 200 articles and is founder of Cartagenia, a company delivering expert systems for clinical interpretation of genomic data.
OP - Wednesday 28 September 2016

OP28: Advances in ultrasound and new technologies:  
focus on other modalities  
Michelangelo A

Chairs: H. Feltovich (United States); A. Righini (Italy)

Fetal speech movement response comparing abdominal and intravaginal music emission  
A. Garcia-Faura (Spain)  
OP28.01

Semi-automated fractional limb volume improves precision of birthweight predictions  
W. Lee (United States)  
OP28.02

Novel MRI assessment of maternal cerebral oxygen consumption and oxygen extraction during pregnancy  
W. Lee (United States)  
OP28.03

WITHDRAWN

3D analysis of the fetoplacental vasculature in normal pregnancies using CT angiography  
M.Ø. Poulsen (Denmark)  
OP28.04

WITHDRAWN

Is quantitative analysis of fetal facial morphology feasible? Preliminary results from a pilot study  
A. Dall'Asta (United Kingdom)  
OP28.05

MRI-ultrasound fusion imaging in real-time virtual sonography for the evaluation of fetal anomalies: preliminary study  
G. Rizzo (Italy)  
OP28.06

3D analysis of the fetoplacental vasculature in normal pregnancies using CT angiography  
M.Ø. Poulsen (Denmark)  
OP28.07

WITHDRAWN

New trends in the diagnosis of orofacial syndromes: the fetal dental panoramic  
L. Gitz (France)  
OP28.08

Diffusion-weighted MRI of the placenta in normal pregnancies and in pregnancies complicated by fetal growth restriction  
D.N. Hansen (Denmark)  
OP28.09

The correlation between computed tomography measurements of the pubic arch angle and the intraspinous diameter in reproductive-age women  
S. Perlman (Israel)  
OP28.10

OP29: IUGR: pathophysiology and therapy  
Michelangelo B

Chairs: A. David (United Kingdom); P. Acharya (India)

Does maternal psychological distress in third trimester affect fetal cerebroplacental circulation measures?  
A. Helbig (Norway)  
OP29.01

Factors associated with the pattern of Doppler deterioration in severely growth-restricted fetuses  
T. Kanagawa (Japan)  
OP29.02

Brain volume and Doppler velocimetry in growth-restricted, small–for-gestational age and appropriate-for-gestational age fetuses  
H.M. Gaafar (Egypt)  
OP29.03

Prenatal demonstration of distal right coronary artery in growth-restricted fetuses: a sign of protective response?  
S. Miyashita (Japan)  
OP29.04

Perinatal effects of nutritional intrauterine therapy in a rabbit model of intrauterine growth restriction  
M. Illa (Spain)  
OP29.05

Long-term functional impairment and their structural correspondence in an animal model of intrauterine growth restriction  
M. Illa (Spain)  
OP29.06

Non-invasive measurements of placental oxygen transport using MRI  
B.S. Saini (Canada)  
OP29.07
Arterial and kidney remodelling in preterm growth-restricted fetus and newborn  
E. Cosmi (Italy)  
Cardiac output and total peripheral resistance in pregnancies with fetal growth restriction  
J. Tay (United Kingdom)  
Difference between the systolic and diastolic fetal abdominal aorta diameters in intrauterine  
growth restriction and control fetuses: a case-control study  
S. Visentin (Italy)  
Assessment of fetal brain vascularisation in fetal growth restriction comparing  
three-dimensional power angiography to bi-dimensional velocimetry  
A. Rossi (Italy)  

OP29: Using ultrasound to evaluate abnormal bleeding  
Tiziano A

Chairs: A. Lanzone (Italy); T. Van den Bosch (Belgium)  
Ultrasonography, macroscopy and microscopy of uterine lesions: a comparative study  
using in vitro gel instillation sonography (iGIS) stereotaxis  
L. Vandermeulen (Belgium)  
Endometrial echo thickness in postmenopausal women: are measurements on  
onsohysteroscopy compatible with measurements on transvaginal sonography?  
O. Rotenberg (United States)  
Evaluation of effects of ultrasound-guided radiofrequency ablation on adenomyosis by using  
contrast enhanced ultrasonography  
W. Luo (China)  
Changes in the sonographic characteristics of adenomyosis after treatment with ulipristal  
acetate  
S. Ferrero (Italy)  
The prevalence of sonographic signs of adenomyosis in women attending a medical screening  
facility  
V.H. Eisenberg (Israel)  
A prospective study on the objective assessment of the international endometrial  
tumour analysis colour score: a global South experience  
M. De Vera (Philippines)  
Sonographic features of broad ligament myomas (BLMs)  
L. Savelli (Italy)  
Definition and prevalence of defective Caesarean section scar by ultrasound: systematic  
review and meta-analysis  
W.P. Martins (Brazil)  
Creation of a scoring system to determine endometrial cancer risk using the international  
endometrial tumour analysis (IETA) features.  
A. Sigue (Philippines)  

OP30: Stillbirth and other late complications  
Tiziano B

Chairs: F. Figueras (Spain); A. Johnson (United States)  
Prevalence of esophageal atresia at different degrees of maximal amniotic fluid index in  
pregnancies complicated by idiopathic polyhydramnios with visible stomach bubble  
J. Park (Republic of Korea)  
Performance of a third trimester combined screening model for the prediction of adverse  
perinatal outcome  
J. Miranda (Spain)  
Fetal abdominal circumference growth velocity as a predictor of neonatal outcome  
in appropriate-for-gestational-age neonates  
M. Hendrix (Netherlands)  
Can weekly antepartum testing decrease stillbirth rate?  
M. Terrani (United States)
Obstetric home-monitoring including CTG in complicated pregnancies: development and results of system, based on free available Open Source software  
**O. Petersen (Denmark)**  
Influence of gestational diabetes on fetal autonomic nervous system  
**S.M. Lobmaier (Germany)**  
The relationship between fetal renal organ volume-corrected artery Doppler parameters and amniotic fluid production  
**V. Seravalli (United States)**  
Fetal middle cerebral artery Doppler at 40 weeks’ gestation in the prediction of emergency delivery for fetal distress in labour  
**F. Crovetto (Italy)**  
Low maternal placental growth factor levels, low cerebroumbilical ratio and the risk of intrapartum fetal compromise  
**L. Bligh (Australia)**  
Comparison of postmortem ultrasound and autopsy in 75 cases of perinatal death  
**L. Tuchtan (France)**  
A scoring model to predict postpartum massive bleeding in pregnancies with placenta previa  
**J. Lee (Republic of Korea)**

**OP32: Fetal anomalies: diagnosis and implications**

**Michelangelo A**

**Chairs: B. Benacerraf (United States); A. Youssef (Italy)**

Chromosomal findings in dilated or asymmetric lateral ventricles: an observational retrospective study  
**E. Katorza (Israel)**

Extra-brain ultrasound abnormalities in fetuses with congenital cytomegalovirus infection: systematic review and meta-analysis  
**C. Scala (Italy)**

3D assessment of the umbilical vein deviation angle (UVDA) for the prediction of liver herniation in left congenital diaphragmatic hernia  
**N. Volpe (Italy)**

The relationship between neonatal gastroschisis and maternal body mass index (BMI) in a UK population  
**J. Hale (United Kingdom)**

The quantitative measurement of prenatal renal echogenicity as a predictive value of postnatal renal function  
**K. Sung (Republic of Korea)**

Isolated bilateral fetal hyperechogenic kidneys: outcome and prognostic factors  
**C. Morin (France)**

Diagnostic accuracy of mid-trimester antenatal ultrasound for multicystic dysplastic kidneys  
**C. Scala (Italy)**

Prenatal diagnosis of crossed ectopic kidney: *in utero* evaluation and long-term follow-up  
**M. Zajicek (Israel)**

Agreement between prenatal ultrasound and fetal autopsy: a systematic review of literature  
**F. Prefumo (Italy)**

Survival at one year of age of fetuses diagnosed with lethal congenital malformations: experience of 12 years in a reference centre in Chile  
**D.P. Cisternas (Chile)**

**OP33: The placenta and brain of fetuses with CHD**

**Michelangelo B**

**Chairs: A. Khalil (United Kingdom); D. Paladini (Italy)**

Head circumference of fetuses with congenital heart disease decreases in the second half of pregnancy  
**R. de Heus (Netherlands)**
Longitudinal analysis of myocardial function and cerebral perfusion in fetuses with left heart defects

J. Degenhardt (Germany)

Congenital heart disease and the placenta – preliminary results from a fetal MRI program

E. Melchior (Austria)

Impaired uteroplacental circulation in pregnancies complicated by fetal tetralogy of Fallot

J. Binder (United Kingdom)

The correlation between fetal head biometry and Doppler parameters in fetuses with congenital heart disease

M. J. Mebius (Netherlands)

Cerebral and placental hemodynamics in congenital heart defects in fetuses

Y. He (China)

Anomalous umbilical cord placental insertion: a possible marker for fetal cardiac defect?

L. Di Luzio (Italy)

Discordant fetal head growth is apparent by mid-pregnancy in fetuses with congenital cardiac abnormalities

R. Parasuraman (United Kingdom)

Correlation between congenital heart defects in fetuses and placental pathologies

Y. He (China)

Fetal cerebral blood flow and neonatal brain white matter changes in complex in human fetuses with congenital heart disease

M. Seed (Canada)

OP34: Using ultrasound to diagnose causes of pelvic pain and endometriosis

Tiziano A

Chairs: C. Exacoustos (Italy); T. Van den Bosch (Belgium)

Edema of the fallopian tube: a novel sonographic sign of adnexal torsion

L. Di Meis (Italy)

Use of extended transvaginal ultrasound in deep endometriosis in patients with clinical suspect of DIE

M. León (Chile)

Ultrasound-based clinical history of rectosigmoid deep infiltrating endometriosis: a 10-year follow-up study

F. Leone (Italy)

Accuracy of different imaging techniques to assess POD obliteration: a systematic review and meta-analysis

B. Shakeri (Australia)

What is the learning curve and does the uterine ‘sliding sign’ alone outperform direct visualisation using sonovaginography for the prediction of rectal/rectosigmoid deep infiltrating endometriosis?

S. Reid (Australia)

Interpreting the transvaginal ultrasound uterine “sliding sign” for the prediction of POD obliteration: a learning curve study

S. Reid (Canada)

Does the uterine “sliding sign” alone outperform direct visualization using sonovaginography for the prediction of rectal/rectosigmoid deep infiltrating endometriosis?

S. Reid (Australia)

Prospective validation of the ultrasound-based endometriosis staging system (UBESS)

B. Shakeri (Australia)

Complications during pregnancy and delivery in women with untreated rectovaginal deep endometriosis

C. Exacoustos (Italy)
P24: New parameters to evaluate the fetal cardiac function

**Chairs: E. Hernández-Andrade (United States)**

- Diagnosis of first-degree atrioventricular fetal block by using pulsed Doppler: assessment of a new image scoring method to measure PR interval
  - L. Gitz (France)
- Two-dimensional B-flow in visualising fetal cardiac blood flow at 11–13 weeks scan.
  - E.S. Nekrasova (Russian Federation)
- Influence of the frame rate (DICOM versus acoustic frame rate) on strain analysis assessed by two-dimensional speckle tracking in fetal echocardiography
  - C. Enzensberger (Germany)
- Genotype-phenotype correlations in congenital heart defects in fetuses
  - Y. He (China)
- 2D-speckle tracking of longitudinal systolic displacement (LSD) of the ventricular walls: does it impact interpretation of the M-mode echocardiogram?
  - G.R. DeVore (United States)
- Time interval measurement in global and regional colour-tissue Doppler imaging (CTDI) of the fetal heart: a new approach to cardiac function
  - S.J. Eschbach (Netherlands)
- F-TAPSE for fetal cardiac function evaluation in the early second trimester of pregnancy in normal and pathological cases
  - B. Messing (Israel)
- Automation of the fetal right myocardial performance index (MPI) using raw ultrasound data
  - A.W. Welsh (Australia)
- Influence of the frame rate (FR) on strain analysis assessed by two-dimensional (2D) speckle tracking in fetal echocardiography
  - C. Enzensberger (Germany)
- Prospective comparison of left fetal myocardial performance index (MPI) measurement techniques and MPI reference ranges
  - T.M. MacDonald (Australia)
- Prelabour fetal ECG in congenital heart disease: a preliminary comparison with neonatal ECG
  - S.B. Clur (Netherlands)

P25: Fetal urinary system

**Chair: A. Bhide (United Kingdom)**

- Antenatal presentation of renal anomalies in lymphedema distichiasis syndrome: is this a rare association? Report of three affected individuals from the same family
  - H. Mousa (United Kingdom)
- Compensatory growth of fetal kidney in unilateral renal agenesis: nomograms from early second trimester to term
  - S. Perlman (Israel)
- Prediction of postnatal surgery in fetuses with isolated hydronephrosis
  - M. Signorelli (Italy)
- Prenatal diagnosis of 17q12 deletion syndrome: from fetal hyperechogenic kidneys to high risk for autism
  - Y.I. Gilboa (Israel)
- Systematic review of the prenatal ultrasound findings among women with bright echogenic kidneys secondary to 17q12 microdeletion syndrome
  - H. Mousa (United Kingdom)
- Prenatal diagnosis of incomplete vesical septum with concomitant anal atresia
  - A. Corbacioglu Esmer (Turkey)
- Posterior urethral valves: diagnosis and management using prenatal ultrasound
  - L.J. Salomon (France)
Predictors of perinatal death in fetuses with lower urinary tract obstruction

F. Fontanella (Netherlands)

Posterior urethral valves and vesicoureteral reflux: can prenatal ultrasonography distinguish between these two conditions in male fetuses?

Y. Chitrit (France)

Measurement of fetal umbilical cord insertion-to-genital tubercle length for the early diagnosis of bladder extrophy

M. Fishel-Bartal (Israel)

The assessment of the classification of fetal hypospadias by prenatal ultrasonography

Q. Wu (China)

P26: The cervix and other challenges in multiple pregnancies  

Botticelli Hub 3

Chairs: M. Bebbington (United States)

Quantified discordant placental echogenicity and thickness in Twin–twin transfusion syndrome and anemia polycythemia sequence.

C. Bamberg (Germany)

“I am not my brother’s keener!” Delivery decisions in discordant DCDA twins with fetal growth restriction of one twin

S.Z. Wanyonyi (Kenya)

Emergency cerclage in singleton and multiple pregnancies: is it worthwhile in both?

L. Patanè (Italy)

Outcomes after cerclage in twin and triplet pregnancy are comparable to singleton pregnancy

H. Kim (Republic of Korea)

Single IUFD in monochorionic diamniotic twins

A.A. Al Ibrahim (Qatar)

Cervical cerclage in triplet pregnancy: does it matter?

A.A. Al Ibrahim (Qatar)

Second trimester cervical length change and the risk of preterm birth in triplet pregnancy

J. Oh (Republic of Korea)

Perinatal outcomes of sIUGR in monochorionic twins: a systematic review of literature

F. Prefumo (Italy)

Perinatal outcome of monochorionic diamniotic twin pregnancies complicated with isolated amniotic fluid volume abnormality < 26 weeks of gestation

H. Kawamura (Japan)

Pravastatin improves placental perfusion and decreases umbilical artery vascular resistance in patients with selective IUGR dichorionic twins

A. Jurisic (Serbia)

Preterm delivery prediction in twins: cervix measurements in mid-trimester

M. Yamamoto (Chile)

P27: Innovations in gynecological imaging  

Botticelli Hub 4

Chair: S. Yagel (Israel)

The efficiency of superb microvascular imaging in patients with endometrial cancer

M. Ukai (Japan)

First in human study using KDR-targeted microbubbles (BR55) ultrasound molecular imaging in ovarian masses

F. Moro (Italy)

Lateral angle and a cavity width ratio, new measurements on uterine coronal section to define better dysmorphic T-shaped uteri

C. Exacoustos (Italy)

Ultrasound 3D evaluation of cervical recovery after LEEP for cervical intraepithelial neoplasia

N. Montik (Italy)

Fibroids vascularisation, elastography appearance and cellularity: preliminary data

N. Montik (Italy)
Contrast-enhanced transperineal ultrasound in mid-compartment prolapse evaluation

D.J. Rozsa (Norway)

Evaluation of the spatiotemporal image correlation (STIC) technology with colour Doppler for preoperative differential diagnosis of ovarian tumours

J.L. Alcázar (Spain)

An attempt to improve and standardise blood flow velocity in enhanced myometrial vascularity

A. Kaelin Agten (United States)

Correlation of volumetric 4D ovarian vascularisation expressed with vS/D and vPI indices: STIC analysis of the whole ovary or a spherical sample

M.J. Kudla (Poland)

Adenomyosis: a purpose of a TVS scoring system to classify the degree of myometrial involvement and extension of the disease

C. Exacoustos (Italy)

Arcuate artery calcification may be a new cardiac marker for coronary heart disease

S. Kelekci (Turkey)

P28: Screening for pregnancy outcomes

Botticelli Hub 1

Chair: H. Feltovich (United States)

Development and assessment of a self-administered questionnaire to gather key information prior to first trimester ultrasound examination

L.J. Salomon (France)

Differential effect of mode of conception and infertility treatment on perinatal outcomes

F. Crispi (Spain)

Raised neutrophil-to-lymphocyte ratio correlate with raised uterine artery Doppler indices and can aid prediction of poor outcomes in pregnancy

E. Breslin (United Kingdom)

Universal screening versus targeted screening for gestational diabetes mellitus at a large tertiary hospital in Singapore

S.D. Koh (Singapore)

First trimester measurement of subcutaneous and visceral adipose tissue thickness for the prediction of gestational diabetes

M. Bourdages (Canada)

Changes in uterine artery and angiogenic factors in the first half of pregnancies complicated by late fetal growth restriction

S. Triunfo (Spain)

The prediction of adverse neonatal outcome is improved by longitudinal analysis of fetal biometric parameters and uterine artery Doppler velocimetry

E. Hernández-Andrade (United States)

The relative utility of lowest versus latest CPR for identifying late onset IUGR and predicting requirement for admission to NICU

A. Duan (Canada)

Use of cerebroplacental ratio done during the third trimester as a predictor of adverse perinatal outcome

T. Dias (Sri Lanka)

Predictive accuracy of Doppler ultrasound in post-term pregnancies

F. D’Antonio (Norway)

The use of late third trimester ultrasound scans in detection of large-for-gestational age babies

T. Dias (Sri Lanka)

Point of care ultrasound use for emergency obstetrical and gynecological conditions in a tertiary care hospital in Rwanda

M. Small (United States)

Pregnancy outcomes associated with presence and severity of adenomyosis

L. Jae eun (Republic of Korea)
P29: Doppler in IUGR management

Chair: K. Maršál (Sweden)

Ultrasound measurement of volume and blood flow in normal fetal kidney

J. Wang (China)  P29.01

Umbilicalcerebral ratio for detection of poor neonatal acid-base status in small-for-gestational age late preterm fetuses

N. Fratelli (Italy)  P29.02

Doppler circulatory responses to acute maternal hyperoxygenation in small fetuses using fractional limb volume

W. Lee (United States)  P29.03

Does early antenatal maternal psychological distress affect fetal cerebroplacental circulation measures in third trimester?

A. Helbig (Norway)  P29.04

The value of cerebroplacental ratio assessment for the prediction of obstetrical outcome in term appropriate-for-gestational age fetuses

A. Youssef (Italy)  P29.05

Prenatal outcome according to discrepant Doppler waveforms between two umbilical arteries

J. Park (Republic of Korea)  P29.06

The role of third trimester cerebroplacental ratio in the prediction of the mode of delivery in singleton AGA and SGA fetuses

E. Zohay (Israel)  P29.07

Prediction of fetal growth restriction and adverse perinatal outcomes by fetoplacental Doppler at 37 weeks’ gestation

S. Triunfo (Spain)  P29.08

Repeatability and reproducibility of third trimester uterine artery and middle cerebral artery pulsatility indexes

L. Marchi (Italy)  P29.09

P30: Neurosonography: focus on the brain and the neural tube

Chair: K. Kalache (Germany)

Preconception counselling and management of pregnancy for young women with spina bifida

L. Masini (Italy)  P30.01

Automatic volume calculation mode assessment of dilated third ventricle: a novel method in the diagnosis of agenesis of the corpus callosum

C. Pascual Botia (Spain)  P30.02

Ventriculomegaly at 11–14 weeks: diagnostic criteria and outcome

F. Ushakov (United Kingdom)  P30.03

Crash sign: a marker for spina bifida at 11–13 weeks

F. Ushakov (United Kingdom)  P30.04

Prenatal detection of neural tube defects in the Netherlands: timing of diagnosis and pregnancy outcome

M. Bakker (Netherlands)  P30.05

Subependymal cysts in the fetal brain: prenatal diagnosis of 12 cases

B. De Keersmaecker (Belgium)  P30.06

Sonographic diagnosis of fetal developmental venous anomaly: persistent echogenic brain lesion drained by a prominent collecting vein

Z. Leibovitz (Israel)  P30.07

Severe ventriculomegaly, cerebellar hypoplasia and molar tooth sign in a case of Joubert syndrome

M. Cialdella (Italy)  P30.08

Case report: prenatal diagnosis of intracranial aneurysm

H. Muñoz (Chile)  P30.09

Prenatal brain calcifications: congenital toxoplasmosis

T. Sarac Sivrikoz (Turkey)  P30.10
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<table>
<thead>
<tr>
<th>EP</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP01</td>
<td>CNS I</td>
</tr>
<tr>
<td>EP02</td>
<td>CNS II</td>
</tr>
<tr>
<td>EP03</td>
<td>Fetal cardiac function</td>
</tr>
<tr>
<td>EP04</td>
<td>Great vessels and venous return</td>
</tr>
<tr>
<td>EP05</td>
<td>Peculiar cases of cardiac anomalies</td>
</tr>
<tr>
<td>EP06</td>
<td>Screening for congenital heart defects I</td>
</tr>
<tr>
<td>EP07</td>
<td>Screening for congenital heart defects II</td>
</tr>
<tr>
<td>EP08</td>
<td>The fetal heart and obstetric complications</td>
</tr>
<tr>
<td>EP09</td>
<td>Aneuploidy screening</td>
</tr>
<tr>
<td>EP10</td>
<td>Fetal anatomy and aneuploidy: case reports</td>
</tr>
<tr>
<td>EP11</td>
<td>Fetal anomalies</td>
</tr>
<tr>
<td>EP12</td>
<td>Screening and genetics</td>
</tr>
<tr>
<td>EP13</td>
<td>Fetal growth: outcomes</td>
</tr>
<tr>
<td>EP14</td>
<td>Sonographic prediction of morbidly adherent placenta</td>
</tr>
<tr>
<td>EP15</td>
<td>Growth</td>
</tr>
<tr>
<td>EP16</td>
<td>Predicting adverse outcome in late pregnancy</td>
</tr>
<tr>
<td>EP17</td>
<td>Predicting hemodynamics and hypertension in pregnancy</td>
</tr>
<tr>
<td>EP18</td>
<td>Predicting preterm and term birth</td>
</tr>
<tr>
<td>EP19</td>
<td>Ultrasound supporting the labour ward</td>
</tr>
<tr>
<td>EP20</td>
<td>Multiple pregnancy</td>
</tr>
<tr>
<td>EP21</td>
<td>Fetal interventions</td>
</tr>
<tr>
<td>EP22</td>
<td>Advances in ultrasound and new technologies</td>
</tr>
<tr>
<td>EP23</td>
<td>Improving maternal and fetal safety</td>
</tr>
<tr>
<td>EP24</td>
<td>Simulation and education in obstetric ultrasound</td>
</tr>
<tr>
<td>EP25</td>
<td>Early pregnancy complications</td>
</tr>
<tr>
<td>EP26</td>
<td>Managing ovarian masses</td>
</tr>
<tr>
<td>EP27</td>
<td>Pelvic pain and endometriosis</td>
</tr>
<tr>
<td>EP28</td>
<td>Reproductive medicine</td>
</tr>
<tr>
<td>EP29</td>
<td>Abnormal bleeding</td>
</tr>
<tr>
<td>EP30</td>
<td>Gynecological oncology</td>
</tr>
<tr>
<td>EP31</td>
<td>Urogynecology</td>
</tr>
<tr>
<td>EP32</td>
<td>Innovations in imaging</td>
</tr>
</tbody>
</table>
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Prenatal evaluation, imaging features and neurodevelopmental outcome of prenatally diagnosed periventricular pseudocysts
*E. Katorza* (Israel)
Antenatal ultrasound and MRI findings of congenital cytomegalovirus infection
*C. Scala* (Italy)
V-mode and B-mode in differential diagnosis among hydrocephalic persistent Blake’s pouch, non-HDC persistent Blake’s pouch and Dandy–Walker complex
*E. Varvarigos* (Italy)
Is it feasible to perform an extended survey of the fetal cerebral lateral ventricles throughout gestation?
*F. Correa* (Spain)
Atrial diameter is correlated with cortical development assessed by neurosonography in fetuses with isolated non-severe ventriculomegaly
*E. Eixarch* (Spain)
Prenatally diagnosed large spontaneous subdural hematoma
*N. Haratz* (United States)
Intrauterine Zika virus infection in Brazil: main central nervous system findings
*L.C. Bussamra* (Brazil)
The role of 2D and 3D ultrasound in the prenatal diagnosis of Apert syndrome
*C.H. Mulcahy* (Republic of Ireland)
Amniotic band syndrome mimicking isolated anencephaly
*A.K. Kesrouani* (Lebanon)
Congenital cytomegalovirus infection: an interesting case of clinical, molecular and pathologic correlations
*S. Visentin* (Italy)
Periventricular nodular heterotopia: prenatal ultrasonographic findings
*S. Park* (Republic of Korea)
Fetal intracranial ultrasound versus or with MRI – benefits, limitations and outcome
*K. Yusupov* (Russian Federation)

EP02: CNS II
The evaluation cerebellar vermis in fetus with transabdominal ultrasonography
*G. Lyu* (China)
The use of 3D volume scanning in assessment of intracranial translucency in fetuses between 11 and 14 weeks’ gestation?
*W.W. To* (Hong Kong)
Ultrasound and Doppler examination fetal brain for detection CNS lesions in preterm birth
*I.V. Ignatko* (Russian Federation)
Prenatal ultrasound diagnosis of lissencephaly in the second trimester of gestation
*O. Kozlova* (Russian Federation)
Prenatal diagnosis of Apert syndrome
*I. Mendilcioglu* (Turkey)
A case of Meckel–Gruber syndrome in a couple with a history of Sandhoff disease
*A.K. Kesrouani* (Lebanon)
Limb body wall complex
*G.A. Menezes* (Brazil)
A case of ventriculomegaly
*S.K. Goergen* (Australia)
Early and uncommon prenatal diagnosis of vein of Galen aneurysm
*N. Meirowitz* (United States)
Detection of fetal cerebellar vermis using 3D ultrasound: methods and advantages  
W. Ji (China)  
Fetus with hydranencephaly survived until the full-term vaginal delivery  
E. Kim (Republic of Korea)

**EP03: Fetal cardiac function**

Evaluation of cardiac function in the fetuses with pre-eclampsia by Tei index measured with real-time dual Doppler modality  
G. Lyu (China)  
Modified myocardial performance index in pregnancies with well-controlled type I and type II diabetes mellitus  
L. C. Bussamra (Brazil)  
Fetal modified myocard performance index in diabetic pregnancies  
S. Kurtulmus (Turkey)  
Evaluation of transverse systolic displacement (TSD) of the right (RV) and left ventricle (LV) of the fetal heart using 2D-speckle tracking  
G. R. DeVore (United States)  
Reference values for fetal heart biometric parameters using spatiotemporal image correlation (STIC) m-mode in a Brazilian population  
L. C. Bussamra (Brazil)  
Reference range for fetal tricuspid annular plane systolic excursion (TAPSE) measurement using spatiotemporal image correlation (STIC) m-mode in a Brazilian population  
L. C. Bussamra (Brazil)  
Lateral and septal wall segmental systolic displacement: a new technique to evaluate fetal cardiac function  
G. R. DeVore (United States)  
Evaluation iSTIC on correlation of normal fetal heart ventricular volume and systolic function  
L. Xie (China)  
The change of early diastolic intraventricular pressure difference in fetuses at mid to late gestation  
A. Takamizu (Japan)  
Frame-by-frame systolic area change: a new diagnostic tool to evaluate fetal cardiac function  
G. R. DeVore (United States)  
Frame-by-frame fractional area change: a new diagnostic tool to evaluate fetal cardiac function  
G. R. DeVore (United States)  
24-segmental sphericity index (SSI): a new diagnostic tool to evaluate fetal cardiac function  
G. R. DeVore (United States)  
24-segmental shortening fraction (SF): a new diagnostic tool to evaluate fetal cardiac function  
G. R. DeVore (United States)  
Using spatiotemporal image correlation with m-mode display to monitor ventricular systolic function of hydrops fetalis  
Z. Xie (China)

**EP04: Great vessels and venous return**

A very rare congenital aortic arch defect defined prenatally: aortopulmonary window associated with sacral teratoma  
T. Sarac Sivrikoz (Turkey)  
Characteristics of eight right aortic arch cases in a single institution  
M. Velipasaoğlu (Turkey)  
Diagnostic accuracy of fetal echocardiography in detecting coarctation of aorta: a systematic review and meta-analysis  
F. D’Antonio (Norway)  
Double outlet right ventricle: what can we predict for neonates based on prenatal diagnosis: retrospective analysis of 39 cases from tertiary centre for fetal cardiology  
M. Slodki (Poland)
**EP04: Cardiac Anomalies**

1. **Perinatal course of the fetuses diagnosed to isolated persistent left superior vena cava**
   - **Y. Maeno** (Japan)

2. **Severe hypoplasia of hepatic inferior vena cava**
   - **E. Varvarigos** (Italy)

3. **Case report: double aortic arch – two cases**
   - **H. Muñoz** (Chile)

**EP05: Peculiar cases of cardiac anomalies**

1. **Fetal spontaneous and isolated hemopericardium producing tamponade: case report**
   - **U. Singh** (India)

2. **Severely dysplastic tricuspid valve and massive tricuspid insufficiency in a second trimester fetus**
   - **M. Rodríguez** (Spain)

3. **Prenatal images of myocardial infarction**
   - **W.A. Clavelli** (Argentina)

4. **A rare case of Ebstein’s anomaly and Down’s syndrome diagnosed intra utero**
   - **C.A. Capurucó** (Brazil)

5. **Cantrell’s Pentalogy: considerations on the early diagnosis – case presentation**
   - **R. Bohiltea** (Romania)

6. **Prenatal diagnosis of a rare congenital heart abnormality: right atrial appendage aneurysm**
   - **T. Sarac Sivrikoz** (Turkey)

7. **Successfully propafenone treatment in refractory fetal atrial flutter**
   - **C.A. Capurucó** (Brazil)

8. **Prenatal diagnosis of a fetal giant cardiac rhabdomyoma**
   - **J.E. Dickinson** (Australia)

9. **The echo-image characteristics of fetal cardiac tumour by echocardiography**
   - **T. Zhu** (China)

10. **Doppler assessment of hypertrophic cardiomyopathy in a case of Costello syndrome**
    - **Y. Kurihara** (Japan)

11. **Case report: multiple cardiac rhabdomyomas diagnosed prenatally**
    - **M. Nowak** (Poland)

**EP06: Screening for congenital heart defects I**

WITHDRAWN

1. **Diagnostic performance of early fetal echocardiography (EFEC) for congenital heart defects (CHD) in high-risk pregnancies: a meta-analysis**
   - **T. Loureiro** (Portugal)

2. **Investigation of the usefulness of the fetal heart screening by the STIC method**
   - **N. Inamura** (Japan)

3. **Extracardiac malformation in prenatally diagnosed congenital heart diseases**
   - **M. Kim** (Republic of Korea)

4. **Early ultrasound detection of congenital heart anomalies in highrisk pregnancies: first and second trimester scans compared to postnatal echocardiography**
   - **M. Aboulghar** (Egypt)

5. **Analysis of copy number variations in fetal conotruncal heart defects using low-coverage whole genome sequencing**
   - **Y. He** (China)

6. **Transvaginal examination in non-informative transabdominal first trimester extended cardiac scan: efficiency and acceptability of the method**
   - **D.G. Iliescu** (Romania)

7. **The accuracy and limitations of prenatal diagnosis of congenital heart defects in a referral centre**
   - **Y. He** (China)
Reliability of early fetal echocardiography (EFEC) for congenital heart disease (CHD) detection
**P. Ricci (Italy)**

Detection of fetal cardiac anomalies: what is the most cost-effective strategy?
**G. Bak (Denmark)**

Retrospective study of fetal echocardiography and follow-up after birth in a single centre
**J. Li (China)**

**EP07: Screening for congenital heart defects II**

Evolution of isolated tricuspid regurgitation at 11–13 gestational weeks in fetuses with normal heart and karyotype
**D. Nemescu (Romania)**

A new screening method of right aortic arch (RAA)
**M. Kawataki (Japan)**

Fetal intelligent navigation echocardiography (FiNE) in a fetus affected by hypoplastic left heart syndrome and restrictive foramen ovale
**A. Weichert (Germany)**

The effect of respiration-like movement on changes in the distance between the left atrial wall and descending aorta
**K. Imamura (Japan)**

The International Prenatal Cardiology Collaboration Group: a new concept for global research study
**G. Rizzo (Italy)**

Impact of maternal obesity on fetal cardiac screening
**G. Bak (Denmark)**

Atrioventricular septal defect: what can we predict for neonates based on prenatal diagnosis—retrospective analysis of 97 cases from tertiary centre for fetal cardiology
**M. Slodki (Poland)**

Markers and intelligent agent driven early fetal echocardiography in lieu of the conventional views-focused scanning method
**S. Rottem (United States)**

The influence of the method of parsing complex heart defects to the success of prenatal diagnostic evaluation
**N. Veccek (Croatia)**

Prenatal invasive testing and karyotypic abnormalities in antenatally diagnosed congenital heart defects: impact on timing of diagnosis and termination of pregnancy
**M. Khare (United Kingdom)**

A novel customisable sensitivity and specificity driven standardisation of early fetal echocardiography by TVS (transvaginal sonography)
**S. Rottem (United States)**

Review of prenatally diagnosed major fetal cardiac anomalies: 5 years’ experience in a perinatology clinic
**S. Kurtulmus (Turkey)**

**EP08: The fetal heart and obstetric complications**

Prenatal manifestations of left atrial isomerism
**M. Medvedev (Russian Federation)**

Ventricular systolic-to-diastolic time index in pregnancies with well-controlled type I and type II diabetes mellitus
**L.C. Bussamra (Brazil)**

Echocardiographic monitoring of sacrococcygeal teratomas in a tertiary centre in Lodz
**M. Slodki (Poland)**

Prenatal diagnosis of polysplenia syndrome
**M. Nagasawa (Japan)**
A caution for use of herbal products and flavonoids during pregnancy: uncommon causes of premature ductal restriction  
**U. Singh** (India)

Prediction of severity of lung hypoplasia in the fetuses with prolonged premature rupture of membrane  
**Y. Yamamoto** (Japan)

Can we predict pulmonary hypertension based on prenatal echocardiography findings in cases of congenital heart defects?  
**M. Siodki** (Poland)

Critical pulmonary valve stenosis in dichorionic and diamniotic twins: prenatal diagnosis, pregnancy outcomes and postnatal development  
**C.A. Capurroco** (Brazil)

Pulsed Doppler imaging of renal artery and vein is useful for diagnosis of fetal arrhythmia  
**T. Itai** (Japan)

**EP09: Aneuploidy screening**

The role of cytochrome P450 in nuchal translucency thickness: a preliminary study  
**F. Padula** (Italy)

Our experience with the first 464 NIPT tests for detecting the most common Trisomies in combination with other prenatal tests  
**U. Res Muravec** (Slovenia)

Prenatal cf-DNA testing for Down’s syndrome and other R chromosomal aneuploidies: clinical outcome in private and public health systems  
**D.M. Strah** (Slovenia)

Fetal cardiac examination is useful to reduce requirement to invasive karyotyping  
**S. Kelekci** (Turkey)

Early amniocentesis: CVS alternative?  
**A.A. Al Ibrahim** (Qatar)

Chromosomal microarray as a first tier test following diagnostic prenatal procedures: the Toronto Mount Sinai Hospital experience  
**N. Alayed** (Canada)

A contribution of chromosomal microarray in fetuses with increased nuchal translucency  
**S. Brezinova** (Czech Republic)

Sonographic findings in fetuses affected by microdeletion 17q21.31  
**C. Martinez-Payo** (Spain)

Prenatal invasive test: our 5 years’ experience  
**S. Kelekci** (Turkey)

Prenatal diagnosis of Charge syndrome associated with intestinal malrotation  
**E. Mousty** (France)

Trisomy 9 detection by non-invasive prenatal test  
**H. Jung** (Republic of Korea)

Ultrasonographic findings in a case of partial deletion of the q arm of chromosome 5  
**C. Martinez-Payo** (Spain)

**EP10: Fetal anatomy and aneuploidy: case reports**

Isolated fetal neck hemangioma mimicking thyroid  
**L. Kaur** (India)

Nager acrofacial dysostosis: early first trimester ultrasound or exome sequencing?  
**E.G. Yapar Eyi** (Turkey)

Twins discordant for an arteriovenous malformation between celiac trunk and intrahepatic umbilical vein  
**D.R. Hartge** (Germany)

Congenital dwarfism with renal dysplasia: case report  
**S. Lee** (Singapore)
First trimester diagnosis of bilateral fibular aplasia, tibial campomelia and oligosyndactyly (FACTO) syndrome: a case report
N. Volpe (Italy)
A case of fetal enterolithiasis
O. Kara (Turkey)
Mandibular facial cleft (Tessier 30)
A.A. Al Ibrahim (Qatar)
Three-dimensional prenatal diagnosis of lateral facial cleft and preauricular skin tags
D. Atanassova (Bulgaria)
Fetus in fetu malformation: a very early prenatal diagnosis by ultrasound scan
R. Amster (Israel)
Prenatal diagnosis of Klippel-Trenaunay syndrome
E. Mousty (France)
Follow the SMA: a simple method for detection of CDH containing bowel only
H. Yazicioglu (Turkey)
Prenatal diagnosis of diaphanospondylodystosis (DSD): a case report
C. Hofstaetter (Switzerland)
Esophagus too large: only fistula?... Think about hiatal hernia!! Especially if its lower portion is concerned
J. Develay-Morie (France)
Case report: an atypical abnormality in case with low risk of non-invasive prenatal testing (NIPT) at my Duc Hospital
M. Phan (Vietnam)
Continuous fetal head flexion: a useful marker for prenatal diagnosis of Lethal multiple pterygium syndrome
A. Hasegawa (Japan)
Duplication of fetal gallbladder
M.G Gupta (India)
Prenatal diagnosis of fetal liver hemangioma
T. Sarac Sivrikoz (Turkey)
Prenatally detected thoracic neuroblastoma
Y. Park (Republic of Korea)
Subdiaphragmatic extralobar pulmonary sequestration: report of two cases
M. Cialdella (Italy)
Isolated right aortic arch – left ductus as a clue to the DiGorge syndrome diagnosis
S. Tudorache (Romania)
Hypoplasia of abdominal muscles – a rare complication following fetal ascites due to maternofetal parvo virus B19 infection
E. de Jong-Pleij (Netherlands)
Look at the fetal hands: case of brachydactyly
L. Kaur (India)
Application of 3D ultrasonography in analysis of fetal anomalies in Wolf-Hirschhorn syndrome
Z. Jurisic (Serbia)
Atypical presentation of megaduodenum – case report
N. Vedmedovska (Latvia)
Frontonasal dysplasia syndrome
A.A. Al Ibrahim (Qatar)
Unusual malformations associated to ICSI
A.K. Kesrouani (Lebanon)
Pena-Shokeir syndrome – type I
G.A. Menezes (Brazil)
Prenatal sonographic diagnosis of Goldenhar syndrome
Y. Kim (Republic of Korea)
Ultrasound characteristics in thoragopagus fetuses
A.K. Kesrouani (Lebanon)
A rare case of recurrent Escobar syndrome diagnosed on ultrasound
N. Agarwal (India)
Antenatal detection of lingual cyst – a case report

V.A. Raman (Sultanate of Oman)
A case of fetal bilateral marked echogenic kidneys with normal amniotic fluid during pregnancy

K. Ichizuka (Japan)
Fetal intrauterine infection of unknown origin with bowel perforation and subependymal hemorrhage

G. Sciotti (Switzerland)
Prenatally diagnosed mega vesica urinaria

M. Bogavac (Serbia)
Bilateral fetal hydronephrosis: case report

O.I. Restrepo (Colombia)
Prenatally detected and managed perineal malignant peripheral nerve sheath tumour: case report

H. Luo (China)
Prenatal diagnosis of cloacal malformation with VATER syndrome: a case report

C.T. Hsieh (Taiwan)
EXIT procedure in a neonate with lymphangioma diagnosed prenatally

D. Saldivar-Rodriguez (Mexico)
Ultrasound presentation of asphyxiating thoracic dysplasia (Jeune syndrome): a case report

G.D. Rezende (Brazil)
Thanatophoric dysplasia: ultrasound findings – report of two cases

C. Flores Acosta (Mexico)
Is amniotic fluid echogenicity associated to IUGR?

A.K. Kesrouani (Lebanon)
Ultrasonographic markers of dengue fever in the fetus

C. Cassis-Phillips (Ecuador)
Transient abdominal cyst

Y. Nieto Jimenez (Spain)
Prenatal diagnosis of Larsen syndrome in a twin pregnancy

L.C. Bussamra (Brazil)

EP1: Fetal anomalies

Contribution of colour Doppler according to the type of malformation

N. Vecek (Croatia)
Perinatal outcome of the agenesis of ductus venosus and associated findings

A. Corbacioglu Esmer (Turkey)
Prenatal diagnosis of upper extremity malformations with ultrasonography: diagnostic features and perinatal outcome

M.T. Ozgun (Turkey)
Novel way to detect small isolated cleft palates

V. Kashyap (India)
Hyoid bone: a new ultrasonographic key to explore fetal malformations of the neck and face

L. Gitz (France)
Prenatal diagnosis of facial clefts: a nine-year experience

M. Irina (Bulgaria)
Effectiveness of ultrasound examinations performed by obstetricians and prenatal cardiologists in prenatal diagnosis of congenital malformations

M. Slodki (Poland)
Prenatal diagnosis of congenital high airway obstruction syndrome: Russian study of 9 cases

N.A. Altynnik (Russian Federation)
EP12: Screening and genetics

Noonan syndrome: new features

J. Bault (France)

Extending the window for genetic screening sonograms: needs assessment for an ultrasound-based Down's syndrome risk model up to 24 weeks' gestation

C.B. Hertenstein (United States)

Comparison of pregnancy outcomes in fetuses with increased nuchal translucency according to the sonographic features

M. Kim (Republic of Korea)

MOM of prefrontal space ratio in Iranian euploid fetuses

V. Marsoosi (Islamic Republic of Iran)

Effect of septation and nuchal thickness on incidence of chromosomal abnormalities in the presence of fetal cystic hygroma

D.C. Arikan (Turkey)

The added value of free-cell DNA analysis over first trimester ultrasound on screening for fetal aneuploidies

E. Becker Jr (Brazil)

Establishment of mass screening for aneuploidies by serum markers in the governorate of Bizerte, northern Tunisia

A. Bouzid (Tunisia)

Increased nuchal translucency and pregnancy outcome: experience of Baskent University Ankara Hospital

N. Sahin Uysal (Turkey)

Parental attitude in follow-up studies after tricuspid regurgitation diagnosis in first trimester of pregnancy

M. Calomfirescu (Romania)

Cystic hygromas in first trimester: Puerta de Hierro Majadahonda Hospital

Y. Nieto Jimenez (Spain)

Intracardiac echogenic focus in the second trimester of pregnancy

O. Tica (Romania)

EP13: Fetal growth: outcomes

Pregnancy and perinatal outcomes in a cohort of second trimester intrauterine growth restricted (IUGR) fetuses

L. Fernández-Blanco (Spain)

Fetal growth centile and Doppler parameters for prediction of poor outcome in second trimester intrauterine growth restriction (IUGR)

A. Peguero (Spain)

Early preterm FGR in sterile intrauterine milieu is associated with atypical CLD or neonatal death without RDS, but not CLD or neonatal death with RDS

C. Park (Republic of Korea)

Antenatal endocrine programming in highrisk pregnancy

I.V. Ignatko (Russian Federation)

Systematic neurosonography in severe intrauterine growthrestricted fetuses

L. Salazar (Spain)

Asphyxia in intrauterine fetus growth restriction: cardiotocography and ultrasound methods of diagnosis

E. Pirnareva (Bulgaria)
EP14: Sonographic prediction of morbidly adherent placenta

Prognostic evaluation to find critical courses in patients with placenta previa: a retrospective analysis of prospectively collected patient data
*M. Delius* (Germany)

Evolution of ultrasound images in case of abnormally invasive placenta (AIP)
*F. Foti* (Italy)

Ultrasound diagnosis and evaluation of the number of prior Caesarean deliveries as risk factor for placenta accreta in placenta previa cases
*M. Okumura* (Brazil)

Fetal growth and AIP
*F. Foti* (Italy)

Twin pregnancies associated to abnormally invasive placenta (AIP): what choices and what challenges
*F. Foti* (Italy)

Two years’ experience in diagnostic and management of abnormally invasive placenta
*R. Bohiltea* (Romania)

Pitfall in imaging abnormally invasive placenta
*A. Kennedy* (United States)

First trimester abnormally invasive placenta in the absence of previous uterine opened surgery
*S. Tudorache* (Romania)

Placenta previa: leading indication of postpartum hysterectomy
*E. Domali* (Greece)

EP15: Growth

Fetal hemodynamics and renal function
*H. Inoue* (Japan)

Fetal biometric ratios as predictors of the SGA infant by customised and unadjusted charts
*M. Mongelli* (Australia)

Evaluating fetal thyroid function with 2D and 3D ultrasound combined with relative hormones in amniotic fluid
*G. Lyu* (China)

Perinatal outcomes in difficult interpreted Doppler umbilical artery waveforms
*I. Safonova* (Ukraine)

Pulsating flow in the umbilical vein is a much better predictors of adverse outcome of pregnancy than is blood flow pattern in the ductus venosus and hepatic vein
*C. Hofstaetter* (Switzerland)

Correlation of ultrasonographic measurements and pharmacologic reactivity of umbilical and placental vessels in normal and growthrestricted fetuses
*M. Jakó* (Hungary)

Influence of umbilical artery resistance and fetal weight on fetal vascular circulatory redistribution
*E. Antolin* (Spain)

Correlation of estimated fetal weight with neonatal birthweight in infants born at borderline viability
*S.A. Hughes* (Canada)

Neonatal head circumference in Lima, Peru
*G. Diez Chang* (Peru)

Fetal biometry: contribution and limitations of the three-dimensional approach
*G. Ambroise Grandjean* (France)

Ultrasound first trimester screening for anomalous umbilical cord insertion (UCI): is it time to consider it?
*L. Di Luzio* (Italy)

Intramuscular maternal dexamethasone administration – effects on fetal Doppler flow
*S. Jankovic Raznatovic* (Serbia)
Association between low umbilical vein flow and subsequent low growth trajectory of adequate-for-gestational fetuses between 31–36 weeks and birth
M.A. Parra-Saavedra (Colombia)

Accuracy of different sonographic formulas for fetal weight estimation at term
V. Stoykova (Bulgaria)

Neonatal height in Lima, Peru
G. Diez Chang (Peru)

The assessment of fetal facial expressions of growth restricted fetuses by HDlive and 4D ultrasound
H. Chida (Japan)

Fetal brain to liver volume ratio measured by MRI is a useful indicator of IUGR in vivo in late gestation
A. Duan (Canada)

Ultrasound and biochemical prognostic markers of fetal growth retardation
I. Ignatko (Russian Federation)

Umbilical artery Doppler pattern in fetuses with two vessel cord
E. Contro (Italy)

Predicting small-for-gestational age newborns in the first trimester of pregnancy using maternal renal interlobar vein impedance (RIVI)
S. Bezerra (Brazil)

The value of ultrasound exams after 24 weeks of gestation for the diagnosis of obstetric and perinatal pathology in low-risk pregnancy
I.V. Safonova (Ukraine)

The effect of measured antenatal parameters on the fetus in private university settings
E. Unlugedik Sayin (Turkey)

Fetal foot length from 10 to 16 weeks on ultrasound
H. Wong (Australia)

EP16: Predicting adverse outcome in late pregnancy

Volume of umbilical venous circulation just before delivery reflect the perinatal outcome
M. Nakamura (Japan)

Impact of amniotic sheets on perinatal outcomes: analysis of 8 cases and literature review
R. Minekawa (Japan)

The value of maternal and fetal Doppler parameters in postdate pregnancies – a prospective study
O. Lebovitz (Israel)

The potential impact of patients’ presentation with reduced fetal movements and drive to reduce stillbirth on service delivery
F. Ajibade (United Kingdom)

Maternal determinants of the amniotic fluid index
M. Mongelli (Australia)

The relationship between the cerebroumbilical ratio and cardiac output in fetuses that develop intrapartum compromise at term
A.A. Alsolai (Australia)

Influence of birthweight on prospective stillbirth risk in the third trimester.
S. Contag (United States)

Phase-rectified signal averaging method: reference ranges and maternal/fetal influence factors on average acceleration and deceleration capacity
S.M. Lobmaier (Germany)

Relation between the timing at open uterine isthmus and hemorrhage in placenta previa
M. Goto (Japan)

Pre-labour fetal cardiac output and risk of intrapartum fetal compromise
A.A. Alsolai (Australia)

WITHDRAWN

EP16.01

EP16.02

EP16.03

EP16.04

EP16.05

EP16.06

EP16.07

EP16.08

EP16.09

EP16.10

EP16.11
The predictive value of RI and PI ratio of fetal descending aorta/MCA for fetal outcome in complicated and uncomplicated pregnancies from 36 weeks  
**L. Eslamian (Islamic Republic of Iran)**  
Prediction of delivery mode in women with low-lying placenta  
**J. Kim (Republic of Korea)**  
Features of antenatal ultrasonographic monitoring in diabetes mellitus pregnant women in the diagnosis of diabetic fetopathy and determining the degree of perinatal risk  
**I. Safonova (Ukraine)**  
The variation of placental migration in patients with malposition of the placenta after late preterm period  
**K. Haino (Japan)**  
Relationship between amniotic fluid and maternal lipid profiles for predicting pregnancy outcome  
**S. Borna (Islamic Republic of Iran)**  
The value of ultrasound studies after 24 gestational weeks for the diagnosis of fetal pathology in low-risk pregnancy  
**I. Safonova (Ukraine)**  
Outcome of the patients with late second trimester isolated oligohydramnios and echogenic bowel without evidence of premature rupture membranes  
**S. Guven (Republic of Korea)**  
The use of sildenafil citrate in pregnancy: a systematic review  
**R.D. Ferreira (Brazil)**  
First trimester serum markers to predict pregnancy complications: Tunisian prospective study  
**A. Bouzid (Tunisia)**  
Pulsatility index of the uterine and cerebral arteries at 41 weeks of pregnancy  
**O.R. Treviño-Montemayor (Mexico)**  
Comparison between uterine artery pulsatility index in monochorionic and dichorionic twin gestations during the first trimester of pregnancy  
**C. Martínez-Payo (Spain)**  
Association between maternal anxiety and depressive mood in third trimester and fetal hemodynamics  
**J. Shin (Republic of Korea)**  
WITHDRAWN  
**L. Hympanova (Czech Republic)**  
Maternal characteristics and ultrasonographic markers in third trimester might predict late gestational hypertension.  
**E. Cosmi (Italy)**

**EP17: Predicting hemodynamics and hypertension in pregnancy**

Electronic poster terminals (Sunday to Wednesday)  
**I. Pisani (Italy)**  
The use of sildenafil citrate in pregnancy: a systematic review  
**R.D. Ferreira (Brazil)**  
First trimester serum markers to predict pregnancy complications: Tunisian prospective study  
**A. Bouzid (Tunisia)**  
Pulsatility index of the uterine and cerebral arteries at 41 weeks of pregnancy  
**O.R. Treviño-Montemayor (Mexico)**  
Comparison between uterine artery pulsatility index in monochorionic and dichorionic twin gestations during the first trimester of pregnancy  
**C. Martínez-Payo (Spain)**  
Association between maternal anxiety and depressive mood in third trimester and fetal hemodynamics  
**J. Shin (Republic of Korea)**  
WITHDRAWN  
**L. Hympanova (Czech Republic)**  
Maternal characteristics and ultrasonographic markers in third trimester might predict late gestational hypertension.  
**E. Cosmi (Italy)**
Reference values of maternal renal interlobar venous Doppler parameters in the first trimester of normal pregnancy
S. Bezerra (Brazil)

Uteroplacental vascularisation quantification by 3DPD: physiological factors and acquisition parameters impact – EVUPA study
O. Morel (France)

WITHDRAWN

Longitudinal assessment of maternal ventricular-arterial coupling in singleton and twin pregnancies
F. Pretumo (Italy)

Fetal renal vascularisation effected by gestational hypertension
M. Jakó (Hungary)

Fetal endothelial remodelling in late-onset gestational hypertension
E. Cosmi (Italy)

Prediction of pre-eclampsia and IUGR by uterine artery Doppler sonography
P. Uharcek (Slovakia)

Angiogenic factors and uterine artery Doppler for prediction of pre-eclampsia in high-risk population
V. Taraseviciene (Lithuania)

Preconceptional fat mass and hemodynamic evaluation as early predictor of pre-eclampsia risk
I. Pisani (Italy)

Comparison of perinatal outcomes in early- and late onset pre-eclampsia
S. Bezerra (Brazil)

Bed rest reduces maternal total vascular resistance and enhances fetal growth
I. Pisani (Italy)

Maternal blood biomarkers, arteriography and uterine artery Doppler (UAD) for the prediction of hypertensive disease in pregnancy
R. Allen (United Kingdom)

Uterine artery Doppler and triple marker positivity for the detection of adverse pregnancy outcome in primary antiphospholipid syndrome
N. Fratelli (Italy)

Placental mesenchymal dysplasia: report of a case
M. Yamamoto (Chile)

**EP18: Predicting preterm and term birth**

Effect of tissue harmonic imaging on measurement of myometrial thickness
M. Gonser (Germany)

Comparison of partosure (PAMG-1) and actim partus (phlGFBP-1) for the prediction of preterm delivery in patients with preterm labour and a short cervix
M. Hadzi Lega (Republic of Macedonia)

Intra- and interobserver variance of elastographic parameters measurement of uterine cervix during pregnancy
M. Kim (Republic of Korea)

Transabdominal, transperineal and transvaginal cervical sonography for prediction of preterm labor
A.A. Altraigey (Egypt)

Cervical pessary and vaginal progesterone for the prevention of SPB in patients with CCI ≤ 5th percentile at routine ultrasound 11 to 13.6 weeks
M.A. Parra-Saavedra (Colombia)

Progesterone delays fetal membrane rupture.
M. Park (Republic of Korea)

Transvaginal measurement of the cervical length between 18 to 24 weeks: beyond prematurity
J. Gevaerd Martins (United States)
Cervical length measurement with and without valsalva as a screening tool for preterm delivery  
*J. Gevaerd Martins* (United States)  
EP18.08

Spontaneous uterine rupture with large amniocele subsequent to prior single-port laparoscopic myomectomy  
*J. Kwon* (Republic of Korea)  
EP18.09

Challenges of endometriosis beyond conception in pregnancy  
*F. Ajibade* (United Kingdom)  
EP18.10

Prenatal diagnosis of caput succedaneum associated with cervical incompetence at 16 weeks  
*W.L. Lau* (China)  
EP18.11

**EP19: Ultrasound supporting the labour ward**

The estimation of blood loss at delivery with the measurement of inferior vena cava diameter  
*M. Koyano* (Japan)  
EP19.01

Sonopartogram using wireless mobile ultrasound Sonon  
*J. Kim* (Republic of Korea)  
EP19.02

Combining maternal and ultrasound variables in predicting vaginal delivery  
*K. Dimassi* (Tunisia)  
EP19.03

Use of ultrasound in diagnosis and management of post-Caesarean section peritonitis at a referral hospital in Rwanda  
*M. Small* (United States)  
EP19.04

WITHDRAWN

Differential diagnosis of the occipitoposterior presentation with intrapartum sonography: the variable attitude of the stargazing fetus  
*F. Bellussi* (Italy)  
EP19.05

Ultrasound measurement of the cervical dilation during latent phase of labour  
*K. Dimassi* (Tunisia)  
EP19.06

Clinical outcome of pregnant women with a previous Caesarean section and an extremely thin lower uterine segment  
*M. Garcia* (United States)  
EP19.07

Sonography of postpartum paravaginal hematoma: report of seven cases  
*F. Bellussi* (Italy)  
EP19.08

The role of Doppler ultrasound in delivery planning of small breech babies at term  
*B.G. Hollwitz* (Germany)  
EP19.09

Prediction of the time to delivery in pregnant women at term  
*N. Sahin Uysal* (Turkey)  
EP19.10

Doppler investigation of the blood flow in fetal bain in breech presentation  
*I.V. Ignatko* (Russian Federation)  
EP19.11

**EP20: Multiple pregnancy**

Twin pregnancy birth in a new non-tertiary hospital  
*L. Patrício* (Portugal)  
EP20.01

Relation between levels of BHCG and PAPP-A with fetal weight in twin pregnancies.  
*C. Martinez-Payo* (Spain)  
EP20.02

Single intrauterine demise of one fetus and the risk of neurologic morbidity in multiple pregnancy  
*R. Bohiltea* (Romania)  
EP20.03

The prediction of monochorionic twins with selective IUGR (sIUGR) using AC discordance in the early second trimester  
*K. Haino* (Japan)  
EP20.04

Discordant cytomegalovirus infection in a dichorionic twin pregnancy: a rare case of periconceptional infection  
*V.H. Kuret* (Canada)  
EP20.05
<table>
<thead>
<tr>
<th>Title</th>
<th>Author(s)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth discordance of monoamniotic twin due to difference of cord</td>
<td>Y. Sun (China)</td>
<td>EP20.06</td>
</tr>
<tr>
<td>diameter in forked umbilical cord: a case report</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conjoined twins detected during routine ultrasonography scan at 20</td>
<td>O.S. Hassan (Sudan)</td>
<td>EP20.07</td>
</tr>
<tr>
<td>weeks' gestational age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management of monochorionic twin pregnancy with early onset TTTS</td>
<td>R. Radulescu-Botica</td>
<td>EP20.08</td>
</tr>
<tr>
<td>after IVF</td>
<td>(Romania)</td>
<td></td>
</tr>
<tr>
<td>Early prenatal diagnosis of parasitic conjoint twin</td>
<td>J. Bault (France)</td>
<td>EP20.10</td>
</tr>
</tbody>
</table>

**EP21: Fetal interventions**

<table>
<thead>
<tr>
<th>Title</th>
<th>Author(s)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perinatal outcome after laser surgery for monochorionic pregnancy</td>
<td>L.J. Salomon (France)</td>
<td>EP21.01</td>
</tr>
<tr>
<td>with early Twin–transfusion syndrome</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluation of second-generation HIFU systems for less-invasive fetal</td>
<td>K. Seo (Japan)</td>
<td>EP21.02</td>
</tr>
<tr>
<td>therapy in TRAP sequence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The outcomes of fetal hydrothorax associated with Down's syndrome:</td>
<td>H. Sago (Japan)</td>
<td>EP21.03</td>
</tr>
<tr>
<td>a nationwide survey in Japan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOOSTB4: a clinical study to determine safety and efficacy of pre-</td>
<td>L.S. Chitty (United</td>
<td>EP21.04</td>
</tr>
<tr>
<td>and/or postnatal stem cell transplantation for treatment of</td>
<td>Kingdom)</td>
<td></td>
</tr>
<tr>
<td>osteogenesis imperfecta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Umbilical artery Doppler findings in donor survivors at one week</td>
<td>I. Fabietti (Italy)</td>
<td>EP21.05</td>
</tr>
<tr>
<td>from endoscopic equatorial laser for Twin–twin transfusion syndrome</td>
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<td>Outcome of twin reversed arterial perfusion sequence planned radio-</td>
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<td>frequency ablation and high-intensity focused ultrasound</td>
<td></td>
<td></td>
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<tr>
<td>Termination of Twin–twin transfusion syndrome within two weeks</td>
<td>Y. Kitadai (Japan)</td>
<td>EP21.06</td>
</tr>
<tr>
<td>following fetoscopic laser photoocoagulation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antenatal management of fetal neonatal alloimmune thrombocytopenia</td>
<td>S. Wada (Japan)</td>
<td>EP21.07</td>
</tr>
<tr>
<td>(FNAIT) and neonatal outcome according to the category of risk</td>
<td>S. Ronzoni (Canada)</td>
<td>EP21.08</td>
</tr>
<tr>
<td>Ultrasound guided bipolar umbilical cord occlusion in monochorionic</td>
<td>K.V. Schou (Denmark)</td>
<td>EP21.09</td>
</tr>
<tr>
<td>pregnancies: learning curve</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outcomes of severe rhesus isoimmunisation requiring treatment at ≤20</td>
<td>N. Crawford (United</td>
<td>EP21.10</td>
</tr>
<tr>
<td>weeks' gestation managed with early intraperitoneal transfusions</td>
<td>Kingdom)</td>
<td></td>
</tr>
<tr>
<td>Prediction of shunt dislodgement in fetuses with lower urinary tract</td>
<td>R. Ruano (United States)</td>
<td>EP21.11</td>
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<td>obstruction</td>
<td></td>
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</tr>
<tr>
<td>treated prenatally by laser ablation of the feeding artery: a</td>
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<td></td>
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<tr>
<td>prospective two-year follow-up</td>
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<tr>
<td>TTTS: relationship between visibility grade and necessity for</td>
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<tr>
<td>irrigation technique</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fetal cardiac procedures and neonatal outcomes: one centre's</td>
<td>L. Patanè (Italy)</td>
<td>EP21.14</td>
</tr>
<tr>
<td>experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment of Twin–twin transfusion syndrome with selective laser</td>
<td>R. Has (Turkey)</td>
<td>EP21.15</td>
</tr>
<tr>
<td>ablation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Prognostic values of Doppler findings in primary fetal hydrothorax around thoracoamniotic shunting
F. Suyama (Japan)

Amnioreduction procedure for singleton pregnancies complicated by polyhydramnios causing maternal discomfort
B.S. Albagawi (Saudi Arabia)

The predictive value of cervical length for pregnancy loss following prenatal invasive tests
S. Kurtulmus (Turkey)

Fetal megavesica and urethral atresia: can the fetus find another way to urinate?
F. Capanna (Switzerland)

Prenatal diagnosis and management of anemia in a large placental chorioangioma
V. Dadhwal (India)

Fetal anemia caused by the Guadalajara variant of G6PD deficiency
M. Knapen (Netherlands)

Fetal chest wall deformity after thoracoamniotic shunting using a double-basket catheter for chylothorax: a case report
A. Makishi (Japan)

Ex utero intrapartum treatment (EXIT) procedure for cervical teratoma
K. Maeda (Japan)

Long-term outcomes in monochorionic twins complicated by amniotic fluid discordance adjoining Twin–twin transfusion syndrome treated by laser surgery
K. Ozawa (Japan)

EP22: Advances in ultrasound and new technologies

Intrauterine placental volume measured by MRI in normal pregnancy and in pregnancies complicated by fetal growth restriction
M. Sinding (Denmark)

3D ultrasound evaluation of the fetal ear – comparison of an xMatrix probe with a conventional mechanical probe
J. Braun (Germany)

Quantitative ultrasound suggests collagen disorganisation in the human cervix in late pregnancy
H. Feltovich (United States)

Reference cap of polyvinyl alcohol for quantitative elastography of the human uterine cervix
N. Uldbjerg (Denmark)

Fusion imaging technique: new technology in obstetric ultrasound: a case report of abnormal intracranial vessel
A. Arechvo (Sweden)

Management of pregnancy in a patient with extensive fibroids
A.A. Bati-Pa (United Kingdom)

Three-dimensional ultrasound imagens in fetal anomalies: different renderisation methods in the support of maternal counselling and diagnosis.
G.A. Menezes (Brazil)

Personalised 3D model for fetal ovarian cyst: a case report
L. Chen (Taiwan)

EP23: Improving maternal and fetal safety

Postive postnatal outcome in pregnancy with neuromyelitis optica
M. Jakó (Hungary)

Hirschsprung’s disease diagnosed in pregnancy period: report of a case
A. Ryu (Republic of Korea)

Contributions of imaging to reproductive challenges of May–Thurner Syndrome (MTS)
F. Ajibade (United Kingdom)
Spontaneously regressed cervical varix as a cause of antepartum bleeding in a pregnant after cervical conisation

G. Lee (Republic of Korea)

Focused ultrasound to identify postpartum intra-abdominal hemorrhage

N. Meirowitx (United States)

Transarterial embolisation for accidently inferior epigastric artery injury after Caesarean section

S. Kim (Republic of )

Ultrasound-colour Doppler diagnosis of uterine rupture after previous laparoscopic myomectomy

A. Vimercati (Italy)

An evolving third trimester uterine rupture without prior history of Caesarean

R.M. Benoit (United States)

Comparison of uterine scar appearance using two-dimension (2D) and three-dimension (3D) transvaginal ultrasound in the evaluation of term pregnant women with previous Caesarean section

A.J. Sigue (Philippines)

Vasa previa, diagnosis, course of pregnancy and delivery – case report

S. Vrzic Petronijevic (Serbia)

Shall prenatal sex determination be made compulsory in India?

R. Kaushik (India)

EP24: Simulation and education in obstetric ultrasound

Trial of a remote hands-on training seminar for fetal echocardiography using the Vidyo system

C. Tagata (Japan)

Development of a low-cost fetal pig simulator for ultrasound training in multiple gestations

E. Codsi (United States)

Target training program based on audit and feedback improves nuchal translucency measurements quality performed by Tunisian trainees in obstetrics and gynecology

K. Dimassi (Tunisia)

A standardised training of 11–13 weeks scan for obstetricians and gynecologists in Lithuania

V. Taraseviciene (Lithuania)

Developing a competency-based ultrasound training tool in rural Uganda

R. Townsend (United Kingdom)

Feasibility and reproducibility of an image-scoring method for assessment of normal fetal secondary palate using 2D imaging

F. Fuchs (France)

An international standard fetal ultrasound training programme organised in a low resource setting: the ISUOG-Benin City experience

E. Enabudoso (Nigeria)

WITHDRAWN

EP25: Early pregnancy complications

Foley balloon versus uterine artery embolisation (UAE) as hemostatic tool in the treatment of Caesarean scar pregnancy (CSP)

F. Foti (Italy)

Does pregnancy outcome in the first trimester correlate with the amount of vaginal bleeding and pain? A preliminary study

M. Al-Memar (United Kingdom)

External validation of risk prediction model M4: rationalising management of pregnancies of unknown location

B. Nadim (Australia)

Ectopic pregnancy: combination of 2D real time and 3D ultrasonography ensures the diagnosis

E. Domali (Greece)
WITHDRAWN
Decision tree analysis incorporating hCG ratio versus risk prediction model M4 to rationalise the management and follow up of women with PUL
B. Nadim (Australia)

Effectiveness and safety of sublingual misoprostol in medical treatment of the first trimester miscarriage and related contributing factors
J. Park (Republic of Korea)

Uterine anomaly and pregnancy failure
S. Wozniak (Poland)

Is there any correlation between medical abortion and arteriovenous uterine malformation?
R. Bohiltea (Romania)

The “Honeycomb Sign”: prevalence of gestational trophoblastic disease in the largest tertiary centre in Rwanda
M. Small (United States)

Magnetic resonance imaging in the diagnosis of a Caesarean section scar ectopic pregnancy: a case report
E.V. Cunha Filho (Brazil)

Monozygotic twins as a consequence of manipulations with embryos
I. Sudoma (Ukraine)

Gartner cyst increase during pregnancy
A.K. Kesrouani (Lebanon)

Ultrasound finding of rare case of early second trimester uterine rupture following misoprostol administration in patient with previous one Caesarean section
E. Zohay (Israel)

Scar pregnancy treated by methotrexate revealing an arteriovenous malformation
A.K. Kesrouani (Lebanon)

Pitfalls in the diagnosis of interstitial/corneal pregnancy: case report
J. Zhi Ping Ho (Singapore)

EP26: Managing ovarian masses
Dermoid cyst on remaining ovarian tissue six months after cystectomy for a complex ovarian mass
C. Olaru (Romania)

Primary ovarian leiomyoma: a rare entity
R. Torres (Portugal)

Use of IOTA terms, definitions and models to describe ovarian mass with elevated β-hCG in 35-years-old patient: case report
N. Abdalla (Poland)

Extra ovarian primary peritoneal carcinoma – a form of early ovarian cancer?
R. Torres (Portugal)

Massive ovarian edema in a neonate following fetal torsion
A. Kennedy (United States)

EP27: Pelvic pain and endometriosis
Rectal endometriotic nodule volume (RENV) and angle of infiltrating endometriotic rectal nodule (AIERN): ultrasonographic markers of severity for DIE
M. León (Chile)

Ultrasound-based clinical history of ovarian endometrioma treated by medical therapy: a 10-year follow-up study
F. Leone (Italy)

Cost-benefit analysis for the utilisation of detailed preoperative ultrasound in women with complex endometriosis disease
B. Shakeri (Australia)
Cost-benefit analysis for the use of transvaginal ultrasound to avoid laparoscopy in women with minimal endometriosis disease
B. Shakeri (Australia)

Sonographic changes in the size of endometriotic nodules and endometriomas during hormonal therapies
S. Ferrero (Italy)

Interrater agreement for the prediction of pelvic adhesions and deep infiltrating endometriosis using specialised transvaginal ultrasound: a pilot study
S. Reid (Canada)

TV-US prediction of pouch of Douglas obliteration in deep infiltrating endometriosis
A. Vimercati (Italy)

Abdominal 2D ultrasonography evaluation of copper-T intrauterine device (IUD) insertion during family planning course of fourth-year medical students
M. Rahman (Indonesia)

Pelvic adenomyoma, eleven years after total hysterectomy: rare report and literature review
M.D. Bernardo (Portugal)

Ultrasound diagnosis of thrombi in pelvic varicocele
A. Melo Alves (Portugal)

Deep neural networks for predicting pouch of Douglas obliteration based on transvaginal ultrasound sliding sign videos
K. O’shea (United Kingdom)

Edometrioma – the tip of a pelvic disease: TVS findings associated with an ovarian endometriosis
C. Exacoustos (Italy)

EP28: Reproductive medicine

The effect of parity on uterine measurements
H. Wong (Australia)

Study on age-related variation in ovarian volume and proportion of endometrial thickness abnormalities in women of advanced and post-reproductive age
T. Dias (Sri Lanka)

Evaluation of ovarian vascularisation in the diagnosis of polycystic ovary syndrome by three-dimensional power Doppler ultrasonography
H. Park (Republic of Korea)

Sonohisterosalpingography (HyCoSy) with Sonovue: 2D versus 3D
C. Marginean (Romania)

Three-dimensional sonographic screening for uterine abnormalities during routine ultrasound assessment in patients undergoing in vitro fertilisation
M. Zajicek (Israel)

Ultrasound guidance during embryo transfer: a systematic review and meta-analysis of randomised controlled trials
C.O. Nastri (Brazil)

The role of time lapse embryo monitoring for patient-based reproductive outcomes: a systematic review and meta-analysis
W.P. Martins (Brazil)

EP29: Abnormal bleeding

Examination about accuracy of the measurement of uterine myoma by transabdominal ultrasonography
T. Ichimura (Japan)

Aplication of ultrasonography with elastography in women suspected of endometrial pathologies
K. Wartecka-Zielinska (Poland)
Accuracy of endometrial-myometrial junction parameters in discriminating benign and malignant uterine pathology using 2D ultrasound

**M.V. Calleja-Gohing (Philippines)**

Hysterosonography performed in bleeding time in the exploration of abnormal uterine bleeding: diagnostic value

**A. Bouzid (Tunisia)**

Value of selected ultrasound parameters of IETA group to differentiate endometrial polyps from another pathologies

**N. Abdalla (Poland)**

Accuracy of 3D ultrasound In the diagnosis of uterine pathology in patients with postmenopausal bleeding

**H.M. Gaafar (Egypt)**

Progesterone receptor modulator associated endometrial changes (PAEC): ultrasonographic findings with pathological correlation

**C. Linares Valldecabres (Spain)**

Combined microwaved endometrial ablation and uterine artery embolisation for the treatment of a giant leiomyoma: case report

**O. Anis (Italy)**

A case of parasitic leiomyoma

**R. Ali (United Kingdom)**

Sonographic diagnosis of vascular lesions of the uterus: a report of three cases

**C.L. Dela Cruz (Philippines)**

Uncommon complication of uterine artery embolisation: expulsion of infarcted myoma and uterine sepsis

**J. Gevaerd Martins (United States)**

Diagnosis and management of congenital uterine arteriovenous malformation (UAVM): case report

**F. Foti (Italy)**

Colour Doppler diagnosis of cervical arteriovenous malformation case report

**M. Tsankova (Bulgaria)**

Arteriovenous malformation of the uterus diagnosed by colour Doppler ultrasound

**I. Markova (Bulgaria)**

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**EP30: Gynecological oncology**

Correlation of endometrial thickness and endometrial volume with tumour size in endometrioid endometrial cancer G1/G2

**J.L. Alcázar (Spain)**

Study on contrast-enhanced ultrasound features in the sclerotherapy of ovarian endometrial cyst

**X. Dong (China)**

Preoperative sonobiopsy based triage versus frozen section in endometrial cancer assessment: preliminary report of a 10-year study

**F. Leone (Italy)**

The role of the Doppler ultrasound before cervical conisation

**S. Jankovic Raznatic (Serbia)**

Contrast enhanced ultrasound in the diagnosis of breast lesions in women and men

**A.V. Kashmanova (Russian Federation)**

An unexpected and unusual finding: contralateral inguinal lymph node metastasis as the only manifestation of ovarian cancer

**E. Domali (Greece)**

Extrauterine pathology detected with transvaginal gynecological ultrasound examination

**T. Van den Bosch (Belgium)**
**EP31: Urogynecology**

Pelvic floor ultrasound in the evaluation of postpartum perineal diseases: pelvic organ prolapse

*F. D’Antonio (Norway)*

Is there an association between diastasis rectus abdominis (DRA) and levator trauma in primiparous women after traumatic labour?

*V.H. Eisenberg (Israel)*

The role of ultrasonography in the evaluation of functional and anatomical disorders associated with static pelvic disorders

*R. Bohiltea (Romania)*

Comparative assessment of levator ani muscle injury among nulligravid, primiparous and multiparous women using 3D transperineal ultrasound

*E.L. Arreza (Philippines)*

**EP32: Innovations in imaging**

Analysis of three-dimensional contrast-enhanced sonographic features of corpus luteum hematoma

*R. Hu (China)*

Uterine cavity volume estimation by different techniques: a feasibility, reliability and agreement study

*W.P. Martins (Brazil)*

Usefulness of elastography in the assessment of Caesarean scar defects in women qualified for surgical scar correction.

*P.R. Szkodziak (Poland)*

The impact of pulse repetition frequency, wall motion filter and flow speed on power Doppler quantification

*W.P. Martins (Brazil)*

Study of contrast-enhanced ultrasound in evaluating clinical therapeutic response with high intensity focused ultrasound for uterine leiomyoma and follow-up result

*M. Zhang (China)*

Intra- and interrater reliability of the 3D-ultrasound control of Essure implants

*S. Herve (France)*

Evaluation of transvaginal ultrasound simulator training for medical student

*P. Capmas (France)*
Exhibition and sponsorship

Satellite symposia*

<table>
<thead>
<tr>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiziano A</td>
<td>Michelangelo B</td>
<td>Tiziano A</td>
<td>Tiziano B</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Samsung Medison</th>
<th>GE Healthcare</th>
<th>Toshiba</th>
<th>Hitachi</th>
</tr>
</thead>
</table>

Hospitality suites*

<table>
<thead>
<tr>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 September</td>
<td>26 September</td>
<td>27 September</td>
<td>28 September</td>
</tr>
</tbody>
</table>

| 3D Systems hospitality and demonstration suite | Bernini 1 |
| Alpinion Medical Systems hospitality & demonstration sessions | Bramante 9 |
| GE Healthcare | Caravaggio 7 & 8 |
| GE VolusonClub lounge & hospitality suite | Lobby |
| Hitachi education & demonstration | Bramante 5 |
| Philips meeting & hospitality suite | Bramante 8 |
| Samsung Medison hospitality & demonstration | Caravaggio 5 |
| Samsung Medison lounge & hospitality suite | Bramante 7 |
| Toshiba Medical Systems hospitality & demonstration sessions | Caravaggio 6 |

Exhibition opening times

<table>
<thead>
<tr>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
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<tr>
<td>25 September</td>
<td>26 September</td>
<td>27 September</td>
<td>28 September</td>
</tr>
</tbody>
</table>

| 09:45 - 17:00 | 09:45 - 16:30 | 09:45 - 16:30 | 09:45 - 15:00 |

* See detailed listings of sponsor activities on pages 152-154.
**Exhibitor listing**

<table>
<thead>
<tr>
<th>Company</th>
<th>Booth</th>
</tr>
</thead>
<tbody>
<tr>
<td>3D Systems Healthcare</td>
<td>31</td>
</tr>
<tr>
<td>Alpinion Medical Systems</td>
<td>46</td>
</tr>
<tr>
<td>Amolab srl</td>
<td>4</td>
</tr>
<tr>
<td>Astraia Software</td>
<td>22</td>
</tr>
<tr>
<td>CAE Healthcare</td>
<td>24</td>
</tr>
<tr>
<td>ContextVision</td>
<td>23b</td>
</tr>
<tr>
<td>Cook Medical</td>
<td>33</td>
</tr>
<tr>
<td>GE Healthcare</td>
<td>43+44</td>
</tr>
<tr>
<td>Healcerion</td>
<td>3</td>
</tr>
<tr>
<td>Hitachi Medical Systems</td>
<td>28</td>
</tr>
<tr>
<td>Illumina</td>
<td>2</td>
</tr>
<tr>
<td>IQ Medical Ventures B.V</td>
<td>10</td>
</tr>
<tr>
<td>ISPD</td>
<td>14</td>
</tr>
<tr>
<td><strong>ISUOG Lounge</strong></td>
<td></td>
</tr>
<tr>
<td>Karl Storz BmbH &amp; Co. KG</td>
<td>15</td>
</tr>
<tr>
<td>Malopolskie Warsztaty</td>
<td>7</td>
</tr>
<tr>
<td>Ultrasonografi Sp ZOO</td>
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<tr>
<td>MedaPhor</td>
<td>9</td>
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<tr>
<td>Med Systems sp. Z o.o.</td>
<td>12</td>
</tr>
<tr>
<td>Mides GmbH</td>
<td>13</td>
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<tr>
<td>Music in Baby</td>
<td>23a</td>
</tr>
<tr>
<td>Nanosonics</td>
<td>5</td>
</tr>
<tr>
<td>Parker Laboratories</td>
<td>36</td>
</tr>
<tr>
<td>PerkinElmer</td>
<td>29</td>
</tr>
<tr>
<td>Philips</td>
<td>27</td>
</tr>
<tr>
<td>Premaitha Health</td>
<td>1</td>
</tr>
<tr>
<td>Roche Sequencing Solutions</td>
<td>47</td>
</tr>
<tr>
<td>Samsung Medison</td>
<td>26</td>
</tr>
<tr>
<td>Shenzhen Mindray Bio-Medical</td>
<td>45</td>
</tr>
<tr>
<td>Sonoscanner</td>
<td>8</td>
</tr>
<tr>
<td>Toshiba Medical Systems</td>
<td>48</td>
</tr>
<tr>
<td>Transmural Biotech</td>
<td>25</td>
</tr>
<tr>
<td>Trice Imaging</td>
<td>21</td>
</tr>
<tr>
<td>Tristel Solutions Limited</td>
<td>38</td>
</tr>
<tr>
<td>Ultrasound Manager</td>
<td>30</td>
</tr>
<tr>
<td>Wisepress</td>
<td>40</td>
</tr>
</tbody>
</table>
**Exhibitor profiles**

**3D Systems Healthcare**

Booth: 31

3D SYSTEMS
5381 South Alkire Circle, Littleton, CO, 80127, USA
+1 303 273 5344
Galia Zilbershtein
Simbionix@3dsystems.com
www.simbionix.com

3D Systems healthcare solutions enhance quality-of-life through the use of 3D printing, surgical planning and personalized medical technologies. Experience our U/S Mentor™, a virtual reality realistic hands-on training simulator for ultrasound-related examinations including OB/GYN Transabdominal and Transvaginal scanning. Designated skill tasks, diverse diagnostic scenarios and captured metrics help promote clinical hands-on proficiency by providing residents, fellows, and practicing physicians with an opportunity to acquire and improve their sonography-related skills on a variety of virtual patients.

**Amolab**

Booth: 4

Via Raffaello Sanzio, 18, 73100, Lecce, Italy
+39 0832 422311
Francesco Conversano
conversano@amolab.it
www.amolab.it

Amolab, a spin-off of the National Research Council in Lecce (Italy), is a research-based, high-tech company specialized in the development, design and production of innovative ultrasound-based medical devises for non-invasive monitoring and diagnostic support in the field of obstetrics and gynecology. Its main product (SensUS Touch) represents a disruptive innovation dedicated to childbirth labor monitoring, which is accomplished in an accurate, automatic and non-invasive manner, thanks to quantitative ultrasound (QUS) approaches and advanced image processing.

**Alpinion Medical Systems**

Booth: 46

7FL. Verdi Tower, 72 Digital-ro 26-gil, Guro-gu, Seoul, 08393, Korea
+82 2 3282 0900
Jayden Jung
international@alpinion.com
www.alpinion.com

Founded in 2007 as a value innovator providing complete ultrasound solutions, ALPINION has been dedicated to technological and user-driven innovation in medical ultrasound transducers, diagnostic and therapeutic ultrasound (US-guided HIFU). With its acoustic engineering superiority, ALPINION strives to provide customers with consistent and fundamentally excellent imaging performance throughout the entire lifetime of its products. As a value innovator in the medical industry, ALPINION progressively expands our business scope vertically and horizontally in every ultrasound area.

**astraia software gmbh**

Booth: 22

Occam str. 20, 80802, Munich, Germany
+49 89 1271 1470
Roland Denk
info@astraia.com
www.astraia.com

astraia software is based in Munich, Germany and was founded in 2000. The aim was to develop an independent database application that would cover all aspects of obstetrics and gynaecology to the highest medical standard.

Since then, astraia has established its position as market leader and pioneer in obstetric and gynaecological database applications. The company’s success is due to a close working relationship with leading experts worldwide and highly flexible adaptation to market requirements.
CAE Healthcare

6300 Edgelake Drive, Sarasota, FL 34240, USA
+49 6131 4950 370
Moritz Schmidl
moritz.schmidl@cae.com
www.caehealthcare.com

CAE Healthcare delivers leading simulation training solutions to hospitals, physicians, nurses, students, emergency responders and the military around the world. Each product is developed in partnership with clinicians and clinical educators whose aim is to ensure physiological accuracy and educational relevance. Visit the CAE Healthcare booth to learn about our advanced patient, imaging and surgical simulators, including iStan, Caesar, VIMEDIX and LapVR. Ask about Blue Phantom ultrasound trainers and LearningSpace center management solutions.

ContextVision

Kungsgatan 50, 11135 Stockholm, Sweden
+46 8750 3550
Fredrik Palm
info@contextvision.se
www.contextvision.se

ContextVision is a medical technology company specializing in image analysis and image processing. Its cutting-edge technology helps doctors accurately interpret medical images, a crucial foundation for better diagnosis and treatment. As an industry pioneer for more than 30 years, ContextVision has decided to take a lead position within deep learning, the latest artificial intelligence technology. The present product portfolio includes image enhancement software for 2D/3D/4D Ultrasound, MRI, X-Ray and Mammography which is used by leading OEMs worldwide.
More quality time with patients

As a women’s health care provider, you focus on delivering quality care through excellent patient relationships. GE Healthcare’s Women’s Health Ultrasound can help you simplify your day so that you can spend more quality time on what matters most, the patient.

- Easily acquire superb 2D images and 3D/4D volumes with Voluson’s intuitive user interface and optimization keys to help detect and diagnose confidently
- Obtain more image detail and clarity in less time with electronic matrix 4D probe technology delivering ultra-fast frame rates, flexible imaging formats, and excellent resolution
- Reduce keystrokes and provide measurement consistency with Voluson’s automated measurement techniques for fetal biometry, follicular counts, and labor progression
- Simplify the overall exam process with patient scheduling, data and image sharing, and seamless reporting with expanded Voluson™ and ViewPoint™ integration

Whether you specialize in Maternal Fetal Medicine, Obstetrics, Gynecology, Labor & Delivery or Assisted Reproductive Medicine, our solutions help meet your clinical needs, support you with greater efficiency, and fit your budget, enhancing the quality of care and time with your patients.

Come see what’s new.
Extraordinary vision is just a touch away.
Visit us at www.voluson.com

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JBA1700XX
Cook Medical booth: 33
O’Halloran Road, National Technology Park, Limerick, Ireland
+353 61 334440
Elizabeth Bettin
EMEAenquiry@CookMedical.com
www.cookmedical.eu

Cook Medical Reproductive Health provides physicians with a comprehensive offering of medical devices for the reproductive system.

Cook Medical is committed to education, research, and collaboration with physicians to enhance patient care for women and men throughout their reproductive lives, from diagnosis to post-delivery. For more information, please visit www.cookmedical.eu/reproductive-health

GE Healthcare booth: 43+44
Tiefenbach 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.

Healcerion Co. Ltd booth: 3
804 Ho, 38-21, Digital-ro, 31-gil, Guro-gu, Seoul, 08376, Korea
+82 70 7582 6326
Selina Seo
info@healcerion.com
www.healcerion.com

Healcerion strives to bring affordable, high-quality medical care to clinical and remote locations around the world. Healcerion offers a mobile-based healthcare system that is specifically designed to provide physicians and patients with flexibility and portability.

SONON is a true wireless mobile portable ultrasound device. It is only 390-gram hand-held device, small as a transducer with a rechargeable battery and WiFi connection. With SONON, doctors can diagnose patients by the bed-side, the delivery room, at a house call, an accident, whenever, whereever. Therefore a SONON can increase satisfaction for both patients and Healthcare providers.

Hitachi Medical Systems booth: 28
Sumpfstrasse 13, CH - 6300 Zug, Switzerland
+1 203 269 5088
Jennifer Lansi
inquiry@hitachi-aloka.com
www.hitachi-aloka.com

Hitachi Aloka Medical pioneered diagnostic ultrasound, and today is known for unparalleled image quality, superior system reliability, ease of use and innovative technology. From our premium F75 and full-featured Arietta 70, to our compact office-based F37, we have the right system for every practice size.
**Illumina, Inc.**

Booth: 2

Chesterford Research Park, Little Chesterford, Saffron Walden, Essex, CB10 1XL, UK
+1 800 809 4566
Marcus Hausch
info@illumina.com
www.illumina.com

Illumina is improving human health by unlocking the power of the genome. Our focus on innovation has established us as the global leader in DNA sequencing and array-based technologies, serving customers in the research, clinical and applied markets. Our products are used for applications in the life sciences, oncology, reproductive health, agriculture and other emerging segments. To learn more, visit www.illumina.com and follow @illumina.

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**IQ Medical Ventures B.V.**

Booth: 10

Delftechpark 26, 2628 XH Delft, The Netherlands
+31 15 2600 955
sales@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. We strive to make life more easy for both the patient and the physician. IQ Medical Ventures 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.

---

**International Society for Prenatal Diagnosis (ISPD)**

Booth: 14

154 Hansen Roadm Suite 201, Charlottesville, VA 22911, USA
+1 434 979 4773
info@ispdhome.org
www.ispdhome.org

Building Global Partnerships in Genetics and Fetal Care. 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.

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**ISUOG**

ISUOG Lounge

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 13,300 members in 128 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 2017 and can immediately access many member benefits including On Demand (platform to view recordings and lectures from our World Congresses) and over 400 web lectures. Reduced fees to attend our 2017 World Congress in Vienna, Austria (16-19 September 2017) also apply! Visit the ISUOG Lounge to find out more about membership and browse your benefits.
Karl Storz GmbH & Co. KG  
Mittelstrasse 8, 78532, Tuttlingen, Germany  
+45 7467 708 0  
info@karlstorz.com  
www.karlstorz.com

KARL STORZ is a renowned manufacturer that is well established in all fields of endoscopy and can be considered as market leader in rigid endoscopy. The still family held company was founded in 1945 in Tuttlingen, Germany, and has grown to one with a worldwide presence and 6700 employees. KARL STORZ offers a range of both rigid and flexible endoscopes for a broad variety of applications. Today’s product range also includes fully integrated concepts for the OR and servicing.

Malopolskie Warsztaty Ultrasonografii SP. Z o.o.  
UL. ABP. Felinskiego 20A, 31-236, Krakow, Poland  
+48 730 740 402  
Piotr Lataka  
info@malopolskieusg.pl  
www.ultrasoundcracow.com

We are organising an ISUOG approved course on advanced first trimester ultrasound on 25-26.11.2016 in Krakow, Poland. More information at our stand no 7 where you will find our innovative 3D models of the fetal heart.

www.ultrasoundcracow.com  www.3Dheart.eu

MedaPhor Ltd  
Cardiff Medicentre, Heath Park, Cardiff, CF14 4W, UK  
+44 2920 756534  
Zara May  
zara.may@medaphor.com  
www.medaphor.com

MedaPhor (AIM:MED) is a global provider of advanced ultrasound skills training simulators for medical professionals. MedaPhor’s revolutionary ScanTrainer Professional simulator offers a unique self-learning ultrasound scanning experience that replicates being taught one-to-one by an expert. It is the only ultrasound skills training simulator to offer curriculum-based teaching, real-patient scans with haptic feedback, virtual tutor with real-time assisted guidance and comprehensive metric-based assessment in one system.

Med Systems sp. Z o.o.  
1 Innowacyjna str., Suwałki, 16-400, Poland  
+48 888 065 534  
Eugene Formaniuk  
ecps@onet.eu

MIDES GMBH  
Weinholdstrasse 33, 8010 Graz, Austria  
+43 31642650010  
Lucijana Manovic  
lucijana.manovic@mides.com  
www.mides.com

MIDES is the leading service provider in certified Ultrasound Probe Repair for Standard 3D/4D- and TEE-probes in Europe. With more than 20 years’ experience, MIDES is certified according to ISO 9001 and ISO 13485 and is able to repair cost-effectively electronic, mechanical and all other defects. The company is offering this service in more than 52 different countries worldwide and is also specialized now in repair of Endo-sono (Ultrasound-Endoscopes). A big range of Ultra-Sound systems, new and refurbished, completes the portfolio of MIDES- many of them are available on stock.

Music in Baby S.L.U  
CL. Mare de Deu de la Salut 78, 1C, 08024 Barcelona, Spain  
+34 931 890 440  
Thomas Bernard  
info@musicinbaby.com  
www.babypod.net

Babypod is a new technological device created for future parents, so they can start communicating with their babies inside of the womb. This gynaecological device plays music through the vagina, which stimulates the foetus, as he can hear it clearly. Using Babypod from week 16 of the pregnancy stimulates the baby’s answer, which consists of head and tongue movements. Babypod has been clinically tested and approved by Institut Marques, an international reference center in Gynaecology.
Nanosonics

Booth: 5

14 Mars Road, Lane Cove NSW 2066, Australia
+61 2 8063 1600
Andrew Murray
A.Murray@nanosonics.com.au
www.nanosonics.com.au

Nanosonics’ unique automated disinfection technology is the first major innovation in high level disinfection (HLD) for ultrasound probes in more than 20 years. The company is the inventor and manufacturer of trophon EPR – the first automated HLD system that delivers fast, safe and effective ultrasound transducer disinfection. The first proven system to kill high-risk, cancer causing HPV. To find out more: visit www.trophon.com, call 1-844-TROPHON or meet us at Nanosonics booth#5.

PerkinElmer

Booth: 29

Mustionkatu 6, 20750 Turku, Finland
Anna Godenhjelm
anna.godenhjelm@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. PerkinElmer has recently acquired Vanadis Diagnostics, which is developing a novel non-sequencing, non-PCR based solution for cfDNA analysis. This acquisition will enable PerkinElmer to offer a simplified, cost-effective, high-throughput screening test to help facilitate wider access to non-invasive prenatal testing for pregnant women.

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.

Parker Laboratories

Booth: 36

Bedrijvenpark Twente 305, The Netherlands
+31 (0)546 549 105
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. We are focused on consistently providing products that meet or exceed industry standards and customer expectations. We create customer confidence through prompt, efficient service and provide effective solutions to our customers’ unique needs.

Philips

Booth: 27

22100 Bothell Everett Highway,
Bothell WA 98021, USA
+34 607 764243
Dolores Cantelli
dolores.cantelli@philips.com
www.philips.com

Philips is dedicated to helping improve healthcare and bettering lives with industry-leading solutions based on the power of ultrasound. Ultrasound is an affordable, growing, and accessible technology that has the ability to reach a diverse patient base. Philips Ultrasound is leveraging our deep experience and collaborating with customers to create solutions and services that help provide the highest quality care. At Philips we make every image count, because every patient matters.
The IONA® test is a regulated, quality assured non-invasive prenatal test focusing on screening for clinically relevant trisomies 21, 18 and 13, thereby simplifying the genetic counselling required. The IONA® test has a low re-draw rate of <0.5% and requires as little as ≥2% fetal faction. Samples can be sent to the IONA® Laboratory in Manchester, UK and turnaround time is 3-5 days. MyNIPT® is Premaitha’s safe, secure and easy online data exchange portal. www.premaitha.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 site is developing assays for sequencing, and refining sequencing techniques to advance sequencing technologies that will deliver truly differentiated clinical value.

Superb imaging during all trimesters
EPIQ 7’s suite of sophisticated transducers meets the needs of your most challenging gynecological surveys and first through third trimester OB exams.

Please visit booth 27 or www.philips.com/ISUOG
Ultimate color expression with crystal clarity

Revolutionizing color imaging.
Experience unsurpassed image clarity with Samsung’s new feature on WS80A with Elite. The innovative Crystal Vue volume rendering technology enhances the expression of scanned areas providing more detailed information for optimized decision support. Boost your diagnostic confidence with this technology, enabling realistic visualization of hemodynamic flow in true morphologic expression.

Ultrasound system WS80A with Elite

Scan code or visit www.samsungmedison.com to learn more.
Samsung Medison

SAMSUNG MEDISON

42, Teheran-ro, 108-gil, Gangnam-gu, Seoul, Korea, 135-280
+82 2 2194 1131
Pia Park
hm11.parksamsungmedison.com
www.samsunghealthcare.com

Samsung Medison, an affiliate of Samsung Electronics, is a global medical equipment company founded in 1985. With a mission to bring health and well-being to people’s lives, the company manufactures diagnostic ultrasound systems around the world across various medical fields. Samsung Medison has commercialized the Live 3D technology in 2001 and since being part of Samsung Electronics in 2011, it is integrating IT, image processing, semiconductor and communication technologies into ultrasound devices for efficient and confident diagnosis.

Sonoscanner

Sonoscanner

6, Rue Andre Voguet, 75013, Paris, France
+33 954971557
Richard Etienne
contact@sonoscanner.com
www.sonoscanner.com

Sonoscanner is the world leader in HD handheld ultrasound scanners. We present the only solution dedicated to OB/GYN with high frequency convex probes and unique endocavitary on pocket sized units.

Shenzhen Mindray Bio-Medical Electronics Co. Ltd.

Shenzhen Mindray Bio-Medical Electronics Co. Ltd.

Mindray Building, Keji 12th Road South, High-tech Industrial Park, Nanshan, Shenzhen 518057, P.R. China
+86 755 8188 7249
Lynn Chen
lynn.lchen_a@mindray.com
www.mindray.com

With over 20 years of experience, Mindray hosts a wide range of ultrasound imaging solutions including cart-based and portable systems. Mindray ultrasound systems are today being used by medical professionals as well as highly dedicated clinical utility. With a global R&D base spanning over Asia, Europe and America, the ultrasound solutions by Mindray are a result of an integral cooperation with the medical community, allowing for the ultrasound systems to be extremely user centric in terms of performance and usability. Mindray is well positioned to become one of the leading ultrasound imaging solutions provider.

Toshiba Medical Systems

Toshiba Medical Systems

TOSHIBA MEDICAL

1385, Shimoishigami, Otawara-shi, Tochigi 324-8550, Japan
+81 287 26 5029
Jeroen Uijtenhout
www.toshibamedicalsystems.com

Toshiba Medical offers a full range of diagnostic medical solutions across the globe. In line with our 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 safety and wellbeing of patients worldwide through uncompromised performance, comfort and safety features.

Superior image quality is the backbone of all our ultrasound systems, because we believe that only the best image can provide you the confidence to make the most critical decisions during early stage pregnancy and beyond.

From SMI that reveals minute microvascular flow as never seen before with ultrasound, to advanced volume imaging, adding more clinical value to 4D, we equip you with the best tools to make your work easier and allow you to see more, earlier, faster.

All our Women’s Health solutions can be tailored to your personal needs.

Visit our Booth, Satellite Symposium and Hospitality Suite during ISUOG 2016 to learn more!
Transmural Biotech
Booth: 25
Sabino Arana, 38, 1-1a, 08028 Barcelona, Spain
+34 931 190 929/ +34 626 667 989
Estefania del Alcazar
e.delalcazar@transmuralbiotech.com
www.transmuralbiotech.com

Transmural Biotech is a Spanish company founded in 2009 that develops and commercializes new technologies based on image processing that improve medical diagnosis for unsolved clinical needs. The first product is quantusFLM, a software that with an automatic analysis of an ultrasound image, predicts Neonatal Respiratory Morbidity risk in a non-invasive way. quantusFLM offers timeless and borderless user experience through its online platform service.

Trice Imaging
Booth: 21
1334 Stratford Court, Del Mar, CA 92014, USA
+1 858 397 5216
Bernd Nuber
info@triceimaging.com
www.triceimaging.com

Tricefy — The Cloud Platform for Ultrasound. Trice has simplified image management while enabling you to share and collaborate like never before. Our cost-effective service allows users to access ultrasound studies from anywhere and share examination results with colleagues, experts, and patients instantly. Please visit us at booth 21 and experience the ease of use, efficient workflows and outstanding communication tools in Tricefy.

Tristel Solutions Ltd
Booth: 38
Lynx Business Park, Fordham Road, Snailwell, Cambridgeshire, UK
+44 1638 72 1500
Carla Kerr
mail@tristel.com
www.tristel.com

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. Please visit Tristel at stand 38 to find out more about Tristel products particularly suitable for ultrasound.

Ultrasound Manager
Booth: 30
Shapinsay, Orkney, KW17 2EA, UK
info@instantpacs.com
www.instanpacs.com

Ultrasound manager is a leading supplier of cloud based PACS services. Studies can easily be shared with patients via ibabyscan.com and with the launch of the instantPACS.com platform at a disruptive price point, the features and technology are accessible to everyone.

Wisepress Medical Bookshop
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Wisepress.com, Europe’s leading conference bookseller, has a range of books and journals relevant to the themes of the meeting. In addition to attending 200 conferences per year, Wisepress has a comprehensive medical and scientific bookshop online with great offers. Follow us on Twitter for the latest news @WisepressBooks.

Wiley
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9600 Garsington Road, Oxford, OX4 2DQ, UK
+49 6201 606719
Katja Habermüller
kchaberm@wiley.com
www.interface.wiley.com

Wiley is ISUOG’s publishing partner for Ultrasound in Obstetrics and Gynecology, available in different innovative formats such as the new Anywhere Article on Wiley Online Library or the Wiley Journal App Service. This opens up new ways for our industry partners to engage with the community and position their brands. Meet the Wiley Publishing and Commercial Sales teams at the ISUOG Lounge to discuss your publications, or how content solutions like webinars, apps, newsletters and sponsored supplements can drive your business.
## Hospitality and education suites

### Bermini 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
</table>
| 15:30 - 16:30 | Fetal neurosonography - simulation based session  
G. Malinger (Israel) |

### Bramante 9

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>09:50 - 10:20</td>
<td>On-site demonstration</td>
</tr>
</tbody>
</table>
|           | 12:00 - 12:20   | Obstetrics Part 1: 1st Trimester Fetal Echocardiography  
G. J. Kim     |
G. Rizzo (Italy) |
|           | 12:40 - 12:45   | Q&A                                                                      |
Gynecological indications  
G. J. Kim |
W. E. Baranowski (Poland) |
|           | 13:25 - 13:45   | Q&A                                                                      |
|           | 15:10 - 15:40   | On-site demonstration                                                   |

### Caravaggio 7 & 8

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunday</td>
<td>10:45 - 11:15</td>
<td>On-site demonstration</td>
</tr>
<tr>
<td></td>
<td>15:20 - 15:50</td>
<td>On-site demonstration</td>
</tr>
<tr>
<td>Monday</td>
<td>09:50 - 10:20</td>
<td>On-site demonstration</td>
</tr>
</tbody>
</table>
|           | 12:00 - 12:20   | Obstetrics Part 1: 1st Trimester Fetal Echocardiography  
G. J. Kim     |
G. Rizzo (Italy) |
|           | 12:40 - 12:45   | Q&A                                                                      |
Gynecological indications  
G. J. Kim |
W. E. Baranowski (Poland) |
|           | 13:25 - 13:30   | Q&A                                                                      |
|           | 15:10 - 15:40   | On-site demonstration                                                   |

For an overview of speakers and topics, please visit the GE Healthcare booth to collect a scientific invitation.
**Bramante 5**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:50 - 10:20</td>
<td>Live Scanning fetal heart examination according to ISUOG Guidelines and beyond J. Carvalho (UK)</td>
</tr>
<tr>
<td>12:00 - 12:45</td>
<td>Workshop about how to use fusion imaging (RVS) in OB/GYN L. Gitz (France)</td>
</tr>
<tr>
<td>12:45 - 13:30</td>
<td>Workshop on the new automatic measurement of fetal heart rate and beyond R. Girardot (France)</td>
</tr>
<tr>
<td>15:10 - 15:40</td>
<td>Open Hands-on</td>
</tr>
</tbody>
</table>

**Caravaggio 5**

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
</table>
| Sunday | 15:20 - 15:50 | 1) Review of ADNEX Prediction Model  
|       |         | 2) IOTA MCQ Test  
|       |         | L. Valentin (Sweden)                                                     |
| Monday | 09:50 - 10:20 | Congenital Zika Virus Infection: Beyond Neonatal Microcephaly A. Melo (Brazil) |
|       | 15:10 - 15:40 | 5D Limb Vol - Fetal Soft Tissue Assessment for Improving Fetal Weight Estimation W. Lee (USA) |
| Tuesday | 09:50 - 10:20 | Clinical Implications of Crystal Vue in Fetal CNS and Face C. Lees (UK) |
|        | 15:10 - 15:40 | 5D CNS Plus: A Useful Tool for Fetal Neurosonography G. Rizzo (Italy) |

**Caravaggio 6**

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunday</td>
<td>13:30 - 14:00</td>
<td>First Trimester, early detection of structural anomalies J. Cruz (Portugal)</td>
</tr>
<tr>
<td>Monday</td>
<td>09:50 - 10:20</td>
<td>Advanced analysis of the fetal heart with speckle tracking C. Enzensberger (Germany)</td>
</tr>
<tr>
<td></td>
<td>13:00 - 13:30</td>
<td>Advances in ultrasound investigation of gynaecological disorders B. Smith (UK)</td>
</tr>
<tr>
<td></td>
<td>15:10 - 15:40</td>
<td>CNS examination - Plea for precise anatomical landmarks L. Guibaud (France)</td>
</tr>
<tr>
<td>Tuesday</td>
<td>09:50 - 10:20</td>
<td>Current status of fetal cardiac interventions - Role of myocardial function imaging R. Axt-Fliedner (Germany)</td>
</tr>
<tr>
<td></td>
<td>15:10 - 15:40</td>
<td>Advances in ultrasound investigation of gynaecological disorders B. Smith (UK)</td>
</tr>
<tr>
<td>Wednesday</td>
<td>09:50 - 10:20</td>
<td>Additional value of fusing ultrasound with MRI in fetal neuro sonography A. Cohen (Portugal)</td>
</tr>
<tr>
<td></td>
<td>13:00 - 13:30</td>
<td>A practical approach to the myocardial performance index S. Eschbach (The Netherlands)</td>
</tr>
<tr>
<td></td>
<td>14:50 - 15:20</td>
<td>CNS examination - Plea for precise anatomical landmarks L. Guibaud (France)</td>
</tr>
</tbody>
</table>
### Satellite symposia

<table>
<thead>
<tr>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiziano A</td>
<td>Tiziano A</td>
<td>Tiziano B</td>
<td>Tiziano A</td>
</tr>
</tbody>
</table>

- **Sunday 12:45 - 13:05**
  Variables used in the ADNEX Prediction Model and How to interpret its findings
  T. Bourne (UK)

- **Sunday 13:05 - 13:25**
  Ultrasound Variables that are used in SIMPLE RULES and How to use them
  D. Timmerman (Belgium)

- **Sunday 13:25 - 13:45**
  Case Studies using Simple Rules and the ADNEX Software
  A. Testa (UK)

- **Monday 12:15 - 13:15**
  B. Benacerraf (USA)
  B. Benoit (France)
  D. Paladini (Italy)

- **Tuesday 12:15 - 13:15**
  See More. Earlier.
  Faster. Fetal
  Heart & Brain.
  Chair: R. Axt-Fliedner
  (Germany)
  First trimester cardiac assessment - how can we see the heart better?
  J. Cruz (Netherlands)
  Tissue doppler imaging and speckle tracking of the fetal heart - what can we expect?
  M. Haak (France)
  Decrease in cephalic biometry - a systematic approach to CNS
  L. Guibaud (France)

- **Wednesday 12:15 - 13:15**
  Novel technology for fetal cardiac function
  M. Nakata (Japan)
  How to monitor fetal ventricular function: today’s and upcoming tools
  R. Girardot (France)
  Ultrasound meets MRI: New fusion imaging technique between US and MRI in gynaecology and obstetrics
  L. Manganaro (Italy)
  Abnormal fetal heart scanning: beyond the fundamentals
  J. Carvalho (UK)

### Industry acknowledgements

**ISUOG gratefully acknowledges the following industry support for our pre-Congress courses**

Supported by an unrestricted educational grant from: [GE Healthcare](https://www.hitachi-medical-systems.eu)

**Saturday 08:30 - 17:30**
Transvaginal ultrasound in gynecological oncology

Botticelli

**ISUOG gratefully acknowledges the following industry support for our hands-on training**

Technical support provided by:

GE Healthcare
Hitachi Medical Systems Europe Holding AG
Mindray
Philips

**Sunday 11:15 - 15:15**
Intimate hands-on training

Bernini 2-5

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

Technical support provided by:

<table>
<thead>
<tr>
<th>Sunday 08:30 - 13:30</th>
<th>Basic training simulation workshops</th>
<th>Bramante 12</th>
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</thead>
<tbody>
<tr>
<td>Monday 13:30 - 16:50</td>
<td>Ultrasound-guided needle procedures in obstetrics</td>
<td>Bramante 12+14</td>
</tr>
<tr>
<td>Tuesday 08:30 - 11:50</td>
<td>Ultrasound-guided needle procedures in obstetrics</td>
<td>Bramante 12+14</td>
</tr>
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</table>

**Industry live scan* acknowledgements**

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

<table>
<thead>
<tr>
<th>Saturday All day</th>
<th>Transvaginal ultrasound in gynecological oncology</th>
<th>Botticelli</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunday 15:00</td>
<td>The perfect views (including audience participation)</td>
<td>Michelangelo</td>
</tr>
</tbody>
</table>

| Monday 08:15     | Assessing the vessels and venous return           | Michelangelo A |
| Monday 11:00     | Advanced fetal brain scanning                     | Michelangelo A |

| Tuesday 08:15    | How can I improve my estimation of fetal size?    | Michelangelo A |
| Tuesday 10:20    | ‘Give me five’: how never to miss a congenital heart defect | Michelangelo A |

| Wednesday 10:20  | Scanning the obese patient                        | Michelangelo A |

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

Receive your ISUOG membership number
ISUOG has two tiers of membership; core and online. Online members can also add a print subscription of UOG. All Congress attendees who were not ISUOG members when they registered have been given ‘core’ membership for 2017. Welcome! Come and visit us at the ISUOG Lounge in the main lobby to discuss your member details.

Find out about your ISUOG membership entitlements
Turn to our membership guide on pages 12 & 14 or speak to the team at the ISUOG Lounge.

Upgrade your ISUOG membership to receive the journal at reduced prices
At the Congress, upgrade at the registration desk during its designated opening times. There are two options; upgrade to online to access the journal online and via the app, or add a print subscription of UOG to also receive print copies of the journal every month.

Learn about submitting a research paper to UOG
If you have new research to share and submit for publication in Ultrasound in Obstetrics and Gynecology, the Editorial team can be found at the ISUOG Lounge and will be happy to answer your questions.

Exercise your voting rights as an ISUOG member
Attend the AGM on Sunday 25 September 2016 from 10:05 - 10:45, in the Michelangelo Ballroom at the Rome Marriott Park.

Find out about ISUOG events and opportunities near you
Did you know ISUOG runs around 40 approved courses each year? In 2016 these courses have already reached 26 countries. Come and see the team at the ISUOG Lounge to find out what activities are happening around the world and near you or to apply to approve your own high quality program.

Find an ISUOG ambassador from your country or region
ISUOG’s regional ambassadors are listed on our website (isuog.org/Membership/AdvisoryMembers) and are easily identifiable at the Congress via their red lapel pins.

Check your Congress presentation is uploaded in time for your session
Check that your Congress posters were uploaded prior to the Congress at any of the On Demand computers on the ISUOG Lounge (in the main lobby) or via the interactive touchscreens in the foyers at any time.

Upload, check or modify presentations
If you are a speaker in an oral session you should attend the speaker preparation room to check your talk. The speaker preparation room is located in room Bramante 10 on the garden level of the Rome Marriott Park. The technical team will be on hand to help you upload your presentation. This service does get very busy so please leave yourself plenty of time; arrive at least 4 hours before your session and preferably the day before.

View an electronic poster
Electronic posters are not presented orally but rather, are available throughout the Congress on the ISUOG Lounge On Demand viewing terminals.
Attend a Hub session
ISUOG’s Hubs will host a variety of interactive research discussions, meet the professor sessions, special interest group open meetings and outreach workshops, as well as a full timetable of exciting collaboration, learning and networking opportunities. You are encouraged to attend as many of the unique ‘drop-in’ sessions as possible. See pages 17 & 24 of this program to see what is happening in the Hubs space each day and attend as many as you wish; this is an informal arena so you can even move between groups gathering at the same time.

Participate in a Simulation or hands-on training workshop
ISUOG is pleased to be hosting 3 innovative, hands-on training workshops at the World Congress which will incorporate the latest in simulation technology. Ultrasound-guided needle procedures workshops run on the afternoon of Monday 26 September and the morning of Tuesday 27 September, incur an extra registration fee and places are limited. The Basic Training Simulation Workshop (only open to Basic Training delegates) runs on Sunday 25 September. Hands-on training workshops run in partnership with CFEF on Sunday 25 September and incur an extra registration fee; places are limited. Pre-event registration for these events is essential however, to enquire whether any places remain, please visit Registration.

See a live scan
Sessions which include live scan demonstrations are clearly marked on the program at a glance on pages 18-21.

Access sessions that you missed
All Congress sessions are recorded and available on the ISUOG On Demand platform. Catch up on sessions you missed at the computer terminals on the ISUOG Lounge or via the interactive touch screens in the foyers.

Collect your Vatican tour ticket
If you have booked a Vatican tour ticket, this will be given out at registration with your badge. You must present your ticket at the entrance to the Vatican or you will not be allowed to join the tour.

Receive your certificate of attendance and CME
Your certificate of attendance will be emailed to you after the event on completion of your Congress evaluation form, which will be emailed to your registered email address. All delegates’ badges will be scanned at the door of the session halls. In order to qualify for Italian CME, Italian delegates must ensure they visit the Bluevents CME desk in the main hotel lobby each day that they wish to claim for.

Receive a tax receipt for your registration
Contact registration@isuog.org.

Explore the sites of Rome
View our LOC visitor guide which provides local tips and travel advice, as recommended by the Local Organising Committee online at isuog.org/worldcongress.

Submit an abstract for the ISUOG Congress next year
Abstract submissions will be accepted from January to April 2017. Follow the instructions published at isuog.org/WorldCongress to submit your original research.

Register to attend the Congress in Vienna 2017
Registration for next year’s World Congress opens in January 2017. All ISUOG members can take advantage of reduced registration rates but register online at isuog.org/worldcongress before July to receive further early bird discounts.
<table>
<thead>
<tr>
<th>Date</th>
<th>Start time</th>
<th>End time</th>
<th>Meeting (secretary)</th>
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<tr>
<td>Saturday 24 September</td>
<td>07:30</td>
<td>08:30</td>
<td>Executive Committee</td>
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<td>ISUOG Board meeting (1)</td>
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<td>14:00</td>
<td>18:00</td>
<td>Journal Editors</td>
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<td>Sunday 25 September</td>
<td>07:30</td>
<td>08:30</td>
<td>CHD-CNS Task Force</td>
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<td>08:00</td>
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<td>Chairpersons briefing</td>
<td>Tiziano Ballroom A</td>
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<td>10:05</td>
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<td>AGM and Awards</td>
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<td>Fetal Biometry Task Force</td>
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<td>Board Inductions</td>
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<td>Advisory Members Lunch</td>
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<td>13:00</td>
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<td>Scientific Committee (1)</td>
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<td>Monday 26 September</td>
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<td>Basic Training Task Force</td>
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<td>Zika Focus Group</td>
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<td>Outreach Committee</td>
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<td>Wednesday 28 September</td>
<td>08:20</td>
<td>09:20</td>
<td>Exhibitors’ Closing Meeting (Breakfast)</td>
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<td>10:00</td>
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<td>Ambassadors Lunch</td>
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<td>Scientific Committee (2)</td>
<td>Boardroom</td>
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</table>
ISUOG members in 128 countries

Celebrating 25 years  #LoveUltrasound

53% growth

13662

ISUOG members in 128 countries

53% growth

1719

Attendees to the world congress in Montréal

94% interested in attending another one

98% satisfaction

82

Learning activities in the CME platform

2609 NEW MEMBERS gained from 67 approved courses

32 trainee partnerships

4494 trainees

743 BASIC TRAINING DELEGATES

Outreach trip to Ghana

4 trainers + 22 trainees across 3 hospitals in Kumasi region

6 GUIDELINES and Basic Training recommendations translated into

14 LANGUAGES

IMPACT FACTOR

4.254

1,787,104 DOWNLOADS

ISUOG learning

ISUOG learning
ISUOG would like to thank the following industry partners for their support of the 26th World Congress:

<table>
<thead>
<tr>
<th>Level</th>
<th>Sponsor</th>
<th>Website</th>
</tr>
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<tbody>
<tr>
<td>Diamond</td>
<td>GE Healthcare</td>
<td><a href="http://www.hitachi-medical-systems.eu">www.hitachi-medical-systems.eu</a></td>
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<td>Gold</td>
<td>SAMSUNG MEDISON</td>
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<td>3D SYSTEMS</td>
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<td>Other sponsorship</td>
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