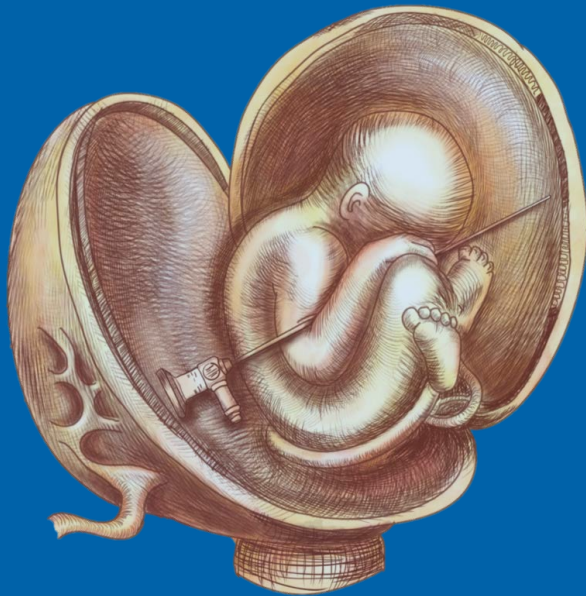


Fetal Surgery and Therapy International Program

Colsanitas Clinic - Keralty

Maternal Fetal Medicine Foundation



XIV Fetal Therapy and Surgery: Advanced Course

Update and Certification
For English and Spanish Speakers

Organized:

Clínica  Colsanitas



Dates for 2024:

October 16 - 20

Bogotá, Colombia

Clínica Universitaria Colombia Clínica

Colsanitas - Keralty

www.maternofetalla.com

Supported By:

Clínica Colsanitas

FIMMF
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Cerfication:

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International Center for
Fetal Surgery and Therapy

Fetal Health Foundation - FSF



Director

Mauricio Herrera

Maternal Fetal Medicine
Fetal Surgery - Therapy
Fetal Cardiology - Fetal Neurology
Head Maternal Fetal Medicine Department
Colsanitas Clinic
Global CEO Momprenatal
President of FIMMF
ISUCG Fellow

Speakers - Professors

- Mauricio Herrera - MMF - Fetal Surgery
- Mario Rebolledo - MMF
- Johanna Soto - MMF
- Natalia Ordoñez - Pediatric Surgery
- Jennifer Guevara - Obstetric Anesthesia
- Jean Pierre Dussan - Obstetric Anesthesia
- Ciro Casadiego - Fetal Anatomy
- Juan Javier López - Clinical Genetics
- FIMMF , International speakers
- FIMMF, Fetal therapy and surgery network.
- Surgical Assistant Fetal Surgery

Course Description

Fetal interventions are becoming less invasive and require training and experience for optimal results. The Fetal Therapy Simulation Course provides an excellent opportunity to explore these techniques in detail, to gain hands-on experience with the instruments and procedures, and to receive feedback on a person's performance and avoid complications.

All of our professors are specialists in Maternal Fetal Medicine and perform comprehensive fetal therapy with experience from some of the most important fetal medicine centers in the world.

The procedures will be carried out using maternal and fetal simulation models with maximum resolution and allow a real experience, in turn, during the course participation in the Fetal Therapy Board will be allowed to live in a real way.

This course is suitable for maternal-fetal medicine or fetal medicine specialists who perform fetal interventions. Participants will also be introduced to a network to share and discuss difficult cases in the future.

Learning Objectives

The main objective of the Master Class in Fetal Therapy and Surgery is to offer an intensive training to the assistants that allows them to understand the techniques of fetal therapy and surgery from the parameters of Maternal Fetal Medicine, starting with the indications, pathologies susceptible to intervention, knowledge of fetoscopy instruments and acquiring the skills to perform validated fetal therapy procedures.

Specific Objectives



The training program include a comprehensive structure based in 15 areas of the fetal therapy and surgery

1. Fetal Anatomy in fetal surgery and fetoscopy
2. Ultrasound Guided procedures hands ON Hand Eye coordination.
3. Training program and techniques for:
 - Amniocentesis. - CVS - Cordocentesis (Fetal anemia)
4. Fetal Punction techniques: Hydrothorax. Fetal anesthesia
5. Mapping and planning access to the amniotic cavity – Vascular trocar insertion
6. Fetoscopic access to the amniotic cavity : Orientation exercises
7. Fetoscopic and fetal surgery instruments
8. Fetal Surgery in twins: Placental laser, cord ligation
9. The fetal airway: FETO procedure – EXIT Procedure
10. Fetal surgery in MMC
11. Fetal Shunts
12. Fetal Tumors
13. Unusual Implantation embrio: CSP, CEP
14. Fetal surgery : CHD Valvuloplasty
15. New developments in fetal surgery: New devices, new procedures



Who should attend

- OBGYN specialist
- Maternal Fetal Medicine specialists
- Fetal Medicine Specialists
- Interventional Radiologist
- 20 seats - for delegates

Metodology

- 5 Days
- Delivery of prior printed material for study
- Master Lectures
- Hands ON Session : Fetal Surgery
- Clinical Cases
- Language: English

Scientific Program

Day1

Wednesday.

07.00 - 07.15 Inauguration Session

07.30 - 09.00 International Board in Maternal Fetal Medicine - Clinical cases in fetal therapy - fetal surgery

09.00 - 09.30 Coffee

09.30 - 12.00 Fetal surgery: Hand - eye coordination exercises - Session I
Ultrasound guide invasive procedures - Needle

Mapping and planning
Access to the amniotic cavity - **M. Herrera and cols**

12.00 - 13.30 **Fetal Live Surgery: C- Section- 37 weeks - POP fetal surgery Spina bifida**

13.30 - 15.00 Fetal surgery: Hand - eye coordination exercises - Session II

Trocar Insertion and fixation, Fetoscopy orientation in the amniotic cavity
Mapping and planning
Access to the amniotic cavity - **M. Herrera and cols**

15.00 - 18.30 Fetal anatomical Dissection - Fetal Cadaver Body - Fetal Anatomy

C. Casadiego - M. Herrera - Cols



Day2

Thursday.

6.30 - 8.00 International Board in Fetal Medicine: Fetal Surgery Cases - World Meeting
Fetal Surgery Center - FIMMF - Colsanitas Keralty - Kypros Nicolaides Center

Auditorium Medical Club 13th floor - Clínica Universitaria Colombia **M. Herrera - Cols**

Validated fetal therapy New developments in Fetal Surgery and Therapy

- Myelomeningocele
- Hydrotorax
- Airway Malformation
- Acardic Twin
- Fetal Hydrops
- Diaphragmatic Hernia
- Amniotic Band
- TTTS: Multiple Pregnancy
- LUTO

8.00 - 08.30 Coffee

8.30 - 09.45 Spina Bifida - Myelomeningocele- Diagnosis - Evaluation - Fetal Therapy - **M. Herrera - N. Ordoñez**

Techniques validated : Open surgery and Fetoscopy

9.45 - 11.00 FIMMF Guidelines and statements: Invasive and Diagnostic Ultrasound Guide Procedures in MFM -

Amniocentesis - Umbilical cord sampling - CVS - **M.Herrera**

Shunts in fetal medicine - Thoracentesis - Urinary Bladder sample - Embrioreduction - CSP - **M. Herrera**

11.00 - 11.30 Coffe - Lunch BOX

11.45 - 14.30 **Fetal Live Surgery: Multiple pregnancy: MC - DA - Discordant Twin - Fetoscopy Cord Ligation - M. Herrera**

14.30 - 15.00 Coffee

15.00 - 18.00 New fetal surgery procedures Surgery: Hands ON Fetoscopy technique all in one. High fidelity simulation -

M. Herrera - N. Ordoñez



Fetal Medicine: Fetal Surgery



Day 3

Friday,

7.00 – 8.00 Breakfast – Medical Club – Clínica Universitaria Colombia

7.30 – 8.00 Anesthesia in fetal surgery - **J. Guevara**

8.00 - 8.30 Genetic in Fetal Surgery- **J Lopez**

8.30 - 9.00 CVS - **M. Singh**

09.00 - 09.30 Coffee

9.30 – 12.30 Amniocentesis , CVS – Cordocentesis y Intrauterine transfusion Hands ON – Simulator - Technique -
Fetal Surgery Room STAFF **M. Herrera**

11.30 - 13.00 Fetal Live Surgery: ONTD - Cephalocele - M. Herrera - C. Martinez - N. Ordoñez

13.30 - 14.30 Lunch

14.30 – 15.45 Multiple Pregnancy - Placenta - Chorionicity - Placenta Anatomy -

Monochorionic placenta MC- DA TTTS - Selective IUGR, TRAP, TAPS, Discordant Twin DC-DA
- Discordant Twin - Selective IUGR - **M. Herrera**

15.45 – 16.25 Instruments and supplies in fetal surgery- **M. Herrera**

16.25 - 16.50 Coffee

16.50 – 18.00 Hands ON - Fetoscopy – Selecting the use of fetoscope – Access techniques

Video Tower instrumental - Laser - Fibers - Surgery Rooms – STAFF – M.Herrera

20.00 Gala Dinner - Dr. Herrera's House - Departure from the Colombian University Clinic at 18.000

Dress code Casual



International Center for
Fetal Surgery and Therapy
Fetal Health Foundation - FSF

Day 4

Saturday.

7.00 – 8.00 Breakfast – Medical Club – Clínica Universitaria Colombia -

8.10 – 9.20 Recognition of placental vessels - TTTS - Acardiac Twin - Technique - Tips and Tricks-**M.Herrera** 9.30 – 12.00 Laser and
placental vessels ablation - Recognition of shunts in TTTS Complications in Multiple pregnancy -

Hands ON – Simulador – Placental – Fetal Surgery Room – STAFF – **M. Herrera**

11.30 - 13.00 Fetal Live Surgery: Spina Bifida In Utero Repair - 24.5 weeks - Herrera - Ordoñez - Martinez

12.00.14.00 Lunch

14.00 - 15.00 Diaphragmatic Hernia – Diagnosis– Evaluation- Fetal Therapy– **M. Herrera**

15.00 - Fetal Airway - Anatomy, evaluation and access - EXIT Technique - **M. Herrera**

14.45 - 15.30 Fetal Shunts – LUTO – Hydrothorax - Airway Malformation

15.30 – 16.00 Fetal Shunts Technique – **M. Herrera**

16.00 – 18.00 Shunts – Hands ON - Fetal Surgery Room **M.Herrera**



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Day 5

Sunday,

7.00 – 8.00 Breakfast– Medical Club– Clínica Universitaria Colombia –ALL -STAFF

8.00 - 8.30 **FETO Hands ON Surgery - Technique - step by step - M. Herrera**

08.30 - 10.25 FETO – Diaphragmatic Hernia - FETO Technique– Hands ON - **M. Herrera**

10.30 - 11.00 – Fetal Surgery in fetal heart: valvuloplasty in fetal heart disease - **M. Herrera**

11.00 - 11.30 Embryonic reduction - Ectopic Pregnancy - CSP –**MHerrera**

11.30 - 12.30 Intrauterine Transfusion - **J. Soto**

12.30 - 13.00 Close - and certifications

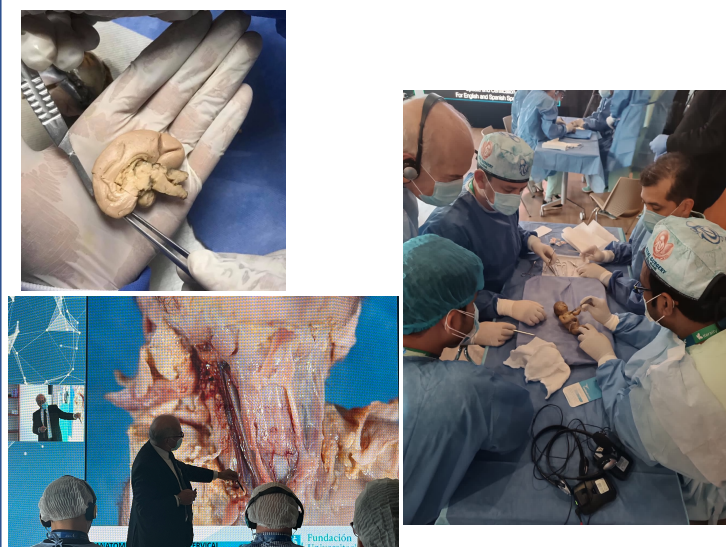


Live fetal surgery





Hands ON Session Fetal
Anatomic Dissection



Hands ON Session - Hands eye coordination
Amniocentesis – Cordocentesis – CVS



Hands ON Session
Fetoscopy – Placental Laser

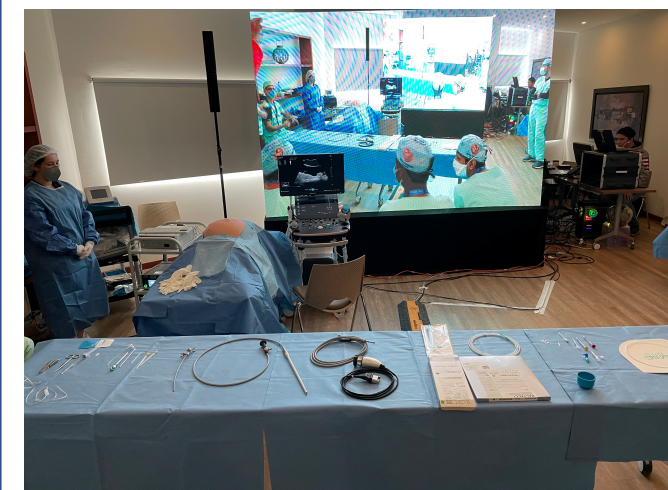


Hands ON Session Fetal Shunts



Hands ON Session
Diaphragmatic Hernia- FETO -

Myelomeningocele



Fetal Medicine : Fetal Surgery



Mapping and Planning : Orientation amniotic cavity



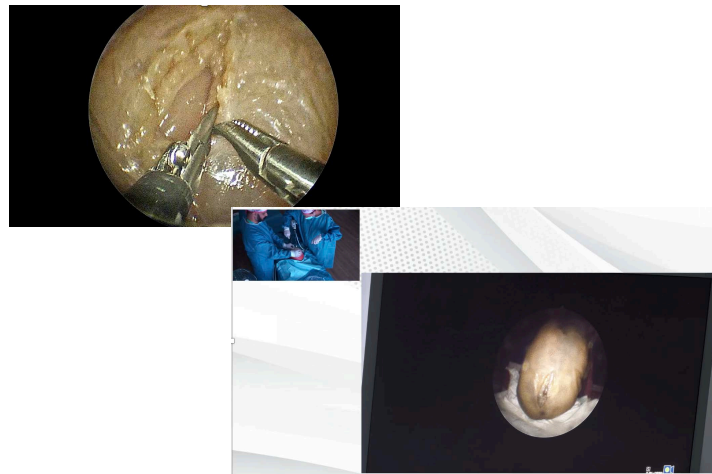
Mapping and Planning : Access to the amniotic cavity



The fetal airway



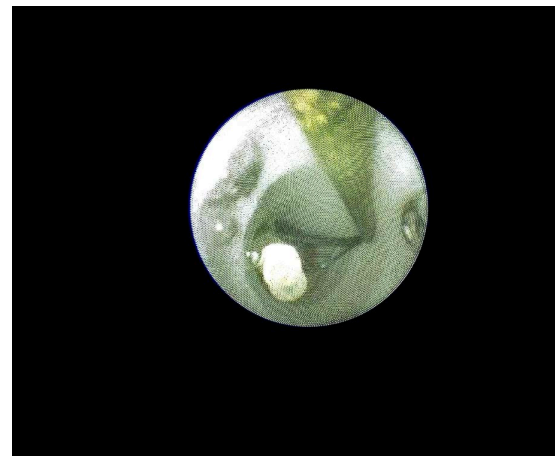
Spina Bifida Session: Hands On



New developments in fetal surgery - Gastroschisis trial - CDH In utero Repair Trial

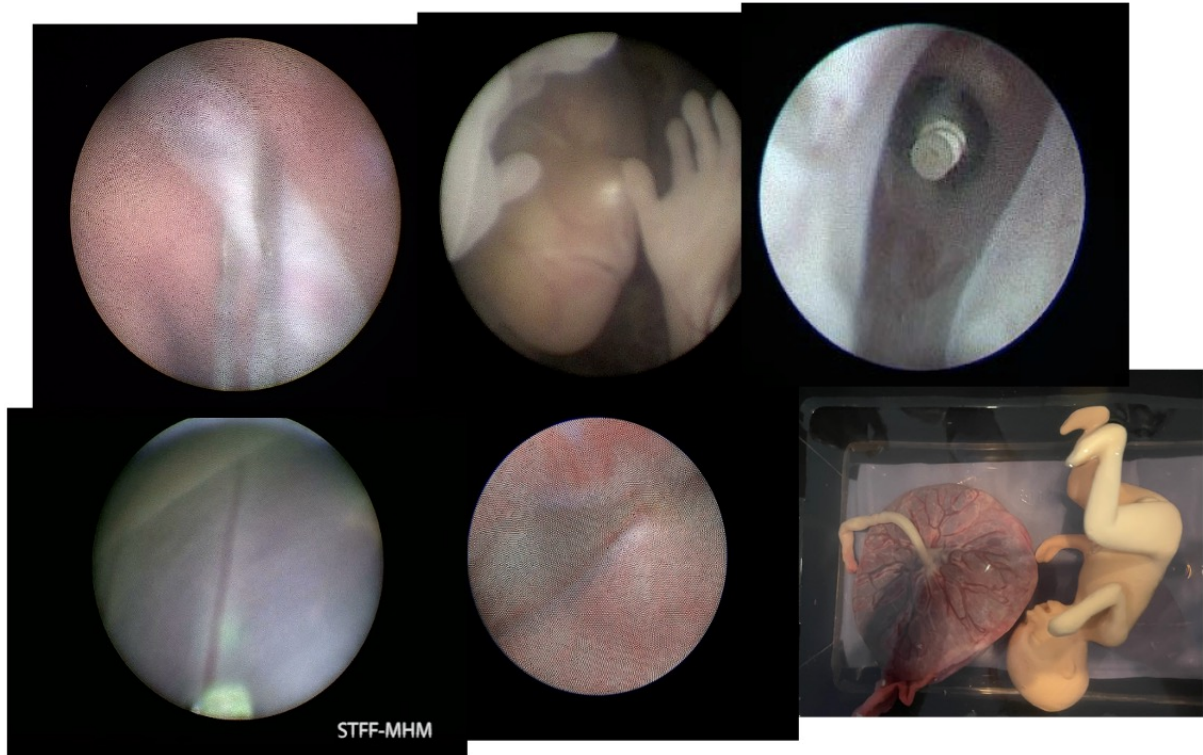


New devices in fetal surgery





Hands ON Session – Fetoscopic techniques



Fetal Surgery and Therapy Program

FIMMF
Fundación de Medicina Materno Fetal

Fetal Surgery and Therapy Center
Fetal Surgery Network

MFMF
Maternal Fetal Medicine Foundation

Fetal Diagnosis, Therapy and Surgery Program
FIMMF

Director - Mauricio Herrera

- Fetal Surgery Multiple Pregnancy
- FETO
- Fetal Surgery Fetal Airway
- Fetal SHUNTS - LUTO
- Fetal Surgery MMC - MYHOS
- Fetal Surgery MMC- Fetoscopy MYHFES
- Fetal SHUNTS - Hydrothorax
- Fetal Surgery - Band Syndrome
- EXIT
- Fetal Tumors
- Fetal Airway Malformations
- IU Blood transfusion
- Fetal Heart Valvuloplasty
- CSP - Ectopic Pregnancy
- PAS - Placenta Accreta Spectrum
- Cervical Cerclaje



Fetal Surgery and Therapy Center Head Chief - Mauricio Herrera

Fetal Surgery and Comprehensive Fetal Therapy - All the technology in one place

Fetal Surgery Procedures	Fetal Surgery in Multiple Pregnancy	FETO – Fetal surgery in Congenital Diaphragmatic Hernia	Fetal Surgery in Fetal Airway obstruction - CHAOS	Fetal surgery in LUTO	Fetal Surgery in Myelomeningocele	Fetal Surgery in Fetal Tumors	Fetal Surgery in Hydrothorax
Pathologies	<ul style="list-style-type: none"> • Monochorial complications: TTTS, Selective IUGR, Acardiac - TRAP, TAPS, discordant twin. • DC - DA complications: Selective IUGR, discordant twin. • Triplets 	<ul style="list-style-type: none"> • Hernia diafragmática Izquierda, Hernia Diafragmática Derecha. 	<ul style="list-style-type: none"> • Laryngeal atresia 	<ul style="list-style-type: none"> • Posterior Urethral valves 	<ul style="list-style-type: none"> • Myelomeningocele – Spina Bífida 	<ul style="list-style-type: none"> • Sacrocoxygeal teratoma • Chorioangiomas • Hepatic hemangioendotheliomas • Lymphangiomatosis 	<ul style="list-style-type: none"> • Unilateral hydrothorax with hemodynamic impact. • Bilateral hydrothorax with hemodynamic impact
Techniques	<ul style="list-style-type: none"> • Fetoscopy: laser photocoagulation of placental vessels, umbilical cord ligation. • Fetal-embryonic reduction. 	<ul style="list-style-type: none"> • Fetoscopy: Fetal airway – Fetal tracheal occlusion 	<ul style="list-style-type: none"> • Fetoscopy: Procedure – Fetal airway patency. Laser flare. 	<ul style="list-style-type: none"> • Fetoscopy: Fetal cystoscopy laser fulguration urethral valves • Vesico-amniotic shunt 	<ul style="list-style-type: none"> • Open Technique: In utero repair with mini-hysterotomy • Fetoscopy: Repair with multiport fetoscopy. 	<ul style="list-style-type: none"> • Fetal intratissue laser. • Ultrasound-guided fetal puncture • Sclerotherapy. 	<ul style="list-style-type: none"> • Thoraco-amniotic shunt • Hydrothorax drainage by ultrasound-guided puncture.
Images in fetal surgery							

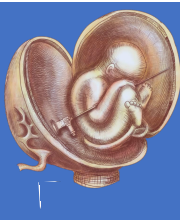
Fetal Surgery and Therapy Center Head Chief - Mauricio Herrera

Fetal Surgery and Comprehensive Fetal Therapy - All the technology in one place



Fetal Surgery in Amniotic Band	Fetal Surgery in airway malformations	Fetal Therapy in Fetal Anemia	Fetal Surgery in Congenital Heart Disease - Valvuloplasty	EXIT Therapy in Fetal Malformations	Placenta Accreta Spectrum Center of Excellence	Therapy in PUL	Center of Excellence for Cervical Cerclage
<ul style="list-style-type: none"> • Amniotic bands with fetal anatomical compromise. 	<ul style="list-style-type: none"> • Pulmonary sequestration with hemodynamic impact. • Macrocytic cystic adenomatoid malformation. 	<ul style="list-style-type: none"> • RH isoimmunization • TAPS • Anemia in fetal infection, PVB19. 	<ul style="list-style-type: none"> • Critic Aortic stenosis. • Critic Pulmonary Stenosis 	<ul style="list-style-type: none"> • EXIT in fetal airway obstruction: Cervical teratomas, Epignatus, laryngeal atresia, Lymphangiomas, tracheal obstruction. 	<ul style="list-style-type: none"> • Diagnosis of placenta accreta spectrum: Placenta accreta, increta and percreta. • Ultrasound and MRI diagnosis. • multidisciplinary management 	<ul style="list-style-type: none"> • Diagnosis and management of pregnancy in unusual location: PUL, ectopic pregnancy, cesarean scar pregnancy, cervical pregnancy. 	<ul style="list-style-type: none"> • Cervical insufficiency
<ul style="list-style-type: none"> • Fetoscopy: release of amniotic bands 	<ul style="list-style-type: none"> • Intratissue laser: in pulmonary sequestration. • Thoraco-amniotic shunt in macrocystic CCAM • Sclerotherapy in mixed MAQ. 	<ul style="list-style-type: none"> • In-utero fetal transfusion, cordocentesis. 	<ul style="list-style-type: none"> • Aortic valvuloplasty, guided by ultrasound. • Ultrasound-guided pulmonary valvuloplasty. 	<ul style="list-style-type: none"> • EXIT: Ex Útero Intrapartum treatment. 	<ul style="list-style-type: none"> • Devascularization surgical techniques. 	<ul style="list-style-type: none"> • Comprehensive management of: Pregnancy in Cesarean Scar - CSP. • Management of tubal, interstitial and cornual ectopic pregnancy. • Cervical pregnancy management. 	<ul style="list-style-type: none"> • Transvaginal cervical cerclage • Transabdominal cervical cerclage.

Fetal Medicine: Fetal Surgery



Your registry include

- Syllabus and study material.
- Coffees, Breakfasts, lunches, Gala dinner.
- Attendance at the International Board of Maternal Fetal Medicine.
- Hands ON Sessions in: Amniocentesis, Cordocentesis, Chorionic Villus Biopsy, Laser in Fetal Medicine, Fetal Surgery and Fetoscopy Instruments, Fetal shunts.
- 15 areas of fetal therapy and surgery standardized by Prof. Mauricio Herrera
- Participation in Live Cases of Fetal Therapy.

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Fetal Medicine: Fetal Surgery



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