

# FetoGenetics

International Congress of  
SFM Telangana Chapter

&  
International Society for  
Prenatal Diagnosis (ISPD)

Demystifying Fetal Genetics



SOCIETY OF  
FETAL MEDICINE



International Society  
for Prenatal Diagnosis

Pre-Conference Workshops - 13<sup>th</sup> December, 2024

Nizam's Institute of Medical Sciences, Punjagutta &  
KIMS Sunshine Hospital Building, Begumpet



Main Conference

14<sup>th</sup> - 15<sup>th</sup>

December, 2024

The Park Hotel  
Hyderabad | India

Scientific Brochure



[www.sfmfetogenetics.com](http://www.sfmfetogenetics.com)



CONFERENCES  
INTERNATIONAL

# Welcome Message

Telangana Chapter of The Society for Fetal Medicine, India in collaboration with the International Society for Prenatal Diagnosis announces **Fetogenetics**, its First International Congress from 14th-15th December 2024. The Congress aims to demystify genetics for the fetal medicine practitioner through interactive learning with leading National and International Faculty. Multiple immersive workshops precede the congress on the 13th December promising one of its kind hands on experience in fetal syndromic diagnoses, genetic counselling and genetic report interpretation.

We welcome all to Hyderabad, the erstwhile city of pearls, and also the city of futuristic living, to participate in this academic extravaganza.



**Dr Mohit V Shah**  
National President SFM



**Dr Ashok Khurana**  
Mentor Emeritus SFM



**Dr Chinmayee Ratha**  
Organising Chairperson



**Dr Shagun Aggarwal**  
Organising Secretary

## REGULAR REGISTRATIONS TILL 10<sup>th</sup> DECEMBER

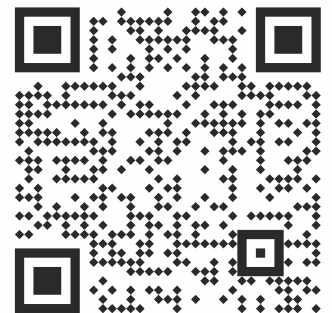
SFM MEMBER	INR 8800
NON MEMBER	INR 11000
PG STUDENT	INR 8000

## WORKSHOP REGISTRATIONS

<b>ONE WORKSHOP FEE</b>	<b>TWO WORKSHOP FEE</b>
SFM MEMBER INR 3200	SFM MEMBER INR 5900
NON MEMBER INR 4000	NON MEMBER INR 7500

The above fees is inclusive of 18% GST

SCAN QR TO  
REGISTER



# Pre-Conference Workshops - 13<sup>th</sup> December, 2024

## Pre-Lunch - ATGC of Genetic Tests- From Lab to Clinic

**Venue:** Department of Medical Genetics, Nizam's Institute of Medical Sciences, Punjagutta, Hyderabad  
(9:00 am - 1:00 pm)

**Convener-** Dr Shagun Aggarwal, Head, Department of Medical Genetics, Nizam's Institute of Medical Sciences

This workshop is focused on a practical application for various genetic tests in fetal medicine practice. It would involve a tour of the Medical Genetics laboratory, live analysis of experiments and case report based discussion of scenarios like abnormal reports, reports with variants of uncertain significance; and pre and post test counselling issues with genetic tests. Various tests like aneuploidy testing, karyotype, Sanger sequencing, chromosomal microarray and exome sequencing would be covered in this workshop.

Welcome and participant introductions	Dr Shagun Aggarwal
Introduction to genetic tests in Fetal medicine	Dr Prajnya Ranganath

### Live Demos and visit to lab

Lead Coordinators	Dr Karthik Bharadwaj, Dr Neelam Saini
Workstation resource faculty	Dr Spoorthi, Dr Sirisha Reddy Baddam, Dr Mayuri Sanjay Dixit, Dr Soumya Penmetssa, Dr Anuradha Manchikanti, Dr B.Roopadarshini, Dr Prathyusha Koneru, Dr Safura Sultana, Dr S Valli, Dr Thipparapu Shankar, Ms Harika Patnaik, Dr Tushar Pallear
Test 1	QF-PCR- aneuploidy and MCC
Test 2	Karyotype
Test 3	Sanger sequencing for target variant
Test 4	Chromosomal microarray
Test 5	Exome sequencing
Participant driven presentations	Dr Shagun Aggarwal, Dr Karthik Bharadwaj, Dr Neelam Saini
Feedbacks and certificates	

## Post-Lunch - Genetic Counseling in Fetal Medicine-Navigating the Maze

**Venue:** Department of Medical Genetics, Nizam's Institute of Medical Sciences, Punjagutta, Hyderabad  
(2:00 pm - 6:00pm)

**Convener-** Dr Shagun Aggarwal, Head, Department of Medical Genetics, Nizam's Institute of Medical Sciences

This workshop would involve case based interactive discussions and group activity. It would involve actual and simulated case scenarios and cover critical aspects of history taking, pedigree drawing, approach to index child workup, abnormal ultrasound workup, pre-test and post-test counselling for complex situations like variants of uncertain significance, NIPT result interpretation, choosing the right genetic investigations, etc. and other scenarios relevant to fetal medicine practice.

Welcome and Participant Introductions	Dr Shagun Aggarwal
	Live exercises
Lead Coordinators	Dr Gayatri Nerakh, Dr Surya Balakrishnan
Workstation resource faculty	Ms Gowri Rao, Mr Prashanth Rao D, Ms Neeraja Reddy Mallela, Ms R Sahithi Rathod, Ms Javeria Nisar, Dr S Valli, Dr Prathyusha Koneru, Dr Thipparapu Shankar, Dr B. Roopadarshini, Dr Tushar Pallear
Case Scenario 1	Previous child with abnormality
Case Scenario 2	Prenatal ultrasound with abnormality
Case Scenario 3	Pre and post test counselling for NIPT
Case Scenario 4	VOUS on Prenatal exome report
Case Scenario 5	Bad obstetric history/ Recurrent pregnancy losses
Participant driven presentations	Dr Shagun Aggarwal, Dr Gayatri Nerakh, Dr Surya Balakrishnan
Feedbacks and certificates	



# Pre-Lunch - Fetal Echo and Cardio Genetics Genetics of Congenital Heart disease: The glass half empty

Venue: Resolution Centre of Fetal Medicine,  
2nd Floor, KIMS Sunshine Building, Prakash Nagar, Opposite to Old Airport, Begumpet, Hyderabad  
(9:00 am - 1:00 pm)

Workshop Convenors: Dr. Sunil Mehta, Dr. TLN Praveen, Dr.Chinmayee Ratha

**Introduction:** The Cardiogenetics workshop, involves a deep dive into the intricate relationship between fetal cardiac abnormalities and genetic association. This workshop is designed for doctors interested in fetal echocardiogram and to understand the genetic underpinnings of heart disease. The participants will explore the latest advancements in fetal echo, demonstration of fetal echocardiogram, relation of various genetic abnormalities associated with cardiac diseases in fetus, when to offer testing, what to test and what results to expect. Also, regarding what and how to counsel the patients.

Join us as we unravel the complexities of Cardiogenetics.

## Session 1

### Evaluation of the Fetal Heart

Session Coordinators: Dr.K Sahithi Reddy, Dr.Harshitha

Chairpersons:Dr Mishu Mangla, Dr Alok Varshney

Time	Topic	Speaker
8:00 AM	Registration	
09:00 - 09:20 am	Second Trimester fetal heart demonstration	Dr Sudeep Verma
09:20 - 09:40 am	Ultrasound indicators rising suspicion of evolving congenital cardiac abnormalities	Dr Geeta Kolar
09:40 - 10:00 am	Basic cardiac evaluation in the first trimester	Dr TLN Praveen

## Session 2

### Opening the pandora box of genetics in congenital heart disease

Session Coordinators: Dr Aditi Shastri, Dr Radhika P

Chairpersons:Dr Roonmoni Deka, Dr Seetha Ramamurthy Pal

10:00 - 10:20 am	Four Chamber abnormalities and genetic association	Dr Sudeep Verma
10:20 - 10:40 am	Conotruncal anomalies and genetic association	Dr Alok Varshney
10:40 - 11:00 am	Connecting the dots: first trimester cardiac	Dr Vandana Bansal

## Session 3

### Diving deep into the Cardiogenetics

Session Coordinators: Dr Priyanka, Dr Chandana

Chairpersons:Dr Arati Singh, Dr Sushma Meka

11:00 - 11:20 am	The cardiac channelopathies - Inherited arrhythmias	Dr Asit Jena
11:20 - 11:40 am	Jumbled organs and the genetic associations	Dr TLN Praveen
11:40 - 12:00 pm	Genetics and epigenetics of 22q11.2 - The DiGeorge syndrome	Dr Prajnya Ranganath
12:00 - 12:30 pm	Discussion	

# Post-Lunch - Fetal Neurosonography and Neuro Genetics

Venue: Resolution Centre of Fetal Medicine,  
2nd Floor, KIMS Sunshine Building, Prakash Nagar, Opposite to Old Airport, Begumpet, Hyderabad  
(1:00 pm - 4:30pm)

Workshop Convenors: Dr. Chinmayee Ratha, Dr. Suseela Vavilala

**Introduction:** Disorders of the developing nervous system may be of genetic origin, comprising congenital malformations of spine and brain that effect normal brain development. Fetal neurogenetics integrates aspects of genetics and development of CNS and how genetic variations influence neurodevelopmental processes.

Understanding neurogenetics helps in improving prenatal diagnostic by utilizing advanced genetic tests and help for the counselling the patients.

## Session 1

Critical Evaluation of CPU of the body

Session Coordinators: Dr Sushma Meka, Dr Neha Reddy

Chairpersons: Dr TLN Praveen, Dr Arati Singh

Time	Topic	Speaker
01:00-01:20 pm	Syndromes and Brain - No more sorrow	Dr Prajnya Ranganath
01:20 -01:40 pm	Fetus CNS in First Trimester	Dr Suseela Vavilala
01:40-02:00 pm	Role of MRI in evaluation of fetal CNS	Dr Eashwar Chandra

## Session 2

Major CNS abnormalities - guiding to choose the right test

Session Coordinators: Dr K Sahithi Reddy, Dr Hars hitha

Chairpersons: Dr Suseela Vavilala, Dr Vaishali Deshmukh

2:00 -2:20 pm	Demonstration of Second Trimester Fetal CNS	Dr Chinmayee Ratha
2:20-2:30 pm	Ventriculomegaly	Dr KV Sridevi
2:30-2:45 pm	Corpus Callosal abnormalities	Dr Alok Varshney
2:45-3:00 pm	Not so innocent CPC	Dr Priti Dubey

## Session 3

Diving deep into the Neurogenetics

Session Coordinators: Dr Aditi Shastri, Dr Jyotsna

Chairpersons: Dr Vandana Bansal, Dr Alok Varshney

3:00-3:15 pm	Posterior fossa malformations	Dr TLN Praveen
3:15-3:30 pm	Aneuploidies and CNS malformations	Dr Suseela Vavilala
3:30 - 3:45 pm	NTD's and Genetics	Dr Seetha Ramamurthy Pal
3:45-4:00 pm	Guidelines for neurosonogram	First Trimester guidelines
		Dr Radhika P
		Second Trimester Guidelines
		Dr Aditi Shastri

4:00 - 4:30 pm

Discussion

# Scientific Program

## 14<sup>th</sup> December, 2024

08:50-09:00 am	Welcome	Dr Chinmayee Ratha
<b>Session 1: Setting the Stage</b>		
09:00-10:20 am	<b>Chairpersons: Dr TLN Praveen, Dr B Srinadh, Dr Narsimha Reddy, Dr Geeta Reddy</b>	
09:00-09:22 am	Genetic Red Flags in First Trimester Scans	Dr Geeta Kolar
09:22-09:44 am	Second Trimester Markers: Present Day Interpretation	Dr Chinmayee Ratha
09:44-10:08 am	Third Trimester Red Flags	Dr Ashok Khurana
10:08-10:20 am	Audience Interaction	
10:20-10:45 am	Tea Break/ Trade Partner Interaction/ Poster Viewing	
<b>Session 2: Sonographic Probing for Syndromes</b>		
10:45-12:15 pm	<b>Chairpersons: Dr Sunil Mehta, Dr Geeta Kolar, Dr Sirisha Reddy Baddam</b>	
10:45-11:07 am	Central Nervous System: What to Expect and Document	Dr Bimal Sahani
11:07- 11:30 am	Interactive Case Based Discussion	Dr Amitha Indersen Dr Shagun Aggarwal Dr Ramesh Konanki
11:30-11:52 am	Cardiovascular System: What to Expect and Document	Dr Adinarayan M
11:52-12:15 pm	Interactive Case Based Discussion	Dr Suseela Vavilala Dr Shagun Aggarwal Dr Nitin Rao
<b>Session 3</b>		
12:20-1:50 pm	<b>Chairpersons: Dr Mamatha Gowda, Dr Ruju Doshi, Dr Arati Singh, Dr Roonmoni Deka</b>	
12:20-12:42 pm	Craniofacial Anomaly: What to Expect and Document	Dr Reema Bhatt
12:42-1:05 pm	Interactive Case Based Discussion	Dr Shagun Aggarwal Dr K Sahithi Reddy Dr Parvathi Ravula
1:05-1:27 pm	Skeletal Anomaly: What to Expect and Document	Dr Krishna Gopal
1:27-1:50 pm	Interactive Case Based Discussion	Dr Gayatri Indla Dr Shagun Aggarwal Dr Geeta Kolar
1:50-2:50 pm	Lunch/ Poster Evaluation	
2:50-3:30 pm	Googly Session: Audience Driven <b>Expert:</b> Dr TLN Praveen, Dr Vandana Bansal	<b>Moderator:</b> Dr Navya KC, Dr Sushma M
3:30-4:30 pm	<b>Judges:</b> Dr Brynn Levy, Dr Ashwin Dalal, Dr Seetha Ramamurthy Pal, Dr Reema Bhatt, Dr Antoni Borrell	
3:30-4:30 pm	<b>Free Paper Presentations</b> (Each 3.5 minutes Presentation+1.5 minutes Discussion)	
4:30-4:50 pm	Tea Break	
<b>Session 4: Newer Technologies in Clinic</b>		
4:50-5:25 pm	<b>Chairpersons - Dr P Balamba, Dr Seetha Ramamurthy Pal, Dr Brynn Levy</b>	
4:50-5:05 pm	NIPT for Chromosomal Disorders	Dr Priya Kadam
5:05-5:25 pm	NIPT as a Contingent Screen: The Barcelona Model	Dr Antoni Borrell
5:25-6:20 pm	Dr IC Verma Memorial Kahoot Quiz <b>Experts:</b> Dr Ashok Khurana, Dr Ashwin Dalal, Dr Antoni Borrell	<b>Quiz masters:</b> Dr Priya Ranganath, Dr Sameer Bhatia <b>Moderators:</b> Dr Shagun Aggarwal, Dr Chinmayee Ratha
6:30 pm	Inauguration	
7:00 pm onwards	<b>Chief Guests:</b> Dr P Balamba, Dr Antoni Borrell, Dr Brynn Levy, Dr Ashok Khurana	
7:00 pm onwards	Gala Dinner and Cultural Program	

# 15<sup>th</sup> December, 2024

08:50-09:00 am	Welcome Welcome on behalf of ISPD	Dr Shagun Aggarwal Dr Mahesh Choolani
<b>Session 5: Solving Genetic Puzzles- A symphony of ATGC</b> <b>Chairpersons - Dr Geeta Kolar, Dr Sheetal Sharda</b>		
09:00-09:25 am	Basics of Genetics for Fetal Medicine Practitioner	Dr Ashwin Dalal
09:25-09:50 am	Cytogenetic Testing in Fetal Anomalies	Dr Brynn Levy
09:50-10:15 am	<b>Tea break</b>	
10:15-10:40 am	Buffet of Genetic Tests: Choosing the Best Fit	Dr Antoni Borrell
10:40-11:05 am	Exome Sequencing for Fetal Anomalies	Dr Brynn Levy
11:05-11:30 am	How to Optimize Genetic Referrals in Resource Restricted Settings	Dr Ashok Khurana
11:30-11:45 am	Interactive Audience Discussion	
<b>Chairpersons:</b> Dr Vandana Bansal, Dr Chinmayee Ratha, Dr Brynn Levy		
11:45-12:45 pm	<b>Panel Discussion:</b> Genetic Evaluation for Lethal fetal anomalies- All is not lost <b>Panelists:</b> Dr Aditya Kulkarni, Dr Vandana Chaddha, Dr Sheetal Sharda, Dr Gayatri V, Dr VVS Chandrasekharam	<b>Moderator:</b> Dr Sujatha Jagadeesh
12:45-1:00 pm	Interactive Audience Discussion	
1:00-2:00 pm	<b>Lunch/ Trade Partner Interaction/Poster viewing</b>	
<b>Session 6: The Next frontier in Fetal Medicine</b> <b>Chairpersons: Dr B Vijaya Lakshmi, Dr Ratna Dua Puri, Dr Brynn Levy</b>		
2:00-2:15 pm	Cell based NIPD for monogenic disorders- seeking new horizons	Dr Ida Vogel (Online)
2:15-2:30 pm	Fetal medicine as a gold mine of genetic discoveries	Dr Shagun Aggarwal
<b>Chairpersons:</b> Dr Antoni Borrell, Dr Vandana Chaddha, Dr Sheetal Sharda		
2:30-3:30 pm	<b>Panel Discussion:</b> Genetic Evaluation for Non Lethal fetal anomalies-Holding hand in uncertain terrain <b>Panelists:</b> Dr Srinivas Murukki, Dr Vandana Bansal, Dr Mamatha Gowda, Dr Arati Singh, Dr Manjula Rao, Dr Nitin Gupta	<b>Moderator:</b> Dr Ratna Dua Puri
3:30-3:45 pm	Interactive Audience Discussion	
<b>Session 7 : Professional Guidelines- Setting benchmarks for optimal clinical practice</b> <b>Chairpersons: Dr Ashok Khurana, Dr Manjula Rao, Dr Ashwin Dalal</b>		
3:45-4:05 pm	<b>Indian Guidelines for Reproductive testing</b> 1. Preconceptional Carrier Screening 2. Genome wide sequencing for fetal anomalies 3. Aneuploidy screening	Dr Ratna Dua Puri Dr Shagun Aggarwal
4:05-4:25 pm	<b>ISPD Guidelines for Reproductive Genetic Testing</b> 1. NIPT for Prenatal screening 2. Exome Sequencing for prenatal diagnosis	Dr Antoni Borrell
4:25-4:40 pm	Interactive Audience Discussion	
4:40-5:00 pm	<b>High Tea Break</b>	
5:00-5:20 pm	Valedictory	
5:20-5:30 pm	Vote of Thanks	Dr Shagun Aggarwal