



DHR Workshop on Medical Genetics
Applications of Genetics in Preconception, Prenatal and
Pediatric Care
(9th June- 4th July 2025)

Agenda

Date	Session-1	Session-2
09/06/2025 Monday	Registration and Breakfast (09.00 am-10.00 am) Welcome Address (10.00 am- 10.15 am) Dr. Geetanjali Sachdeva Director, (ICMR-NIRRH, Mumbai) Introduction to Workshop (10.15 am- 10.30 am) Dr. Shailesh Pande Head, Genetic Research Centre, (ICMR-NIRRH, Mumbai) Introduction of Participants (10.30 am- 11.00 am) Inaugural Talk (11.00 am- 11.30 am) Dr. M. J. Jassawala <i>Chief Guest</i> (Medical Director, Wadia Hospital, Mumbai) (11.30 am- 12.00 noon) Dr. Ullas Kolthur <i>Guest of Honor</i> (Director, CDFD, Hyderabad)	Lecture 1: (1.45pm-2.45 pm) Mechanisms that encode physiological plasticity & memory: from development to ageing Dr. Ullas Kolthur (Director, CDFD, Hyderabad) Tea Break (2.45 pm- 3.00 pm) Lecture 2: (3.00pm-5.30pm) Genetics in Medical Practice Dr. Shailesh Pande ICMR-NIRRH

	(12. 00 noon-12.10pm) Vote of Thanks (12.10 pm-12. 40 pm) Pretest	
Week 1		
FUNDAMENTALS OF CYTOGENETICS		
10/06/2025 Tuesday	Lecture 1: (9.15 am - 10.45 am) Cytogenetic Techniques, Chromosome Identification, and Introduction to ISCN Nomenclature Dr. Arundhati Athalye (Jaslok Hospital, Mumbai) Tea Break (10.45 am – 11.00 am) Lab Video: (11.00 am- 1.00 pm) Setting up a Karyotype culture, harvesting, staining/ banding, etc. Harsh / Juili (ICMR-NIRRH)	<u>GRC Lab</u> Lecture 1: (2.00 pm - 3.30 pm) Laboratory Genetics: Batch A (Juili) (2.00 pm- 3.30 pm) Karyotype culture planting Batch B (Harsh) Karyotype culture planting Tea Break (3.30 pm- 3.45 pm) Lecture 2: (3.45 pm- 5.30 pm) Chromosome Identification Dr. Shailesh Pande (ICMR-NIRRH)
11/06/2025 Wednesday	Lecture 1: (9.15 am – 10.45 am) Laboratory Aspects of Genomic Instability in Hematological Disorders Dr. V. Babu Rao (ICMR-NIIH) Tea Break (10.45 am - 11.00 am)	Lecture 1: (1.45 pm- 3.15 pm) Introduction to Florescent In-situ Hybridization (FISH) and Next Generation Cytogenomics -Its applications in Clinical Practice Dr. Usha Dutta (CDFD, Hyderabad)

	Lecture 2: (11.00 am-12.30pm) Laboratory aspect of Hematological Malignancies Dr. Shailesh Pande ICMR-NIRRH Discussion (12.30pm-1.00pm) Dr. Shailesh Pande ICMR-NIRRH	Laboratory Genetics: (3.15 pm- 6.00 pm) FISH Lab Video: (3.30 pm- 3.45 pm) Tea Break (3.45 pm- 4.00 pm) FISH Demo Day 1: (4.00 pm- 6.00 pm) Batch A (Juili/Chinna) Batch B (Harsh)
12/06/2025 Thursday	Lecture 1: (09.15 am – 10.15 am) Introduction to cytogenomic techniques Dr.Shyla Ravindran (ICMR-NIRRH) <u>Stem Cell</u> Demonstration: (10.15 am- 11.15 am) Microarray Dr.Shyla Ravindran (ICMR-NIRRH) Tea Break (11.15 am -11.30 am) Lecture 2: (11.30 am - 1.00 pm) Microarray technique and its applications Dr. Shailesh Pande (ICMR-NIRRH)	Lecture 1: (1.45 pm- 3.15 pm) GLP in a genetic lab and accreditations (NABL & CAP) Dr. Dhanlakshmi Shetty (ACTREC) Tea Break (3.15 pm- 3.30 pm) <u>GRC Lab</u> Laboratory Genetics: (3.30 pm- 6.00 pm) FISH Demo Day-2: Batch A (Chinna/Juili) Batch B (Harsh)

13/06/2025 Friday	<i>Conference Room (Online)</i> Lecture 1: (9.15 am- 10.45 am) Basics of molecular genetics, different types of PCR and various molecular techniques. <i>Dr. DVS Sudhakar</i> (ICMR-NARFBR) Tea Break (10.45 am -11.00 am) <i>GRC Lab</i> Lecture 2: (11.00 am - 01.00 pm) Laboratory Genetics: Harvesting and slide preparation <i>Harsh</i>	<i>GRC Lab</i> (1.45 pm- 3.30 pm) Laboratory Genetics: Staining, banding orientation to the automated Microscope <i>Harsh</i> (ICMR-NIRRCH) Tea Break (3.30 pm- 3.45 pm) Lab Visit (1st-6th Floor) (3.45 pm- 5.30 pm) Harsh/ Chinna (ICMR-NIRRCH)
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