

Genomics India

12 - 14 August, 2025
JN Tata Auditorium, IISc, Bengaluru

Theme
The Indian Genomics Journey

PROGRAM SCHEDULE

In association with



Organized By



Co-Organized By





12 - 14 August, 2025
JN Tata Auditorium,
IISc, Bengaluru

India's Premier Genomics Conference

Join us at GenomicsIndia Conference, GIC2025 as we unlock genomics potential for a more sustainable future. The three-day genomics conference is set to be a dynamic gathering, uniting key players from diverse sectors, including industry, academia, and research. This event is designed to serve as a knowledge-sharing hub, offering a platform for insightful discussions on the latest trends and breakthroughs in the field of genomics.

Throughout the conference, attendees can anticipate a deep dive into cutting-edge research that showcases the forefront of genomics technologies. The primary focus will be on disseminating groundbreaking discoveries and innovations in this rapidly evolving domain.

GIC 2025 promises an unparalleled opportunity for engagement & networking. Attendees will have the chance to connect with industry luminaries, visionaries from the academic sphere, as well as representatives from both startups & established profit and non-profit organizations including Mincorns, Soonicorn, Unicorns, Decacorns & Hectocorns within the biotech sector.

Indian Institute of Science, Genotypic Technology, Dhitiomics Technologies and QTLomics Technologies looks forward to welcoming you to this Gateway of "The Indian Genomics Journey"



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12th AUGUST PROGRAM



Hall A

NGS Analysis & Genome Informatics Program
7:30 AM - 5:30 PM



Main Hall - Mini Symposium

Biology in AI Era - A paradigm shift

Upskilling researcher investigators for the AI World
2:00 PM - 5:00 PM



Hall C - Mini Symposium

Think Tank: Workshops by Genomics & Allied
Technology Firms (Industry-led sessions)
2:00 PM - 5:00 PM



GIC 2025 - NGS PROGRAM (HALL A) Moderator: Dr Amol Date		
12 TH AUG	TOPIC	SPEAKER
7:30 AM	Registration - collect the badges at registration desk	
9:30 - 10:00 AM	Next-Generation Sequencing Analysis in the AI world Commander.ai NGS analysis using agentic ai	Dr Raja Mugasimangalam
10:00 - 11:00 AM	Basics of NGS Data Analysis and NGS data formats	Dr Meenal Vyas
11:00 - 11:30 AM	Tea Break	
11:30 - 12:30 PM	Basics of NGS Data Analysis Denovo assembly and Gene prediction	Mr Nihar Bachan Das
12:30 - 1:00 PM	Insights into Transcriptome and Small RNA data analysis	Ms Garima Sanoria
1.00 - 2:00 PM	Lunch	
2:00 - 2:30 PM	Single cell and direct RNA	Ms Garima Sanoria
2:30- 3:00 PM	Human genome variation from long reads	Mr Nihar Bachan Das
3:00 - 3:30 PM	Epigenetics	Dr Sudha Rao
3:30 - 4:00 PM	NGS For Biopharma and Vaccine Industry	Dr Amol Date
4:00 - 4:30 PM	Insights Into The Microbiome Analysis Using NGS Data	Dr Meenal Vyas
4:45 - 5:00 PM	Quiz and Awards	
5:00 - 5:30 PM	High Tea	
5:30 PM	INAUGURATION IN MAIN HALL	
	<p>Welcome address: Genotypic Technology and Indian Institute of Science</p> <p>Inaugural Dignitaries:</p> <ul style="list-style-type: none">Dr Piero Carninci - HUGO President (2025-2027)Prof. G. Rangarajan - Director, IIScProf Samir Brahmachari, Founder Director CSIR - IGIBDr Debnath Pal, CDS, IISc <p>Patron's Address: Prof Samir Brahmachari, Founder Director CSIR - IGIB</p> <p>GIC Evolution: Dr Raja Mugasimangalam, Founder & CEO Genotypic Technology</p> <p>Keynote Address by Chief Guest: Dr Rajesh S Gokhale, Secretary DBT</p> <p>Vote of thanks: Dr Sudha Rao, Co Founder and Executive Director, Genotypic Technology</p>	

GIC 2025: MAIN HALL - MINI SYMPOSIUM: BIOLOGY IN AI ERA - A PARADIGM SHIFT (2:00 - 5:00 PM) Upskilling Research Scientists for the AI World Conveners: Dr Raja Mugasimangalam, Dr Debnath Pal		
12 TH AUG	TOPIC	SPEAKER
1:00 PM	Registration - collect the badges at registration desk	
2:00 - 2:30 PM	Introduction to AI History and the future The paradigm shift	Dr Raja Mugasimangalam, <i>Genotypic Technology</i>
2:30 - 3:00 PM	From Pubmed search to Phd Thesis, AI tools and ethics, the changing senario's AI tools in scientific writing and publishing	Ashwin B.R Kumar, <i>Genotypic Technology</i>
3:00 - 3:15 PM	Agentic Model for data analysis (AI running programs and tasks on your computer)	Rahul Kumar, <i>Genotypic Technology</i>
3:15 - 4:00 PM	Democrticizing AI: Own you AI mini server RAG models for data mining scientific literature	Dr Debnath Pal, <i>IISc (Moderator)</i> Vicky Amar Daiya, <i>Genotypic Technology</i>
4:00 - 4:30 PM	Machine requirement for usage of AI	Dr Debnath Pal, <i>IISc</i>
4:30 - 5:00 PM	Panel session on “Navigating the AI Frontier: Ethics, Boundaries and Best Practices in Research”	Shekar Suman, <i>Biotecnika (Moderator)</i> Dr. Nihar Desai, <i>ARTPARK</i> Dr. Vishwanathan Bhaskar, <i>Madras Diabetes Research Foundation</i> Dr. Perisamy, <i>Unifab Technologies</i>
5:00 - 5:30 PM	High Tea	
	INAUGURATION IN MAIN HALL	
5:30 PM	Welcome address: Genotypic Technology and Indian Institute of Science Inaugural Dignitaries: <ul style="list-style-type: none">Dr Piero Carninci - HUGO President (2025-2027)Prof. G. Rangarajan - Director, IIScProf Samir Brahmachari, Founder Director CSIR - IGIBDr Debnath Pal, CDS, IISc Patron's Address: Prof Samir Brahmachari, Founder Director CSIR - IGIB GIC Evolution: Dr Raja Mugasimangalam, Founder & CEO Genotypic Technology Keynote Address by Chief Guest: Dr Rajesh S Gokhale, Secretary DBT Vote of thanks: Dr Sudha Rao, Co Founder and Executive Director, Genotypic Technology	

GIC 2025: HALL C (2:00 - 5:00 PM) THINK TANK: WORKSHOPS BY GENOMICS & ALLIED TECHNOLOGY FIRMS (INDUSTRY-LED SESSIONS) Co-ordinators: Dr Karthik, Aiyaz		
12 TH AUG	TOPIC	SPEAKER
1:00 PM	Registration - collect the badges at registration desk	
2:00 - 2:30 PM	Flexibility and High-Resolution Biology with 10x Genomics Single Cell and Spatial Applications	Mr Santosh Prasad <i>Applications Scientist, 10x Genomics</i>
2:30 – 3:00 PM	Live Demo: Overview of 10x Genomics Single Cell and Spatial Instruments	Mr Aravinda Lochan <i>Field Application Scientist, GeneX India Bioscience</i>
3:00 – 3:20 PM	Software Demo: Data Visualization and Analysis	Mr Santosh Prasad <i>Applications Scientist, 10x Genomics</i>
3:20 – 3:30 PM	Quiz by 10X Genomics	Dr Avid Hussain & Dr. Sailakshmi
3:30 - 4:15 PM	Accelerating Biomarker Breakthroughs: Advanced Genomics Workflows for Precision Medicine	Dr Kashyap Krishnasamy, <i>Spinco</i>
4:15 - 4:45 PM	Integrative Insights: The Power of Single cell Multi-Omics Biology	Dr Romsha Kumari, <i>BD Life Sciences</i>
4:45 - 5:00 PM	Advancing on Surepath – Agilent genomics solutions	Dr Sangeeta Tripathy , <i>Field Application Scientist, Labindia</i>
5:00 - 5:30 PM	High Tea	
	INAUGURATION IN MAIN HALL	
5:30 PM	<p>Welcome address: Genotypic Technology and Indian Institute of Science</p> <p>Inaugural Dignitaries:</p> <ul style="list-style-type: none">• Dr Piero Carninci - HUGO President (2025-2027)• Prof. G. Rangarajan - Director, IISc• Prof Samir Brahmachari, Founder Director CSIR - IGIB• Dr Debnath Pal, CDS, IISc <p>Patron's Address: Prof Samir Brahmachari, Founder Director CSIR - IGIB</p> <p>GIC Evolution: Dr Raja Mugasimangalam, Founder & CEO Genotypic Technology</p> <p>Keynote Address by Chief Guest: Dr Rajesh S Gokhale, Secretary DBT</p> <p>Vote of thanks: Dr Sudha Rao, Co Founder and Executive Director, Genotypic Technology</p>	



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Theme
The Indian Genomics Journey

13th AUGUST PROGRAM

→ Main Hall
8:00 AM - 7:00 PM

→ Hall A
11:00 AM - 7:00 PM

13 th AUGUST	MAIN HALL	HALL A
8:00 AM	Registrations	
9:00 - 10:35 AM	Session 1- GenomeIndia Project	XXXXXXXXXXXX
	Chair: Prof Samir K Brahmachari Founder Director CSIR - IGIB, Former Director General CSIR	
	GenomeIndia Project: A population genomic endeavor for public health Dr K Thangaraj, CSIR - CCMB	
	Whole Genome Sequencing Enables Discovery of Population-Specific Disease Susceptibilities Dr Bratati Kahali, CBR - IISc	
	Understanding the genetic architecture of non-syndromic autism spectrum disorder in India Dr Harsh Sheth, FRIGE Institute of Human Genetics	
	Enabling the responsible sharing of Biological Data: Indian Framework Dr Richi Mahajan, Department of Biotechnology	
10:35 - 10:50 AM	Tech Talk 1: Oxford Nanopore Technologies Clinical applications of ONT long read sequencing Dr Ahmad Tayoun, Al Jalila Children Hospital, Part of Dubai Health Corporation, Dubai UAE	
10:50 - 11:20 AM	Tea Break & Networking	
11:20 – 1:00 PM	Session 2 - Genomeinformatics - Insights into its database and applications	Session 3 - Microbial & Bacterial Genomics (MTB AMR, Bioremediation), Fungal Genomics (Pathogens & Beneficial)
	Chair and Speaker Genome inference using a pangenome reference Dr Chirag Jain, IISc	Chair: Dr Asif Mohmmmed - ICGEB
	GenomeIndia: From Population Diversity to Disease Burden in Mainland India Dr Chandrika Bhattacharyya, BRIC - NIBMG	Genomics in TB Diagnostics and Transmission Dr SivaKumar, NIRT Chennai
	Static Snapshots vs. Dynamic Landscapes: Rethinking RNA and Protein Function in the Genomic Era Dr Debnath Pal, IISc	From soil to society – evolutionary dynamics and antimicrobial resistance of enteric bacteria in the environment Dr Niyaz Ahmed, UoH
	GenomeKlinik- A portal with Web-GMSECT for Structural Variation Extraction & Annotation Dr Abhishek Narain Singh, Abioteqnet	Sequence, Detect , Defend: Rewriting the Playbook of Infectious Disease Management Dr Sandeep Reddy - Ramaiah Medical College
	From Static Knowledge Graphs to Cognitive Biointelligence: Enabling Dynamic, Context-Aware Discovery in Genomics and Precision Medicine Dr Prashanth S.R, EQ.ai	Dynamic 3D interactions, replication timing and repressive marks of heterochromatic domains ensure cell cycle progression and genome stability in Cryptococcus neoformans Dr Kaustuv Sanyal, Bose Institute
1:00 – 1:15 PM	Tech Talk 2 - 10X genomics New Insights in Single Cell and Spatial Exploration Dr Brett Kennedy - Market Development Manager	Tech Talk 3: New England Biolabs Next-Gen Epigenomics: Unlocking DNA Methylation with Enzymatic Methylation Dr Selva Ramasubramanian - Senior Field Application Scientist
1:15 – 2:00 PM	Lunch + Poster & Networking	

13 TH AUGUST	MAIN HALL	HALL A
2:00 – 3:45 PM	Session - 4 Wellness and Longetivity Genomics	Session - 5 Multiomics
	Chair: Dr Royana Singh - BHU	Chair: Dr Dharmalingam - AMRF
	Charting India’s Genetic and Phenotypic Variability: The Phenome India Initiative Dr Shantanu Sengupta, CSIR - IGIB	Structure-guided medical genomics Dr Lipi Thukral, CSIR - IGIB
	An Ayurgenomics based approach to the Missing Link in Rare Disease Classification Dr Mitali Mukerji - IIT Jodhpur	An Integrated Multi-Omics and AI/ML Framework for Exploring Marine Resources: From Genomics to Translational Applications Dr Debasis Dash, DBT - ILS
	Integrating Omics & AI for Ayurveda 3.0 Dr Bala Pesala, Ayur.ai	Personalized Genomic Drivers of Rheumatoid Arthritis: Precision Targets and Potential Opportunities for Therapy Dr Nagasuma Chandra - IISc
	Climate Change and Epigenome: Unravelling Impacts on Maternal-Fetal Health and Longevity Dr Srimonta Gayen, IISc	Agentic AI in Imageomics Dr Shoba Vijayaraghavan - Accenture
	Role of genetic variants in precision medicine for cardiovascular wellness and health Dr A K Munirajan - University of Madras	Tech Talk 4: Somalogic Explore the future of Precision Proteomics with Somascan Technology Dr Caroline Chan - Customer Solutions Manager
3:45 – 5:00 PM	Tea Break, Poster Presentation & Networking	
5:00 - 6:40 PM	Session 6 - Special Initiatives (Pangenomes, Metagenomics, Immunology)	Session 7 - Special Session: Digital Health and AI
	Chair: Dr Deepti Dileep Deobagkar - SPPU	Chair: Dr Sharad Sharma, iSpirit
	Genomics for conserving endangered species Dr Uma Ramakrishnan, NCBS	Dr Raghu Dharmaraju, ARTPARK
	sncRNAs as Biomarker of Tuberculosis Diagnosis Dr Asif Mohmmed, ICGEB	Trajectory of digital health adoption pre ABDM and post ABDM Dr Siddharatha Bhattacharya, NATHealth
	Supramolecular attack particles as delivery vehicles: Bridging Immunology and Genomic medicine Dr Ashwin Kumar Jainarayanan, Granza Bio	Affordable and Accurate Next Gen Sequencing using AI & Molecular Computing Dr Manoj Gopalkrishnan, Algorithmic Biologics
	Early DNA Methylation Predictors of Type 2 Diabetes Mellitus in Normoglycemic Adults: Insights from a Six-Year Prospective Cohort Study Dr Abdul Jaleel, RGCB	The Platform Imperative: Building a Trustworthy AI Ecosystem in Digital Health Dr Himanshu Makkar, CARPL.ai
	Tech Talk 5: Genome Valley/GeneFirst ATOM-Seq: A High-Sensitivity Ligation-Free Library Preparation Chemistry for Cell-Free and FFPE Samples Dr Thomas Dunwell - Head of Research And Development	Advancing Precision Medicine in India Dr Parima Desai - IQVIA



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14th AUGUST PROGRAM

→ Main Hall
9:00 AM - 6:45 PM

→ Hall A
9:00 AM - 3:30 PM

14 TH AUGUST	MAIN HALL	HALL A
9:00 - 10:45 AM	Session 8- Omics For Deeper Biological Insights	Session 9 - Plant Genomics (Rice, Cotton, etc.)
	Chair: Dr Ashis Kumar Das - BITS, Pilani	Chair: Dr Raja Mugasimangalam - Genotypic Technology
	<i>Decoding the Hidden Secrets of Chemical Space using AI</i> Dr Gaurav Ahuja - IIITD	<i>Near telomere to telomere (T2T) genome assembly of the medicinal plant Nyctanthes arbor-tristis (L) provides insights into ursolic acid biosynthesis</i> Dr Jogeswar Panigrahi - Berhampur University
	<i>Spatial transcriptomic analysis reveals age-related alterations in the spatial organization of cell types within the mouse olfactory bulb</i> Dr Sanjeev Galande - SNU	<i>Legume Microbiome Dynamics: Insights from Multi-Omics Approaches and Beyond</i> Dr Mukesh Jain - JNU
	<i>Unveiling Rare Microbial Taxa from Deep-Sea Ecosystems through Single-Cell Genomics</i> Dr Sushmitha T J - NIOT	<i>The Invasive Plant Rhizo-Microbiome</i> Dr Gitanjali Yadav - NIPGR
	<i>Transcriptionally Active Microbes (TAMs)-Resident Microbes-Disease Severity: A Tale of Tales</i> Dr Rajesh Pandey CSIR-IGIB	<i>Genomics Assisted Plant Breeding</i> Dr Sunil Kumar - Corteva
10:45 - 11:15 AM	Tea Break	
11:15 - 12:00 PM	Keynote Talk: <i>Genomic regulation and functional aspects of long non-coding RNAs</i> Dr Piero Carninci - RIKEN Center for Integrative Medical Sciences, Japan	XXXXXXXXXXXX
12:00- 12:15 PM	Tech Talk 7: Spinco Dr Cong Luan Nguyen, Business Manager - Vizgen	Session 11 - Genomics Research
12:15- 1:00 PM	Session 10 - Panel: Precision Oncology - clinical genomics, Indian variations observed and implications	Chair: Dr Sanjeev Jain, NIMHANS
	Chair: Dr Sudha Rao, Genotypic Technology	<i>Theileria annulata Mimics Cancer by Hijacking Host ERK1/2 Phosphorylation Networks: Multi-Omics Reveals Therapeutic Targets</i> Dr Paresh Sharma - NIAB
	<ul style="list-style-type: none">Dr Mayur Parihar - TMC KolkataDr Ramesh Hariharan - Strand Life SciencesDr S Mahalingam - IIT MadrasDr Paturu Kondaiah - IISc	<i>Genomics approaches for surveillance of pathogens affecting dairy cattle</i> Dr Dhanasekaran Shanmugam - NCL pune
		<i>Comparative metageomic analysis of upper respiratory systems microbiome</i> Dr Indranil Chattopadhyay - CUTN
1:00 - 2:00PM	Lunch + Poster & Networking	

14 TH AUGUST	MAIN HALL	HALL A
2:00 TO 3:30 PM	Session 12 - Big Data Analytics and AI	Session 13 - Sequence to functions
	Chair: Dr K V S Hari - CBR, IISc	Chair: Dr Lakshmi B R, MDCRC
	<i>Faster and Cheaper AI-based Solutions for Genomics</i> Dr Sanchit Misra - Intel Lab, Bengaluru	<i>Simple Sequence Repeats: functionally conserved constituents of genomes</i> Dr Rakesh Mishra - TIGS
	<i>Breast Cancer Research in the Age of AI and Agents</i> Dr Debarka Sengupta - IIITD	<i>WGCNA uncovers molecular markers of insulin resistance in children with type 1 diabetes</i> Dr Satyajeet Khare - Symbiosis
	<i>Models, Networks & AI: A Trifecta Empowering Big Data Analytics in (Meta) Genomics</i> Dr Karthik Raman - IITM	<i>DNA Repeat Instability in Neuropsychiatric Illness</i> Dr Meera Purushottam - NIMHANS
	<i>The role of deep-learning in unraveling transcriptional regulation in plant genomes</i> Dr Ravi Shankar - IHBT	<i>Soma-to-germline miRNA inheritance and intergenerational stress resilience</i> Dr Meetali Singh - IISc
3:30 TO 4:00 PM	Tea Break	
MAIN HALL		
4:00 TO 5:30 PM	Session 14 - RNA Biology	
	Chair: Dr Sanjeev Galande - SNU	
	<i>The secrets of the dark genome: noncoding RNA component</i> Dr Kumaravel Somasundaram - IISc	
	<i>Dissecting the role of Polyadenylation machinery in Stem Cell maintenance and differentiation.</i> Dr Dasaradhi Palakodeti - inStem	
	<i>RNA methylome of clinical Plasmodial isolates</i> Dr Ashis Kumar Das - BITS Pilani	
	<i>Reprogramming Mycobacterial metabolism: Transcriptomic Insights into Drug Targeting and Vaccine Innovation for TB</i> Dr Ruchi Jain Dey, BITS Hyderabad	
5:30 to 6:15 PM	Valedictory Session Chair: Dr Sudha Rao, Genotypic Technology <i>GenomeIndia and beyond: global perspectives and national priorities</i> Dr LS Shashidhara, NCBS	
6:15 to 6:45 PM	Valedictory Address: Dr LS Shashidhara, Director - NCBS Parting thoughts: Dr Debnath Pal, CDS, IISc Awards Distribution: Dr Piero Carninci - RIKEN Center for Integrative Medical Sciences, Japan Dignitaries: <ul style="list-style-type: none">Prof Samir Brahmachari, Founder Director CSIR - IGIBDr Raja Mugasimangalam, Founder & CEO Genotypic TechnologyDr Sudha Rao, Co Founder and Executive Director, Genotypic Technology	

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