



ICGCW 2025

**7th INDIAN CANCER GENETICS CONFERENCE & WORKSHOP
Tata Memorial Hospital & ACTREC, Mumbai, India**



ICGC2025 CONFERENCE TMH, PAREL: 22-23 Feb '25 (Saturday & Sunday)

**THREE PRECONFERENCE
HANDS ON WORKSHOPS
20-21st Feb 2025**

- Genetic Counselling of Common Hereditary Cancers: TMH, Mumbai
- NGS Wetlab, DryLab & Reporting: ACTREC, Navi Mumbai
- Functional Genomics & Tissue Culture, ACTREC, Navi Mumbai

Deep Dive To know More about Less Known Genes

My
Rare Gene Diary

- Should Germline or Somatic report include these genes / variants ??
- How should they be described ?
- How to act (or not) on these ?

Navigating The Rising Tide of VUS

Registration Link
for a Deep Dive to learn
together & reach consensus

ALL ABOUT LESS KNOWN or MODERATE RISK GENES, HYPOMORPHIC ALLELES & VUS

TMC Cancer Genetics Unit has CURATED germline genotype & phenotype data of 10,000+ cases - not only well characterised genes like BRCA1/2, MLH1, MSH2, TP53, PALB2) but also Less known genes (CHEK2, BRIP1, RAD51, CDH1, MSH6, PMS2, SDH, & many more We have reclassified hundreds of ClinVar VUS as Likely Benign & a few as Likely Pathogenic

Registration fee (with 18% GST) *Will be Half for Trainees & GCs & *Double for Industry delegates	Early Bird 31-12.2024	Regular 31-1-2025	SPOT REG Feb 2025
Conference Only	6000	7500	9000
Conference + GC Workshop	8000	9500	12000
Conference + 1 Lab Workshop NGS or Functional Genomics	10000	12000	If available

DATES TO REMEMBER

→ **EARLY BIRD: 31/12/2024**

→ **ABSTRACT: 05/02/2025**

Mail 1 page PDF abstract to

icgcw.tmc@gmail.com

Best Paper Award for

One abstract each in

- Clinical Genetics
- Genetic Counselling
- Molecular Genetics

**Abstracts eligible for fee waiver

**May Request Reg Fee Refund for abstract with Genotype-Phenotype description of >10 cases of less known genes or VUS

<< CLICK TO REGISTER >>

Email icgcw.tmc@gmail.com

Phone +91-22-27405000 ext. 5318

Mobile: +91-8433733212

Registration Link: <https://forms.gle/5H6csUwmQ1NwYUx5>

PATRON
Prof. Sudeep Gupta

CHAIRPERSON
Prof. Rajiv Sarin

ORGANIZING SECRETARY
Dr Poonam Gera

TREASURER
Dr Somya Srivastava

Less Known or Moderate Risk Genes, Hypomorphic Alleles & VUS

- *Why are they tested in the first place?*
- *Should they be in the report & how should they be described?*
- *Genotype-Phenotype uncertainty of these genes or variants*
- *Family & functional studies to characterise these variants*
- *Pitfalls in ignoring or acting upon these genes / variants*
- *My RARE GENE DIARY of Low to Moderate Cancer Risk Genes*

Three Pre Conference Workshops

1) **CANCER GENETIC COUNSELLING**

- *Genetic counselling overview*
- *Drawing informative complex pedigrees*
- *Psychosocial issues in genetic counselling*
- *Counselling for VUS & Moderate penetrance genes*
- *Counselling for HBOC, Lynch, Li-Fraumeni, NF, FAP, MEN2, Cowden, RB1, Dicer, WT1 & other syndromes*
- *Prenatal & Pre-Implantation genetic testing*
- *Case based discussions & role plays*

Only 40
participants

2) **NGS WET LAB, DRY LAB & REPORTING**

- *Library prep - Targeted Panel & Exome*
- *Setting up NGS run on MiSeq & NextSeq*
- *Bioinformatics - fastq to vcf, genomic databases*
- *Variant annotation, clinical report drafting on ACMG guidelines. Case based discussions on imp. aspects*
- *Sanger sequencing, Long Range PCR & Digital MLPA*

Only 24
participants

3) **FUNCTIONAL GENOMICS & TISSUE CULTURE**

- *Functional Genomics Overview*
- *Mammalian Cell Culture Techniques*
- *Gene Editing Technologies - CRISPR/Cas9*
- *Functional Assays in Tissue Culture*
- *DNA Damage Repair and Genomic Integrity*
- *Apoptosis and Cell Survival Assays*

Only 14
participants

Pre Conference Workshop 1

Cancer Genetic Counselling in Practice

(TMH)

Thursday & Friday: 20th & 21st February, 2025
Venue: Choksi Auditorium, Tata Memorial Hospital, Parel, Mumbai

Who should attend: Genetic Counsellors, Oncologists, Gynecologists, Preventive Medicine

Faculty: Rajiv Sarin, Somya Srivastava, Neena Bhatnagar, Deepali Kapoor, Aparna Dhar, Deepanjana Dutta, Yoon Sook Yee

Instructors: TMC Clinical Genetic & Counselling Team

Format: Faculty Talks, Case Based Interactive Discussions & Role Plays

Day 1 (10 am - 6:00 pm)

1. **Overview of Cancer Epidemiology, risk factors & Cancer Genetics:** Risk factors for cancers, Global burden of Cancer & Hereditary Cancers
2. **Cancer Genetic Counselling in Indian Practice Setting & Barriers**
3. **Taking Personal & Family history, Phenotyping, Syndromic Diagnosis & drawing complex pedigrees**
4. **Navigating Medical Records of relevance and Verbal Autopsy techniques for cancer**
5. **Knudson's model for suspecting inherited predisposition to cancer:** Concept and case scenarios
6. **Choosing the right test and panel- Germline, Somatic or Both and their Sequence**
7. **Do's & Don'ts in Pretest and Post Test counselling:** Theoretical framework and real life scenarios
8. **Minimizing Pre-analytical errors, Consents & disclaimers:** Systematic approach to spot the red flags.
9. **Navigating through Genomic Databases to improve reporting and improve public health**
10. **Interpreting Genetic Test Reports**
11. **Dealing with VUS in the Clinic**

Day 2 (9 am - 5:30 pm)

1. **HBOC syndrome, BRCA1/2 & other HRR Genes**
2. **Lynch Syndrome, MMR Genes**
3. **Li-Fraumeni Syndrome, TP53**
4. **MEN1, MEN2 & PPGL syndromes**
5. **NF1 & NF2 Syndrome**
6. **Cowden & Peutz Jegher Syndrome**
7. **DICER, WAGR and other syndromes, genes**
8. **Screening / Preventive Surgery for Ovary & Endometrial Cancer Risk**
9. **Screening / Preventive Surgery for Breast Cancer Risk**
10. **Chemoprevention, Endoscopic management & Surgical Prevention of colorectal cancer risk**
11. **Reporting & counseling for moderate penetrance genes**
12. **Ethical Legal and Psychosocial Issues in Genetic Counselling**
13. **Feedback, Post Workshop Evaluation & Group Photo**

Pre Conference Workshop 2

NGS & Digital MLPA - Wet Lab, Dry Lab & Reporting (ACTREC)

Thursday & Friday: 20th & 21st February, 2025
Venue: Genomics Lab, CRI, ACTREC, Kharghar, Navi Mumbai

Who should attend: Genome analysts, Molecular Biologists, Molecular Pathologists, Clinicians, Genetic Counsellors, PhD students

Faculty: Rajiv Sarin, Poonam Gera, Somya Srivastava, Nikhil Gadewal

Instructors: TMC Genomics Lab & Reporting Team

Format: Faculty Talks, NGS Wet Lab, Sanger / MLPA Overview & Brief Demonstration, Interrogating Database & Drafting Reports, Case Based Interactive Discussions & Troubleshooting [BRING YOUR LAPTOPS, IF POSSIBLE]

Day 1 (10 am - 6:30 pm)

1. **Overview** of somatic & Germline testing & common hereditary cancer syndrome
2. **DNA extraction on Semi-Automated platforms & QC**
3. **NGS Hands-on workshop (in 2 batches)**
4. **Primer Designing & Troubleshooting for PCR**
5. **MLPA (including Digital MLPA):** Principles, steps & report analysis
6. **Sanger Sequencing:** Principle, steps, run set up demo and report analysis
7. **Bioinformatic pipelines**
8. **Population & disease database & resources used for variant classification**

Day 2 (9 am - 5:30 pm)

1. **Sequencing Outputs, QA & QC**
2. **ACMG Classification:** Applying various criteria for variant classification & reporting
3. **Variant interpretation & Reporting with Sophia DDM (Demo including CNV analysis)**
4. **NGS Run Set up, Sequencing Methods & Illumina platforms**
5. **Interesting & informative cases:** Variant Analysis, Interpretation, Clinical correlation
6. **Report Analysis in clinics:** Tips & tricks on fingertips
7. **Feedback, Post Workshop Evaluation & Group Photo**

Pre Conference Workshop 3

Functional Genomics, Tissue Culture & CRISPR (ACTREC)

Thursday & Friday: 20th & 21st February, 2025
Venue: Sarin Lab & Hasan Lab, CRI, ACTREC, Kharghar, Navi Mumbai

Who should attend: Molecular Biologists, PhD students and Post Docs & Scientists

Faculty: Rajiv Sarin, Syed Hasan, Ashwin Kotnis, Poonam Gera, Jasoda Parmar

Instructors: Amartya Chakraborty, Om Yadav & Neha Gupta & Anup Jha

Format: Faculty Talks, Wet Lab techniques and Demonstration,

Day 1 (9:30 am - 6:00 pm)

1. Introduction to Functional Genomics: (Talk - Dr Ashwin Kotnis)

Overview of functional genomics, its role in understanding gene function, and how cell culture models like LCLs contribute to this research.

2. Mammalian Cell Culture Techniques:

Key techniques in culturing and maintaining mammalian cells (including LCLs, PBMCs)

3. Functional Assays in Mammalian Cell Culture:

a. Cell Proliferation Assay:

Measuring cell growth and division in response to gene modifications.

b. Cell Migration Assay:

Investigating how gene modifications impact cellular motility.

4. DNA Damage Repair and Genomic Integrity:

Molecular techniques for studying DNA damage response in cell culture models.

Day 2 (9:30 am - 6:00 pm)

1. CRISPR in Gene Editing: An Introduction to Its Applications: (Talk - Dr Syed Hasan)

In-depth discussion on CRISPR/Cas9 applications in LCLs & other tissue culture systems for functional genomics. Exploring genetic modifications, gene knockouts, and gene overexpression techniques to study gene function

2. Gene Editing Technologies - CRISPR/Cas9:

- | | |
|--|--|
| a. Designing the Guide RNA (sgRNA) | b. Vector digestion and gel extraction |
| c. Annealing of sgRNA Oligonucleotides | d. Ligation |
| e. Plasmid Isolation | f. Cell Transfection |
| g. Targeted DNA Cleavage | h. Validation of edits. |

3. Apoptosis Assay and Cell Survival:

Measuring apoptosis in response to genetic modifications using functional assays

4. Troubleshooting and Discussion.

5. Feedback, Post Workshop Evaluation & Group Photo

7th ICGC 2025 CONFERENCE, TMH, PAREL, MUMBAI: 22-23 Feb 2025

Full scientific programme on following page

DAY 1 ICGCW Conference: 22nd FEBRUARY 2025 (SATURDAY)

9:00 - 10:00	Registration & Breakfast	
10:00 - 10:15	Recap of NGS workshops	Poonam Gera
10:15 - 10:30	Recap of GC workshops	Aparna Dhar
10:30 - 10:40	Recap of Functional Genomics workshops	Ashwin Kotnis
10:40 - 11:10	Keynote: Less Known or Intermediate risk Genes & VUS: Perils in ignoring them or acting upon them	Rajiv Sarin
11:10 - 11:30	Prenatal Cancer Genetics for less known genes	Somya Srivastava
11:30 - 11:55	BRIP1 & BARD1, ABRAXAS & CDK12	CGC Team & Prabhat Bhargava
11:55 - 12:20	MRN Complex: MRE11, RAD50, NBN Genes	CGC Team & Ashwin Kotnis
12:20- 12:45	APC - FAP & AFAP syndrome	CGC Team & Rajiv Sarin
12:45 - 1:35	LUNCH & Poster Viewing	
1:35- 2:00	Rare Polyposis Genes: MUTYH, SMAD4, BMPR1A, NTHL, POLD1/E & GREM1	Team CGC & Nikhat Khan
2:00 - 2:25	EPCAM, MSH6, PMS2, MSH3, MLH3	Team CGC & Aparna Dhar
2:25 - 3:00	Panel Discussion: Screening & Risk Reducing Salpingo-oophorectomy or Hysterectomy for Intermediate Risk Genes & VUS	Rajiv Sarin (Moderator), Ranjit Manchanda, Basumita Chakraborti, Rahul Roy Chowdhury, Sneha Raj, Neena Bhatnagar, Aparna Dhar
3:00 - 3:20	EGFR,HOXB13,CDKN2A	CGC Team & Somya Srivastava
3:20 - 3:40	PTEN & STK11 & other Hamartoma genes	CGC Team & Somya Srivastava
3:40 - 4:00	TEA BREAK	
4:00 - 4:15	PALB2	Team CGC & Jaya Ghosh
4:15 - 4:30	ATM	Team CGC & Mansi Munshi
4:30 -4.45	CHEK2	Team CGC & Poonam Gera
4:45- 5:25	Panel Discussion: PARPi in non-BRCA HRR pathway mutated cancers (Ovary, Breast, Prostate & Pancreas)	Akhil Kapoor (Moderator), Amit Joshi, Asif Shaikh, Raja Pramanik, Sudeep Gupta, Seema Gulia, Shona Nag, R. Sarin
6:30 PM - 11 PM Sunset Banquet Dinner at Hotel Marine Plaza, Marine Drive		

DAY 2 ICGCW Conference: 23rd FEBRUARY 2025 (SUNDAY)

8:15 - 8:50	Breakfast	
8:50 - 9:15	Democratizing data driven genomic medicine: The SOPHiA Genetics approach	Giorgia Riboldi-Tunncliffe
9:15 - 9:35	TSC1 &2, VHL	Team CGC & Archya Dasgupta
9:35 - 10:00	Hypomorphic Alleles & VUS in High Penetrance Genes	Rajiv Sarin
10:00 - 10:25	Rare Renal Ca Gene (FH, FLCN, MET, BAP1, WT1)	Team CGC & Amit Joshi
10:25 - 10:45	SMARCA4,SMARCB1,SMARCE, DICER1	Team CGC & Rajiv Sarin
10:45 - 11:00	Leukemia Predisposition Genes (except TP53 & CMMRD)	Team CGC & Minu Singh
11:00 - 11:20	Tea Break	
11:20 - 11:50	Keynote: Precision Oncology at Crossroads	Kumar Prabhash
11:50 - 12:10	NF1/NF2 & LZTR1	Team CGC & Jayant Goda Sastri
12:10 - 12:30	RET, MEN1 & CDKN1B	Team CGC & Anuja Deshmukh
12:30 - 12:55	PPGL genes (SDHA/B,C,D,FA2, Max, MDH2, CDC73)	Team CGC & Nalini Shah
12:55 - 1:25	Panel Discussion: Spectrum & Burden of Childhood Cancer Predisposition Syndromes: The way forward	Rajiv Sarin (Moderator), Badira CP, Maya Prasad, Archya Dasgupta, Richa Jain, Sangeeta Mudaliyar, Balaji TK
1:25 - 2:15	LUNCH & Poster Viewing	
2:15 - 2:35	RAD51B, RAD51C, RAD51D, XRCC2 & 3	Team CGC & Amrit Kaler
2:35 - 2:55	CDH1 & CTNNA1	CGC Team & Rajiv Sarin
2:55 - 3:15	TP53	CGC Team & Rima Pathak
3.15 -3.55	Panel Discussion: Prophylactic Bilateral / Contralateral Mastectomy for Intermediate Penetrance Genes	Amar Deshpande (Moderator), Shalaka Joshi, Nita Nair, Rahul Agarwal, Rajiv Sarin
3:25 - 4:15	Best Paper Session	
4:15 - 4:45	Discussion & Consensus	
4.45-5.00	Vote of Thanks & Awards	

FACULTY LIST 7th ICGCW

Faculty from TMH & ACTREC, Mumbai	Faculty from other Centres in India & International Faculty
<i>Amar Deshpande, Breast Surgical Oncologist</i>	<i>Akhil Kapoor, Medical Oncologist, MPMMC, TMC, Varanasi</i>
<i>Amit Joshi, Medical Oncologist</i>	<i>Amrit Kaler, Molecular Pathologist, KDAH, Mumbai</i>
<i>Anuja Deshmukh, H&N Surgical Oncologist</i>	<i>Aparna Dhar, Cancer Genetics & Precision Oncology, MAX Hosp, Delhi</i>
<i>Archya Dasgupta, Radiation Oncologist</i>	<i>Asif Shaikh, Medical Oncologist, HOC, Vedanta, Ahmedabad</i>
<i>Badira CP, Pediatric Oncologist</i>	<i>Ashwin Kotnis, Professor, Biochemistry, AIIMS, Bhopal</i>
<i>Jaya Ghosh, Medical Oncologist</i>	<i>Balaji TK, Pediatric Oncologist, Cancer Institute, Adyar, Chennai</i>
<i>Jayant Goda Sastri, Radiation Oncologist</i>	<i>Basumita Chakraborti, Gynaec Surgical Oncologist, TMC, Kolkata</i>
<i>Kumar Prabhash, Medical Oncologist</i>	<i>Dipanjana Dutta, Medical Genetics & Counselling, Kolkata</i>
<i>Maya Prasad, Pediatric Oncologist</i>	<i>Mansi Munshi, Radiation Oncologist, Ruby Hall Clinic, Pune</i>
<i>Nikhil Gadewal, Bioinformatician</i>	<i>Minu Singh, Molecular Genetics, PGIMER, Chandigarh</i>
<i>Poonam Gera, Molecular Pathologist</i>	<i>Nalini Shah, Clinical Endocrinologist, KEM Hospital</i>
<i>Prabhat Bhargava, Medical Oncologist</i>	<i>Neena Bhatnagar, Senior Genetic Counsellor</i>
<i>Rajiv Sarin, Radiation Oncologist & Cancer Geneticist</i>	<i>Nikhat Khan, Molecular Geneticist & Pharmacogenomics, Mumbai</i>
<i>Rima Pathak, Radiation Oncologist</i>	<i>Nita Nair, Breast Surgeon, Apollo Hospital, Mumbai</i>
<i>Shalaka Joshi, Breast Surgical Oncologist</i>	<i>Rahul Agarwal, Surgical Oncologist, NSCB Cancer Centre, Kolkata</i>
<i>Sneha Raj, Gynaec Surgical Oncologist</i>	<i>Rahul Roy Chowdhury, Gynaec Surgical Oncologist, SGCC&RI, Kolkata</i>
<i>Somya Srivastava, Medical Geneticist</i>	<i>Raja Pramanik, Medical Oncologist, AIIMS, Delhi</i>
<i>Sudeep Gupta, Medical Oncologist</i>	<i>Ranjit Manchanda, Gynaec Surgical Oncologist, QMUL, London, UK</i>
<i>Syed Hasan, Scientist & PI</i>	<i>Richa Jain, Pediatric Oncologist, PGIMER, Chandigarh</i>
	<i>Sangeeta Mudaliyar, Pediatric Oncologist, BJ Wadia Hospital, Mumbai</i>
	<i>Seema Gulia, Medical Oncologist, HBBCRCH, TMC, Punjab</i>
	<i>Shona Nag, Medical Oncologist, Sahyadri Hospital, Pune</i>
	<i>Yoon Sook-Yee, Cancer Genetic Counsellor, Kuala Lumpur, Malaysia</i>

WORKSHOP INSTRUCTORS

NGS WET LAB, DRY LAB, SANGER, DIGITAL MLPA & REPORTING

ACTREC Cancer Genetics & Genomics Lab: Jayakrishnan JT, Sharda Haralkar, Naresh Mahida, Varsha Jadhav, Parag Madankar, Anmol Singh, Vedika Divekar

Industry partners: SOPHiA & Genique: Sudeesh Karumathil, Mandar Ankolkar; Premas Life Sciences: Seram Anil Singh; Thermo Fisher Scientific: Dheeraj Chaudhari, Sachin Sathe.

GENETIC COUNSELLING

Vishala Varghese, Gouri Pandit, Vandana Kembhavi, Sindhura Gopinath, Anjana Anoop, Judith Talker, Sabhya Agarwal, Rashi Verenker, Madhura Pathak, Susmitha Billapati, Gopa Boliya, Aanchal Pandey, Thorvi Vaity, Archi Rungta, Akanksha Angre, Hashime Ismail, Sharmishtha Bhattacharya

FUNCTIONAL GENOMICS, TISSUE CULTURE & CRISPR

Jasoda Parmar, Amartya Chakraborty, Om Yadav, Neha Gupta & Anup Jha

VOLUNTEERS

Priyanka Kapa, Anamika Chain, Janvi Bhatankar, Siddhi Gosavi, Srushti Uthale, Gauri Akhare, Srushti Vinerkar, Siddhi Jadhav, Hadrian Xavier, Rajesh Sawant & Kavita Bhise

SOCIAL MEDIA COORDINATOR: Payal Jobanputra

<https://www.linkedin.com/company/106582056/admin/dashboard/>

<https://www.instagram.com/cancergeneticsclinic?igsh=b3lxZ3ZrcmFrZ2dy>

PATRON

Prof. Sudeep Gupta

CHAIRPERSON

Prof. Rajiv Sarin

ORG. SECRETARY

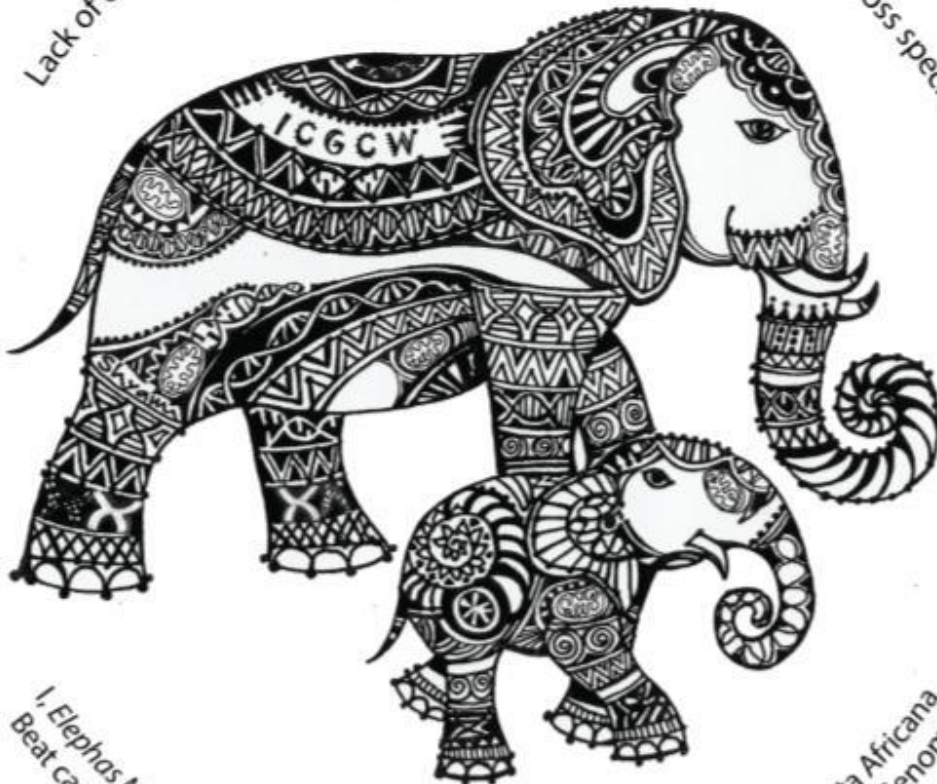
Dr Poonam Gera

TREASURER

Dr Somya Srivastava

Peto's Paradox

Lack of correlation between lifespan, body size, and cancer risk across species



! *Elephas Maximus* - The Asian Elephant & my African Cousin - *Loxodonta Africana*
Beat cancer risk as we have 20 copies of **The TP53 gene** - Guardian of the Genome
And also because we love fibre rich food & we DO NOT smoke!