

37th IACR Convention

From Cancer Biology to Precision Oncology: Challenges and Considerations

*Jointly Organized by Indian Association of Cancer Research &
Bose Institute, National Institute of Biomedical Genomics, Indian Statistical
Institute, Indian Institute of Chemical Biology, IIT-KGP, IPGMR, Saha Institute of
Nuclear Physics, IISER-Kolkata, Chittaranjan National Cancer Institute, Saroj
Gupta Cancer Centre, Burdwan University, University of Calcutta*

*23rd- 25th February, 2018,
Bose Institute, Unified Academic Campus, EN block, Salt Lake, Kolkata*

Programme

23rd February, 2018

08.30 am-09.30 am

Registration

09.30 am-10.00 am

Inauguration (Auditorium)

SESSION 1

Chair: Prof. Partha P. Majumder

10:00am - 11:00 am

**IACR Oration & Institute Day Address of the National Institute of
Biomedical Genomics, Kalyani**

Using Genomics to Inform Care of Patients with Cancer

Peter Campbell

11:00am-11:30am

Tea Break

SESSION 2

Chair: Prof. Siddhartha Roy and Prof. Samit Chattopadhyay

11:30am – 11:50am

*INOVATe: a step closer to precision treatment for women with
epithelial ovarian cancer*

Anna deFazio

11:50am -12:10 pm *Genetic landscape of Indian gliomas: Defective neuroactive ligand-receptor interaction pathway identifies glioblastoma with poor survival*
Kumaravel Somasundaram

12:10pm-12:30pm *Axonal Guidance Proteins in Tumorigenesis: Role of Genetic Status of KRAS and TGF- β 1 Signaling Pathway*
Debabrata (Dev) Mukhopadhyay

12.30 pm-1.30 pm **Poster Session (Hallway)**

[Poster numbers 1-25 + 25 posters for Baxi and Kulkarni Awards]

1.30 pm-2.30 pm **Lunch**

Invited Lecture (Hall-A; 2.30 pm – 5.10 pm)

SESSION 3

Chair: Dr. Kunal Ray & Dr. Arindam Maitra

(AGILENT sponsored session)

2.30 pm - 2.50 pm **IL-01.** *Precision Medicine in Acute Lymphoblastic Leukaemia*
Vaskar Saha

2.50 pm - 3.10 pm **IL-02.** *Mapping trajectories of drug-induced tumor evolution “one cell at-a-time”*
Ramanuj DasGupta

3.10 pm - 3.30 pm **IL-03.** *Precision Medicine in Cholangiocarcinoma: Progress in Motion*
Kabir Mody

3.30 pm - 3.50 pm **IL-04** *Translating Cancer Genomics to Medicine*
Amit Dutt

3.50 pm - 4.10 pm **IL-05.** *Functional analysis of GWAS identified 5p15 locus reveals potential therapeutic targets for prostate cancer*
Jyotsna Batra

4.10 pm - 4.30 pm **IL-06.** *Comprehensive genomic profiling in oral squamous cell carcinoma of the gingivo-buccal region and identification of genes that drive lymph node metastasis*
Nidhan K Biswas

4.30 pm - 4.50 pm **IL-07.** *Epigenome-wide unique DNA methylation signature in Oral Squamous Cell Carcinoma patients in India.*
Raghunath Chatterjee

4.50 pm - 5.10 pm **IL-08.** *Radio genomics: A new approach for risk prediction modelling of radiation toxicities in Head Neck Squamous Cell Carcinoma (HNSCC)*

Arnab Pal

Invited Lecture (Hall-B; 2.30 pm – 5.10 pm) (Tea will be served outside the lecture Hall-B)

SESSION 4

Chair: **Prof. Tanya Das & Prof. Bidyut Roy**

- 2.30 pm - 2.50 pm **IL-09.** *Cellular State Transition Dynamics in EGF-induced in Epithelial-Mesenchymal Transition*
Biplab Bose
- 2.50 pm - 3.10 pm **IL-10.** *Role of Osteopontin in Tumor Microenvironment: A New Paradigm in Cancer Therapy*
Gopal C. Kundu
- 3.10 pm - 3.30 pm **IL-11.** *Phenotypic plasticity along the Epithelial-Mesenchymal axis in Ovarian Cancer*
Sharmila Bapat
- 3.30 pm - 3.50 pm **IL-12.** *Questioning of the canonical signaling of toll-Like receptor in tumor micro-environment*
Anupam Basu
- 3.50 pm - 4.10 pm **IL-13.** *BIORAD talk*
- 4.10 pm - 4.30 pm **IL-14.** *A challenge in glioma therapy: Nanotechnology based targeted drug delivery through blood brain barrier (BBB)*
Mrinal Kanti Ghosh
- 4.30 pm - 4.50 pm **IL-15.** *Cooperation of various proteins with HSF1 during HSP70 transcription in human cells*
Mahadeb Pal
- 4.50 pm - 5.10 pm **IL-16.** *Immune-rejuvenation therapy of cancer*
Gaurisankar Sa
- 5.10 pm - 05.30 pm *Tea Break*

Oral Presentation-(Hall-A; 5.30 pm – 6.30 pm)

SESSION 5

Chair: **Prof. Jharna Ray & Prof. Saurabh Ghosh**

- 5.30 pm-05.45 pm **OP-01.** *NMK-057, a novel triazole derived γ -secretase inhibitor attenuates Notch mediated-epithelial to mesenchymal transition and stemness and induces autophagic cell death in triple negative breast cancer cells.*
Amlan Das

- 5.45 pm-06.00 pm **OP-02.** *Next Next-gen assay in Prostate Cancer Precision Medicine*
Navonil De Sarkar
- 6.00pm-06.15 pm **OP-03.** *Pooled analysis of accuracy of visual inspection with acetic acid and cervical cytology for cervical cancer screening- Meta-analysis Approach*
Shashi Sharma
- 6.15pm-06.30pm **OP-04.** *Deciphering cancer invasiveness from the perspective of chromatin state of EMT-transcription factor*
Moitri Basu

Oral Presentation- (Hall-B; 5.10 pm – 6.10 pm)

SESSION 6 Chair: **Dr. Snehasikta Swarnakar & Prof. Madhusudan Das**

- 5.30pm -05.45 pm **OP-05.** *Enrichment of Molecular Transport Pathway Identified by Genome-wide CpG Methylation Screening in Pancreatic Ductal Adenocarcinomas Patients in Eastern India*
Nilabja Sikdar
- 5.45pm -06.00pm **OP-06.** *Therapeutic Intervention to reduce extracellular matrix deposition for regression of liver injuries and hepatocellular carcinoma*
Subhrajit Biswas
- 6.00pm – 6.15pm **OP-07.** *Serum 5-LOX: protein marker for breast cancer and new approach for therapeutic target*
Sharmistha Dey
- 6.15pm - 06.30pm **OP-08.** *Novel albumin coated nanoparticles using chlorogenic acid: An effective inducer of growth inhibition, oxidative stress and apoptotic signaling in cancer cell lines*
Sujata Maiti Choudhury
- 6.30 pm - 07.30 pm **Cultural Program**
7.30 pm Onwards **Dinner**

24th February, 2018

Smt Mangala Bamne and Shri Sitaram Joglekar Award Lectures (Young Scientists below the age of 30 years) Auditorium (9.30 am – 12.30pm)

SESSION 7

Chair: Dr. Rita Mulherkar &Dr. Annapoorni Rangarajan

- 9.30 am -9.40 am **AL-01.** *Neem Leaf Glycoprotein inhibits nuclear translocation of HIF activational complex in hypoxic tumor microenvironment to downregulate VEGF production*
Akata Saha
- 9.40 am -9.50 am **AL-02.** *Novel, Recurrent and Founder Mutations in Mismatch Repair Genes in a large Indian Hereditary Non-polyposis Colorectal Cancer (HNPCC) Cohort*
Anuja Lipsa
- 9.50am -10.00am **AL-03.** *MiR-324-5p is a critical determinant of mutant p53-driven cancer cell stemness*
Dishari Ghatak
- 10.00am-10.10 am **AL-04.** *miR-325: a novel miRNA involved in regulation of Treg cell development and function in tumor milieu*
Sayantana Bose
- 10.10am -10.20am **AL-05.** *Functional Interactions between JMJD6, HOTAIR and EZH2 that promote breast cancer*
Antara Biswas
- 10.20am-10.40 am **AL-06.** *E3 ubiquitin ligase MARCH8 promotes esophageal squamous cell carcinoma growth*
Shivam Singh
- 10.40am- 10.50am **AL-07.** *Ovarian cancer metastatic potential is attenuated by a peptide-based inhibition of S100A4 activity*
Tulika Mitra
- 10.50am -11.00am **AL-08.** *High resolution landscape of Mitochondrial Genome in Gingivobuccal Oral Cancer: Somatic Alterations Modulate Prognosis in Patients*
Arindam Palodhi
- 11.00am- 11.30am **Tea Break**
- 11.30am-11.40am **AL-09** *Tumor inhibition effect of pulsed electric field on breast cancer model*
S. Poompavai

- 11.40am-11.50am **AL-10** *Role of serum NFkB-p50 and IkB α protein inhibitor in progression and development of Head and Neck squamous cell carcinoma (HNSCC)*
Vertica Agnihotri
- 11.50am-12.00 **AL-11** *Functional genomics identified novel tumor suppressor gene Cavin3 to be associated with the deregulation of EGFR and IGF1R pathways during development of cervical squamous cell carcinoma in Indian patients.*
Anirban Roychowdhury
- 12.00-12.10pm **AL-12** *Gene regulatory networking unfolds the molecular cue to lysophosphatidic acid induced metabolic adaptations in ovarian cancer cells*
Upasana Ray
- 12.10pm-12.30pm *Live streaming of cervical screening at a village in Birbhum district, West Bengal*
Samit Chattopadhyay

12.30 pm-1.30 pm **Poster Session (Hallway)**

[Poster numbers 26 - 75]

1.30 pm-2.30 pm **Lunch**

Invited Lecture- (Auditorium; 2.30 pm –05.30pm)

SESSION 8

Chair: Dr. T. R. Santhosh & Prof. Debabrata (Dev) Mukhopadhyay

- 2.30 pm - 2.50 pm **IL-17.** *Intragenic DNA methylation: Role in alternative splicing and cancer metabolism*
Sanjeev Shukla
- 2.50 pm - 3.10 pm **IL-18.** *Interplay of inflammatory and metabolic networks in glioma progression*
Ellora Sen
- 3.10 pm - 3.30 pm **IL-19.** *Metabolic Switch Promotes Invasion In Ovarian Cancer Cell*
Sib Sankar Roy
- 3.30 pm - 3.50 pm **IL-20.** *Induction of precocious anaphase and chromosome instability and association of GSTP1 I105V polymorphism in areca nut-induced oral carcinogenesis*
Anupam Chatterjee
- 3.50 pm - 4.10 pm **IL-21.** *Epigenetic drift towards histone modifications regulates multiple gene expression and play crucial roles in progression of human cancers*
Samir Kumar Patra

- 4.10 pm - 4.30 pm **Tea Break**
- 4.30 pm - 4.50 pm **IL-22.** *Genetic variations in gallbladder cancer predisposition: A multigenic approach*
Zafar A Shah
- 4:50 pm- 5:10pm **IL-23** *Promise of NLGP as an Immunotherapeutic Drug and Hurdles in Clinical Translation*
Rathindranath Baral

Invited Lecture- (Hall-A; 2.30 pm – 5.30 pm)

SESSION 9 **Chair: Prof. Nitai P. Bhattacharyya & Dr. Sujoy Dasgupta**

- 2.30 pm - 2.50 pm **IL-24.** *Epigenetic Reprogramming of the Promoter Restricts Telomerase Reactivation in Cancer Cells*
Shantanu Chowdhury
- 2.50 pm - 3.10 pm **IL-25.** *Regulation of cellular gene expression by p53 and its isoform: Role of miRNAs*
Saumitra Das
- 3.10 pm - 3.30 pm **IL-26.** *Regulation of Gene expression by Targeting DNA Secondary Structures*
Jyotirmayee Dash
- 3.30 pm - 3.50 pm **IL-27.** *LCN2 expression promotes tumor progression and induces chemo and radio resistance upon plakophilin3 loss.*
Sorab N. Dalal
- 3.50 pm - 4.10 pm **IL-28.** *TRIM28, a potential prognostic biomarker and therapeutic target in Breast Cancer*
Paturu Kondaiah
- 4.10 pm - 4.30 pm **Tea Break**
- 4.30 pm - 4.50 pm **IL-29** *Existence of diverse gene regulatory signatures in carcinoma of the prostate*
Sanghamitra Sengupta
- 4.50 pm - 5.10 pm **IL-30** *Human DNA Glycosylase NEIL2 operates at the intersection of oxidative DNA damage repair and inflammatory gene expression: Potential linkage to cancers*
Tapas Hazra.
- 5.10 pm - 5.30 pm **IL-31.** *Atypical PHD finger protein UBR7, a H2BK120 ubiquitinating enzyme, suppresses Triple Negative Breast Cancer*
Chandrima Das

Invited Lecture-(Hall-B; 2.30 pm – 5.30 pm)

SESSION 10

Chair: Prof. Neeta Singh & Dr. Diptendra Sarkar

- 2.30 pm - 2.50 pm **IL-32.** *Double-negative feedback loop between AMPK and Akt regulates breast cancer metastasis*
Annapoorni Rangarajan
- 2.50 pm - 3.10 pm **IL-33.** *Transcriptional Targeting in Head and Neck Cancer and Cancer Stem Cells: Role of HPV*
Bhudev C. Das
- 3.10 pm - 3.30 pm **IL-34** *Cancer stem cells unfurl an unexpected Twist*
Urmi Chatterjee
- 3.30 pm - 3.50 pm **IL-35.** *Invasion and Metastasis cascade in oral cancer*
Dr. Prabhudas S. Patel
- 3.50 pm - 4.10 pm **IL-36** *Factor Induced Autoacetylation of Master Epigenetic Enzyme p300: Implications in Cancer Manifestation*
Tapas K. Kundu
- 4.10 pm - 4.30 pm **Tea Break**
- 4.30 pm - 4.50 pm **IL-37.** *Improving outcome in Homologous recombination stratified epithelial ovarian cancers: Journey in science and surgery*
Asima Mukhopadhyay
- 4.50 pm - 5.10 pm **IL-38.** *New insights into the role of myeloid cells in regulating human cancer progression*
Subhra K Biswas
- 5.10 pm - 5.30 pm **IL-39.** *Multiplex time assays using genetically labelled fluorescent probes for cancer drug discovery and signaling studies.*
Dr. T. R. Santhosh Kumar

General Body Meeting- (Auditorium; 6.00 pm – 7.00 pm)

7.30 pm Onwards Banquet Dinner

25th February, 2018

Shri Ramnath Hiralal Jaju and Dr. Virendra Balkrishna Kamat Award Lectures (Scientists age of 30-40 years) Auditorium (9.30 am – 11.00 am)

SESSION 11

Chair: **Prof. P Kondiah & Dr. Amit Dutt**

9.30 am -9.45 am **AL-13.** *Targeting CD8⁺ effector T cells by mesenchymal stem cells and pericytes: An overlooked immune evasion mechanism in cancer*

Anamika Bose

9.45 am -10.00 am **AL-14.** *Mutation and expression deregulated landscape of immune response genes in Gingivobuccal squamous cell carcinoma (GBSCC)*

Eishita Chattopadhyay

10.00am -10.15am **AL-15.** *BRCA1: A Cardinal Facet in the Etio-Pathology of Hydatidiform Moles*

Revathy Nadhan

10.15am-10.30 am **AL-16.** *Impact of Host methylome on HPV16 related cervical cancer pathogenesis*

Shrinka Sen

10.30am -10.45am **AL-17.** *Small molecule induced regulation of oncogenic promoter G-quadruplex*

Tania Das

10.45am-11.00 am **AL-18.** *Molecular targeting therapy of breast and colon cancer by PAR1 mediated apoptosis through a novel pro-apoptotic peptide*

Tanusree Ray

11.00am - 11.30am

Tea Break

Invited Lecture-(Hall-A; 11.30 am – 12.30 pm)

SESSION 12

Chair: **Prof. Soumitra Das & Prof. B.C. Das**

11.30 am - 11.50 am **IL-40.** *The quadrivalent HPV vaccine induces cross-reactive immune response that may mediate cross protection to untargeted HPV types*

Devasena Anantharaman

11.50 am - 12.10 pm **IL-41.** *Genetic variations of Human Papillomavirus type 16 and their impact on T and B cell epitopes*

Mausumi Bharadwaj

12.10 am - 12.30 pm **IL-42.** *Impact of variations in Hepatitis B virus genome on progression of Hepatocellular carcinoma*
Soma Banerjee

Invited Lecture-(Hall-B; 11.30 am – 12.30 pm)

SESSION 13 Chair: **Prof. Tapas Kundu & Prof. Hemanta K Majumder**

11.30 am - 11.50 am **IL-43.** *Diacerein-mediated inhibition of IL-6/IL-6R signaling induces apoptotic effects on breast cancer*
Mahitosh Mandal

11.50 am - 12.10 pm **IL-44.** *P53 missense mutations: 'all mutants are equal but each mutant is more equal than the other'*
Murali Dharan Bashyam

12.10 am - 12.30 pm **IL-45.** *The possible functions of JMJD6 in breast cancer*
Kartiki V. Desai

12.30 pm-1.30 pm ***Poster Session (Hallway)***

[Poster numbers 76 - 109]

1.30 pm-2.30 pm ***Lunch***

Company Lecture-V (Auditorium) (2.30 pm – 3.15 pm)

SESSION 14 Chair: **Dr. Tapas Sengupta & Dr. Raghunath Chatterjee**

2.30 pm - 2.45 apm **CL-01.** **ILLUMINA**

2:45 pm - 3.00 pm **CL-02.** **THERMO FISHER SCIENTIFIC**

3:00 pm – 3:15 pm **CL-03.** **WIPRO GE HEALTHCARE**

Invited Lecture (Auditorium) (03.20pm-4.00pm)

SESSION 15 Chair: **Prof. Gaurisankar Sa and Prof. Anupam Basu**

3.20pm-3.40pm **IL-46.** *Molecular Crosstalk Between RNA-binding Proteins and microRNAs in Cancer*
Partho Sarothi Ray

3.40pm-4.00pm

IL-47. *Cancer cells exploit sialic acids, sialyl transferases and sialidases for their successful survival*

Chitra Mandal

4.00 pm – 4.45 pm

Valedictory, Awards & Concluding remarks

The speakers are requested to load their lecture materials in the Power Point projection system at least 30 min ahead of the scheduled session