

2014 NGBT Program (updated Nov 15th 2014)

17th Nov 2014 - Monday - DAY 1

Concurrent Session I (Auditorium 1)

Concurrent Session II (Auditorium 2)

Concurrent Session III (Auditorium 3)

08:30 - Registration begins

09:30-09:55 - Conference Inauguration & Host Introductions - Chief Guest: **Dr. P. Satish Chandra**, Director/Vice-Chancellor, NIMHANS, Bangalore, India

09:55-10:00- **VarMap** - a Realtime genotyping - kick-off

Session - 01 - NGS Technologies - Keynote (Auditorium 1)

10:00-10:10 - Awards/Introduction (Chair: Sekar Seshagiri, Genentech, USA)

10:10-11:00 - Dr. **Stephan C Schuster**, NTU, Singapore - **Population Genomics and informed breeding aid species conservation**

11:00-11:30 - Tea Break/Poster Setup

Session 02 - NGS/Genomics Technologies
(Auditorium 1)

Session 03 - NGS solutions - Hardware/Sample Prep
(Auditorium 2)

Session 04 - Plant Genomics I
(Auditorium 3)

Chair: Dr. Ramprasad VL, Medgenome, India

Chair: Dr. Sriharsa Pradan, NEB, USA

Chair: Dr. George Thomas, SGRF, India

11:30-11:50 - Dr. Kahlil Lawless, Illumina, Singapore - **\$1000 genome: A era of population genomics**

11:30-11:50 - Dr. Vikrant Sethi, EMC-Isilon, India- **Managing Big Data For Life Sciences with EMC Isilon**

11:30-11:50 - Dr. Usha VijayRaghavan, IISc, India - **Functional genomics of regulatory transcription factors for rice flower development**

11:50-12:10 - Dr. William LaRochelle, Roche, USA - **Roche Sequencing: Target Enrichment, Genotyping and the Future of Personalized Healthcare**

11:50-12:10 - Dr. Carol Keating, NEB, USA - **New Developments in Sample Preparation for Next Generation Sequencing**

11:50-12:10 - Dr. Sivarama Prasad Lekkala, SciGenom, India - **High Throughput Genotyping Technologies for Plant Breeding- A Case Study of 70K Cotton Infinium BeadChip**

12:10-12:30 - Dr. Naveed Alam, Thermo Fisher, India - **Latest developments in Ion Torrent™ NGS technology for accelerating clinical research**

12:10-12:30 - Dr. Beena PS, SciGenom, India - **Microbiome of deep Arabian sea sediment: A simple methodology for sequencing low concentration samples of extreme environments on NGS platforms**

12:10-12:30 - Dr. Boney Kuriakose, SciGenom, India - **Targeted genome sequencing approaches and their applications for crop improvement**

12:30-13:30 - Lunch & Exhibitor visit/Poster Setup/ Art Ehibition/ VarMap sample collection

Session 05 - Clinical/Medical Genomics I
(Auditorium 1)

Session 06 - NGS Analysis Methods and Applications
(Auditorium 2)

Session 07 - Genomics Applications
(Auditorium 3)

Chair: Dr. Akhilesh Pandey, Johns Hopkins, USA

Chair: Dr. Andrew Peterson, Genentech, USA

Chair: Dr. George Thomas, SGRF, India

13:30-13:50 - Dr. Sucheta Bhatt, Illumina, USA - **Non Invasive Prenatal Testing (NIPT): Key Considerations**

13:30-13:50 - Dr. Jeff Wall, UCSF, USA - **Estimating genotype error rates from high-coverage next-generation sequence data**

13:30-13:50 - Dr Meng Lye See, Fludigm, Asia Pacific, **Examining Omics at the Single Cell Level**

13:50-14:10 - Dr. Swarkar Sharma, SMVD Univ, India - **Whole Exome Sequencing in Characterizing Mysterious Crippling Disorder of Arai Village of J&K, India**

13:50-14:10 -Dr. N Senthil Kumar, Mizoram Uni., India - **Mitochondrial and Nuclear gene polymorphisms associated with gastric cancer susceptibility in Mizo population, Northeast India - An in silico Approach**

13:50-14:10 - Dr. Ana Carolina, NTU, Singapore, **Pathogens dispersal by airborne mechanical vectors: the microbiome of carrion-feeding flies.**

14:10-14:30- Dr. Anguraj Sadanandam, ICR, UK - **Facilitating Personalized Cancer Medicine using a Systems Biology Approach**

14:10-14:30 - Dr. Mitali Mukerji, IGIB, India - **Understanding human genetic individuality through phenotype scaffolds of extreme constitution types of Ayurveda**

14:10-14:30 - Dr. Anuradha Upadhyay, NRC Grapes, India - **NGS for transcriptome analysis in grape**

14:30-15:30 - Tea Break & Poster viewing / Exhibitor visit

Session 08 - Clinical/Medical Genomics II
(Auditorium 1)

Session 09 - Animal/Conservation Genomics
(Auditorium 2)

Session 10 - Metagenomics/Protist Genomics
(Auditorium 3)

Chair: Dr. M M Srinivas Bharath, NIMHANS, INDIA

Chair: Dr. Nandini Robin, IndiaBioScience, India

Chair: Dr. Bharat Chattoo, Uni. of Baroda, India

15:30-15:50 - Dr. G Kumaramanickavel, Narayana Nethralaya, India - **Eye Genomics: Research Bench to the Prescription Pad!**

15:30-15:50 - Dr. Arun Zachariah, Dept. of Forest and Wildlife, India - **Disease Ecology in free ranging wild animals in Southern India**

15:30-15:50 - Dr. Arnab Pain, KAUST, Saudi Arabia - **Chromerid genomes reveal the hallmarks of evolution of obligate intracellular parasitism in apicomplexa**

15:50-16:10 - Dr. Ashwin Mallipatna, Narayana Nethralaya, India - *Early Detection of Retinoblastoma Using RB1 Mutation Detection in India: Challenges and Solutions*

16:10-16:30 - Dr. Vajira Dissanayake, Uni. Colombo, SriLanka - *NGS in the clinic and the use of the Clinical exome to diagnose inherited and rare diseases*

15:50-16:10 - Dr. Amrita Srivathsan, NUS, Singapore - *Metagenomics and its application to conservation efforts of the banded leaf monkey in Singapore*

16:10-16:30 - Dr. Uma Ramakrishnan, NCBS, India - *Population genomics of non-model organisms: are we there yet ?*

15:50-16:10 - Dr. PG Koringa, Anand AU, India - *Metagenomic Data Analysis Challenges*

16:10-16:30 - Dr. Yougesh Shouche, NCCS, India - *Genomics and metagenomics of human gut: Indian scenario*

Session 11- Medical Genetics - Special Keynote (Auditorium 1)

16:30-16:35 - Awards/Introduction (Chair: Sekar Seshagiri, Genentech, USA)

16:35-17:00 - Distinguished Medical Geneticist Lecture - Dr. IC Verma, Sri Gangaram Hospital, India - *Genetic Practice in the Genomic Era*

Session 12- Human Genetics - Keynote (Auditorium 1)

17:00-17:10 - Awards/Introduction (Chair: Sekar Seshagiri, Genentech, USA)

17:10-18:00 - Dr. Aravinda Chakravarti, Johns Hopkins, USA - *Can human genetics in India make unique contributions ?*

Session 13 - Posters and Welcome Mixer (1st Floor)

18:00-19:00 - Poster Viewing # 1-40

19:00-20:00 - Poster Viewing # 41-80

18th Nov 2014 - Tuesday - Day 2

Concurrent Session I (Auditorium 1)

Concurrent Session II (Auditorium 2)

Concurrent Session III (Auditorium 3)

08:30 - Registration begins

09:00-17:00 Job fair - (1st Floor) - Concurrent with other sessions

10:00-20:00 - Art Exhibition, Vendor Exhibits and Poster Display

Poster lightning round # 1 (Auditorium 2)

09:00-10:00 - Posters # 1-40 - Chair: Krishnaraj Rajalingam, Johannes Gutenberg University Mainz, Germany

10:00-18:00 - Art Exhibition, Vendor Exhibits and Poster Display

Session 14- Population and Medical Genetics - Keynote (Auditorium 1)

10:00-10:10 - Awards/Introduction (Chair: Sekar Seshagiri, Genentech, USA)

10:10-11:00 - Dr. Steven Turner, PacBio, USA - *Single molecule sequencing and its applications*

11:00-11:30 - Tea Break / Exhibitor events

Session 15 - Clinical/Medical Genomics III
(Auditorium 1)

Session 16 - Plant Genomics IV
(Auditorium 2)

Session 17- Cancer Immunotherapy/Drug Development
(Auditorium 3)

Chair: Dr. Mitali Mukerji, IGIB, India

Chair: Dr. Arjula Reddy, Uni. of Hyderabad, India

Chair: Dr. Mallika Singh, Patronus Therapeutics, USA

11:30-11:50 - Dr. Ramesh Hariharan, Strand LS, India - *Structural Variants and Copy Numbers in Clinical Cases*

11:30-11:50 - Dr. Malali Gowda, CCAMP, India - *Genome architecture of Magnaporthe species complex*

11:30-11:50 - Dr. Dineli Wickramasinghe, Amgen, USA - *Using next generation sequencing to identify suitable tumor targets for immunotherapy*

11:50-12:10 - Dr. Choon Kiat Ong, National Cancer Centre, Singapore - *Genomics of Asian Cancer - From Discovery to Clinical Implications*

11:50-12:10 - Dr. Ravi Gupta, MedGenome, India - Rice Variation Database (RiceVarDb) – *A portal for studying rice genetic variations across a wide-range of rice cultivars*

11:50-12:10 - Dr. Amit Chaudhari, MedGenome, USA - *Discovering novel T-cell epitopes in mutated oncogenes and tumor suppressor genes using OncoMD*

12:10-12:30 - Dr. Narayana Raghupathy - *Personalized RNA-seq*

12:10-12:30 - Dr. VLN Reddy, ANGRAU, India - *NGS applications in agriculture*

12:10-12:30 - Dr. Fred Fellouse, Univ. Toronto, Canada - Synthetic antibodies as reagents, diagnostics and therapeutics

12:30-13:30 - Lunch & Exhibitor visit/Poster viewing

Session 18- Population and Medical Genetics - Keynote

13:30-13:35 - Awards/Introduction (Chair: George Thomas, SGRF, India & Sekar Seshagiri, Genentech, USA)

13:35-14:20 - Dr. Arjula Reddy, Uni. of Hyderabad, India - *NextGen Technologies in Plant Genomics Research and Breeding*

Session 19- Science Communication (Auditorium 1)

14:20-14:40 - Dr. Volker Doetsch, Goethe University, Germany - *What's eLife ?*

14:40-15:30 - Tea Break & Poster viewing / Exhibitor visit

Session 20 - Clinical/Medical Genomics IV
(Auditorium 1)

Session 21 - Virus/Bacteria/ Nematode Genomics
(Auditorium 2)

Session 22 - NGS Technologies
(Auditorium 3)

Chair: Dr. Anguraj Sadanandam, ICR, UK

Chair: Dr. VB Reddy, SciGenom, India

Chair: Dr. Ashok Gopinath, Illumina, India

15:30-15:50 - Dr. Nallasivam Palanisamy, Uni. Michigan, USA - *Molecular Classification of Prostate Cancer and the Role of Molecular Pathology in Stratified Medicine*

15:30-15:50 - Dr. Milner Kumar, SciGenom, India - *Whole genome sequencing and annotation of a nuclear polyhedrosis virus using second and third generation sequencing platforms*

15:30-15:50 - Dr. Zora Modrusan, Genentech, USA - *Expanding high-throughput NGS applications: from profiling whole tissues to single cell genomics*

15:50-16:10 - Dr. Ramprasad VL, MedGenome, India - *Genetics of Foveal Hypoplasia*

15:50-16:10 - Dr. V. Nagaraja, IISc, India - Topology - *Transcription coupling : genomic landscape*

15:10-16:30 - Dr. Sriharsa Pradan, NEB, USA - *Mapping DNA methylation and hydroxymethylation in mammalian genome*

16:10-16:30 - Dr. Sai Yendamuri, American Oncology, India - *MicroRNA Biomarkers for Lung Cancer*

16:10-16:30 - Dr. Uma Rao, IARI, India - *Nematode genomics for new generation management strategies*

16:10-16:30 - Dr. Dhinoth Kumar B, SciGenom, India - *Next Generation Sequencing and genome editing technologies for advancing biological studies*

Session 23 - Panel Discussion (Auditorium 1) Chair: Dr. Sridevi Hegde	Session 24 - Plant Genomics VI (Auditorium 2) Chair: Dr. VLN Reddy	Session 25 - Translational Research/Drug development (Auditorium 3) Chair: Dr. Ramchand CN, Saksin Lifesciences, India
<p>16:30-17:30 - Genomics and Genetics applications in the clinic - are we there yet ?</p> <p>Panelist: Dr. Ashutosh Gupta, Dr. Hemalata W Bhatia, Dr. Rekha Gupta, Dr. Pooja Sharma, Dr. Subha Phadke, Dr. Parag Tamhankar, Dr. Jayesh Sheath, Dr. Fenny Sheath, Dr. Ashwin Dalal, Dr. Sridevi Hegde, Dr. Mitesh Shetty, Dr. Divya Pachat</p>	<p>16:30-16:50 - Dr. V B Reddy, SciGenom, India - <i>Genome sequencing and analysis of Gossypium arborium and Gossypium herbaceum</i></p> <p>16:50-17:10 - Dr. Raman Babu, CIMMYT, India - <i>Genomics-assisted breeding for tropical maize improvement</i></p> <p>17:10-17:30 - Dr. V. Siva Reddy, ICGEB, India - <i>Use of high throughput transcriptomic and proteomic approaches to understand the genome involved in the cotton fibre cell development</i></p>	<p>16:30-16:50 - Dr. Sadasivan Vidyasagar, Uni of Florida, USA - <i>A functional approach to improve barrier function and decrease inflammation</i></p> <p>16:50-17:10 -Dr. Kini Manjunatha, NUS, Singapore - <i>Design and Development of Short and Potent Inhibitors of Thrombin</i></p> <p>17:10-17:30 -- Dr. Jay Fox, Uni. of Virginia, USA - <i>Informatic Approaches to Inform Novel Therapeutics and Therapeutic Intervention</i></p>
<p style="text-align: center;">Session 26 - Human Genetics - Keynote (Auditorium 1)</p>		
<p>17:30-17:40 - Awards/Introduction (Chair: Sekar Seshagiri, Genentech, USA)</p>		
<p>17:40-18:30 - Dr. K. Thangaraj, CCMB, India - <i>Complex origin of Indian populations and its profound medical implications</i></p>		
<p style="text-align: center;">Session 27 - Posters viewing (1st Floor)</p>		
<p>18:30-20:00 - Posters Viewing</p>		
<p style="text-align: center;">Entertainment & Dinner</p>		
<p>19:00-20:00 - Entertainment 20:00-21:00 - Dinner</p>		

19th Nov 2014 -Wednesday - Day 3

Concurrent Session I (Auditorium 1)

Concurrent Session II (Auditorium 2)

Concurrent Session III (Auditorium 3)

08:30 - Registration begins

Poster lightning round # 1 (Auditorium 2)

09:00-10:00 - Posters # 41-80 - Chair: Krishnaraj Rajalingam, Johannes Gutenberg University Mainz, Germany

10:00-14:00 - Art Exhibition, Vendor Exhibits and Poster Display

Session 28-Diabetes Genomics - Keynote

10:00 - Awards and Introduction

10:10-11:00 - Dr. V Mohan, MDRF, India - *Genomics of Diabetes*

11:00-11:30 - Tea Break & Exhibition

**Session 29 - Epidemiology/Medical Genomics
(Auditorium 1)**

Chair: Dr. Jeff Wall, UCSF, USA

11:30-11:50 - Dr. RM Anjana, MDRF, India - *The Diabetes Epidemic in India: Still Spiralling upwards?*

11:50-12:10 - Dr. Andrew Peterson, Genentech, USA - *Genomic Approaches to Dissecting Type 2 Diabetes*

12:10-12:30 - Dr. BK Thelma, Delhi Uni., India - *Tales of gene discovery- the NGS way*

**Session 30 - Cancer Genomics/Signaling
(Auditorium 2)**

Chair: Dr. Krishnaraj Rajalingam, Uni. Mainz, Germany

11:30-11:50 - Dr. S Mahalingham, IIT-M, India - *RASSF signalling and Cancer*

11:50-12:10 - Dr. Bengt Hallberg, University of Gothenburg, Sweden - *A role for ERK5 in the regulation of MYCN expression by ALK in neuroblastoma*

12:10-12:30 - Dr. Volker Doetsch, Goethe University, Germany - *P63 and p73 in human cancer*

**Session 31 - Genomics and Proteomics
(Auditorium 3)**

Chair: Dr. Akhilesh Pandey, Johns Hopkins, USA

11:30-11:50 - Dr. Utpal Tatu, IISc, India - *Genome sequencing to understand parasite evolution*

11:50-12:10 - Dr. Arkasubhra Ghosh, Narayana Nethralaya, India - *Identification of biomarkers for corneal ectasia: scope for clinical translation*

12:10-12:30 - Dr. Harsha Gowda, Institute of Bioinformatics, India - *Digging deeper into the human proteome*

12:30-13:30 - Lunch & Exhibitor visit/poster viewing

Session 32- Cancer Genomics Keynote

13:30-13:40 - Awards/Introduction

13:40-14:30 - Dr. Partha P Majumder, NIBMG, India - *Finds from Our Recent Excavations of Oral Cancer Genomes*

14:30-15:00 -- Tea Break & poster / Exhibitor visit

**Session 33 - Population Genomics
(Auditorium 1)**

Chair: Dr. Andrew Peterson, Genentech, USA

15:30-15:50 - Dr. Jeff Wall, UCSF, USA - *Quantifying the extent of ancient admixture in human history*

15:50-16:10 - Dr. Analabha Basu, NIBMG, India - *Population diversity and history of the Indian subcontinent: Uncovering the deeper mosaic of sub-structuring and the intricate network of dispersals*

16:10-16:30 - Dr Hie Lim Kim, NTU, Singapore - *Khoisan hunter-gatherers have been the largest population throughout most of modern human demographic history*

**Session 34 - Cancer Genomics/Signaling
(Auditorium 2)**

Chair: Dr. Narayana Raghupathy, Jax lab, USA

15:30-15:50 - Dr. Hubert Serve, Goethe University, Germany - *Targeting Signal Transduction in Acute Myeloid Leukemia*

15:50-16:10 - Dr. Akhilesh Pandey, Johns Hopkins, USA - *A multi-Omics investigation of a human hematopoietic cell type*

16:10-16:30 - Dr. Amit Dutt, ACTREC, India - *Integrated Genomic Analysis to Predict Nodal Metastasis in Head and Neck Cancer*

**Session 35 - Plant Genomics VII
(Auditorium 3)**

Chair: Dr. Malali Gowda, CCAMP, India

15:30-16:30 - Dr. P V Shivaprasad, NCBS, India - *Epigenetics and small silencing RNAs in plants*

15:50-16:10 - Dr. Rohini Sreevathsa, IARI, India - *Functional genomics for translational research*

16:10-16:30 - Dr. Mukesh Jain, NIPGR, India - *Next Generation Genomics: Connecting Genes and (Epi)Genomic Variations to abiotic stress response/adaptation*

**Session 36 - Disease Genomics
(Auditorium 1)**

**Session 37 - Cancer Drug Discovery
(Auditorium 2)**

**Session 38 - Disease Genomics
(Auditorium 3)**

Chair: Dr. Mitali Mukerji, IGIB, India	Chair: Dr. Dineli Wickramasinghe, Amgen, USA	Chair: Dr. G Kumaramanickavel, Narayana Nethralaya, India
<p>16:30-16:50 - Dr. Sathish Chandra Girimaji, NIMHANS, India - <i>Whole exome sequencing reveals a novel mutation associated with X-linked Mental Retardation (XLMR)</i></p>	<p>16:30-16:50 - Dr. Jason Moffat, Univ Toronto, Canada - <i>Genetic tools for cancer target discovery and evaluation</i></p>	<p>16:30-16:50 - Dr. Deepti Deobagkar, Uni. Pune, India - <i>Transcriptomics (NGS) and genome wide methylation analysis of the normal human fibroblasts and Turner syndrome reveals association of epigenetic processes with Turner phenotypes</i></p>
<p>16:50-17:10 - Dr Sanjib Sinha, NIMHANS, India. <i>Epilepsy: Indian perspective</i></p>	<p>16:50-17:10 - Dr. Mallika Singh, Patronus Therapeutics, USA - <i>Targeting therapeutic nodes in cancer</i></p>	<p>16:50-17:10 - Dr. Priya Chockalingam, Cardiac Wellness Institute, India - <i>Cardiac Channelopathies: A Global Update and an India Perspective</i></p>
	<p>17:10-17:30 - Dr. Eric Stawiski, Genentech, USA - <i>Spectrum of diverse genomic alterations define non-clear cell renal carcinoma subtypes</i></p>	<p>17:10-17:30 - Dr. Bhaswar Maity, ILS, India - High throughput Genetic Analysis in Cancer research: Diagnostics to Prognosis</p>
Session 39 - Realtime Genotyping Results, Poster Awards & Conference Wrap-up		
<p>17:30-17:45 - VarMap - Realtime Genotyping Results</p>		
<p>17:45-17:55 - Poster Awards</p>		
<p>17:55-18:00 - Wrap-up</p>		