Scientific program

7th February 2012

Registration	**1700h – 1830h**

Inaugural Session	**1830h – 2000h**	
1830h – 1845h	Welcome address	Tej K Pandita
1850h – 1900h	Opening Remarks	BC Das
1900h – 1905h	Introduction of the Keynote speaker	Yosef Shiloh
1905h – 2000h	**Key note address:** Michael B. Kastan Duke Cancer Institute, Durham, NC USA	Ataxia-telangiectasia: bedside to bench to bedside
2000h – 2005h	Vote of thanks	BS Dwarakanath
2005h – Until	**DINNER**	

8th February 2012

Session I 0830h – 1125h	**DNA Damage Response** Chairpersons: Simon Powell / Bin Wang	
0830h – 0850h	Tanya Paull University of Texas at Austin, Austin, TX, USA	Regulation of ATM activation
0850h – 0910h	Junjie Chen MD Anderson Cancer Center Houston, TX, USA	DNA damage-induced signaling pathways
0910h – 0930h	K. Muniyappa Indian Institute of Science, Bangalore, India	Insights into the mechanistic aspects of DNA replication fork reversal catalyzed by RuvA proteins
0930h – 0950h	Roger Greenberg University of Pennsylvania, Philadelphia, PA, USA	Chromatin responses at DNA double strand breaks
0950h – 1005h	Markus Lobrich Darmstadt University of Technology, Radiation Biology and DNA Repair, Darmstadt, Germany	Chromosomal translocations arising from resected DNA double-strand breaks in G1 phase
1005h – 1020h	Benjamin Chen UT Southwestern Medical Center,	DNA-PKCs modulates ATM signalling in response to oxidative stress

	Dallas, TX, USA	
1020h – 1045h	TEA	
1045h – 1125h **Special talk**	Stephen P. Goff Columbia University, New York, NY, USA	Retroviral restriction factors and dependency factors: Selections for retrovirus resistance
Session II 1125h – 1245h	**DNA Damage Response** Chairpersons: Hari Misra / Jessica Tyler	
1125h – 1145h	Penelope A Jeggo University of Sussex, East Sussex, UK	How ATM modifies higher order chromatin structure.
1145h – 1205h	Jean Gautier Columbia University, New York, NY, USA	Initiation of DNA double-strand break repair
1205h – 1225h	Dipanjan Chowdhury Harvard Medical School, Boston, MA, USA	What goes on must come off: phosphatases gate-crash the DNA damage response
1225h – 1240h	Anant Narayan Bhatt Institute of Nuclear Medicine and Allied Sciences, Delhi, India	Enhanced glycolysis confers radioresistance in cells by facilitating DNA repair
1240h – 1340h	LUNCH	
1340h – 1500h	**Poster Session (1)**	
Session III 1500h – 1800h	**Cancer** Chairpersons: Michael White /BC Das / Roger Greenberg	
1500h – 1525h	Jerry Shay UT Southwestern Medical Center, Dallas, TX, USA	Genome-wide human shRNA screening to dissect pathways involved in telomerase action
1525h – 1550h	Richard A Gatti UCLA School of Medicine, Los Angeles, CA, USA	Developing smart drugs for nonsense mutation
1550h – 1610h	Stephen Meyn University of Toronto, Ontario, Canada	Distinct spatial/temporal dynamics of ATM at DNA breaks suggests an early role in DSB processing
1610h – 1645h	TEA	
1645h – 1700h	S Bowen National Cancer Institute, National Institutes of Health, Bethesda, MD, USA	ATM deficiency impairs T- cell receptor β rearrangement and thymocyte development at the point of β selection
1700h – 1715h	Clayton Hunt UT Southwestern Medical Center, Dallas, TX, USA	Targeted T-cell deletion of MOF affects both T- and B-cell biology
1715h – 1730h	SR Bhaumik Southern Illinois University School of Medicine	Damage recognition at the active gene by RAD26p and its role in regulation of chromatin structure to control transcription and associated DNA repair *in vivo*

	Carbondale, IL, USA	
1730h – 1745h	Ester M Hammond The University of Oxford, Oxford, UK	Targeting radiation resistant hypoxic tumour cells through ATR inhibition
1745h – 1800h	Nobuo Horikoshi UT Southwestern Medical Center, Dallas, TX, USA	Expression of the proapoptotic protein Daxx carboxyl terminal domain confers resistance to DNA damage

9th February 2012

Session IV 0830h – 1030h	**DNA Damage Response** Chairpersons: David Chen / B. Dwarakanath	
0830h – 0850h	David Cortez Vanderbilt University School of Medicine, Nashville, TN, USA	Function of SMARCAL1 in maintaining genome integrity
0850h – 0910h	Brendan Price Harvard Medical School, Boston, MA, USA	Chromatin dynamics, epigenetics and the DNA protein
0910h – 0930h	David Boothman UT Southwestern Medical Center, Dallas, TX, USA	ATM-mediated IGF-1-sCLU expression: A marker of genetic instability.
0930h – 0950h	Kristoffer Valerie Virginia Commonwealth University, Richmond, VA, USA	Targeting the DNA kinase as a novel strategy for radiosensitizing glioblastoma multiforme in mice
0950h – 1010h	Walter N Hittelman UT MD Anderson Cancer Center Houston, TX, USA	Visualizing genetic instability, clonal evolution, and tumor heterogeneity
1010h – 1025h	G Nagaraju Department of Biochemistry, Indian Institute of Science, Bangalore, India	Distinct roles of Fanco/rad51c in DNA damage signaling and repair: implications for Fanconi anemia and breast cancer susceptibility
1025h – 1040h	Raj Pandita UT Southwestern Medical Center, Dallas, TX, USA	Single strand binding protein 1 recruits telomerase at telomeres to extend g-overhang
1040h – 1100h	TEA	
Session V 1100h – 1300h	**Cancer** Chairpersons: Martin Lavin / Walter Hittelman	
1100h – 1125h	Michael White UT Southwestern Medical Center, Dallas, TX, USA	Harnessing cancer genome diversity for intervention target discovery and development
1125h – 1145h	Shantanu Chowdhury Institute of Genomics and Integrative Biology, Delhi, India	Molecular mechanisms of metastases suppression by nme2 using genomic approaches
1145h – 1205h	Kum Kum Khanna Queensland Institute of Medical Research, Herston, Australia	Rad51 expression levels predict synthetic lethality and metastatic potential in high grade breast cancers.

1205h – 1225h	Howard Lieberman Columbia University, New York, NY, USA	Functional roles for RAD9 in prostate cancer
1225h – 1245h	Thomas Ludwig Columbia University, New York, NY, USA	Functional analysis of the BRCA1 tumor suppressor gene
1245h – 1300h	W Shi Queensland Institute of Medical Research, Herston, Australia	SSB1 is essential for embrygenesis and genomic stability maintenance in mice
1300h – 1400h	LUNCH	
1400h – 1440h **Special Lecture**	Yosef Shiloh Sackler School of Medicine, Tel Aviv University, Tel Aviv, Israel	On the neurological phenotype of A-T
1440h – 1600h	**Poster Session (2)**	
1600h – 1630h	TEA	
Session VI 1630h – 1900h	**DNA Damage Response** Chairpersons: Tanya Paull / Altaf Wani	
1630h – 1650h	Peter Burgers Washington University School of Medicine, St Louis, MO, USA	Connecting DNA damage to cell cycle checkpoint activation
1650h – 1710h	David Chen UT Southwestern Medical Center, Dallas, TX, USA	Persistent ku binding to DSBs interferes with DNA end resection and homologous recombination
1710h – 1730h	Hari Misra Bhabha Atomic Research Centre, Mumbai, India	DNA damage responsive eukaryotic type ser/thr protein kinase role in radiation resistance of *deinococcus radiodurans*
1730h – 1745h	Kienan Savage Queen's University Belfast, Belfast, UK	The novel ATM/ATR mediated BRCA1/BCLAF1 complex regulates DNA repair and genomic stability through mRNA splicing
1745h-1800h	Altaf A Wani The Ohio State University Medical Center, Columbus, OH, USA	ATM at the crossroads of UV radiation-mediated NER and DDR pathways
1800h – 1815h	John Murnan University of California, San Francisco, CA, USA	The role of ATM and mre11 in the deficiency in nonhomologous end joining near telomeres in mammalian cells
1815h – 1830h	Mercy J. Raman, Banaras Hindu University, Varanasi, India	Dynamics of radiation induced DSB repair foci in male germ cells
1830h – 1845h	Cheng WH University of Maryland, College Park, MD, USA	The role of ATM and DNA-PK in selenium-induced oxidative stress and senescence response
1845h-1900h	Break	

1900h – 1930h	**Bharatanatyam Recital – Kum Sahana**
1930h – Until	DINNER

10th February 2012

Session VII 0830h – 1000h	**Neurodegenerative Diseases** Chairpersons: Peter McKinnon / Howard Lederman	
0830h – 0850h	Ari Barzilai Tel Aviv University, Tel Aviv, Israel	The role of the DNA damage response on the functionality of the neuro-glio-vascular unit
0850h – 0910h	Karl Herrup Rutgers University, New Jersey, USA	From the nucleus to the cytoplasm and back: ATM and the epigenetics of the neuronal genome
0910h – 0930h	Howard Lederman University of John Hopkins, Baltimore, MD, USA	Is A-T a disease of disordered inflmmation?
0930h – 0950h	Tom Crawford University of John Hopkins, Baltimore, MD, USA	Lessons from a blinded baclofen treatment trial
0950h – 1030h	TEA/ Poster	
–	**Neurodegenerative Diseases** Chairpersons: Karl Herrup / Zhao-Qi Wang	
1030h – 1050h	Peter McKinnon St Jude Children's Research Hospital, Memphis, TN, USA	DNA damage signaling and neurogenesis
1055h – 1115h	Martin Lavin Queensland Institute for Medical Research, Brisbane, Australia	Role of senataxin in protecting the genome
1115h – 1135h	Sankar Mitra University of Texas Medical Branch, Galveston, TX, USA	Role of heterogeneous nuclear ribonucleoproteins in DNA oxidized base and strand break repair: implications in neurodegenerative diseases
1135h – 1150h	Zhao-Qi Wang Leibniz Institute for Age Research, Jena, Germany	Differential function of NBS1 and ATR in neuropathology
1150h – 1205h	Sachin Katyal St Jude Children's Research Hospital, TN, USA	ATM maintains genome stability and neurogenesis via the DNA single-strand break repair pathway
1205h – 1220h	ML Hegde University of Texas Medical Branch, Galveston, TX, USA.	Deficiency in repair of oxidized bases and strand breaks in neurodegenerative brain genome
1220h – 1300h **Special talk**	Marian Carlson Columbia University, New York, NY, USA	Regulation of the AMPK pathway and connections to ATM
1300h – 1400h	LUNCH	

Session IX 1400h – 1530h	**Cancer** Chairpersons: Thomas Ludwig / Sorab Dalal	
1400h – 1420h	Domenico Delia Fondazione IRCCS Istituto Nazionale Tumori, Milano, Italy	Effects of hypoxic stress on neuroglial differentiation of ATM-deficient human neural stem cells
1420h – 1440h	Subrata Sen The University of Texas M.D. Anderson Cancer Center, Houston, Texas, USA	Aurora kinase-a regulation of DNA damage response pathways in human cells
1440h – 1500h	Vani Brahmachari University of Delhi, Delhi, India	Mining the human genome for components of regulatory modules involved in maintenance of transcriptional state through development
1500h – 1520h	Toru Ouchi Roswell Park Cancer Institute, NY, USA	New insights of ATM and brat1 in differentiation and cancer phenotypes
1520h – 1535h	Or Shahar The Hebrew University, Jerusalem, Israel	Live imaging – DNA DSB formation reveals new aspects of homologous recombination
1535h – 1600h	TEA	
Session X 1600h – 1805h	**Cancer and Genomic Instability** Chairpersons: Anindya Dutta / Richard Gatti	
1600h – 1620h	Cheryl Walker Institute for Biosciences and Technology, Texas A&M Health Science Center, Houston, TX, USA	ATM Signaling at the Peroxisome to mTORC1 Links ROS to Autophagy and Peroxisomal Homeostasis
1620h – 1635h	Shyamal Desai Louisiana State University Health Sciences Center, New Orleans, LA, USA	Rethinking neurodegeneration in ataxia telangiectasia: role of proteinopathy?
1635h – 1650h	Sangar Sengupta National Institute of Immunology, New Delhi, India	Enhancement of fbw7-mediated c-myc ubiquitylation and degradation by bloom helicase leads to delay in tumor initiation
1650h – 1705h	B Xu The Methodist Hospital Research Institute, Houston, TX, USA	The mitotic function of the ATM kinase
1705h – 1720h	Mayank Singh UT Southwestern Medical Center, Dallas, TX, USA	MOF cooperates with DNAa polymerase eta to repair intra strand break induced by cross-linking agents
1720h – 1735h	Yutaka Miura Nagoya City University Medical School, Nagoya, Japan	The ZFHX3 (ATBF1) transcription factor induces PDGFrb, which activates atm in the cytoplasm to protect cerebellar neurons from oxidative stress
1735h – 1750h	R Stewart University of Queensland, Brisbane, Australia	A cellular model to investigate the role of ATM in the nervous system

1750h – 1805h	Q Shi University of Science and Technology of China, Hefei, China	The fate of micronucleated cells post x-irradiation detected by live cell imaging

11th February 2012

0800h – 0830h	Organizing committee meeting	
Session XI 0830h – 1035h	**DNA Damage Response** Chairpersons: Junjei Chen/Peter Burgers	
0830h – 0850h	Rene H. Medema University Medical Center Utrecht, Utrecht, The Netherlands	Chromosome segregation errors as a cause of DNA damage and structural chromosome aberrations
0850h – 0910h	Tej K Pandita UT Southwestern Medical Center, Dallas, TX, USA	ATM dependent mof threonine 392 phosphorylation is required for chromatin retention of DNA dsb repair factors
0910h – 0930h	Jessica Taylor MD Anderson Cancer Center, Houston, TX, USA	Chromatin disassembly and reassembly during double strand break repair and the DNA damage response
0930h – 0950h	B.S. Dwarakanath Institute of Nuclear Medicine and Allied Sciences, Delhi, India	Role of hexokinase II in DNA repair
0950h – 1005h	Bin Wang MD Anderson Cancer Center, Houston, TX, USA	Functional analysis of a BRCA1 associated complex in DNA damage response
1005h – 1020h	Sherif El-Khamisy Genome Damage and Stability Centre, University of Sussex, Brighton, UK	Breaking and sealing one strand of DNA: a role for sumo
1020h – 1035h	AK Naik Indian Institute of Science, Bangalore, India	Differential reaction kinetics, cleavage complex formation and nonamer binding domain dependence dictate the structure and sequence specific nuclease activity of RAGS
1035h – 1100h	TEA	
1100h – 1140h **Special talk**	Luis F. Parada, UT Southwestern Medical Center, Dallas, TX, USA	Cancer stem cells sustain glioblatoma growth and infiltration *in vivo*
Session XII 1140h – 1310h	**DNA damage response** Chairpersons: Maria Jasin / Tej Pandita	
1140h – 1200h	Simon N Powell Memorial Sloan-Kettering Cancer Center, New York, NY, USA	The effect of ATM and CHK2 on the BRCA1-BRCA2 pathway of homologous recombination
1200h – 1220h	Roberto Chiarle Harvard Medical School, Boston, MA 02115, USA	Mechanism of chromosome breaks and translocations in b cells as revealed by genome-wide translocation sequencing
1220h – 1240h	Anindya Dutta University of Virginia, Charlottesville, VA, USA	Extra chromosomal micro-DNAs and chromosomal micro deletions in normal tissues

1240h – 1255h	S Bekker-Jensen University of Copenhagen, Copenhagen, Denmark	DNA damage-inducible sumoylation of HERC2 promotes RNF8 binding via a novel sumo-binding zinc finger
1255h – 1310h	Junya Kobayashi Radiation Biology Center, Kyoto University, Kyoto, Japan	Novel role of NBS1 in ubiquitination-mediated response through RNF20
1310h – 1415h	LUNCH	
Session XIII 1415h – 1525h	**Cancer** Chairpersons: Domenico Delia/Dipinjin Chowdhary	
1415h – 1435h	Daman Saluja University of Delhi, Delhi, India	P53 mediated gene repression in response to genotoxic stress is mediated through recruitment of sin3b
1435h – 1455h	Les Krushel UT MD Anderson Cancer Center, Houston, TX	Translational regulation of the aurora a mRNA
1455h – 1515h	Sorab N Dalal Tata Memorial Centre Kharghar Node, Navi Mumbai, India	Regulation of cell cycle progression by 14-3-3γ
1515h – 1530h	S Nayler University of Queensland, Brisbane, Australia	A human iPSC model of ataxia-telangiectasia recapitulates the cellular phenotype
1530h – 1545h	B. Uygungil Johns Hopkins Hospital, Baltimore, MD, USA	Safety of live viral vaccines and retrospective review of immunologic status of 329 patients with ataxia telangiectasia
1545h – 1600h	TEA	
1600h – 1630h	Wrap up	
1630h – 1640h	Vote of Thanks	