

A REPORT OF THE 25TH ANNUAL IACR CONVENTION

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The 25th annual Indian Association of Cancer Research (IACR) convention was held at Advanced Centre for Treatment, Research and Education in Cancer (ACTREC) in Kharghar, Navi Mumbai, from February 15 to 18, 2006. It was indeed a proud homecoming for IACR, as it was founded by scientists of the erstwhile Cancer Research Institute (CRI) - which now forms the basic research wing of ACTREC.

The Inaugural function took place in the ACTREC auditorium in the evening on Wednesday February 15, 2006. The welcome address by Dr. Rajiv Sarin (*Director, ACTREC*) was followed by the address by IACR President Dr. Dhananjaya Saranath (*Reliance Life Sciences, Navi Mumbai*). In her opening remarks, Dr. KA Dinshaw (*Director, TMC*) congratulated IACR on



Inaugural function of the 25th annual IACR Convention
Dr. Dhananjaya Saranath (President), Dr. Rajiv Sarin (Chairperson), Dr. Kiran Majumdar-Shaw (Chief Guest),
Dr. K.A. Dinshaw (Patron), Dr. M.G. Deo (Founder President) and Dr. S.M. Zingde (Convenor)

reaching this important milestone. The Chief Guest Dr. Kiran Majumdar-Shaw (*CMD, Biocon Ltd., Bangalore*) in her inaugural address updated the audience about the status of biotechnology research in India today. Her presentation was followed by the address by Dr. MG Deo (*Founder President, IACR*) wherein he detailed the reasoning behind setting up IACR and his pride at its silver jubilee. He also shared his vision for IACR's growth in the years to come. Following the report by Dr. Neelam Shirsat (*Secretary, IACR*), the past twentyfive years' office bearers of IACR were felicitated. The function ended with acknowledgements by Dr. Surekha Zingde (*Dy. Director, CRI-ACTREC*).

Scientific deliberations of the 25th annual IACR convention began on Thursday, February 16, 2006, with the Dr. MG Deo Oration session chaired by Dr. D Saranath (*RLS, Navi Mumbai*). This year's recipient of this prestigious Oration was the renowned immunologist Dr. Ashok Khar



Dr. M. G. Deo Oration Award presentation
Dr. Ashok Khar (Awardee), Dr. M. G. Deo and Dr. Dhananjaya Saranath

(*Shantha Biotechnics Ltd, Hyderabad*). He spoke about his work on the mechanisms involved in the spontaneous rejection of tumours in syngeneic hosts, using a rat tumour model system. He highlighted the role played by various effector cells such as NK cells and further discussed how he had used monoclonal antibodies to retard tumour growth in tumour-bearing animals.

The first session [I: Tumour Cell Biology] of the convention was chaired by Drs. BR Das (*Speciality Ranbaxy, Mumbai*) and MG Deo (*Moving Academy of Medicine and Biomedicine, Pune*). This session included invited talks on 'Nucleoplasmic shuttling of Rb in cancer via CDK-



Dr. Sushil Rane

phosphorylation dependent nuclear export' by Dr. Sushil Rane (*National Cancer Institute, USA*), 'Altered cell surface glycosylation and organ specific metastasis' by Dr. Rajiv Kalraiya (*ACTREC, Navi Mumbai*), 'Unveiling the mystery of differential glycosylation of biomolecules and their potential application in childhood acute lymphoblastic leukemia' by Dr. Chitra Mandal

(*Indian Institute of Chemical Biology, Kolkata*), 'Rb-dependent or -independent cellular growth of cervical intra epithelial neoplasia lesions' by Dr. S Ashraf Imam (*Huntington Medical Research Institute, USA*), 'What's my (cell) line?' by Dr. Sen Pathak (*MD Anderson Cancer Center, USA*), 'Rho A: A critical signaling molecule in CML' by Dr. Nishigandha Naik (*ACTREC, Navi Mumbai*), 'Role of Rho c in cervical carcinoma progression & invasion' by Dr. Sweta Shrivastava (*National Centre for Biological Sciences, Bangalore*) and 'Cytokeratins: markers of cell differentiation or regulators of cell differentiation' by Dr. Milind Vaidya (*ACTREC, Navi Mumbai*).

The post lunch session [II: Drug Discovery & Delivery] was chaired by Dr. Somesh Sharma (*Nicholas Piramal India Ltd., Mumbai*). It included interesting talks on 'Discovery and development of a novel cyclin – dependent kinase inhibitor, P276-00' by Dr. Kalpana Joshi (*NPIL, Mumbai*), 'Metallo drugs for selective targeting of tumors' by Dr. Subhash Padhye

(*University of Pune, Pune*) and 'Molecular modeling and drug design in reference to anti-cancer drug design against known targets' by Dr. Chhabinath Mandal (*IICB, Kolkata*).

Proffered posters from students and young investigators (total 43) were put up in the pandal right from the morning of day two. In addition, there were 11 more posters from young investigators who were vying for the poster awards. All the posters were kept on display throughout the convention so that delegates could view them at their convenience. Time was allocated for 'poster viewing' during the tea break, with the presenting authors being present next to their posters to answer specific queries.



Poster Session

The next session [III: Cancer Therapeutics] was chaired by Drs. SG Gangal (*MAMB, Pune*) and KB Sainis (*Bhabha Atomic Research Centre, Mumbai*). The talks included 'IL-13 receptor targeted therapy for human brain cancer' by Dr. Bharat H Joshi (*Food and Drug Administration, USA*), 'Immunotherapeutic strategy for cancer: Lessons to be learnt from auto-anti melanocytic responses' by Dr. PK Das (*University of Amsterdam, The Netherlands*), 'Role of osteoclast in bone metastasis: Suppression of increased osteoclast number and activity by interleukin-4' by Dr. Mohan R Wani (*National Centre for Cell Sciences, Pune*), 'Molecular profiling of high and low metastatic prostate cancer cells treated with quercetin. Role of flavonoids in chemoprevention of cancer' by Dr. P Madhavan Nair (*State University of New York at Buffalo, USA*) and 'Epigenetic approaches in cancer control and epidemiology' by Dr. Mukesh Verma (*NCI, USA*). Dr. James Hebert made a presentation entitled 'Integrating molecular and epidemiologic methods in cancer research: the viewpoint of a high level administrator in a major US research university' in place of his absent colleague Dr. Harris Pastides (*University of South Carolina, USA*). This was followed by a talk on 'Regression of malignant tumours following a new method of treatment utilizing homeopathic medicines' delivered jointly by Drs. Prasanta and Pratip Banerji (*PBHR Foundation, Kolkata*), followed by talks on 'Cancer: description and management in Ayurveda' by Dr. ADB Vaidya (*Swami Prakashanand Ayurvedic Research Centre, Mumbai*) and 'Tumour markers: From research lab to path lab' by Dr. Sanjeev Kumar Gupta (*Yashraj Biotechnology Ltd., Navi Mumbai*).



Dr. P. K. Das



General Body Meeting at the 25th annual IACR Convention
Dr. Neelam Shirsat (Secretary), Dr. Dhananjaya Saranath (President),
Dr. Kishore Amin (Treasurer) and Dr. Rakesh Rawal (Election Officer)

The IACR general body meeting was held in the evening. The results of the election of the new IACR executive committee (EC) were declared by the election officer Dr. Rakesh Rawal (*GCRI, Ahmedabad*). The new IACR EC (2006-2008) is as follows: President: Dr. Bhudev C. Das (*ICPO, Noida*); Vice-President: Dr. Shubhada

V. Chiplunkar (*ACTREC, Navi Mumbai*); Secretary: Dr. Nishigandha R. Naik (*ACTREC, Navi Mumbai*); Jt. Secretary: Dr. Prabhudas S. Patel (*GCRI, Ahmedabad*); Treasurer Dr. Narendra Joshi (*ACTREC, Navi Mumbai*); Members: Dr. Neeta Singh (*AIIMS, New Delhi*), Dr. Dhananjaya Sarnath (*RLS, Navi Mumbai*), Dr. Amitava Chatterjee (*CNCI, Kolkata*), Dr. Anil D'Cruz (*TMH, Mumbai*), Dr. Tanuja R. Teni (*ACTREC, Navi Mumbai*), Dr. N.W. Johnson (*Griffith University, Australia*), Dr. Ashok Vaidya (*SPARC, Mumbai*), Dr. Purvish Parikh (*TMH, Mumbai*); Ex-Officio Member: Dr. Neelam Shirsat (*ACTREC, Navi Mumbai*).

Day three of the IACR convention, i.e. Friday, February 17th 2006, was wholly devoted to the Silver Jubilee Symposium on 'Molecular Profiling and Cancer Management' organized as a part of its silver jubilee celebrations. The highlights of this symposium were invited presentations by eminent basic researchers as well as clinicians who have made seminal contributions in molecular profiling and cancer management. The symposium chairpersons were Drs. Rajiv Sarin and Dr. Sudhir Shrivastava (*NCI, USA*). In his opening remarks, Dr. Rajiv Sarin gave an overview of the potential of this nascent field. Dr. Sudhir Srivastava spoke about "The NCI's Early Detection Research Network: Meeting the promises and challenges in molecular screening of cancer". Dr. Cathie Garnis (*British Columbia Cancer Research Center, Canada*) made a presentation entitled "Genomic alterations as diagnostic markers in premalignant disease".



Prof. Peter Selby

In the pre-lunch session, Prof. Peter Selby (*Cancer Research UK/ St. James Hospital, UK*) presented a talk entitled "Will clinical proteomics alter the practice of oncology?". Dr. Julio Celis (*The Danish Centre for Translational Breast Cancer Research, Denmark*) spoke on "Proteomic strategies in breast cancer". Dr. Gajanan Sherbet (*University of Newcastle upon Tyne, UK*)

made a presentation entitled “Artificial neural network based analyses of breast cancer progression”. Dr. Susanta Roychoudhury (*IICB, Kolkata*) gave a talk on “Probing genomic alterations in head and neck cancer”.

In the post-lunch session, Dr. Kumaravel Somasundaram (*Indian Institute of Science, Bangalore*) spoke about “Gene expression profiling using DNA microarrays: Development of markers for glioma progression and diagnosis”. Dr. Ravi Sirdeshmukh (*Centre for Cellular and Molecular Biology, Hyderabad*) made a presentation on “Glial tumors and differential protein expression: Clinical



Dr. K. Somasundaram

questions and biomarker hunt”. Dr. Surekha Zingde (*ACTREC, Navi Mumbai*) spoke about “Proteomic profiling of oral cancer – Biomarkers and potential targets”. Dr. Shubhada Chiplunkar (*ACTREC, Navi Mumbai*) made a presentation entitled “TCR genes and CD3- ξ chain as biomarkers for cancer diagnosis and prognosis”. Dr. Rajiv Sarin summed up the day’s proceedings by underlining the importance of molecular profiling in cancer management.

The rest of the day was reserved for the vital and popular Poster and Oral Award sessions. In all, 11 entries were received for the Poster awards. This was followed by the oral award session chaired by Drs. Kalpana Joshi (*NPIL, Mumbai*) and Pratibha Amare-Kadam (*Tata Memorial Hospital, Mumbai*). Ten entries were received from students and young investigators. They had prepared their presentations really well and this session was a treat to attend. At the end of the day, all the delegates enjoyed a sumptuous dinner on the lawns of ACTREC that were twinkling with hundreds of fairy lights.

The last day of the IACR convention, i.e. Saturday, February 18th 2006, began with session IV: Molecular markers of cancer, which was chaired by Drs. BC Das (*Institute of Cytology and Preventive Oncology, New Delhi*) and RA Bhisey (*Pune Univ, Pune*). The session included the following presentations: ‘Oral submucous fibrosis (OSF): An immunohistochemical study of proliferation, apoptosis and differentiation markers’ by Dr. K Ranganathan (*Ragas Dental College, Chennai*), ‘Study of telomere – telomerase dynamics in oral cancer’ by Dr. Prabhudas Patel (*Gujarat Cancer and Research Institute, Ahmedabad*), ‘Identification of genetic alterations in oral tumour genomes for the development of disease specific CGH arrays’ by Dr. Jennifer



Dr. K. Ranganathan

Campbell (*British Columbia Cancer Research Centre, Canada*), 'Estimation of angiogenic factors in breast cancer' by Dr. Sunil Trivedi (*GCRI, Ahmedabad*), 'A preliminary investigation on molecular basis for clinical aggressiveness in cervical carcinoma by comparative genomic hybridization & conventional fluorescence in-situ hybridization' by Dr. Ashutosh Halder (*All India Institute of Medical Sciences, New Delhi*) and 'Molecular profiling of human lung squamous cell carcinoma and chemoadjuvant action of chemopreventive curcumin' by Dr. Neeta Singh (*AIIMS, New Delhi*).

The pre-lunch session [V: Carcinogenesis & Chemoprevention] chaired by Drs. Nitin Telang (*Cornell University, USA*) and KVK Rao (*ex-ACTREC, Navi Mumbai*), had presentations on 'Prevention of carcinogenesis in a model for familial colon cancer' by Dr. Nitin Telang (*Cornell University, USA*), 'Chromate carcinogenesis mitigation by lipoic acid' by Dr. Sushil Kumar (*Industrial Toxicology Research Centre, Lucknow*), 'Mutagenicity of garam masala (spice blend) extract and its modulatory effects on the mutation induced by heterocyclic amines in an Ames test' by Dr. GP Meshram (*Defense Research and Development Establishment, Gwalior*), 'Anti-cancer potential of turmeric oil' by Dr. JV Joshi (*SPARC, Mumbai*), 'Nicotine, nitrosamine and heavy metal content of commonly used smokeless tobacco products' by Dr. Sreevidya Subramoney (*Healis-Sekhsaria Institute of Public Health, Navi Mumbai*) and 'Increased risk of oral leukoplakia and cancer among tobacco users in relation to polymorphisms at GSTM3 and XRCC1 loci' by Dr. Bidyut Roy (*Indian Statistical Institute, Kolkata*).



Dr. Sreevidya Subramoney

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The post lunch session [VI: Epidemiology & Molecular Epidemiology] was chaired by Drs. Kishore Chaudhry (*Indian Council of Medical Research, New Delhi*) and PC Gupta (*HSIPH, Navi Mumbai*). The session included talks on 'Hereditary cancer detection and prevention program' by Dr. T Rajkumar (*Cancer Institute (WIA), Chennai*), 'What role for epidemiology and international collaboration in understanding large and changing disparities in cancer rates?' by Dr. James Hebert (*University of Southern California, USA*), 'Relative risks of tobacco-related cancers for various types of tobacco use' by Dr. PC Gupta, and finally 'Study of human leukocyte antigen (HLA) & killer immunoglobulin-like receptor (KIR) genotypes in breast cancer patients' by Dr. NN Joshi (*ACTREC, Navi Mumbai*).

The last session of the convention [VII: Impact of basic research on clinical practice] was chaired by Drs. KG Nair (*Holy Spirit Hospital, Mumbai*) and AN Bhisey (*Pune Univ, Pune*). The presentations included 'Clinical implications of basic research' by Dr. Ashish Bakshi (*ACTREC, Navi Mumbai*) 'Impact of basic research on clinical practice' by Dr. Rajan Badwe (*TMH,*

Mumbai) and 'Translation of high throughput genomics & proteomics research into the clinic' by Dr. Richard Somiari (*ITSI – Biosciences, USA*).

The Valedictory function followed where the long awaited awards in the young scientist categories were announced. Ms. Rachana Patel (*ACTREC, Navi Mumbai*) won the Shri Sitaram Joglekar award for her oral presentation entitled 'Evaluation of anti-initiating effect(s) of polymeric black tea polyphenols'. Ms. Palak



Felicitation function of the 25th annual IACR Convention
Dr. G.B. Maru (Organizing Secretary), Dr. Rajiv Sarin (Chairperson) and Dr. S.M. Zingde (Convenor)

Parekh (*ACTREC, Navi Mumbai*) won the Smt. Mangala Bamane award for her oral presentation entitled 'Resveratrol: A potential chemopreventive agent for liver cancer'. Ms. Poonam Baliga (*Manipal College of Pharmaceutical Sciences, Manipal*) won the Shri Rajnikant Baxi award for her poster entitled 'Evaluation of anti-metastatic and anti-angiogenic activity of hydroalcoholic extract of *Phyllanthus emblica* (Amla) on B16F10 melanoma cells'. Ms. Rachana Garg (*ACTREC, Navi Mumbai*) won the Shri Rambhau Kulkarni award for her poster entitled 'Evaluation of mechanism(s) of curcumin mediated chemoprevention'. Ms. Nithya Srinivasan (*ACTREC, Navi Mumbai*) was awarded a Special Prize for her poster entitled 'Role of poly N-acetyl lactosamine substituted β -1,6 branched N-oligosaccharides in mediating invasion, motility and proliferation of melanoma cells to the lungs'.



Ms. Poonam Baliga receiving the Shri Rajnikant Baxi award
from Dr. A. N. Bhisev

The 4-day IACR convention saw participation by over 100 delegates from across the country as well as from abroad. The Convention proved to be a very proactive forum that provided avenues for exchange of information, data and ideas between active researchers, thus giving a major fillip to cancer research in India.