

IABS – 2015 Conference Report

The Fourth Annual Meeting of the **Indian Academy of Biomedical Sciences** (IABS) was organized by Nizam's Institute of Medical Sciences, Hyderabad at the Auditorium of CSIR-IICT, Taranaka, Hyderabad with effect from 9th January 2015 to 11th January 2015 as "*International Conference on Recent Advances in Research & Treatment of Human Diseases*". The conference was inaugurated by Dr. Ch. Mohan Rao, Director, Centre for Cellular & Molecular Biology (CCMB) and presided over by Dr. L. Narendranath, Director, Nizam's Institute of Medical Sciences, Hyderabad. The inaugural functions was also graced by many luminaries including Prof. Hari S. Sharma (Netherlands) the founder President of IABS, Prof. A.S. Kanagasabapathy, Dr. Saif Ahmad (Canada), Dr. P. Usharani, NIMS, Hyderabad and Prof Vijay Kumar Kutala, the Organizing Secretary of the Conference. IABS Presidential Address was delivered by Prof. Abbas Ali Mahdi (KGMU, Lucknow). The conference was attended by over three hundred delegates from different parts of India and about 20 delegates from various regions of the world including U.S.A., Canada, Europe, Australia and Asia including Malaysia, U.A.E. and Iran.

The three day international meet was organized under the leadership of Prof. Vijay Kumar Kutala, Department of Pharmacology and Therapeutics, Nizam's Institute of Medical Sciences, Hyderabad. During the conference many sessions were organized where national and international experts from different fields deliberated upon Environmental toxins and lung diseases, Neurological disorders, Cancer, diabetes, cardiovascular diseases, metabolic disorders, autoimmune diseases and recent advances in medical research.

In the session "Environmental Exposure: Lung Diseases", Dr. Viswanathan (University of Illinois, Chicago, USA) presented his work on "the Autotaxin- Lysophosphatidic Acid Signaling Axis in the Pathogenesis of Asthma". Dr. Parinandi Narasimham (Ohio State University, Columbus) presented his work on indoor airborne dust/particulate matter causing respiratory diseases and a novel lipid centric mechanism of airway inflammation. Dr. Vidyani, (University of Illinois, Chicago, USA) presented work on therapeutic intervention of sphingolipids in ventilator-induced lung injury.

In the session on "Nitric Oxide in Health & Disease" Dr. Kishore Parsa (Dr. Reddy's Institute of Life Sciences, Hyderabad) presented his work on "A Novel Immuno-modulatory Function of PHLPP1: Inhibition of iNOS via Attenuation of STAT1 ser 727 Phosphorylation in Mouse Macrophages", Prof. Arunabha Ray (Vallabhai Patel Chest Institute, University of Delhi) presented work on "Nitric oxide (NO) regulates gender based differences in stress responses in rats", Dr. Madhu Dikshit (CSIR-CDRI, Lucknow) presented her work on "L-Plastin-S-glutathionylation attenuates human neutrophil chemotaxis, polarization and bactericidal activity". Dr. Kavita Gulati (Vallabhai Patel Chest Institute, University of Delhi) presented her work on "Experimental studies on the role of NO during drug and xenobiotics induced toxicity", Dr. Suvro Chatterjee, (Anna University, Chennai) presented his work on "Type 2 Diabetes mellitus perturbs red blood cell nitric oxide signaling", while Dr. N.S. Verma (KGMU, Lucknow) presented his work on "Mitochondrial Dysfunction in diabetes".

In the session on "Cancer" Dr. Elisabeth Deindil (Walther-Brendel-Centre of Expert Medicine, Munich) presented her work on "New players in Arteriogenesis-the central role of mast cells", Dr. Arabinda Choudhury (Senior Scientist, IICT. Hyderabad) spoke on

"Eradicating established tumor through in vivo dendritic cell targeted genetic immunization in combination with targeted chemotherapy" and Dr. Nandini Ghosh Choudhury (University of Texas, USA) presented her work on "Omega-3 Fatty Acids elicit multiple mechanisms to control breast cancer growth and metastasis". Dr. K.B. Kalpana (University of Saskatchewan, Canada) presented her work on "Potent immunotherapy using adoptively transferred transgene IL-6-engineered dendritic cell-stimulated CD8+ T-Cell with prolonged survival and enhanced cytotoxicity". Dr. V. Radha (Senior Scientist, CCMS, Hyderabad) delivered a talk on "Signaling to proliferation arrest and differentiation: A tale of two molecules". Dr. S.S. Chauhan (AIIMS, Delhi) presented his work on "Transcription factor C/EBP- β mediates down-regulation of dipeptidyl-peptidase III expression by interleukin 6 in human glioblastoma cells".

In the session on "Novel Technologies" Dr. Subhash Chandra Parija (Dean, Research, JIPMER) presented his work on "Recent developments in diagnosis of parasitic infections in humans", Dr. S.K. Verma (Department of Pathology, JIPMER) spoke on "Gold Nanoparticles: Recent Applications in cancer diagnostics and therapy", while Dr. Sadhna Sharma (PGIMER, Chandigarh) presented her work on "Therapeutic implications of nanotechnology based treatment strategies against mycobacterial infections". Dr. Saif Ahmad (University of Ottawa, Ottawa, Ontario) presented his work on "Electrocardiogram-Assisted Blood Pressure Estimation in Patients with Atrial Fibrillation and other Chronic Conditions", Dr. S. Asha Devi (Bangalore University) presented her work on "Exercise and Brain" and Dr. Rajesh Mohanraj (UAE University, Al Ain, UAE) deliberated on "Targeting Ploy (ADP-ribose) polymerase (PARP) for developing antifibrotic agents".

In another session on cancer, Dr. Kim Vaiphei (PGIMER, Chandigarh) presented her work on "Human esophageal squamous cell carcinoma: role of Human Papilloma Virus and its genotypes in cancer cell". Dr. Poonam Kakkar (CSIR-IITR, Lucknow) presented her work on "FoxO proteins nuclear retention and BH3-only protein Bim induction evokes mitochondrial dysfunction mediated apoptosis in Berberine-treated HepG2 cells". Dr. P.R. Padma (Coimbatore) presented her work on "Effects of bacoside fraction of *Bacopa monnieri* on the expression of selected cancer related genes in oral cancer cells". Dr. P. Shanthi (University of Madras) delivered a talk on "Kalpaamrutha a promising herbal formulation in the effective treatment of malignant tumors" and Dr. Jyotdeep Kaur (PGIMER, Chandigarh) presented her work on "Cytokines and their genotypes as predictors of HBV related HCC in India".

In a session on "Diabetes" Dr. Nalini Santanam (Marshall University, USA) presented interesting work on "Impact of Technology-based intervention on Biomarkers and Micro RNAs in Patients with T2DM". Dr. Goutam Ghosh Choudhury (University of Texas Health Science Centre, St. Antonio, USA) presented work on "Micro RNA-214 launches a cell autonomous signaling pathway leading to mTORC1 activation necessary for diabetic renal complications". Dr. Parimal Mishra (Dr. Reddy's Institute of Life Sciences, Hyderabad) presented his work on "ERK2-Mediated Phosphorylation of Transcriptional Coactivator Binding Protein PIM1/NCoA6IP at Ser298 Augments Hepatic Gluconeogenesis". Dr. Kaiser Jamil (JNIAS, Hyderabad) presented her work on "Networking of TNF α and its role in Diabetes Mellitus".

In the session on "Autoimmune Diseases" Dr. Moinuddin (ANU, Aligarh) presented his work on "Biophysical and Immunochemical Studies on Methylglyoxal Modified Histones", Dr. Alpana Sharma (AIIMS, New Delhi) presented her work on "Yo-T-cells and Scavenger receptors involvement in the Immunopathogenesis of Pemphigus Vulgaris", Prof. Khursheed Alam (AMU, Aligarh) presented his work on "Glycated H2A; A likely trigger for systemic lupus erythematosus".

In the session on "Cardiovascular Diseases" Dr. Paolo Di Nardo (University of Rome, Italy) presented his interesting work on "Engineered Tissues for Heart Mending" while Dr. Dinender Singh (University of Central Florida) deliberated on his recent work on "Cardiac Regeneration in the Injured Myocardium". Dr. Periannan Kuppusamy (Dartmouth Med. School, USA) presented his work on "Sense & Sensibility of Oxygen in Acute Myocardial Infarction and Protection", Dr. Namakkal S. Rajasekaran (The University of Alabama at Birmingham, USA) presented his work on "Genetic Basis for Cardiomyopathy: Reductive Stress and Pathological Cardiac Remodeling". Dr. Shreesh Ojha (UAE University, Al Ain, UAE) presented his work on "Therapeutic Potential of cannabinoid agonist in experimental model of ischemic heart disease".

In the session on "Nutraceuticals" Dr. Lindsay Brown (The University of Southern Queensland, Australia) presented his work on "Functional foods for metabolic syndrome", Dr. Louis Prem Kumar (University of Southern Illinois, USA) presented his work on "Transient receptor Potential (TRP) Channels as Targets for Botanicals", Prof. Afozul Huq, (Principal Scientist, VPS Healthcare, Abu Dhabi), Presented his work on "Vitamin D Deficiency: A Global Perspective", Dr. Mummady Swamy (Universiti Sains Malaysia) presented his work on "Antioxidant Propolis Intervention in Kainic acid mediated excitotoxicity in rat brain", Prof. Sandip K. Bandyopadhyay, (Dr. B.C. Roy PG Ins. of Basic Med. Sci. Kolkata) presented his work on "Natural neuroprotectant from Tea (*Camellia sinensis*) having gastro-protective property", Dr. Subir Kumar Das (College of Medicine & JNM Hospital, Kalyani), presented his work on "Scavenging property of different grape cultivars against ionizing radiation-induced liver damage ex vivo", Dr. Sukesh Mukherjee (NRI Med. College, Vizag) presented his work on "Role of immunological modulation and biochemical variations in NAFLD patients with Type 2 DM", Prof. Santasree Mazumdar (University of Calcutta, Kolkata) presented her work on "The Comparative studies of chemoprotective effects of nanoconjugate of different plant polyphenols".

In the session on "Neurological Diseases" Prof. Anurag Tomar, (Director, NIMS University, Jaipur) presented his work on "Excessive fluoride Delineate neurotoxicity and its association with reduced intelligence score in children of Rajasthan, India", Prof. Abbas Ali Mahdi (KGMU, Lucknow) spoke on his work on neurotoxicity caused by silica nanoparticles. Dr. Rajeswari (AIIMS, New Delhi) presented her work on "Diagnostic and Therapeutic approaches in Friedreich's Ataxia", Dr. K.K. Srivastava (New Delhi) deliberated on role of adaptogens for increasing physical and mental performance. Dr. Seeema Bhargava (New Delhi) presented her work on "Oxidative biomarkers and therapeutic adjuvants in occlusive vascular disease".

Altogether about 100 invited lectures and oral presentations were made during the three day conference and more than one hundred twenty students made poster presentations.

The Indian Academy of Biomedical Sciences instituted many prestigious awards which were presented to eminent scientists during the inaugural function on 9th January 2015. “Padma Shri Prof. Mahdi Hasan Award” for clinical research for the year 2014 was bagged by Prof. Lalit Kumar, Professor & Head, Department of Medical Oncology, All India Institute of Medical Sciences, New Delhi, who is an eminent Medical Oncologist of the country and a recipient of Padma Shri Award himself. “Prof. Sohail Ahmad Award” for basic science research was conferred upon Prof. D.N. Rao, Professor & Head, Department of Biochemistry, All India Institute of Medical Sciences, New Delhi for his outstanding work in Immunology. “Late Smt. Kusum Sharma Award” for a young woman Scientist was given to Dr. Sarita Gupta, National Institute of Immunology New Delhi, who has not only published very good research papers but has also filed thirteen patents

During the valedictory function, which was graced by Dr. Ahuja as the Chief Guest, Prof. Najmul Islam, Prof. Abbas Ali Mahdi and Prof. Vijay Kumar Kutala were also present. “Prof. Nurul Islam Award” for the best paper presented during the conference by a young scientist was presented to Dr. Santosh Kumar (Shrichitra Institute of Medical Sciences, Thiruvanthapuram). Other best paper awards were bagged by Dr. Srinivasan Vedantham (Department of Chemical Engineering & Biotechnology, SASTRA University, Thanjavur) and Dr. Shaik Mohammad Naushad (Sastra University, Thanjavur). Best poster awards were presented to Dr. T. Anand (Pondicherry), Ms. Geetika Gupta (Hyderabad), Mr. Syed Hussain Mustafa Rizvi (Lucknow) and Ms. Nazia Uzma (Hyderabad) Travel awards were given to Ms. Shyni GL (Thiruvanthapuram), Ms. R. Preeti (Coimbatore), Ms. Namrata Rastogi (Lucknow) and Mr. Raviraj Anand Devkar (Manipal).

On the second day of the conference the annual general body meeting of the Indian Academy of Biomedical was also held in which Prof. Najmul Islam, Department of Biochemistry, J.N. Medical College, AMU, Aligarh was elected President. Prof. Vijay Kumar Kutala, Nizam’s Institute of Medical Sciences, Hyderabad and Prof. S.K. Verma (JIPMER, Pondicherry) were elected Vice-Presidents and Prof. Alpana Sharma (AIIMS, New Delhi) was elected as Secretary – General of the Indian Academy of Biomedical Sciences.

Prof. Nibriti Das (New Delhi), Prof. P.R. Padma (Coimbatore), Prof. Subir Kumar Das (Kalyani, West Bengal), Prof. Hari Om Shrama (Bhavnagar, Gujarat) and Dr. Sandeep Tripathi (Jaipur) were elected as Zone Secretaries of the Academy. Amongst the other new office bearers Dr. Arun Raizada (New Delhi), Prof. Khursheed Alam (Aligarh), Prof. Narsingh Verma (Lucknow), Dr. H.V. Singh (New Delhi), Prof. S.R. Chaphalkar (Baramati), Prof. Asha Devi (Bangalore), Prof. Sadhna Sharma (Chandigarh), Prof. Sabhiya Majid (Srinagar), Dr. Manoj Rawat (Agra), Dr. Sukesh Mukherjee (Vishakhapatnam), Dr. Moinuddin (Aligarh) and Prof. Savita Yadav (New Delhi) were elected to the Executive Committee of the IABS for the year 2015-2016.