



# National Seminar On Translational Research NSTR - 2017

04 March

-

Organized by Department of Biochemistry, JIPMER, Puducherry & Indian Academy of Biomedical Sciences

The National Seminar on Translational Research (NSTR)-2017 was organized by the Department of Biochemistry, Jawaharlal Institute of Medical Education and Research (JIPMER), Puducherry and Indian Academy of Biomedical Sciences, on March 4, 2017. Translational research is defined as an interdisciplinary branch of the biological sciences, which applies findings from basic science to enhance human health and well-being. It aims to "translate" findings in fundamental research into medical practice and meaningful health outcomes. The theme of this NSTR-2017 conference was 'From the Bench to the Bedside'.

This year's programme was organized for the first time in the Union Territory of Puducherry at the Mini-Auditorium, Fourth Floor, JIPMER Academic Centre on 4th March 2017. The registration for the conference commenced at 8 am. One hundred and sixty registered participants and inhouse JIPMER participants attended NSTR-2017 and made the conference a grand success. The day's proceedings commenced with the Dhanvantari prayer and the welcome address by Dr. M. G. Sridhar, Senior Professor of Biochemistry & Organizing President. The Chief Guest for the occasion was Dr. Subhash Chandra Parija, Director, JIPMER, who inaugurated the conference. The guests of honour were Dr. J. Balachander, Medical Superintendent; Dr. R. P. Swaminathan, Dean (Academic) and Dr. Abbas Ali Mahdi, Secretary General of the Indian Academy of Biomedical Sciences. The vote of thanks was delivered by Dr. Zachariah Bobby, Professor and Head of Biochemistry, JIPMER & Organizing Chairman.



Inauguration of NSTR-2017 by Professor Subhash Chandra Parija, Director, JIPMER

Following the inaugural session, Dr. Subhash Chandra Parija, Director, JIPMER, a biomedical scientist of international repute, delivered the key note address on this occasion. He outlined the current research scenario in India and also emphasized the importance of good research to alleviate human suffering.



#### Professor Subhash Chandra Parija, Director, JIPMER being felicitated after delivering the Key Note Address by Professor M. G. Sridhar, Organizing President, NSTR-2017

After the keynote address, Dr. Medha Rajappa, Additional Professor of Biochemistry & Organizing Secretary shed light on the topic at hand, i.e. translational research and its relevance in clinical practice. Session I of the conference started with the invited talk by Dr. A. Surendiran, Department of Pharmacology, JIPMER, Puducherry on the topic "Hype, Hope & Reality - Genomics in Indian Context". He outlined that the sequencing of human genome has opened up unlimited potential for medical research combined with advances in technology and that there is a need for translational research to fully exploit the scientific advancements made in the field of genetics. This was followed by an invited lecture from Dr. Savita Yadav, Department of Biophysics, AIIMS, New Delhi on "Protein signatures in human seminal plasma and their functional implications". She highlighted the role of prolactin inducible protein in male fertility related biological processes, specifically sperm functions and motility.

After the tea break, scientific session II started. A talk by Dr. Alpana Sharma, Department of Biochemistry, AIIMS, New Delhi set the stage for the next session on "Translational Research in Oncology". She spoke on the topic "Extracellular matrix component hyaluronic-acid mediated CD44 signalling confers survival benefit to tumor cells in urothelial carcinoma of bladder". She further explained that her research has identified potential candidate biomarkers (ECM molecules, cytoplasmic elements as well as key immunological factors), linked with tumor growth and metastasis in bladder cancer. It was followed by invited talks by Dr. Maheswaran Mani, Department of Microbiology, Pondicherry University on "Modulation of Kit Signaling for Efficient Hematopoietic Stem cell Transplantation" and Dr. Rajendra Prasad, Department of Biochemistry & Molecular Biology, Annamalai University, on "Defeating multidrug resistance in cancer through targeting ABC drug efflux transporters". Session II ended with a lunch break.

Session-III of the conference commenced with a lecture by Dr. Abbas Ali Mahdi, Department of Biochemistry, King George's Medical University, Lucknow on the topic "Fluoride – An Inexplicable Natural Toxicant". In his presentation, Dr Mahdi reviewed the toxic potential of fluoride as also its adverse effects on human health. This was followed by an invited talk by Dr. Ramesh, Department of Biochemistry, Mahatma Gandhi Medical College and Research Institute, Puducherry on the role of micro-RNAs, with special reference to their applications in cardiovascular disease. He further explained that miR-499 could serve as a good diagnostic marker in acute myocardial infarction. In continuation with the role of micro-RNAs in health and disease, the next talk by Dr. Mohammad Kaleem Ahmad (Department of Biochemistry, King George's Medical University, Lucknow) was on the identification and validation of miR-711 as a novel biomarker in prostate cancer.

Session IV was a panel discussion, on the topic 'Bench to Bedside – Molecular biology in prevention, detection and treatment of human diseases, moderated by Dr. Surendiran and Dr. Sandhiya. The panellists were Professor Alpana Sharma, Professor Savita Yadav, Professor Abbas Ali Mahdi, Professor Ramesh, Dr. Maheswaran Mani and Dr. Rajendra Prasad. This forum, with active delegate participation, debated key translational research questions and thereby helped direct efforts towards creating greater impact and awareness regarding translational research. The esteemed panellists' scientific insights made for a fascinating panel discussion and this session was the highlight of the proceedings of an academic feast at NSTR-2017.

The conference concluded with a group photo session and followed by National Anthem.

This event at JIPMER was attended by 160 delegates: postgraduate students, residents, PhD scholars, and faculty members of JIPMER and other medical institutions of the union territory of Pondicherry and neighbouring Tamil Nadu. It was highly appreciated by the student community and faculty alike and it was proposed to make this an annual event in the JIPMER Research Calendar.



Group Photo of Organizing Team of NSTR-2017, along with the invited resource persons



Rangoli (Floor decoration) on the occasion of NSTR-2017, depicting the theme of the conference