

# 9<sup>th</sup> Symposium on Frontiers in Biomedical Research (FBR -2014)

14<sup>th</sup> -16<sup>th</sup> April, 2014

Venue: Conference Hall, Opp. Botany Dept, University of Delhi, Delhi-110007

(Scientific Session)

**14.04.2014, Monday (Day 1)**

**Inauguration** **09.00 am-10.00 am**

**High Tea** **10.00 am-10.30 am**

**Session I: Chairman: Prof. Madan Chaturvedi**

**Plenary Lecture**

**PL1. Prof. Samir K. Brahmachari** **10.30 am-11.30 am**

“Open Innovation, Big Data and Crowd Sourcing: The Next Frontier in Biomedical Science”.

**Session II: Microbes & Health – I** **11.30 pm-01.30 pm**

**Invited Lectures:**

**IL1. Dr. Rajendra Prasad** (Director, VPCI) –“Problem of TB in India. What are issues ?”.

**IL2. Dr. Rup Lal** (DU) - “Modification of Rifamycin Polyketide Backbone in *Amycolatopsis mediterranei* Leads to the Production of a New Rifamycin B Analog with an Improved Drug Activity Against Rifampicin- Resistant *Mycobacterium tuberculosis* strains”.

**IL3. Dr. Shibnath Majumdar** (DU) – “Fishy route to understand the pathogenicity of *A. hydrophila*”.

**Oral Presentations:**

**OP1. Ms. Arti Selvakumar** (ACBR) – “Reciprocal Regulation of Reactive Oxygen Species and phospho-CREB Regulates Voltage Gated Calcium Channel Expression During *Mycobacterium tuberculosis* Infection”.

**OP2. Ms. Deepali Joon** (ACBR) –“Rapid and sensitive loop mediated isothermal amplification assay for the diagnosis of pulmonary tuberculosis”.

**Lunch** **01.30 pm-02.00pm**

**Posters Session** **02.00 pm-03.30pm**

**PP1. Ms. Alka (ACBR)** – “Identification and characterization of novel drug targets of *Mycobacterium tuberculosis*”.

**PP2. Mr. Athmanathan Baskaran** (Bharathidasan University, Triruchirappalli) – “Prevalence and molecular characterization of vibrios associated with seafood and clinical samples in Tiruchirappalli, Tamil Nadu”.

**PP3. Mr. Bhartendu Vimal** (BIT, Jharkhand) – “Investigation of GLO I inhibitor in *leishmania denovani*: A pharmacoinformatics approach”.

**PP4. Mr. Chetkar Chandra Keshavam** (Department of Zoology, DU) – “An Assessment of Antimicrobial Activity of Plant Extracts on Culture Dependent Midgut Microbial Flora of Dengue Vector *Aedes aegypti*”.

**PP5. Ms. Deepika Sharma** (ACBR) – “Differential activation of L-type during voltage gated Calcium channel (*Mycobacterium tuberculosis*)”.

**PP6. Ms. Gunjan Kak** (ACBR) – “Modulation of Interferon-gamma receptor (IFN-  $\gamma$ R) in human macrophages by *Mycobacterium tuberculosis*”.

**PP7. Ms. Indu Kumari** (ACBR) – “Understanding the molecular mechanism of multi drug resistance in *Neisseria gonorrhoeae* using mutations in PBP2 and mtrR as model system”.

**PP8. Mr. Kaushik Bhattacharyya** (ACBR) – “Sequence variation and its functional implication in clinical isolates of *Mycobacterium tuberculosis*. In silico analysis of DNA sequence data”.

**PP9. Ms. Kirti Sharma** (ACBR) – “Comparative study on prevalence of HPV (human papillomavirus) infection in tribal belt of India: Madhya Pradesh, Chhattisgarh and Jharkhand”.

**PP 10. Mr. Manoj Kumar Nimesh** (ACBR) – “Evaluation of diagnostic potential of lamp assay for the detection of *Mycobacterium tuberculosis* using the clinical specimens”.

**PP11. Dr. Nidhi Garg** (DU) – “Metabolomics of hexachlorocyclohexane (HCH) transformation: ratio of LinA to LinB determines metabolic fate of HCH isomers”.

**PP12. Dr. Nisha Saxena** (Chemistry dept. DU.) – “Amine based Compounds in Treatment of Tuberculosis”.

**PP13. Mr. Prabhakar Semwal** (Graphic Era University, Dehradun) – “Screening for analog of Rifampicin and Isoniazid from herbal plants of Uttarakhand using in silico approach for treatment of Tuberculosis (TB)”.

**PP14. Mr. Prashant Kumar Mishra** (ACBR) – “Seroprevalence of putative novel immuogens of chlamydia trachomatis and their seropositivity”.

**PP15. Mr. M. Sathiyendiran** (Department of Chemistry, DU) – “*fac*-Re(CO)<sub>3</sub>-based organometallic complexes for photoluminescence cell-imaging”.

**PP16. Ms. Shweta Rai** (ACBR) – “Differential expression of Th1 and Th2 cytokines during experimental cerebral malaria in C57b1/6j mice”.

**PP17. Ms. Shalini Singh** (M.K.R.Govt Degree College) – “Enhance DNA hybridization on nanostructured silicon surface”.

**PP18. Ms. Sonal Yadav** (ACBR) – “Analysis of cytokine level in vaginal washes of trichomoniasis patients”.

**PP19. Ms. Sureka Indrajith** (Bharathidasan University, Triruchirappalli) – “Detection and Characterization of Salmonella sp. and their antibiotic resistance from different meats in Tamil Nadu, India”.

**PP20. Mr. Subhash C Sonkar** (ACBR) – “Needs for diagnostic assays for syndromic management of vaginal discharge: where we stand?”.

**PP21. Mr. Subhash Mehto** (ACBR) – “Modulations of macrophage functions by HIV1-Nef”.

**PP22. Mr. Vivek Verma** (ACBR) – “Estimation of proinflammatory cytokine IL-1b response in UTI patients”.

**Tea** **03.30pm-03.45pm**

**Session III: Microbes & Health - II** **03.45 pm-06.00pm**

**Invited Lectures:**

**IL4. Dr. Manju Bala** (Safdarjung Hospital) – “Action plan to respond to emerging XDR *Neisseria gonorrhoeae* and threat of untreatable gonorrhea”.

**IL5. Dr. Pawan Malhotra** (ICGEB) – “Pathogens immune evasion mechanisms”.

**LI6. Dr. Rajni Gaiind** (Safdarjung Hospital) – “Carbapenem Resistant Enterobacteriaceae: An emerging public health concern in India”.

**Oral Presentations:**

**OP3. Mr. D. Nagarjuna** (ACBR) – “*Escherichia coli*: Is it a Commensal or Pathogen?”

**OP4. Ms. Divya Sachdev** (ACBR) – “Development of in-house PCR assay for co-detection of *Chlamydia trachomatis*, *Neisseria gonorrhoeae* and *Trichomonas vaginalis*.”

**OP5. Mr. Mohit Vashishta** (ACBR) – “Regulation of Programmed Death ligand 1 (PDL-1) during strip to cover *Pneumoniae infection*”.

**15.04.2014, Tuesday (Day 2)**

**Session IV: Genomics in Biomedical Science** **9.00 am-11.00 am**

**Invited Lectures:**

**IL7. Dr. Dinesh Gupta** (ICGEB) – “Arginine methylation and dephosphorylation in *P. falciparum* asexual blood stage”.

**IL8. Dr. Vinod Scaria** (IGIB) – “Personal Genomes to Precision Medicine”.

**IL9. Dr. Srikant Kukreti** (DU) - “Formation of DNA triple helical structures at genomic locations”

#### **Oral Presentations:**

**OP6. Ms. Lubna Wasim**(ACBR) – “Antiproliferative and Synergistic Effect of HDAC Inhibitor LBH589 with Topoisomerase Inhibitors in Cervical Cancer HeLa cell line”.

**OP7. Dr. Chandra bhusan Mishra** (ACBR) – “Development of Novel and Potent Adenosine A<sub>2A</sub> receptor antagonists as potential anti Parkinsonian agents”.

**Tea**

**11.00 am-11.15am**

**Session V: Strategies for drug development and prudence in drug usage**

**11.15 am-01.30pm**

#### **Invited Lectures:**

**IL10. Dr. Y.K. Gupta** (AIIMS) – “Translational Pharmacovigilance”.

**IL11. Dr. Pramil Tewari** (NIPER) – “Safe Drugs”.

**IL12. Dr. Shailly Tomar** (IIT-R) –“Strategies for discovering antiviral molecules against Chikungunya and other mosquito-borne RNA viruses”.

#### **Oral Presentations:**

**OP8. Mr. Vishal Nemaysh** (ACBR) – “Identification of PDGFR Chemoprints for pharmacophore generation to design the novel PDGFR antagonists for targeting Glioblastoma Multiforme(GBM)”.

**OP9. Mr. Dinesh Kumar** (Bharathidasan) – “Antibacterial and Antioxidant potential of metabolite from the bacterium *Bacillus licheniformis* associated with the Marine Sponge *Callyspongia fallax*”.

**OP10. Ms. Farah Nawaz** (Jamia Hamdard) – “Molecular modelling based design and synthesis of pyrazole derivatives bearing hydrazinecarbothioamide skeleton: search for potential anticancer agents”.

**Lunch**

**01.30 pm-02.00pm**

## Posters Session

02.00 pm-03.30pm

**PP23. Mr. Abhishek Sehrawat** (Department of Radiodiagnosis, AIIMS, New Delhi) – “Bio-medical Research - Aspects in Radio-diagnosis”.

**PP24. Mr. Abhishek Sengupta** (Amity Institute of Biotechnology) – “Brain energy metabolism as a framework for the mechanistic modelling of dihydrolipoamide deficiency (DLDD)”.

**PP25. Ms. Dipika Rungta** (BIT, Jharkhand) – “Computational analysis of Nipah virus fusion protein through Docking and MD Simulation approach”.

**PP26. Mr. Gaurav Kishor** (BIT, Jharkhand) – “*In silico* molecular docking analysis of inhibitors for ornithine decarboxylase in *Leishmania donovani*”.

**PP27. Mr. Gourav Dhiman** (Thapar University, Patiala) – “MHC restricted peptide identification in cancer protein Metadherin for immunogenic response”.

**PP28. Mr. Indrajeet Kumar** (G. B. Pant engg. College, Gharwal, Uttarakhand) – “A review on classification of liver tumor by image processing of ultrasound images”.

**PP29. Ms. Kalpana Avasthi** (Chemistry Dept, Dr Hari Singh Gour University, MP) – “An expeditious synthesis and antimicrobial, antitubercular evaluation of azetidinones derivatives via 1,2,4,-triazoles”.

**PP30. Ms. Kalyani Kumari** (NIMHANS) – “Isolation and propagation of early passage monolayer cultures from brain tumor biopsies for preclinical research”.

**PP31. Ms. Manisha Sikka** (ACBR) – “Antiproliferative effects of cyclooxygenase-2 inhibitor, etoricoxib in combination with cholecystokinin antagonists in human pancreatic cancer cells”.

**PP32. Mr. Mohd Javed Naim** (Jamia Hamdard University) – “Synthesis and biological evaluation of some novel pyrazole derivatives as anti-inflammatory agents”.

**PP33. Mr. Md Jahangir Alam** (Jamia Hamdard University) – “Design and synthesis of 4-(5-chloro-3-methyl-1-phenyl-1H-pyrazol-4-yl)-6-(substituted phenyl) pyrimidin-2-ol analogues as anti-inflammatory and analgesics agents”.

**PP34. Mr. Muneeb A Faiq** (ACBR) - “Practical Protocol for consistent and enhanced expression of membrane proteins”.

**PP35. Mrs. Nalini Yadav** (ACBR) – “Elucidating Molecular Mechanism of antiproliferative action of active principle isolated from *B. diffusa* and to find out its probable target receptor”.

**PP36. Mr. Nitin Vishnoi** (ACBR) – “Synthesis of novel substituted carbazole derivatives to study their interaction with CT-DNA”.

**PP37. Ms. Nupur Jhingan** (ACBR) – “AR-A 014418 Used against GSK3beta Down regulates Expression of hnRNPA1 and SF2/ASF Splicing Factors”.

**PP38. Mr. Parveen Kumar** (ACBR) – “Co-encapsulation of Etoposide and vorinostat in poly(ethylene glycol) based biodegradable nanogels”.

**PP39. Ms. Poonam** (ACBR) – “Design, synthesis and evaluation of (4-benzylpiperidin-/piperazin-1-yl) alkyamine derivatives as multifunctional agents for the treatment of Alzheimer's disease”.

**PP40. Ms. Priyanka Narad** (Amity Institute of Biotechnology) – “In-silico docking analysis of alanine racemase as a potential target for the treatment of tuberculosis using a plant source ligand”.

**PP41. Ms. Rashi Arora** (ACBR) – “Development of molecular beacon based RT-PCR assay for easy visualization of chimeric transcripts of AML-ETO[t(8;21)] in acute myeloid leukemia patients”.

**PP42. Ms. Rimpay Kaur Chowhan** (ACBR) – “Effect of Phosphorylation on Peroxiredoxin-6”.

**PP43. Ms. Ruhi Ali** (Jamia Hamdard, Hamdard University) – “Design, synthesis and in vivo screening of substituted 1,3-benzo[d]thiazol-2-yl propanamides as anticonvulsants”.

**PP44. Ms. Shika Saxena** (Amity Institute of Pharmacy) – “Role of multi-kinase inhibitor and its analogues in management of hepatocellular carcinoma”.

**PP45. Mrs. Sunita Jetly** (ACBR) – “Design of rapid molecular beacon based RT-PCR assay for detection and quantification of BCR-ABL and AML-ETO Transcript in myeloid leukemia patients”.

**PP46. Ms. Suparna Sharma** (S.V. Subharti University, Meerut) – “Simultaneous determination of metformin, pioglitazone and glibenclamide in bulk drug and pharmaceutical dosageform by RP-HPLC method”.

**PP47. Mr. Umesh Kumar** (ACBR) – “GSTP1, HIC1 and CDH1 as the early stage methylation markers for triple negative breast cancer in Indian women”.

**PP48. Mr. Vikas Saini** (ACBR) – “An evaluation of anticancer activity of diallyl disulfide analogs; an active principle of garlic”.

**Tea** **03.30 pm-03.45pm**

**Session VI: Cancer Biology and Cancer Management** **03.45 pm -06.00pm**

**Invited Lectures:**

**IL13. Dr. Neerja Bhatla** (AIIMS) – “Cervical Cancer Control in the Community: Will HPV vaccination impact screening ?”.

**IL14. Dr. Neeta Singh** (AIIMS) – “Mitochondriopathy and Epithelial ovarian cancer”.

**IL15. Dr. Chitra Sarkar** (AIIMS) – “Molecular markers in cancer : Use in clinical practice”.

**Oral Presentations:**

**OP11. Dr. Abhishek Tyagi** (ACBR) – “Role of AP-1 in Maintenance of Cervical Cancer Stem-like Cells and its Subsequent Targeting by Combination of Curcumin and UV”

**OP12. Ms. Neetika Barbagga** (ACBR) – “Reactive Oxygen Species Mediate Apoptosis Induced by Demethoxycurcumin in Human glioma U87 cells through Bcl-2 Down-Regulation”.

**OP13. Ms. Vidhi Vashistha** (ACBR) – “ AR-A 014418 Used against GSK3beta Down regulates Expression of hnRNPA1 and SF2/ASF Splicing Factors

**16.04.2014, Wednesday (Day 3)**

**Session VII: Epigenetics and Chromatin reorganization 9.00 am-10.45am**

**Invited Lectures:**

**IL16. Dr. Madhulika Srivastava** (NII) – “Organization amidst chaos : regulation of nuclear processes by CTCF”.

**IL17. Dr. K. Natarajan** (JNU) – “Dissecting the functional modules in TAF9 for transcriptional activation”.

**Oral Presentations:**

**OP14. Ms. Shruti Jain** (ACBR) – “Does dINO80, a chromatin remodeling protein, regulate multiple developmental genes in Drosophila?”

**OP15. Ms. Shweta Mendiratta** (ACBR) – “Analysis of the functional diversity of hINO80, a chromatin remodeling protein”

**OP16. Ms. Rama Kadamb** (ACBR) – “Sin3B activation upon stress induced signaling leads to regulation of p53 target genes and damage response pathways”.

**Tea 10.45 am-11.00am**

**Session VIII: Understanding Complex diseases 11.00 am-1.45 pm**

**Invited Speakers:**

**IL18. Dr. Jayashree Bhattacharjee** (Principal, VMMC) – “The journey in search of endothelial dysfunction with reference to nitric oxide (NO) and endothelial nitric oxide synthase (eNOS) gene polymorphism in preeclampsia”.

**IL19. Dr. Ritu Singh** (LHMC) – “Atherosclerosis –A multifactorial disease with a genetic pre-disposition ?”.

**IL20. Dr. Rajiv Bhat** (JNU) – “Protein folding, aggregation and diseases: Role of chemical chaperones”.

**IL21. Dr. Rizwan Hasan Khan** (Aligarh Muslim University)- “Amyloid Induction in Diverse Class of Proteins: Exploiting SDS as a Tool”.

### **Oral Presentations:**

**OP17. Mr. Sudhir Chandra** (ACBR) – “Angiotensin II type 1 receptor gene in Essential Hypertension”.

**OP18. Ms. Shruti Mittal** (ACBR) – “Chaperone-like role of calcium in protein aggregation: An insight into relieving neurodegenerative proteopathies”.

**OP19. Mr. R. S. Ray** (ACBR) - “Effect of Scopolamine and mecamylamine on oxidative damage and memory dysfunction in mouse model of global cerebral ischemia: A comparative study”.

### **Lunch**

**1.45 pm-2.15 pm**

### **Poster Session**

**2.15 pm-3.30 pm**

**PP49. Ms. Apra Manral** (ACBR) – “Synthesis of diallyl disulfide derivatives and their potential use in the treatment of Alzheimer's disease”.

**PP50. Mr. Chetan Malik** (I.G.N.O.U) – “S6 Peptide Derived from KvAP Channel Shows Cooperativity in Gating on Bilayer Lipid Membrane”.

**PP51. Mr. Dimpy Sharma** (ACBR) – “Approach to Design the allosteric modulators of dopamine receptors in the therapy of parkinson's disease”.

**PP52. Ms. Gunjan Sharma** (Amity Institute of Pharmacy - Amity University) – “Identification of protein based diagnostic biomarkers: paving way for early detection of diabetes mellitus”.

**PP53. Mr. Jayant Maini** (ACBR) – “Delineation of the functional diversity of human PRE-PIK3C2B”.

**PP54. Ms. Meenakshi Dwivedi** (ACBR) – “Effect of SIN-3 on lifespan regulation in *Caenorhabditis elegans*”.

**PP55. Mr. Mohsen Gasemi** (ACBR) – “Diversity of genetic interactions of dINO80, a chromatin remodelling protein, in *Drosophila*”.

**PP56. Ms. Neha Kasturia** (ACBR) – “Role of SIN3 in oxidative stress mediated mitochondrial dysregulation in *S.cerevisiae*”.



**PP57. Ms. Nitika (ACBR)** – “Towards understanding the mechanism and consequence of the regulatory role of INO80 in human cells”.

**PP58. Ms. Parul Gulati (ACBR)** –“Exploring the secrets of genomic imprinting in mealybugs”.

**PP59. Dr. Poonam Shukla (Chemistry Dept. DU)** – “Flavanoids in the treatment of diabetes”.

**PP60. Mrs. Rita Kumari (ACBR)** – “Postoperative administration of 7-NI ameliorates 6-OHDA induced neurotoxicity in bilaterally lesioned female rat model of Parkinson’s disease”.

**PP61. Mr. Roshan Kumar Dutta (South Asian University, Delhi)** – “Metal based specificity of mouse senescence marker protein-30”.

**PP62. Ms. Ruchi Jakhmola Mani (Amity Institute of Biotechnology)** – “Effect of quercetin on alzheimer's model of zebrafish and prediction of its binding site on nAChR Receptor”.

**PP63. Mr. Saurabh Singh (INMAS)** – “Inhibition of chemical and radiation induced tumorigenesis by dietary 2-deoxy-D-glucose in mice”

**PP64. Mr. Shashidhar Mehta (Mewar University, Cittergarh, Rajasthan)** – “Abnormal haemoglobins among sindhi populations of Delhi”.

**PP65. Ms. Shivani G Virmani (Bhaskaracharya college of Applied Sciences (DU), New Delhi)** – “Apolipoprotein (APO) AIV gene polymorphisms and CAD”.

**PP66. Ms. Smrita Singh (JSSATE-Science and Technology Noida)** – “Comparative analysis of Sirtuin 1 towards Neuroprotection “.

**PP67. Ms. Soni Shankhwar (ACBR)** – “Extraction and purification of Tyrosine Hydroxylase from leaves of Mucuna pruries”.

**PP68. Mr. Suchit Khanna (INMAS)** – “Epigenetic regulation and nuclear functions of Hexokinase-II in malignant human cells: genesis and implication”

**PP69. Ms. Swati Chauhan (ACBR)** – “Expression of Heat Shock Protein 70 gene in Essential Hypertension”.

**PP70. Ms. Zarmina Badar (Jamia Millia Islamia, Delhi)** – “Aldosterone synthesis gene: cause or effect of essential hypertension”.

**Tea** **3.30 pm-4.00 pm**

**Valedictory Function** **4.00 pm-5.00 pm**

**Valedictory Address**

**Dr. Shiv Kumar Sarin (Institute of Liver & Biliary Sciences)** –"Heart of the Liver".