9th Symposium on Frontiers in Biomedical Research (FBR -2014)
14th -16th 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 RifamycinPolyketide 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 donovani*: 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*)”.


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”.


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)₃-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-Ib 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 Gaind (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?”


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 A2A 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) – “Biomedical 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”.


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 Faq (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”.


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. Rimpy 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”.


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 Kadam** (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 predisposition”.
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


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, Cittorgarh, 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".