

International Conference on Recent Trends in Biotechnology and Applied Bioinformatics

Scientific Programme

27th – 29th April 2023

Venue: Sharda University, Greater Noida, Uttar Pradesh, India

| Day 1 27 th April 2023, Thursday, Anand Swaroop Auditorium | |
|--|--|
| 09:00 AM to 10:00 AM | Registration |
| 10:00 AM -11:30 AM | Inaugural Function |
| High Tea (11:30 AM – 12:00 PM) | |
| Keynote Addresses | |
| Chairpersons: Prof. Vinod Joshi & Prof. B.C. Tripathy | |
| 12:00 PM - 12:30 PM | Prof. R N K Bamezai , GAP Health Foundation, New Delhi Metabolic convergence despite genomic-epigenomic heterogeneity in cancer with a therapeutic potential |
| 12:30 PM – 1:00 PM | Prof. (Dr.) Anil Kumar Suri , Centre of Cancer Immunotherapy, Sri Ram Cancer & Superspeciality Centre, Mahatma Gandhi Medical College and Hospital, Jaipur Newer frontiers of cancer immunotherapy in reproductive cancers |
| 1:00 PM – 1:30 PM | Prof. Bernhard Grimm , Institute of Biology AG Plant Physiology, Berlin, Germany Multiple regulatory effects on the synthesis of 5-aminolevulinic acid by auxiliary and regulatory factors |
| Lunch (1:30 PM – 2:15 PM) | |
| Keynote Addresses Continuing | |
| 2:15 PM – 2:45 PM | Prof. Suhel Parvez , School of Chemical and Life Sciences, Jamia Hamdard, New Delhi Dopamine Agonists Target Mitochondrial Permeability Transition Pore in Alzheimer's Disease |
| 2:45 PM - 3:15 PM | Dr Roya Rozati , MHRT and Shadan Institute of Medical Sciences, Hyderabad An exploration of the proteomic landscape of unexplained female infertility using bioinformatics |
| 3:15 PM – 4:30 PM | Poster Presentation |
| Tea Break (4:30 PM – 5:00 PM) | |
| 5:30 PM – 7:00 PM | Cultural Program |
| 7:00 PM Onwards | Dinner |

Day 2
28th April 2023, Friday
APJ Abdul Kalam Auditorium and Visvesvaraya Auditorium

Keynote Address

| Keynote Address (APJ Abdul Kalam Auditorium) | | Keynote Address (Visvesvaraya Auditorium) | |
|---|---|--|--|
| Chairperson: Prof. RS Sharma | | Chairperson: Prof. Pitam Chandra | |
| 9:30 AM – 10:00 AM | Dr G Taru Sharma , Director, NIAB, Hyderabad Bench to bedside to brass tacks research: opportunities and challenges | 9:30 AM – 10:00 AM | Prof. Govindjee , University of Illinois, Urbana, IL, USA Photosynthesis research - A historical perspective |

Plenary Lectures

| Plenary Lecture (APJ Abdul Kalam Auditorium) | | Plenary Lecture (Visvesvaraya Auditorium) | |
|--|---|---|--|
| Chairperson: Prof. Abhimanyu Kumar Jha & Dr Pankaj Taneja | | Chairperson: Prof. Nasreen Zafar Ehtesham & Dr. Arpita Roy | |
| 10:00 AM – 10:30 AM | Dr Mohd. Ashraf Ganie , Sher-i-Kashmir Institute of Medical Sciences, Srinagar, J&K Molecular Pathogenesis of Polycystic Ovary Syndrome (PCOS) | 10:00 AM – 10:30 AM | Prof. M. Z. Abdin , Jamia Hamdard, New Delhi A molecular approach for the production of modified stevia sweetener with enhanced sweetening index |
| 10:30 AM – 11:00 AM | Prof. Angamuthu Selvapandiyam , Jamia Hamdard, New Delhi Comprehensive proteomic profiling of the host and the gene-deleted leishmania parasites towards the parasite's efficacy as a potential vaccine candidate | 10:30 AM – 11:00 AM | Prof. B C Das , AIMMSCR, Amity University, Noida, Uttar Pradesh Novel Curcumin-Folate Conjugates; Targeted Drug Delivery for Cervical Cancer |
| 11:00 AM – 11:30 AM | Prof. S S Chauhan , AIIMS, New Delhi Diagnostic, prognostic and therapeutic significance of RNA binding protein HnRNP in head and neck cancer | 11:00 AM – 11:30 AM | Dr Harpreet Singh , ICMR, New Delhi, India Genome Disparities in Pathogens: Implications for Global Health and Policy - A Case Study of Mycobacterium Tuberculosis |

Tea Break (11:30 AM – 12:00 Noon)

| Plenary Lecture Continuing (APJ Abdul Kalam Auditorium) | | Plenary Lecture Continuing (Visvesvaraya Auditorium) | |
|--|--|---|--|
| 12:00 PM – 12:30 PM | Prof. Abhisheka Bansal , JNU, New Delhi Combination of reverse genetics and biochemical approaches to identify novel intervention strategies for control of malaria | 12:00 PM – 12:30 PM | Prof. Anju Shrivastava , University of Delhi, Delhi Neutrophils in host-tumor crosstalk: Role in systemic deterioration |
| 12:30 PM – 1:00 PM | Prof. D B Sahoo , University of Delhi, New Delhi Seaweeds and their biotechnological applications | 12:30 PM – 1:00 PM | Dr Hisashi Ito , Hokkaido University, Sapporo, JAPAN Structural and functional analysis of chlorophyll metabolic enzyme for application to plant biotechnology |
| 1:00 PM – 1:30 PM | Prof. Nelson Saibo , Institute of Chemical & Biological Technology, Lisbon, Portugal Phytochromes and Phytochrome Interacting Factors regulate rice development: from coleoptile elongation to flowering | 1:00 PM – 1:30 PM | Dr Deena Hassan Elsoni , Rabdan Academy Abu Dhabi, UAE Non-steroidal anti-inflammatory drugs and Biomarkers: A new paradigm in Colorectal Cancer |
| 1:30 PM – 2:00 PM | Prof. Margarida Oliveira , Catedrático Institute of Chemical & Biological Technology, | 1:30 PM – 2:00 PM | Dr Showkeen Muzamil , Khalifa University, Abu Dhabi |

| | | | |
|--|--|--|---|
| | Lisbon, Portugal Setting-up biotech tools to uncover the molecular regulation of cork development | | Decellularized extracellular matrix-based nanoemulgel system for full-thickness wound healing |
| Lunch (2:00 PM – 2:45 PM) | | | |
| Invited Lectures | | | |
| Session 1: Medical Biotechnology, Cancer Biology and Computational Biology (APJ Abdul Kalam Auditorium) | | Session 2: Environmental Biotechnology, Genetic Engineering, Plant Biotechnology and Virology (Visvesvaraya Auditorium) | |
| Chairpersons: Prof. Anju Shrivastava, Dr Rani Astya & Dr Sunita Sharma | | Chairpersons: Prof. M. Z. Abdin & Prof. Amit Kumar Singh | |
| 2:45 PM – 3:05 PM | Dr Rupesh K. Srivastava , AIIMS, New Delhi, India Utilizing the Immunoporotic Potential of Bregs under Inflammatory bone loss in Osteoporosis: <i>Bench-to-Bedside</i> | 2:45 PM – 3:05 PM | Dr Rajeev Singh , Jamia Milia Islamia, New Delhi Non-ionizing electromagnetic radiation and Human Health |
| 3:05 PM – 3:25 PM | Dr Nirmala Jagadish , Centre of Cancer Immunotherapy, Sri Ram Cancer & Superspeciality Centre, Mahatma Gandhi Medical College and Hospital, Jaipur SPAG9: A Novel Potential Therapeutic Target in Ovarian Cancer | 3:05 PM – 3:25 PM | Dr Ravi Datta Sharma , Amity University, Gurgaon, Haryana Prediction of numbers and concentration of Alternative splicing based transcriptional biomarkers using RNA-Seq data |
| 3:25 PM – 3:45 PM | Dr Ankur Sharma , Harry Perkins Institute of Medical Research, Western Australia Oncofetal Ecosystem In HCC: Towards Spatial Precision Oncology | 3:25 PM – 3:45 PM | Dr Pallavi Singh , Graphic Era Deemed to be University, Dehradun, Uttarakhand, India Targeting GSK-3 β for the development of potential Therapeutics against Neurodegenerative Diseases |
| 3:45 PM – 4:05 PM | Dr Rakesh Kumar , SMVDU, J&K New Breast Cancer Hotspot Mutation of ANKLE1 and its direct role in DNA Damage and Repair in Mammalian Cells | 3:45 PM – 4:05 PM | Dr M. Iqbal R. Khan , Jamia Hamdard, New Delhi Phytohormones mediated defense mechanisms under different environmental stress regimes |
| Tea Break (4:05 PM – 4:30 PM) | | | |
| Session 1 Continuing (APJ Abdul Kalam Auditorium) | | Session 2 Continuing (Visvesvaraya Auditorium) | |
| 4:30 PM – 4:50 PM | Dr Niti Puri , JNU, New Delhi A Proteomics approach to find novel therapeutic targets for allergic diseases by deciphering the spatial and temporal regulation of protein traffic in mast cells during allergen challenge. | 4:30 PM – 4:50 PM | Dr Ramesh Namdeo Pudake , Amity University, Noida Deploying a rhizospheric microbes to abiotic stress tolerance in finger millet |
| 4:50 PM – 5:10 PM | Dr Anil Kumar , NII, New Delhi Inflammatory and deleterious role of gut microbiota-derived trimethylamine on colon cells | 4:50 PM – 5:10 PM | Dr Anuja Krishnan , Jamia Hamdard, New Delhi Enhanced generation and characterization of dengue viral-like particles |

Day 3
29th April 2023, Friday, APJ Abdul Kalam Auditorium

Plenary Lectures

Chairperson: Prof. Syed Ehtesham Hasnain & Prof. Bhuvnesh Kumar

| | |
|---------------------|--|
| 9:30 AM – 10:00 AM | Prof. (Dr.) Ashwani Pareek , NABI, Mohali Making Rice STRONGER |
| 10:00 AM – 10:30 AM | Dr Niranjan Chakraborty , NIPGR, New Delhi Application of organellar proteomics in biotechnology |
| 10:30 AM – 11:00 AM | Prof. Dhruv Kumar , UPES, Dehradun Autophagy-metabolic axis in head and neck cancer |

Tea Break (11:00 AM – 11:30 AM)

Invited Lectures

| Session 3: Plant Biotechnology (APJ Abdul Kalam Auditorium) | | Session 4: Microbiology and Industrial Biotechnology (Visvesvaraya Auditorium) | |
|--|--|---|--|
| Chairperson: Dr Saleem Siddiqui & Dr Sachin Teotia | | Chairperson: Dr Tripti Bhatnagar & Dr Amit Kumar | |
| 11:30 AM – 11:50 AM | Prof. Girish Mishra , University of Delhi, Delhi Emphasis on lipid metabolism and lipid-mediated signaling in plants | 11:30 AM – 11:50 AM | Dr Neetu Kumra Taneja , Probiotic Bacteria as Vitamin Biofactories- Biotechnological approaches to combat micronutrient deficiencies |
| 11:50 AM – 12:10 PM | Prof. Renu Deswal , University of Delhi, Delhi Digging Brassica cuticle leads to surprises | 11:50 AM – 12:10 PM | Dr Tripti Bhatnagar , Codon Biotech, Noida |
| 12:10 PM – 12:30 PM | Dr Nirala Ramchiary , JNU, New Delhi Structural and functional conservation of genetic loci governing morphological and yield component traits | 12:10 PM – 12:30 PM | BD Biosciences Role of flow cytometry in Biotechnology |
| 12:30 PM – 12:50 PM | Dr Neeti Sanan Mishra , ICGEB, New Delhi ARMOUR for plant development and response to stress | 12:30 PM – 12:50 PM | IAS Medicare ART Bank The best Egg Donor and ART Bank of India |

Lunch (12:50 PM – 1:30 PM)

APJ Abdul Kalam Auditorium/ Visvesvaraya Auditorium

Oral Presentation

| Session 5 (APJ Abdul Kalam Auditorium) | | Session 6 (Visvesvaraya Auditorium) | |
|--|--|--|---|
| Chairpersons: Dr. Garima Chauhan, Dr. Monika Jain & Dr. Niraj Kumar Jha | | Chairpersons: Dr. Arun Agarwal, Dr. Saurabh Kr. Jha & Dr. J. Muthukumaran | |
| 1:30 PM – 1:40 PM | Priya Chamoli - Graphic Era Deemed to Be University, Uttarakhand Optimization of Pre-Processing Strategy for Pennisetum purpureum Schumach: A Potential Bioenergy crop for Bioethanol Production | 1:30 PM – 1:40 PM | Ketki Gwalani - Hislop College, Nagpur, India Optimization of culture conditions for callus induction and in vitro plant regeneration of Coleus forskohlii, an endangered medicinal plant |
| 1:40 PM – 1:50 PM | Jaskirat Kaur Sohal - Chandigarh University, Punjab The Impact of the COVID-19 Pandemic on the | 1:40 PM – 1:50 PM | Shweta Chaudhary - Gautam Buddha University, Greater Noida, India Effects of cytokinins on in vitro flowering of |

| | | | |
|-------------------|---|-------------------|---|
| | Early Onset of Polycystic Ovary Syndrome (PCOS) and Polycystic Ovary Disorder (PCOD) in Young Women: A Cross-Sectional Survey Analysis using RStudio | | nodal explant of <i>Vitex negundo</i> (L.): an important medicinal plant |
| 1:50 PM – 2:00 PM | Ajeet – ICMR, New Delhi Influence of RFR emitted from Cell Phone on Common Mental Disorders of North Indian Population | 1:50 PM – 2:00 PM | Rajesh Kumar - Gautam Buddha University, Greater Noida Transcription Activator-Like Effector Nucleases (TALENs) based genome editing for increased fruit size of tomato |
| 2:00 PM – 2:10 PM | Pardeep Yadav - Sharda University, Greater Noida, India Repurposing of FDA approved viral drugs against RNA-Dependent-RNA-Polymerase of Japanese Encephalitis Virus | 2:00 PM – 2:10 PM | Archana Prajapati - Gautam Buddha University, Greater Noida CRISPR/Cas9 mediated gene editing against Powdery Mildew disease to mimic natural ol-2 mutation in <i>Solanum lycopersicum</i> |
| 2:10 PM – 2:20 PM | Garima Gangwar - Gautam Buddha University, Greater Noida Role of target of rapamycin (TOR) in <i>Candida auris</i> growth and pathogenesis. | 2:10 PM – 2:20 PM | Jyoti Singh - Sharda University, Greater Noida, India Survey of major allium viruses infecting Indian shallot (<i>Allium cepa</i> var. <i>aggregatum</i>) cultivars and their detection with multiplexed RT-PCR |
| 2:20 PM – 2:30 PM | Soumya Sharma - Amity University, Noida, India Candida rugosa lipase immobilization on biopolymer-based nano gel and its morphological characterization | 2:20 PM – 2:30 PM | Naveen Kumar - Sharda University, Greater Noida, India Targeted gene mutations using CRISPR-Cas9 technique affects production of seed oil content in <i>Brassica juncea</i> (Indian mustard) |
| 2:30 PM – 2:40 PM | Dahir Sagir Idris - Sharda University, Greater Noida, India Eco-friendly synthesis, characterization, and application of silver-copper bimetallic nanoparticles | 2:30 PM – 2:40 PM | Priyanka Babuta - Department of Botany, University of Delhi, Delhi Genome-wide identification and characterization of NADPH-dependent thioredoxin reductases from <i>Brassica juncea</i> |
| 2:40 PM – 2:50 PM | Zainab Mirza - Jamia Millia Islamia, New Delhi Molecular Aspects Of Arsenic-Iron Give-And-Take To Alleviate Arsenic Stress In Rice | 2:40 PM – 2:50 PM | Taniya Bargoti - Gautam Buddha University, Greater Noida, Uttar Pradesh, India Genome editing for reversing the evolutionary loss of anthocyanin accumulation in tomato (<i>Solanum lycopersicum</i> L.) |
| 3:00 PM – 4:00 PM | Valedictory Function | | |
| 4:00 PM | High Tea | | |