





ANTIMICROBIAL RESISTANCE CONFERENCE (AMRC 2024)

Theme: "Exploring the Bioresources of India to fight

against Antimicrobial Resistance (AMR)"

April 04-05, 2024

Organized by

INSTITUTE OF BIORESOURCES AND SUSTAINABLE DEVELOPMENT (IBSD) Takyelpat, Imphal, Manipur, India www.ibsd.gov.in

ICMR-NATIONAL INSTITUTE OF CHOLERA AND ENTERIC DISEASES (ICMR-NICED)

CIT Road, Beliaghata, Kolkata, India www.niced.org.in

In Association with

SOCIETY FOR ETHNOPHARMACOLOGY

Jadavpur, Kolkata, India www.ethnopharmacology.in

Venue: Science City, Kolkata, India PROGRAMSCHEDULE

REGISTRATION: 09:00 - 10:00 AM

Day 1: April 04, 2024 Venue: Science city auditorium, J.B.S. Haldane Avenue Kolkata-700 046, India

INAUGURATION PROGRAM OF AMRC 2024 10:00 – 11:20 AM

Arrival of the Guests

Prof. PadmanabhanBalaram, Former Director, Indian Institute of Science (IISC) Bangalore, India

Prof. Pulok K Mukherjee, Chairman, AMRC 2024 & Director, Institute of Bioresources& Sustainable Development, Imphal, India

Dr. Shanta Dutta, Chairman, AMRC 2024 & Director, ICMR-National Institute of Cholera and Enteric Diseases, Kolkata, India

Shri. Indraneel Das, Vice President, Society for Ethnopharmacology, Kolkata, India **Dr. Siddhartha Niyogi,** Director of Health Service, Ex Officio secretary, Department of Health & Family Welfare, Government of West Bengal.

Dr. Subhra Chakraborty, *Director, National Institute of Plant Genome research, New Delhi, India*

Dr. S Indira Devi, Organizing Secretary, AMRC 2024 & Scientist, Institute of Bioresources& Sustainable Development, Imphal, India

Dr. Sushmita Bhattacharya, Organizing Secretary, AMRC 2024 & Scientist, ICMR-National Institute of Cholera and Enteric Diseases, Kolkata, India

Keynote address by:

Prof. PadmanabhanBalaram, Former Director, Indian Institute of Science (IISC), Bangalore, India

TEA BREAK : 11:20 – 11:30 AM

SCIENTIFIC SESSION I:

11:30 AM - 12:30 PM

"The crisis of AMR and Exploring Bioresources for the development of new generation antimicrobials"

Chairperson:

Dr. Arun Bandyopadhyay, Director, Gujarat Biotechnological University, Gujarat, India Dr. Sagar Sengupta, Director, National Institute of Biomedical Genomics, Kalyani, India

Speaker	Title
Dr. Shanta Dutta	Therapeutic intervention of Shigella flexneri by a
Director	herbal compound: anovel approach
ICMR-National Institute of Cholera	
and Enteric Diseases, Kolkata, India	
Prof. Pulok Kumar Mukherjee	Medicinal Plants and other Bioresources of NER to
Discretes	combat AMR - New Generation Antimicrobials

Director Institute of Bioresources& Sustainable Development, Imphal, India

Dr. Kh. Ranjana Head, Dept of Microbiology **RIMS**, Imphal

Infection Prevention and Control (IPC) in preventing Antimicrobial Resistance (AMR) in Healthcare facilities

SCIENTIFIC SESSION II: 12:30 - 01:30 PM

"Resistance, surveillance, transmission, epidemiology and therapeutic approaches for Gram positive and gram negative bacterial infection"

Chairperson:

Dr. Amit Ghosh, JC Bose Chair Professor (NASI), ICMR-NICED Dr. V Ravichandiran, Director, National Institute of Pharmaceutical Education & Research, Kolkata

Speaker	Title
Dr. Tushar Kant Beuria Scientist DBT-ILS, Bhubaneswar	Targeting the bacterial efflux pump to combat antimicrobial resistance in Methicillin-resistant <i>Staphylococcus aureus</i>
Dr. Saugata Hazra Associate Professor IIT Roorkee, Uttrakhand	360 Degree AMR Management: Unveiling the Strategic Endeavors Employed by the Hazra Group in Mitigating Antibiotic Resistance (ABR), with a Focus on Beta-Lactamase as a Molecular Indicator
Prof. Sanjay Jachak Professor, NIPER, Mohali, Punjab	Natural products as a potential source of Bacterial pump efflux inhibitors: An Arsenal against AMR
Dr. Sulagna Basu Scientist ICMR-NICED, Kolkata	Towards understanding the exchange of genes in the gut: the <i>mcr</i> example

LUNCH: 01:30 - 02:00 PM

PANEL DISCUSSION I i-Connect Program: Business Meet: 02:00 PM - 03:30 PM

"Bioresources to fight antimicrobial resistance (AMR) : Development of New Generation Antimicrobials"

Chairperson:

Prof. Pulok K Mukherjee, *Director, Institute of Bioresources* & *Sustainable Development,Imphal, India*

Dr. U.V Babu, Director, Himalaya Wellness Company, Bengaluru, India

PANELIST

Shri. Birendra K Sarkar

President, Society for Ethnopharmacology, India & MD & CEO, Parker Robinson Pvt Ltd., Kolkata

Dr. Rajiv Rai

Senior Vice President - Head R&D Emami Ltd., Kolkata, India

Dr. V Ravichandiran

Director, National Institute of Pharmaceutical Education & Research, Kolkata Dr Anindya Dasgupta

Scientific Manager, Himalaya Wellness Company, Bengaluru, India

Dr. Gaurgopal Maiti Technical Advisor, Parker Robinson Pvt Ltd., Kolkata Anish Chakraborty Chairman, Seacom Group &Seacom Skills University, Kolkata

Shri Indraneel Das MD, Declibac Technologies Pvt. Ltd. Kolkata, India

Dr. U.V Babu Director, Himalaya Wellness Company, Bengaluru, India Prof. Sanjay Jachak Professor, NIPER, Mohali Punjab, India

Dr. Sunil K. Dubey General Manager Emami Ltd., Kolkata, India

SCIENTIFIC SESSION III: 03:30 - 04:45 PM

"Fighting AMR by intervening host pathogen interaction"

Chairperson:

Dr. Mamta Chawla Sarkar, Scientist-F, ICMR-NICED, Kolkata **Prof. Rajib Bandyopadhyay**, Professor, Dept. of Instrumentation and Electronics Engg, Jadavpur University, Kolkata

Speaker	Title
Prof. Chittur V Srikanth Professor Regional Centre for Biotechnology, Faridabad	Salmonella mediated host epigenetic manipulation in immune evasion and chronic infections
Dr. S. Indira Devi Scientist, DBT-Institute of Bioresources and Sustainable Development (IBSD), Imphal	Antimicrobial peptides and bioactive metabolites from microbes and plant sources to combat against AMR
Dr. Mukesh Pasupuleti Principal Scientist CSIR-CDRI, Lucknow	Discovery and development of innovative novel next-generation biotherapeutics by Unveiling the Hidden Potential of the Innate Immune System:To tackle Emerging and Reemerging Pathogenic Infections
Dr. Anil Kumar Singh	Resistome characterization of clinically relevant

Scientist CSIR-NEIST, Jorhat, India enteric bacteria for β -lactam antibiotic resistance

Panel Discussion Session II: ONE HEALTH 04:45 PM - 05:45 PM

Chairperson:

Dr. Subhra Chakraborty, *Director, National Institute of Plant Genome research, New Delhi, India* **Dr. Shanta Dutta,** *Director, ICMR-National Institute of Cholera and Enteric Diseases, Kolkata, India*

PANELIST

Dr. Arun Bandyopadhyay Director, GBU, Gujarat, India

Dr. Nanaocha Sharma

Scientist, DBT-IBSD, Imphal Dr. Debjit Chakraborty Scientist, ICMR- NICED, Kolkata **Prof. Pallab Kanti Haldar** Director, SNPS, JU, Kolkata

Dr. Agniva Majumder, Scientist, ICMR- NICED, Kolkata **Dr. K Jeyaram** Scientist, DBT-IBSD, India

Dr. Falguni Debnath Scientist, ICMR- NICED, Kolkata Dr. Pardeep K. Bhardwaj Scientist, DBT-IBSD, Imphal

POSTER SESSION I: 02:30 PM - 05:00 PM

Evaluators:

Dr. Pardeep K. Bhardwaj, Scientist, DBT-IBSD, Imphal
Prof. Sanjay Jachak, Professor, NIPER, Mohali, Punjab
Dr.SurajitBasak, Scientist, ICMR-NICED, Kolkata
Dr. Amrita Bhattacharjee, Scientist, ICMR-NICED, Kolkata
Dr.AnindyaSundar Ghosh, Professor, IIT, Kharagpur
Dr. Lokesh Deb, Scientist, DBT-IBSD, Imphal
Shri. Prabir Banerjee, EC Member, Society for Ethnopharmacology, India
Dr. Amit Kar, Project Scientist, DBT-IBSD, Imphal

Day 2: April 05, 2023

Venue: Science city auditorium, J.B.S. Haldane Avenue Kolkata-700 046, India

HALL – 1: Scientific Session IV

10:00 AM - 11:00 AM

"Policy aspects of AMR and antibiotic stewardship"

Chairpersons:

Dr. Alok Deb, Scientist G, ICMR-NICED, Kolkata Dr. Subhash C Mandal, EC Member, Society for Ethnopharmacology, Kolkata, India

Speaker

Prof. Arun K. Singh Professor, Neonatology, AIIMS Jodhpur, Rajasthan

Strategies for Mitigating Antibiotic Resistance: A Comprehensive Policy Approach

Title

Dr. Dipankar Majhi

Deputy Director Public Health Dept. of Health & Family Welfare, Govt. West Bengal, Kolkata

Prof. Suparna Chatterjee

Professor, Dept. of Pharmacology, Institute of Postgraduate Medical Education & Research,Kolkata

HALL – 1: Panel Discussion Session: III 11:00 – 12:00 PM

Lead Development and Combinational Approach To Mitigate AMR

Chairpersons:

Dr. Pardeep K Bhardwaj, Scientist, DBT-IBSD, Kolkata

Dr. SandipanGanguly, Scientist F, ICMR-NICED, Kolkata PANELIST

Dr. Suman Kanungo

Scientist-F, ICMR- NICED, Kolkata Dr.Provash C. Sadhukhan Scientist-E, ICMR- NICED, Kolkata Dr.Sandip Mukhopadhyay Scientist-E, ICMR-NICED, Kolkata **Dr. Pallavi Indwar,** Scientist-D, ICMR- NICED, Kolkata **Dr.Agniva Majumder** Scientist-C, ICMR- NICED, Kolkata **Dr.Sushmita Ray** CARI ,Kolkata

HALL -2: Scientific Session V

11:00 AM - 12:00 PM

"Role of anti-microbial peptides, endophytes and microbiomes for prevention and control of AMR"

Chairperson:

Dr. Amit Pal, Scientist G, ICMR-NICED, Kolkata Dr. K Jeyaram, Scientist, DBT-IBSD, India

Speaker	Title
Dr. Debprasad Chattopadhyay	Traditional Medicine: Can it be the
Former Director	Nature's Weapon against Drug-
ICMR-NITM, Belagavi	Resistance Microbes?

Dr. Sudipto Saha Associate Professor Bose Institute, Kolkata Exploring microbial genes associated with antimicrobial resistance in the lung microbiome of respiratory disease patients

HALL -1: Scientific Session VI 12:00 PM – 01:30 PM

"Reservoirs of antibiotic resistance genes, ecology and carriage"

Chairpersons:

Prof Asis Mazumdar, Nodal Coordinator, RCFC (ER), Jadavpur University, Kolkata **Dr. Kh. Ranjana,** Head, Dept of Microbiology, RIMS, Imphal

Speaker	Title
Dr. Asish K Mukhopadhyay Scientist G ICMR-NICED, Kolkata	Carbapenem Resistance in clinical Vibrio cholerae O1 strains: A Challenge to Modern Medicine
Dr. Anindya Sundar Ghosh Professor, IIT Kharagpur, India	P-type ATPase zinc transporter Rv3270 of <i>Mycobacterium tuberculosis</i> enhances multi-drug efflux activity against structurally unrelated antibiotics
Dr. Rajlakshmi Viswanathan Scientist E ICMR-NIV, Pune	Antimicrobial resistance at animal human interface-A One Health Approach
Dr. Vishwanath Bhagwath Principal Scientist, R&D Himalaya Wellness Company Bangalore, India	Exploring Indian Medicinal Plants as Potential alternatives

HALL - 2: SCIENTIFIC SESSION VII 12:00 PM – 01:30 PM

"Mechanism of action of new compounds (natural and synthetic) and repurposed drugs"

Chairperson:

Dr. Lokesh Deb, Scientist, DBT-IBSD, Imphal Shri. Amitavo Das, Treasurer, Society for Ethnopharmacology, India

Speaker	Title	
Dr. Souvik Mukherjee Associate Professor, BRIC-National Institute of Biomedical Genomics (NIBMG), Kalyani, West Bengal	Deciphering the Host Microbiome Interactions that leads to the Development of Antimicrobial Resistance in Chronic Inflammatory Diseases in Humans	
Dr. Alok Kr. Chakrabarti, Scientist, ICMR- NICED, Kolkata	Revitalizing Phage Therapy For Cholera: Isolation, Screening And Characterizationof Bacteriophages To Evaluate Therapeutic Potential	
Dr. Sushmita Bhattacharya Scientist, ICMR-NICED, Kolkata	Unveiling the role of HMGB1 (High Mobility group Box1) inhibition in autophagy during <i>Helicobacter pylori</i> infection	

LUNCH: 01:30 -02:00 PM

Hall 1 - ORAL PRESENTATION SESSION 2:00 PM - 03:30 PM

Dr. Kh. Ranjana, Head, Dept of Microbiology, RIMS, Imphal
Dr. W. Mohendro Singh, Administrative Officer, DBT-IBSD, Imphal, India
Dr. Alok Deb, Scientist G, ICMR-NICED, Kolkata
Dr.Mamta Chawla Sarkar, Scientist F, ICMR-NICED, Kolkata
Dr.Rajlakshmi Viswanathan, Scientist E, ICMR-NIV, Pune
Dr. Amit Kar, Project Scientist, DBT-IBSD, Imphal
Dr. Sujoy K Das, Scientist, CSIR-Indian Institute of Chemical Biology, Jadavpur, Kolkata

Valedictory Program: 03:30 PM - 04:30 PM Distribution of Awards

Dr. Shanta Dutta, *Director, ICMR-National Institute of Cholera and Enteric Diseases, Kolkata, India*

Prof AsisMazumdar, Nodal Coordinator, Regional Cum Facilitation Centres, Jadavpur University, Kolkata

Dr. Subhra Chakraborty, *Director, National Institute of Plant Genome Research, New Delhi, India*

Dr. SulagnaBasu, *Scientist, ICMR-National Institute of Cholera and Enteric Diseases, Kolkata, India*

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Prof. Pulok K Mukherjee, *Director, Institute of Bioresources*& Sustainable *Development, Imphal, India*