



International Webinar on Emerging Trends in Biotechnology: Current and Challenges in Biotechnology Research

Jointly organized by

Pachhunga University College and Mizoram University Aizawl, India

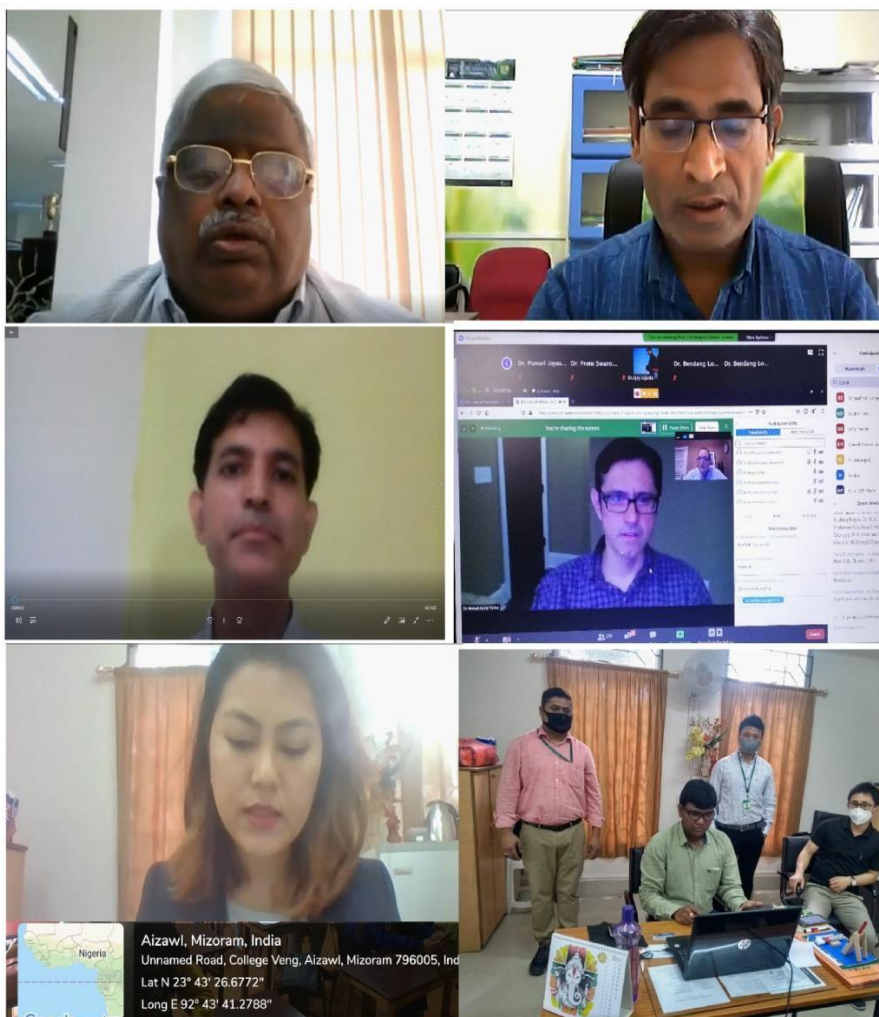
International Webinar on Emerging Trends in Biotechnology: Current and Future Challenges in Biotechnology Research Jointly organized by The Department of Biotechnology, Pachhunga University College campus and Mizoram University Aizawl, India from **24-26 June 2020**. The event was organized with the kind and generous support of our honourable vice-chancellor **Prof. K.R.S. Samba Siva Rao** (Chief Patron & VC Mizoram University) and **Prof.S.K.Mehta**, (Organizing Secretary) Dean School of Life Sciences, Mizoram University with two broad objectives viz; to share the knowledge of biotechnology research going across the globe and motivate the researchers/students for pursuing higher studies.

The online webinar was organized by **Dr Mukesh Kumar Yadav & Dr Prashant Kumar Singh** (Ass. Prof., PUC). Prof.

K.R.S. Samba Siva Rao (VC Mizoram University) was Chief Patron & **Dr Tawnenga** (Principal, PUC), **Prof. Lalhundanga** (Registrar, MZU), **Dr K. Lalchandama** (Head, Department of Zoology and Life Science PUC) were the patron of the event. **Prof**

S.K. Metha (Dean, School of Life Sciences, MZU) was organizing secretary, and **Dr Liansangmawii Chhakchhuak** (Head Dept. of Biotechnology, PUC), **Dr Zothanpuia**, (Dept. of Biotechnology, PUC), **Dr Punuri Jayasekar Babu**, (Dept. Of Biotechnology PUC), **Dr Garima Singh**, (Dept. Botany PUC), **Dr. Bendangchchang Longchar**, (Dept. Of Life Science, PUC) were convenors of the webinar.

Twenty-two speakers from the USA, Europe, Isreal, South Korea, China, Mexico, and India shared their knowledge on plant biotechnology to animal biotechnology. On average, the total number of participants on **day-1, day-2, and day-3** were **852, 668 and 755**, respectively. Moreover, we have received more than **100 abstracts** from across the globe.



The inaugural function of the program was chaired by Dr Mukesh Kumar Yadav, Assistant Professor from the Department of Biotechnology, PUC. The introductory speech was delivered by Dr Liansangmawii Chhakchhuak (Head Dept. of Biotechnology, PUC), followed by a welcome address by the organizing secretary Prof. S.K. Mehta. Prof. K.R.S inaugurated the webinar. Samba Siva Rao, Honourable Vice-Chancellor, MZU. Dr Zothanpuia, Department of Biotechnology, chaired the first session. The first-day talk was started by invited speaker Dr Sunil Kumar Sahu, China National Gene Bank (CNGB), BGI-Shenzhen, China, on "How is genomics revolutionizing agricultural and evolutionary researches? The second talk was delivered by Dr Gaurav Zinta, CSIR-Institute of Himalayan Bioresource Technology, Himachal Pradesh, India, on "Systems biology perspective on climate change impact on plants". The third speaker was Dr Vivakanand Tiwari, from Weizmann Institute of Science, Israel. He shares his journey of Redox regulation of photosynthesis. The fourth talk was delivered by Dr Qing Xue, Nanjing Agriculture University, China, on "Next-generation taxonomy in Nematodes: IT technologies bring a better resolution". The afternoon session was a chair by Dr Zhanpuia, Assistant Professor from the Department of Biotechnology, Pachhunga University College (PUC). The fifth Dr Avanish Rai, Ghent University, Belgium, talked about "Modularity in plant terpenoid metabolism: dynamic regulation through protein prenylation". After lunch, the session was chaired by Dr Prashant Kumar Singh, Department of Biotechnology. Dr Naveen Chandra Joshi delivered the first talk from Amity University, Noida, on Glutathione Recycling - a prerequisite for maintaining plant root system architecture. Next, Prof. Viji Sittler from Morgan State University, Baltimore, USA, talked about "Biotechnological approaches and challenges in large-scale cyanobacterial biofuel production". The last talk was from Dr Michal Lieberman Lazarovich, Agriculture Research Organization (ARO), Israel was on the topic "Pollen flavonols as a new approach to achieving heat stress resilience in tomato".

The second-day event was started by invited talk of Prof. Christopher Davies from The Medical University of South Carolina, the USA, on the topic "How mutations in penicillin-binding protein 2 confer cephalosporin resistance to *N. gonorrhoeae*". The second talk was from Dr Jorge E. Vidal, University of Mississippi Medical Center, USA, on "Streptococcus pneumoniae biofilms and transference of resistance within biofilms". The third lecture was from Dr Ashutosh Sharma, Centre of Bioengineering Tecnológico de Monterrey Campus-Queretaro, Mexico, "Current Status and Challenges in Medicinal Plant Research". The fourth lecture was from Prof. Surya Pratap Singh, Head, Department of Biochemistry, Banaras Hindu University, on the topic "Role of Ayurvedic herbs in Neuroprotection & Treatment of Parkinson's disease". Dr Vivek Dogra delivered the following lecture, CSIR-Institute of Himalayan Bioresource Technology, Himachal Pradesh, India, on the topic "How do plants perceive and respond to developmental and environmental stimuli: the emerging role of Chloroplasts". The afternoon session was a chair by Dr Punari Jayasekar Babu, Assistant Professor from the Department of Biotechnology, Pachhunga University College (PUC). The next speaker was Dr Dinesh Kumar, Indian Agricultural Statistics Research Institute, India. He delivered a lecture on "Why computational genomics approach is needed to manage and improve agricultural germplasm? Dr Jing-hua Wang from, Daejeon University, South Korea, delivered a lecture on "Fermented herbs exert anti-obesity effect via gut microbiota regulation". The next lecture was of Dr Manas Ranjan Prusty, Agriculture Research Organization (ARO), Israel, on "RECA9: Recombining wild species introgression via mitotic gene editing in barley. Dr Prem Swaroop Yadav from, Massachusetts General Hospital, Harvard Medical School, Boston, USA was on the topic "Limb specific Stat3 loss of function leads to downregulation of Wnt/b-catenin signalling and causes skeleton defects observed in HIES/Job Syndrome patients". Dr Monika Saxena from the Massachusetts Institute of Technology (MIT) delivered a talk on "Understanding a connection between Metabolism and Mental Health Disorder".

The third-day event chair was Dr Bendangchuchang Longchar, Assistant Professor from the Department of Biotechnology, Pachhunga University College (PUC). Dr Ajay Jajodia, University of Washington, USA, the third day's first lecture on "Functional dissection of non-coding variants associated with rheumatoid arthritis". Next, Dr Dharmendra Kumar Yadav, Gachon University of Medicine and Science, South Korea, delivered a lecture on "Computational study of skin lipid bilayer member's and permeability of Ros". The afternoon session was chaired by Dr Garima Singh, Assistant Professor from botany, PUC. Then, Dr Grace Lhaineikim Chongloi, Weizmann Institute of Science, Israel, delivered a talk on "How conserved developmental programs influence the architecture and productivity of plants? Finally, Dr Sayantan Panda, Weizmann Institute of Science, Israel, delivered a lecture on the topic "Orchestration of Steroidal Glyco Alkaloid metabolism'- a tradeoff between jasmonate mediated defence vs gibberellic acid-mediated growth.

Best e-Poster Awards

1. "Endophytic bacterial diversity of viral.RNase as potential antiviral agents."

Dr Gajanan Mehetre, Department of Biotechnology, Mizoram University, India.

2. "Antimicrobial Potential of Selected Wild Edible Vegetables..... India."

Rosie Lalmuanpuii, Department of Botany, Mizoram Univeristy, India.

3. "Anti-gout Activity and GC-MS.....Extracts."

Ferid Abdulhafiz, Universiti Malaysia, Kelantan, Malaysia.

4. "Splice variant of regulated in Arabidopsis thaliana."

Dr Abhishek Kumar, Dept. of Biotechnology, Rani Lakshmi Bai Central Agricultural University, India.



Head

Department of Biotechnology