

# 2<sup>nd</sup> International Conference on Applied Biosciences (ICAB-2021)

# **SCIENTIFIC PROGRAM**

# December 30-31, 2021

Organized by:

Department of Biosciences, Mohammad Ali Jinnah University, Karachi, Pakistan.

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#### Day 1 (Thursday, December 30, 2021) Inaugural Session (Venue: Audi-III, Block C)

Registration Venue: Welcome Desk, Block C	08:30-9:00 am
Recitation of Holy Quran	09:00-9:05 am
National Anthem	09:05-9:10 am
Welcome Address by Prof. Dr. M. Kamran Azim, Dean, Faculty of Life Sciences, Mohammad Ali Jinnah University, Karachi, Pakistan and Chief Organizer of ICAB-2021	09:10-9:20 am
Address by Prof. Dr. Zubair Ahmed Shaikh, President, Mohammad Ali Jinnah University, Karachi, Pakistan and Patron, ICAB-2021	09:20-09:40 am
Keynote Speech by Prof. M. Waheed Akhtar, School of Biological Sciences, University of the Punjab, Lahore, Pakistan. Title: "Designing Proteins for Diagnostic and Therapeutic Applications"	09:40-10:20 am
Planting in the MAJU Urban Forest under construction in collaboration with NED University of Engineering & Technology, Karachi, Pakistan	10:20-10:30 am

Tea Break (10:30-11:00 am)

Session I: (11:00 am–01:00 pm)			
Venue: Audi	Venue: Audi III, Block C		
Moderator: 1	Prof. Dr. Zahra Hasan, Aş	ga Khan University, Karachi, Pakistan	
Time	Speaker	Title	
11:00-11:20 am	<b>Muhammad Kamran Azim</b> Mohammad Ali Jinnah University, Karachi, Pakistan	Amazing Medicinal Properties of Natural honey and Its Glycoproteins	
11:20-11:45 am	<b>Syed Abid Ali</b> ICCBS, University of Karachi, Karachi, Pakistan	Interdisciplinary Research at a Crossroads: Snake Venom Proteomics - Antivenomics and the Synthesis of Silver- Antidote	
11:45 am- 12:10 pm	<b>Muhammad Mushtaq</b> BUITEMS, Quetta, Pakistan	Status of Candida and Candidiasis in Pakistan	
12:10-12:30 pm	<b>Irfan Khan</b> ICCBS, University of Karachi, Karachi, Pakistan	Extracellular Vesicles from Mesenchymal Stem Cells reduce oxidative stress in rat Intervertebral Disc Degeneration Model	
12:30-01:00 pm	<b>Ömür Baysal</b> Mugla Sitki Kocman University, Mugla, Turkey	Omics Technologies Encompassing Bioinformatics Approaches for Agrobiotechnology and Biological Control of Plant Diseases (Online)	

Lunch & Prayer Break (1:00-2:00 pm) Venue: Cafeteria (Block C)

# Session II: (02:00-04:10 pm)

Venue: Audi-III, Block C

Moderator: Prof. Dr. M. Waheed Akhtar, University of the Punjab, Lahore, Pakistan

Time	Speaker	Title
2:00-2:25 pm	<b>Zahra Hasan</b> The Aga Khan University, Karachi, Pakistan	Upregulated type I interferon responses in asymptomatic COVID-19 infection are associated with improved clinical outcome
2:25-2:50 pm	<b>Mojtaba Amani</b> Ardabil University of Medical Sciences, Ardabil, Iran	The effect of cytarabine on mitochondrial activity of kG1a cell line
2:50-3:10 pm	Mehdi Vosoughi Niri Ardabil University of Medical Sciences, Ardabil, Iran	Adsorption of hexavalent chromium using Nano magnetized activated carbon produced from filamentous algae
3:10-3:30pm	Sangam Khalil The Islamia University of Bahawalpur, Pakistan	Vulnerability of Carnivore Species to Habitat Fragmentation along Indus River

3:30-3:45 pm	<b>Jamal-U-Ddin Hajano</b> Sindh Agriculture University, Tandojam, Pakistan	Screening of cotton genotype against cotton leaf curl virus under natural conditions
3:45-4:10 pm	<b>Choudhary Shoaib</b> <b>Ahmed</b> University of Toronto, Toronto, Canada.	Changing the Treatment Paradigm; Treating the Virus by Targeting the Host (Online)

Poster Session & Tea (4:10-6:00 pm) Venue: Block D



Day 2 (Friday, December 31, 2021) (Venue: Audi-III)

Parallel Session III-A (10:00-11:40 am)

Venue: Audi-III, Block C

Moderator: Prof. Dr. Mushtaq Hussain, Dow University of Health Sciences, Karachi, Pakistan.

Time	Speaker	Title
10:00-10:25 am	<b>Maryam Shafique</b> Federal Urdu University, Karachi, Pakistan	Production, characterization and pilot scale applications of a protease from Bacillus subtilis ZMS-2 in leather processing
10:25-10:40 am	<b>Sehar Afshan Naz</b> Federal Urdu University, Karachi, Pakistan	Evaluation of Antifungal resistance and virulence factors of Candida albicans isolated from different clinical specimens
10:40-10:55 am	<b>Zehra Hashim</b> University of Karachi, Karachi, Pakistan	Novel Synergistic Combination Treatment for Triple Negative Breast Cancer
10:55-11:10 am	<b>Ayaz Ahmed</b> ICCBS, University of Karachi, Karachi, Pakistan	Ursolic Acid and its Amide Derivatives Disrupts Clinical Acinetobacter Baumannii Isolates
11:10-11:20 am	<b>Shumaila Khalid</b> ICCBS, University of Karachi, Karachi, Pakistan	Engineering Stem Cells; An Approach to Cure Pain and Inflammation in Spinal Cord
11:20-11:40am	<b>Rahimova Rana</b> Azerbaijan Medical University, Baku, Azerbaijan	Matrix Metalloproteinases and Autoimmune Thyroiditis (Online)

Parallel Session III-B (10:00-11:40 am)		
Venue: Audi-I, Block A Moderator: Dr. Mehtab Alam, Mohammad Ali Jinnah University, Karachi, Pakistan.		
10:00-10:20am	<b>Syed Faraz Moin</b> University of Karachi, Karachi, Pakistan	Exploring Salivary Proteins in Dental Caries and for Systemic Marker Protein
10:20-10:35am	<b>Muhammad Bilal Azmi</b> Dow University of Health Sciences, Karachi, Pakistan	In Silico Approach to Explore the Molecular Interaction of NNAT Gene Variants with Therapeutic Compounds of Anorexia Nervosa
10:35-10:50am	Yasmeen Rashid University of Karachi, Karachi, Pakistan	In silico analysis of <i>Naegleria fowleri cathepsin-B</i> paralogs: important drug targets
10:50-11:05am	<b>Jahanzeb Mudassir</b> Bahauddin Zakariya University, Multan, Pakistan	Effect of Processing Parameters on Formation of Self- assembled Polyelectrolyte Nanocomplexes: An Optimized Nanocarriers System for Oral Protein Delivery
11:05-11:20am	Yasir Mahmood University of Karachi, Karachi, Pakistan	Multiplex-ARMS PCR for of Vitamin D Receptor Gene Variations in Type 2 Diabetic Patients in Pakistan
11:20-11:30am	<b>Atiqa Najeeb</b> The Islamia University of Bahawalpur, Pakistan	Association of Avian Diversity with Water at Patisar Lake, Lnsp: A Case Study in South Punjab
11:30-11:40am	<b>Shahryar Ul Hassan</b> The Islamia University of Bahawalpur, Pakistan	Ecobiology of Monitor lizard (Varanus bengalensis) in Cholistan Desert Bahawalpur, Punjab

#### Tea Break (11:40-12:00 noon)

## Session IV: (12:00 noon-01:00 pm)

#### Venue: Audi-III, Block C

#### Moderator: Dr. Iqbal Azimuddin, Mohammad Ali Jinnah University, Karachi, Pakistan.

Time	Speaker	Title
12:00-12:20 pm	<b>Mushtaq Hussain</b> Dow University of Health Sciences, Karachi, Pakistan	Host and SARS-CoV-2 Genetic Variations
12:20-12:40 pm	<b>Kashif Ali</b> SZABIST, Karachi, Pakistan	Antimicrobial Resistance: What we should know and what we should do?
12:40-1:00 pm	Mahadev Malhi Molecular Diagnosis Laboratory, Bahria Town International Hospital, Karachi, Pakistan	Functional Variants in Complement Genes are associated with Genetic Susceptibility to Leprosy

# Lunch & Prayer Break (1:00-2:30 pm) Venue: Cafeteria (Block C)

## Parallel Session VA (02:30-04:10 pm)

#### Venue: Audi-III

Moderator: Prof. Dr. Muhammad Mushtaq, BUITMS, Quetta, Pakistan

Time	Speaker	Title
02:30-2:45 pm	Naveed Khan Chinese Academy of Science, China	Improving Rice Crop Yield by Mining Natural Variations of NPQ Dynamics by GWAS
2:45 -3:00 pm	<b>Junaid Ahmed Kori</b> Mehran UET, Jamshoro, Pakistan	Metagenomic analysis of drinking water samples collected from treatment plants of Hyderabad City and Mehran University Employees Cooperative Housing Society
3:00-3:10 pm	Fareha Masood Sir Syed University of Engineering and Technology, Karachi, Pakistan	GENPRO: An Android Application for the Analysis of Genomic and Proteomic Data
3:10-3:20 pm	<b>Huroom Aslam</b> Mohammad Ali Jinnah University, Karachi, Pakistan	Analysis of Multiple Strains of Mycoplasma pneumoniae
3:20-3:30 pm	<b>Safina Zahra</b> Mohammad Ali Jinnah University, Karachi, Pakistan	Pan-Genome Analysis of Stenotrophomonas maltophilia: An Insight over Pathogenicity and Drug Resistance
3:30-3:40 pm	S.M. Kamran Ullah Centers of Excellence in Science and Applied Technologies (CESAT), Islamabad, Pakistan	In Vitro Screening of FDA-Approved Drugs against SARS- CoV-2 isolated in Pakistan
3:40-3:50 pm	<b>Anab Fatima</b> Dow University of Health Sciences, Karachi, Pakistan	The Broad Field of Forensic Pharmacy: An Important and Evolving Recognition need in Pakistan
3:50-4:00 pm	<b>Faryal Anjum</b> University of Karachi, Karachi, Pakistan	Evaluation of Antibacterial Activity of Plants Extracts prepared from Commonly Found Plants in Karachi against Strong Biofilm Forming Clinical Isolates of S. aureus
4:00-4:10 pm	Asif Ali Panhyar Provincial Reference Lab, Karachi, Pakistan	Prevalence of Tuberculosis and Rif resistant cases in Taulka Gambat District Khairpur Mir's Sindh by using GeneXpert Instrument

## Parallel Session V B (02:30-04:10 pm)

#### Venue: Audi-I

Moderator: Dr. Maryam Shafique, Federal Urdu University, Karachi, Pakistan.

Time	Speaker	Title
02:30-2:45 pm	<b>Mehtab Alam</b> Mohammad Ali Jinnah University, Karachi, Pakistan	Therapeutic Potential of Scorpion Venom
2:45 -3:00 pm	<b>Syed Mohammad Omer</b> Dow University of Health Sciences, Karachi, Pakistan	Neuro-Ocular Defects Modelling in Drosophila melanogaster by MTX Exposure
3:00-3:10 pm	<b>Sanya Shabbir</b> Dow University of Health Sciences, Karachi, Pakistan	Longevity in Drosophila melanogaster Model Adversely Affected by Chronic Antibiotic Exposure
3:10-3:20 pm	<b>Ayesha Hafeez</b> BUITEMS, Quetta, Pakistan	Detection and characterization of Candida species from Head and Neck Cancer patients by CHROMagar and PCR
3:20-3:30 pm	<b>Mohsina Akhter</b> University of the Punjab, Lahore, Pakistan	Construction of Fusion antigens of <i>Mycobacterium</i> <i>tuberculosis</i> for Diagnostic and Therapeutic Applications
3:30-3:40 pm	Syed Inayatullah Agha QUITMS, Quetta, Pakistan	Efficacy of Biocontrol agents against Phytopathogenic Fungi in Green House Condition
3:40-3:50 pm	<b>Sana Aurangzeb</b> University of Karachi, Karachi, Pakistan	Three Dimensional Structural Investigation of Lead Molecules against Neisseria meningitidis Pathogenic Factors; A step towards drug designing
3:50-4:00 pm	<b>Mehwish Hamid</b> University of Karachi, Karachi, Pakistan	Identification and structural investigation of potential novel drug candidates against lethal human pathogen
4:00-4:10 pm	<b>Tahira Ghulam</b> Mohammad Ali Jinnah University, Karachi, Pakistan	Genetic association of GJB2 variants in Pakistani Population

Concluding Session (04:10-04:30 pm)

