



SCIENTIFIC PROGRAM

Day 1: December 13, 2023 (Wednesday)

Venue: University of Management & Technology (UMT), C-II Johar Town, Lahore

08:30-10:00 REGISTRATION, GUESTS TO BE SEATED

INAUGURAL SESSION	
Hakim Muhammad Saeed Seminar Hall	
TIME	PROCEEDINGS
10:00-10:05	Recitation from Holy Quran & National Anthem
10:05-10:10	Dr. Muhammad Sohail Afzal (Chairperson, Department of Life Sciences, UMT)
10:10-10:20	Prof. Dr. Sammia Shahid (Dean, School of Science, UMT)
10:20-10:30	Prof. Dr. Mohammad Perwaiz Iqbal (Life Sciences, UMT) <i>Low-cost solutions to national problems through evidence-based research</i>
10:30-10:40	Prof. Dr. Nessar Ahmed (Manchester Metropolitan University, UK) <i>Significance of biological research pertaining to life</i>
10:40-10:50	Prof. Dr. Asif Raza (Rector, UMT)
10:50-11:00	Guest of Honor - Prof. Dr. M. Waheed Akhtar (Secretary, Lahore Chapter, Pakistan Academy of Sciences)
11:00-11:10	Chief Guest - Prof. Dr. Shahid Munir (Chairperson, Punjab Higher Education Commission)
11:10-11:30	REFRESHMENT

11:30 – 12:30	PLENARY SESSION Seminar Hall		PLENARY SESSION 1C-14
11:30-12:00	Prof. Dr. M. Waheed Akhtar (University of the Punjab, Lahore) <i>Designing Proteins for Therapeutic and Industrial Applications</i>		Prof. Dr. Javed Iqbal (University of the Punjab, Lahore) <i>Can Agriculture Biotechnology Mitigate Climate Change?</i>
12:00-12:30	Prof. Dr. Najam-us-Saher Sadaf Zaidi (National University of Sciences & Technology) <i>Advances in Dengue Vaccine Research: The Pakistani Perspective</i>		Prof. Dr. Malik Mujaddad Ur Rehman (Abbottabad University of Science & Technology) <i>Use of Bacteriophage for Controlling Citrus Canker Disease Caused by Xanthomonas axonopodis pv. citri</i>
12:30-13:45	TECHNICAL SESSION I-A Microbiology & Immunology Seminar Hall Chair: Prof. Dr. Mujaddad Ur Rehman (AUST) Co-Chair: Prof. Dr. A. Rehman (PU)	TECHNICAL SESSION I-B Genetics 1C-14 Chair: Prof. Dr. M. Waheed Akhtar (PU) Co-Chair: Prof. Dr. Najam-us-Saher Sadaf Zaidi (NUST)	TECHNICAL SESSION I-C Plant Sciences 1N-13 Chair: Prof. Dr. Javed Iqbal (PU) Co-Chair: Prof. Dr. Tehmina Anjum (PU)
	Prof. Dr. A. Rehman (PU) <i>Concurrent removal of hexavalent chromium and degradation of azo dyes and plastic by Ochrobactrum intermedium isolated from industrial wastewater</i> Dr. Yasir Waheed (PAS) <i>The new Hepatitis elimination strategy and repurposing of COVID-19 infrastructure for Hepatitis elimination</i> Dr. Shahan Azeem (UVAS) <i>A PCR-based hemagglutinin subtyping tool to aid in the surveillance of avian influenza viruses in migratory wild birds</i> Dr. Syed Qasim Raza (UVAS) <i>Multi-parametric detection of non-cell-autonomous and cell-autonomous deaths in cancer cells</i> Nimra Naseer (PU) <i>Chromium stress mitigation through plant growth-promoting bacteria: a promising strategy for sustainable agriculture</i>	Dr. Naveed Anwar (UAF) <i>Phenotypic and genotypic characteristics of a live-attenuated genotype I vaccine of Japanese encephalitis virus</i> Sumbal Sarwar (PU) <i>Genetic studies in the Pakistani population reveal novel associations with ventricular septal defects (VSDS)</i> Iqra Arshad (UMT) <i>Exome sequencing revealed novel variation in SLC24A1 gene causing congenital stationary night blindness</i> Maria Bibi (UMT) <i>Exome sequencing revealed novel variation in PRMT7 gene causing intellectual disability</i> Mahrukh Khan (UMT) <i>In-Silico Analysis of Man2b1 Gene to Predict the Pathogenic Variants Cause Alpha-Mannosidosis</i> Dr. Amir Lal (SKKU, Korea) <i>Genetic diversity in ssDNA viruses: Deciphering the role of interspecies recombination in speciation</i>	Prof. Dr. Tehmina Anjum (PU) <i>Nanoparticles based crop protection against soil borne pathogens for sustainable agriculture</i> Dr. Waheed Akram (PU) <i>Combined application of beneficial microbes and chemical elicitor to manage fusarium wilt of tomato</i> Muhammad Shahid (NIAB) <i>“NIAB MUNG 2021” A high yielding, disease resistant and bold seeded mungbean (Vigna radiata L. Wilczek) variety developed through inter-specific hybridization</i> Aqsa Akhtar (UMT) <i>Formulation and evaluation of functional candies fortified with carrot juice and fennel seed extract: nutritional and sensory properties</i> Rhea Aqueel (FCU) <i>Cotton microbiome profiling and Cotton Leaf Curl Disease (CLCuD) suppression through microbial consortia associated with Gossypium arboreum</i>
13:45-14:30	LUNCH / PRAYER - POSTER SESSION		

14:30-15:00	PLENARY SESSION Seminar Hall		PLENARY SESSION 1C-14	
	Prof. Dr. Nessar Ahmed (Manchester Metropolitan University, UK) <i>Role of Advanced Glycation Endproducts in Diabetic Retinopathy</i>		Prof. Dr. Sami SIMSEK (University of Firat, Turkey) <i>The Role of miRNAs in the Diagnosis of Cystic Echinococcosis</i>	
15:00-16:00	TECHNICAL SESSION I II-A Bioinformatics Seminar Hall Chair: Dr. Sumera Zeb (UCP) Co-Chair: Dr. Hafiz Muzzammel Rehman (PU)	TECHNICAL SESSION II-B Biotechnology 1C-14 Chair: Prof. Dr. Muhammad Arshad (UOE) Co-Chair: Dr. Shafiq ur Rehman (PU)	TECHNICAL SESSION II-C Biochemistry 1N-13 Chair: Prof. Dr. Nessar Ahmed (UK) Co-Chair: Dr. Shahbaz Aslam (PU)	
	Dr. Sumera Zeb (UCP) <i>Identification of isobenzofuranone derivatives as promising antidiabetic agents: Assessment of enzyme inhibition studies and computational docking analysis</i> Dr. Hafiz Muzzammel Rehman (PU) <i>Identification of RdRp inhibitors against SARS-CoV-2 through E-pharmacophore-based virtual screening, molecular docking and MD simulations approaches</i> Fatima tuz Zahra (UMT) <i>Expression profiling of key genes involved in glioblastoma using systematic Bioinformatics approach</i> Rafiah Kanwal (UMT) <i>Identification of hub genes associated with rheumatoid arthritis via integrated bioinformatic analysis</i> Hafiza Maria (UMT) <i>Identifying potential drugs targeting key genes associated with Glioblastoma through an In-silico approach</i>	Dr. Shafiq ur Rehman (PU) <i>Bacteriophages: Older but a ray of hope in the Era of Antibiotic Resistance</i> Dr. Bushra Tabassum (PU) <i>Resilient crop production: Pyramiding RNAi with Cry toxins in Cotton enhanced control of Pink Bollworm</i> Dr. Zill-e-huma Aftab (PU) <i>Bio-fabrication of zinc oxide nanoparticles to rescue mung bean against Cercospora leaf spot</i> Dr. Amina Arif (UCP) <i>Tailoring molecular recognition in predesigned multifunctional enzyme mimicking porphyrin imprinted interface for high affinity and differential selectivity; sensing etoposide in lung cancer patients</i> Urwa Tariq (UMT) <i>Therapeutic effects of Olea europaea L. fruit extract against cigarette smoke-induced depressive-like behaviors in Sprague-Dawley rats</i> Komal Javed (UMT) <i>Therapeutic activity of walnut (Juglans regia L.) in adjuvant induced Arthritis in Sprague Dawley rats</i>	Dr. Shahbaz Aslam (PU) <i>Early diagnosis and prognosis of lung cancer through liquid biopsy using cell free circulating biomarkers</i> Dr. Muhammad Sajjad Khattak (PU) <i>Protein engineering approaches for efficient hydrolysis of plant polysaccharides</i> Dr. Shahid Ali (UOH) <i>Osmotin inhibits hypoadiponecetinemia-induced NLRP3 inflammasome activation to improve dementia</i> Zainab Bintay (UMT) <i>Assessing the divergent vitals response to physical activity in young male individuals consuming whey protein supplements versus milk as their whey protein source</i> Sadia Liaquat (MUL) <i>Effect of high temperature on lipid profile and heart structure in developing chick embryo (Gallus Gallus Domesticus)</i>	
16:00-17:00	CB1-601 Hands On Session	CB1-602 Hands On Session	CB1-606 Hands On Session	1C-14 Career Counselling Session
	MD Simulation Dr. Hafiz Muzzammel Rehman (PU)	UCSC Browser Dr. Muaz Aslam (LUMS)	Drug Design Dr. Muhammad Naveed (UCP)	Academia: Dr. M. Sajjad Khattak (PU) Industry: Ms. Javaria Badar (Nestle Pakistan)

Day 2: December 14, 2023 (Thursday)

	PLENARY SESSION Seminar Hall	PLENARY SESSION 1C-14	PLENARY SESSION 1N-13
09:00-09:30	Prof. Dr. Shahida Hasnain (University of the Punjab, Lahore) <i>The Hidden Players of Nature: Microbial Diversity, Microbiomes, and Microbiota</i>	Prof. Dr. Michael J. McInerney (University of Oklahoma, Norman, OK, USA) <i>Syntrophy as an Essential Interaction in Methane Production</i>	Prof. Dr. Naeem Rashid (University of the Punjab, Lahore) <i>Bioscience: Dry or Wet?</i>
09:30-11:00	TECHNICAL SESSION III-A Biotechnology Seminar Hall Chair: Prof. Dr. Anjum Nasim (PU) Co-Chair: Dr. Hafiz Ubaid ur Rehman (UMT)	TECHNICAL SESSION III-B Life Sciences 1C-14 Chair: Dr. Muhammad Sajjad Khattak (PU) Co-Chair: Dr. Wasiq Ikram (MUL)	TECHNICAL SESSION III-C Microbiology & Immunology 1N-13 Chair: Prof. Dr. Shahida Hasnain (PU) Co-Chair: Prof. Dr. Uqba Mehmood (SU)
	<p style="text-align: center;">Prof. Dr. Anjum Nasim (PU) <i>Camellia sinensis</i> loaded iron oxide nanoparticles: synthesis, biodistribution and cytotoxic effects</p> <p style="text-align: center;">Dr. Malik Ihsan Ullah Khan (UOL) <i>Designing nanomedicine according to tumor microenvironment to improve cancer therapy efficacy</i></p> <p style="text-align: center;">Saba Yaseen (MNSUAM) <i>Functional Analysis of a GhNAC79 Gene in Cotton Using VIGS And CRISPR-Cas9 for Drought and Salt Responsiveness</i></p> <p style="text-align: center;">Zulekha Zameer (FCU) <i>Metabolic and morphological analysis of Dof1 transgenic T2 wheat lines under nitrogen stress</i></p> <p style="text-align: center;">Tauheed Suddal (UMT) <i>Target prediction of candidate miRNAs from Oryza sativa for silencing the Pyricularia oryzae genome</i></p>	<p style="text-align: center;">Dr. Wasiq Ikram (MUL) <i>Optimizing Citric Acid Amended Phosphorus for Wheat Productivity in Calcareous Soil by Using 32P Isotopic Labeling</i></p> <p style="text-align: center;">Dr. Muhammad Nouman (Mahidol University, Thailand) <i>Transforming diabetic foot care with innovative orthotic management by bridging research and clinical practice</i></p> <p style="text-align: center;">Dr. Muhammad Zahoor (University of Oslo, Norway) <i>Identification of key regulators in cellular proteostasis</i></p> <p style="text-align: center;">Dr. Khurram Liaqat (Indiana University School of Medicine) <i>The undiagnosed rare disease clinic (URDC): ending the diagnostic odyssey of patients with rare genetic diseases</i></p> <p style="text-align: center;">Dr. Ibrahim Rashid (VU) <i>Navigating ethical challenges in AI deployment for biomedicine therapeutics, research, and diagnostics</i></p>	<p style="text-align: center;">Prof. Dr. Uqba Mehmood (SU) <i>Vaccine Production: Molecular Level</i></p> <p style="text-align: center;">Dr. Saima Younas (PU) <i>Direct acting antivirals for treatment and management of Hepatitis C virus infection in Pakistan</i></p> <p style="text-align: center;">Dr. Shahzada Khurram (UMT) <i>Effect of colchicine on cellular and humoral immune responses in mice</i></p> <p style="text-align: center;">Ayesha Badar (FCU) <i>Cotton microbiome: Plant's defense against viral cotton leaf curl disease</i></p> <p style="text-align: center;">Ateeba Asif (UMT) <i>Antimicrobial sensitivity and complicated diseases prevalence in local population of Sialkot, Pakistan</i></p>
11:00-12:30	TECHNICAL SESSION IV-A Animal Sciences Seminar Hall Chair: Dr. Tanveer Hussain (UVAS) Co-Chair: Dr. Muhammad Idnan (UO)	TECHNICAL SESSION IV-B Microbiology & Immunology 1C-14 Chair: Prof. Dr. Naeem Rashid (PU) Co-Chair: Dr. Iqbal Alvi (HU)	TECHNICAL SESSION IV-C Bioinformatics 1N-13 Chair: Dr. Muhammad Naveed (UCP) Co-Chair: Dr. Bilal Wajid (UET)
	<p style="text-align: center;">Dr. Tanveer Hussain (UVAS) <i>Livestock species under productive and adaptability pressure under changing climate of Pakistan with focus on Yak and Camel from north to south</i></p> <p style="text-align: center;">Dr. Muhammad Idnan (UO) <i>Genetic diversity in bats from Bajaur Agency, FATA, Pakistan, analyzed by 16S rRNA</i></p>	<p style="text-align: center;">Dr. Iqbal Alvi (HU) <i>Engineered lytic proteins and engineered bacteriophages</i></p> <p style="text-align: center;">Dr. Nazia Kanwal (SU) <i>Molecular modelling of cyclopeptides targeting Non-structural NS5A protein of Hepatitis C Virus</i></p>	<p style="text-align: center;">Dr. Muhammad Naveed (UCP) <i>Navigating the nanoscale frontier to leverage nano-informatics for precision nano-medicine with engineered silver nanoparticles</i></p> <p style="text-align: center;">Dr. Bilal Wajid (UET) <i>MetGenoX: a Metagenomics support package</i></p>

	<p>Umair Ahmed (UMT) <i>Development and analysis of lemongrass oil-infused edible coatings for improved microbial safety in chicken meat</i></p> <p>Iza Tahreem (MUL) <i>Effect of Allium sativum on C-reactive protein and cardiac structure in rabbits</i></p> <p>Muhammad Zahid (MUL) <i>Histopathological study of lead acetate Pb (CH₃COO)₂ accumulation in muscle and kidney tissues of Labeo rohita (Rohu)</i></p> <p>Sara Chaudhry (MUL) <i>Evaluation of the testicular toxicity caused by Lorazepam and ameliorative role of Vitamin C in albino mice (Mus musculus)</i></p> <p>Zohaib Hassan (MUL) <i>Histopathological effect of cadmium chloride on liver and gills of fish Labeo rohita</i></p>	<p>Naveen Dilawar (AWKUM) <i>Potential of rhizospheric fungi to reduce copper and lead toxicity in triticum aestivum</i></p> <p>Atta ur Rehman (AWKUM) <i>Alleviation of cold stress in Oryza sativa L by endophytic fungi</i></p> <p>Aqsa Tariq (PU) <i>Synergistic effect of multitrailt PSB for osmotic stress alleviation</i></p> <p>Amina Anjum (UMT) <i>Prevalence of periodontitis associated with diabetes in local populations in Sialkot, Pakistan</i></p> <p>Noshaba Saleem (FCU) <i>Metabolomic analysis and biotic stress tolerance induced in wheat by cell free supernatant of rhizospheric and phyllospheric bacteria</i></p>	<p>Syeda Amna (UMT) <i>Integrated transcriptome profiling for identification of prognostic hub genes as therapeutic targets of glioblastoma</i></p> <p>Eman Naeem (UMT) <i>In-silico approaches to identify potential drug-like compounds against Glycoproteins: Gn, Gc, and RNA-dependent RNA polymerase (RdRp) of Hantavirus</i></p> <p>Asifa Roohi (UMT) <i>In silico analysis of Levivirus MS2 capsid protein interaction with its genomic RNA</i></p> <p>Mahnoor Mushtaq (UMT) <i>Computational screening of non-synonymous SNPs from human SQLE gene to assess their association with multiple cancer types</i></p> <p>Aiman Yaseen (UMT) <i>In-Silico Approach for The Identification of Potent Anti-Cancer Drug Against Selected Proteins Responsible for Causing Pancreatic Ductal Adenocarcinoma</i></p>
12:30-13:30	LUNCH / PRAYER - POSTER SESSION		
13:30-15:00	TECHNICAL SESSION I V-A Microbiology Seminar Hall Chair: Dr. Imran Sajid (PU) Co-Chair: Dr. Aatif Amin (UCP)		TECHNICAL SESSION V-B Biochemistry 1N-13 Chair: Prof. Dr. Muhammad Arif Nadeem Saqib (NSU) Co-Chair: Dr. Hina Zain (SU)
	<p>Dr. Imran Sajid (PU) <i>21st Century expedition: Exploring indigenous microbial resources for novel antibiotics and anticancer drugs</i></p> <p>Dr. Aatif Amin (UCP) <i>Antimicrobial effect of silver nanoparticle based whey emulsions and edible films to prolong shelf life of fruits and vegetables</i></p> <p>Dr. Hafiz Zeshan Wadood (LGU) <i>Effect of Pseudomonas aeruginosa strain ZK biofilm on the mechanical and corrosion behavior of 316L stainless steel and α-brass</i></p> <p>Dr. Abdul Rauf (UMT) <i>Highly synergistic antibacterial activity of Copper(II)-based Nano metal-organic framework</i></p> <p>Rida Rasheed (PU) <i>Efficacy of Zn solubilizing bacteria to manage malnutrition: An organic green strategy</i></p> <p>Naseem Bibi (PU) <i>Phytostimulatory potential of biofilm forming bacteria and its implications for advanced agricultural practices</i></p>		<p>Prof. Dr. Muhammad Arif Nadeem Saqib (NSU) <i>Healthy diet is not expensive, cost analysis of different diets from major cities of Pakistan</i></p> <p>Dr. Hina Zain (SU) <i>Comparison & activity analysis of lipase and cellulase embedded MOF synthesised using De-Novo and hydrothermal method</i></p> <p>Dr. Irum Naureen (MUL) <i>Effects of Passive tobacco (Nicotiana tabacum) Smoking on Lipid Profile and Heart Structure in Chickens</i></p> <p>Syed Afnan (UMT) <i>A study on chicken nuggets valorized with beef and chicken liver: Formulation and evaluation</i></p> <p>Saleha Khan (UMT) <i>Formulation and evaluation of whole wheat bitter gourd-supplemented cookies for improving blood glycemic levels</i></p> <p>Misha Arooj (UMT) <i>Formulation and assessment of chick-pea rice pulao using fenugreek seeds and Indian rennet to improve blood glycemic levels</i></p> <p>Sabiha Gull (MUL) <i>Effect of maternal malnutrition on the hematological profile, glucose level and heart structure of developing fetus in rabbits (Oryctolagus cuniculus)</i></p>

15:00-15:45	PLENARY SESSION Seminar Hall
	Prof. Dr. Shahid Mahmood Baig Chairman, Pakistan Science Foundation
15:45-16:30	CONCLUDING SESSION
15:50-16:00	Dr. Muhammad Sohail Afzal (Chairperson, Department of Life Sciences, UMT)
16:00-16:10	Abid H.K. Sherwani (Director General, UMT)
16:10-16:20	Prof. Dr. Asif Raza (Rector, UMT)
16:20-16:30	Chief Guest Prof. Dr. Shahid Mahmood Baig (Chairman, Pakistan Science Foundation)
16:30-16:45	Souvenirs & Certificates Distribution by Rector UMT & DG UMT
16:45-17:00	REFRESHMENT



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