

8th Annual Neuroscience Conference (8ANC)

Organised by Pakistan Society of Basic and Applied Neuroscience (PASBAN)

Wednesday & Thursday October 5 & 6, 2022

Venue: Dr. Abdul Qadeer Khan Auditorium Lecture Hall 1, Dow International Medical College
(DIMC), Ojha Campus
Dow University of Health Sciences (DUHS), Karachi, Pakistan

Conference Chair, 8ANC

Dr. Sonia Siddiqui

Organizing Committee, 8ANC

Prof. Dr. Kartar Dawani (Chair)

Prof. Dr. Nusrat Shah

Prof. Dr. Zeba Haque (Co-Chair)

Dr. Sheikh Kaiser Waheed

Prof. Dr. Kashif Shafique

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Dr. Bushra Amin (Co-Chair)

Prof. Dr. Nikhat Siddiqui

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Omer Nadeem Shafi, M. Omar Larik, Mehreen Enam, M. Saad Abdul Qadir, M. Mohsin Imtiaz, M. Ashhal Iftekhhar, Daniyal Muhammad Alam, Maryam Urooj, Zoha Khan, Aroosa Roshan, Mehak Arija, Reyan Jakhro, Amna Mustafa, Wajeelha Saif, Bilal Syed, Zara Ahmed Qureshi, Haniah Mahboob, Aietain Ali Abbasi, Arfa Khan, Syed Haider Jalal, Muhammad Mustafa, Afaf Aijaz, Mahavash Nadeem, Namarta Kumari, Aazmeer Khan, Maria Fiaz, Fatima Gauhar, Salaar Ahmed, Namrah Aziz, Jawad Amin, Meher Angez, Shilpa Golani, M. Musa Hamza, Murtaza Bukhari, Salman Qamar, Ali Ahmed, Zuhaib Ali, Akmal Shahzad, Shahier Paracha, Ayaan Ali Qureshi

Day 1
October 5, 2022

Session One: Inauguration Ceremony
Chair: Dr. Sonia Siddiqui, DIMC, DUHS
Moderator: Mehreen Enam, Co-Moderator: Omer Nadeem Shafi
Time: 09:30 am to 11:00am (Pakistan Time; GMT +5)

Time	Duration	Speaker	Title
09:30 am-09:33	03 mins	Audio/Visual	National Anthem of Pakistan
09:33 am-09:35	02 mins	Ebrahim Alam M.B.B.S. Student, DIMC	Recitation of Holy Quran
09:35am – 09:38am	03 mins	Dr. Sonia Siddiqui, DUHS, Karachi	Welcome Address, 8ANC
09:38am – 09:41am	03 mins	Prof. Dr. Syed Ather Enam, <i>S.I.</i> Founding President PASBAN and Chair Neurosurgery, The Aga Khan University and Hospital	Introduction About PASBAN
09:41am – 09:51am	10 mins	<u>Address by Guest of Honor:</u> Prof. Dr. Muhammad Saeed Quraishy, <i>T.I.</i> Vice Chancellor, DUHS	
09:51am – 10:10am	20 mins	<u>Address by Chief Guest:</u> <i>Prof. Dr. Atta-ur-Rahman, FRS, N.I., H.I., S.I., T.I.,</i> Khwarizmi Laureate Meritorious Professor Fellow of the Royal Society, UNESCO Laureate	
10:10am – 10:30am	20 mins	<u>Keynote Speaker:</u> Circuit-targeted neuromodulation in neuropsychiatry Dr. Shan Siddiqui Harvard Medical University, USA	
10:30 am -11:00 am	30 mins	Certificate Distribution followed by TEA BREAK	

Session Two

Chair: Dr. Fazal Arain, Aga Khan University and Hospital, Pakistan
Moderator: Salman Qamar, Co-Moderator: Muhammad Musa Hamza
Time: 11:00am to 12:30pm (Pakistan Time; GMT +5)

Time	Duration	Speaker	Title
11:00 am – 11:10am	10 mins	Prof. Dr. Ather Enam, S./ Chair Neurosurgery, The Aga Khan University and Hospital, Karachi, Pakistan	Evolution of Human Brain: Proposed Revision of Nomenclature
11:10am – 11:20am	10 mins	Prof. Dr Darakhshan Haleem Meritorious Professor, Dr Panjwani Center for Molecular Medicine & Drug Research (PCMD), ICCBS, University of Karachi, Karachi, Pakistan	Treating Serotonin Deficiency Brain Disorders with Tryptophan
11:20am – 11:30am	10 mins	Prof. Dr Noor Jahan Dean faculty of Pharmacy, DUHS	Effect of Antidepressant as adjuvant therapy with an Anti-arthritis agent in rat model
11:30am – 11:40am	10 mins	Prof. Dr. Zeba Haque Principal Dow International Medical College, DUHS	Leptins in CNS disorders
11:40 am -11:50 am	10 mins	Prof. Dr. Sumbul Shamim Principal Dow College of Pharmacy, DUHS	Nanomedicine in Central Nervous System (CNS) Disorders: A Present and Future Prospective
11:50am – 12:00pm	10 mins	Q&A	Participants
12:00pm – 01:00pm	25 mins	LUNCH BREAK	

Session Three

Chair: Dr. Bushra Amin, Aga Khan University and Hospital, Pakistan

Moderator: Omer Shafi, Co-Moderator: Amna Mustafa

Time: 01:00pm to 03:00pm (Pakistan Time; GMT +5)

Free Papers (5 mins Talk + 2 mins Q/A)

Oral Presentations (12:30 pm-2:00 pm)

Time	Duration	Authors / Speaker	Title
01:00pm – 01:10pm	10 mins	Prof. Dr Raza Shah, T.I. HEJ, UoK	Novel Methods and Technology Development
01:10pm – 01:20pm	10 mins	Brig. Shoab Ahmed, S.I. Director, Dr Abdul Qadir Khan Institute of Behavioral Health Sciences, DUHS	ALZHEIMER'S, IS THERE A HOPE?
01:20pm – 01:30pm	10 mins	Dr Wasdev Amar Dr Abdul Qadir Khan Institute of Behavioral Health Sciences, DUHS	Substance Use: Is it a Brain Disorder?
01:30pm – 01:40pm	10 mins	Dr. Saima Mahmood Malhi and Dr. Shabana Usman Simjee Department of Pharmacology, Faculty of Pharmaceutical Sciences, Dow College of Pharmacy, Dow	Neuropharmacology: Screening tools to discover new therapeutic agents
01:40pm – 01:50pm	10 mins	Prof. Waggan, University of Turku and Turku University Hospital, Finland	Purinergic signaling in Parkinson's Disease using PET and MRI
01:50pm – 02:00pm	10 mins	Dr. Sonia Siddiqui Dow University of Health Sciences, Karachi	Extracellular Matrix Proteins: Potent targets to develop therapeutic drugs
02:00pm - 02:10 pm	10 mins	Dr Tehniat Faraz Ahmed; Prof. Fauzia Imtiaz; Dr Uzma Zaman; Dr. Naila Shahbaz; Affan Ahmed Dow University of Health Sciences	Plasma phosphorylated tau and Neurofilament light hold promise as potential biomarker for Alzheimer's disease
02:10pm – 02:20 pm	10 mins	Keynote Address Dr. Soyiba Jawed Title: Cognitive and neural engineering University of Technology, Brno, Czech Republic	
02:20pm - 02:30 pm	10 mins	Q&A	Participants
02:30pm - 03:00 pm	30 mins	Tea BREAK	

Day 1 | October 5, 2022

Session four

Showcasing Neuroscience Educational Webinar Series (NEWS)

Chair: Prof. Dr. Zafar Bashir, Bristol University, UK

Speaker: Prof. Dr. Emma Robinson, Bristol University, UK

Title: Investigating the neuropsychological effects of antidepressant in a translational rodent model.

Moderator: Muhammad Musa Hamza, Co-Moderator: Salman Qamar

Time: 03:00pm to 04:00pm (Pakistan Time; GMT +5)

Session Five

Chair: Prof. Dr. Nikhat Siddiqui

Moderator: M. Ashhal Iftekhar, Co-Moderator: Muhammad Mustafa

Time: 09:00am to 10:00am (Pakistan Time; GMT +5)

Free Papers (Part-I)

(3 mins Talk + 2 mins Q/A)

Oral Presentations (02:30 pm-03:05 pm)

09:00am- 09:05am	5 mins	Kalpana Kumari Dow College of Pharmacy, DUHS, Karachi	Relation of Poor Oral Hygiene with cognitive decline and dementia
09:05am- 09:10 am	5 mins	Lubaba Khalid Department of Biological and Biomedical Sciences, Aga Khan University, Karachi, Pakistan	Homozygous nonsense variant in SACS gene causes autosomal recessive spastic ataxia of Charlevoix-Saguenay in a consanguineous Pakistani family
09:10am- 09:15am	5 mins	Mehr Musani, Dr Fazal Arain Aga Khan University, Karachi, Pakistan	Zingiber Officinale can reduce the seizure frequency and improve memory and depression which be associated with significant changes in the brain architecture.
09:15am- 09:20am	5 mins	Ammara Rafique and Hajra Naz Department of Biochemistry, University of Karachi, Main University Road, Karachi,	Negative air ions; Source of neurorehabilitation for Cerebral Palsy patients
09:20am- 09:25am	5 mins	Aisha Ishaque Dr. Panjwani Center for Molecular Medicine and Drug Research, International Center for Chemical and Biological Sciences, University of Karachi, Karachi	Mesenchymal Stem Cells for the Treatment of Neurodegenerative Ailments
09:25am- 09:30am	5 mins	Maryam Amjad, Atiya Tabassum, Khalid Sher, Sunil Kumar, Sitwat Zehra, Sehrish Fatima Dr. A. Q. Khan Institute of Biotechnology and Genetic Engineering (KIBGE),	Analyses of the Variants in GABRA1 and GABRG2 Genes with Susceptibility to Epilepsy: A Case-Control Study
09:30am- 09:35am	5 Mins	Rabeet Tariq Liaquat National Hospital Shift her on 5 th oct 5mins	Outcomes And Factors Affecting Transcranial Direct Current Stimulation In Alzheimer's Disease Patients: A Systematic Review
09:35am- 10:00am	25 mins	TEA BREAK	

Session Five

Chair: Prof. Dr. Arif Harekar

Moderator: Amna Mustafa, Co-Moderator: Muhammad Mustafa

Time: 10:00am to 11:15am (Pakistan Time; GMT +5)

Free Papers (Part-II)

(3 mins Talk + 2 mins Q/A)

Oral Presentations (03:25pm-04:10 pm)

10:00am- 10:05am	05 mins	Ambreen Hasnat and Darakhshan Jabeen Haleem Biomedical Engineering Department, Sir Syed University of Engineering and Technology	Attenuation of 5-ht-1a receptors' sensitivity following apomorphine-induced sensitization
10:05am- 10:10am	05 mins	Asma Akram, Fatima Mahmood, Amal Mujeeb, Dr Sobia jamil Jinnah university for women	Acanthosis Nigerians: skin pigmentation inversely associated with insulin resistance
10:10am - 10:15am	05 mins	Bushra Jabeen Mehdi, Amber Nawaz and Sunila Afroz Biomedical Engineering Department Sir Syed University of Engineering & Technology Quid-e- Azam University, Islamabad	Neurobehavioral and Biochemical Effects of Nicotine and Caffeine Addiction in Young Population: A Correlated Study
10:15am - 10:20am	05 mins	Gulkhubaz Khan, Muhammad Imran Khan, Neelum Gul Qazi Bashir Ahmad Majeed Ullah Amjad Khan Department of Pharmacy, Kohat University of Science and Technology Institute of Applied Sciences and Technology, Mang, Haripur, KPK, Pakistan Faculty of Pharmaceutical Sciences, Riphah International University, Islamabad, Pakistan. Department of Physiology, Bannu Medical College	Adolescence social isolation stress increase the vulnerability to morphine dependence in animal model via oxidative stress, NMDA and nitric oxide pathway
10:20am- 10:25am	05 mins	Ghasif Zain, Syed Taha Ahmed, Muhammad Rashid Ejaz, Sarim Bin Farooq, Mirza Zargham Baig (institute)	Meditation And Its Effect On Pain Relief, Increase In Grey Matter And Cortical Thickness
10:25am- 10:30am	05 mins	Haq Nawaz Khan PIEAS	Adult GAMT Deficiency: A Report Of Two Siblings
10:30am- 10:35am	05 mins	Humaira Ansari, Shumaila Usman, Syed Tousif Ahmed, Kanwal Hanif, Shazia Hashmat, Kevin	Mevastatin: A Novel Agent Forming Dopaminergic Neurons From Human Mesenchymal Stem Cells

		Joseph Jerome Borges Department of Physiology, Research, Ziauddin University, Dr. Zafar H. Zaidi Centre of Proteomics, University of Karachi, Department of Anatomy, Ziauddin University	
10:35am- 10:40am	05 mins	Zoha Khan, Larik M.B.B.S. students, DIMC, DUHS	Impact of Inflation on Mental Health
10:40am- 10:45am	05 mins	Sijil Raza, Fatima Ali, Abeera Afzal, Warisha Sheikh, Anusha Baig, Saima Mahmood Malhi* Dow College of Pharmacy, Dow University of Health	Treatment of Parkinson's disease: An Ethno-pharmacological Review
10:45am- 10:55am	10 mins	Q&A	Participants
10:55am- 11:15am	20 mins	Tea break	

Day 2 | October 6, 2022

Session Seven

Chair: Prof. Dr. Zeba Haque, DIMC, DUHS

Moderator: Shilpa Golani, Co-Moderator: Muhammad Musa Hamza

Time: 11:15 am to 01:15pm (Pakistan Time; GMT +5)

Time	Duration	Speaker	Title
11:15am – 11:35am	20 Mins	Keynote Speaker: Dr. Sheikh Kaiser Waheed President and CEO, Medisure Pharmaceutical, Private Limited	
11:35am – 11:45am	10 Mins	Prof. Dr. Fawzia Siddiqui The Aga Khan University And Hospital, Karachi, Pakistan	To Improve The Care Of People With Epilepsy. She Has Formulated Easy To Follow Practical And Cost Effective Epilepsy Management Guidelines For Physicians In Third World Countries Like Pakistan.
11:45am – 11:55am	10 Mins	Prof. Dr. Masood Ahmed Principal, Ruth Pfau Fazai Medical College, Karachi, Pakistan	Unfolding The Human Brain
11:55am – 12:05pm	10 Mins	Prof. Dr. Zafar Bashir School Of Anatomy University Of Bristol	Imaging And Recording From Memory Neurons (Prof Zafar Bashir Is Based at The University Of Bristol, UK.
12:05pm – 12:15pm	10 Mins	Dr. Bushra Amin Department Of Biological And Biomedical Sciences, The Aga Khan University	High-Throughput Analysis To Develop Reliable Diagnostic Test For Early Dementia
12:15pm – 12:25pm	10 Mins	Dr. Ruqaya Nangrejo Baqai Medical University	Diabetic Neuropathies
12:25pm – 12:35pm	10 Mins	Rabab H. Ibrahim, Zafar Ali, Muhammad Ansar, Uzma Abdullah, Ambrin Fatima The Aga Khan University, , University Of Swat, University Of Lausanne, Lausanne, Switzerland University Institute Of Biochemistry And Biotechnology (Uibb), Pmas-Arid Agriculture University, Rawalpindi. Pakistan	A Novel Homozygous Variant In Znf142 Causes A Complex Neurodevelopmental Disorder With Intellectual Disability, Dystonia And Seizures In A Consanguineous Pakistani Family.
12:35pm- 12:45pm	10 Mins	Komal Mahmood Dow College Of Pharmacy, Dow University Of Health Sciences, Karachi, Pakistan	Preclinical Screening Of The Therapeutic Potential Of Vanillin Derivatives As Antiepileptics And Promoters Of Neuroplasticity
12:45pm- 01:15 pm	30 mins	Lunch	

Session Eight

Chair: Prof. Dr. Saad Shafqat

Moderator: Mehreen Enam, Co-Moderator: M. Ashhal Iftekhar

Time: 01:15pm to 02:30pm (Pakistan Time; GMT +5)

Free Papers (Part III)

(3 mins Talk + 2 mins Q/A)

Oral Presentations (12:35pm-01:30 pm)

01:15pm - 01:20pm	5 Mins	Dr Muhammad Wasim, Dr Fazal Arain Aga Khan University	Development Of Low-Cost Hplc Based Assay For Screening Of Neuro-Metabolic Disorders
01:20pm- 01:25pm	5 Mins	Zara Sami And Hajra Naz Department Of Biochemistry, University Of Karachi, Main University Road, Karachi,	Beneficial Effects Of Surah Al Fatiha Therapy On Cognitive Functions Of Normal And Pcos Afflicted Females
01:25pm- 01:30pm	5 Mins	Prashant Tikmani , Saiqa Tabassum , Madiha Shaikh Sameen Fatima Chohan , Saida Haider Department Of Biosciences, Faculty Of Life Science, Szabist, Karachi	Comparative Effects Of Persea Americana (Seeds & Pulp) On D-Galactose Induced Aging In Albino Rats
01:30pm- 01:35pm	5 Mins	Dr. Aisha Ambreen Senior Biochemist Department Of Biochemistry, Punjab Medical College, Faisalabad Medical University, Faisalabad Consultant Biochemist In Biochemistry Department, University Of Agriculture, Faisalabad, Pakistan	Defective Oligodendroglia Cells And Etiology Of Amyotrophic Lateral Sclerosis (Als)
01:35pm- 01:40pm	5 Mins	Dr. Rabia Aiman, Dr. Bushra Amin* Department Of Biological And Biomedical Sciences, The Aga Khan University, National	Identification Of Alzheimer's Disease Related Highly Susceptible Gene Mutations In Pakistani Population: A Pilot Study
01:40pm- 01:45 Pm	5 Mins	Shabina Jabeen, Dr. Bushra Amin* Department Of Biological And Biomedical Sciences, The Aga Khan University	Alzheimer's Disease Modelling And Novel Drug Intervention To Prevent Neuronal & Memory Loss
01:45 Pm- 01:55pm	5 Mins	M. Rashid Ejaz, Ghasif Zain, Sarim Bin Farooq, Mirza Zargham Baig, Syed Taha Ahmed	Impact Of Meditation On Neurological And Psychiatric Disorders.
01:55 Pm- 02:00pm	5 Mins	Syed Taha Ahmed, Ghasif Zain, Sarim Bin Farooq, Mirza Zurgham Baig, Rashid Ijaz Saleem Habib University	Yoga, Meditation And Its Effect On Neuroplasticity And Various Other Cns Related Disorders.
02:00pm- 02:05pm	5 Mins	Waniyah Masood	The Possible Application Of Ketamine In The Treatment Of Depression In Alzheimer's Disease

02:05pm- 02:10pm	5 Mins	Ahmed Waqas 1 , Muhammad Umair 2 Department Of Zoology University Of Education, Lahore, Pakistan. Medical Genomics Research Department, King Abdullah International Medical Research Center (Kaimrc), Ministry Of National Guard – Health Affairs (Mngha), Riyadh, Kingdom Of Saudi Arabia (Ksa).	Biallelic Variant In The Trna Methyltransferase Domain Of The Alkb Homolog 8 Causes Syndromic Intellectual Disability
02:10pm- 02:15pm	5 Mins	Maria Azam, Amna Tariq, Nida Sohail, Shamim A. Qureshi And Jehan Ara Department Of Biochemistry, University Of Karachi, Karachi-75270, Pakistan	Mitigated Effect Of Brown Algae Against Ccl4 Induced Neuronal Inflammation In Rats.
02:15pm- 02:20pm	5 Mins	Amna Siddiqui Executive Feeel (Pvt) Ltd, A Digital Mental Health Company.	Enhancing Emotional Awareness And Empathy In Primary School Children Using Video Literacy
02:20pm- 02:25pm	5 Mins	Aniqa Batool Pharmacy Department, Nicvd	Pharmacist Is The Core For The Rational Use Of Antibiotics In Pediatrics With Congenital Heart Disease.
02:25pm- 02:30pm	5 Mins	Aazmeer Mohammad Khan, Saera Suhail Kidwai, Saima Akhtar, Jamal Ara Students, Paf Chapter, Karachi, Pakistan department Of Medicine, United Medical And Dental College, Karachi, Pakistan department Of Public Administration, University Of Karachi, Pakistan	Knowledge, Aptitude And Practice: Smoking And Gutka Habits In A Lower Socio-Economic Cohort

Session Nine

Closing Ceremony

Moderator: Dr. Sonia Siddiqui, Co-Moderator: Omer Nadeem Shafi

Time: 02:30pm to 02:58pm (Pakistan Time; GMT +5)

Time	Duration	Speaker	Title
02:30pm-02:35pm	05 Mins	Audio/Visual	National Anthem
02:35pm-02:38pm	03 Mins	Ebrahim Alam M.B.B.S. Student, DIMC	Recitation of Holy Quran
02:38pm- 02:48pm	10 Mins	Address by Chief Guest Dr. Mukhtar Ahmed Chairman, Higher Education Commission of Pakistan	
02:48pm- 02:53pm	05 Mins	Prof. Dr. Zeba Haque	Closing Remarks
02:53pm-02:58pm	05Mins	Dr. Fazal Arain	Vote of Thanks

PASBAN Executive Committee Meeting

Time: 03:00 pm to 03:30 pm (Pakistan Time; GMT +5)

Only for PASBAN Executive Committee Members

PASBAN – GB Elections

Time: 03:30pm to 04:00pm (Pakistan Time; GMT +5)

Only for PASBAN Members