Dr. Fazal M. Arain

Publications

To date, 22 publications

2017

1. Waqas M, Enam S, Hashmi F A, **Arain FM.** Video Microscope Robotic Arm-Assisted, Neuronavigation-guided Glioma Resection and Regional Sampling. *Cureus 2017;* 9(10): e1738.
2. Chand P, Raghib MF, Salat MS, **Arain FM.** Hemimegalencephaly with intractable epilepsy: A case report. *J Pak Med Assoc*. 2017; 67(9): 1444-1446. **[IF: 0.616]**
3. Amin F, Dar AH, Osama K, Khan F, Mitha R, Tharwani A, Haider G, Chand P, **Arain FM**. A species dependent response to the pro-epileptic drug pentylentetrazole in birds. *Brain Res Bull*. 2017; 134: 189-194. **[IF: 3.033]**
4. Amin F**; Arain FM**. Are animal models applicable for research on schizophrenia? *Asian Journal of Psychiatr*. 2017; 30; 167-168
5. Chand P, Husein RB, **Arain FM**. A rare case of Becker Disease in a 7 year old boy. *Pakistan Journal of Neurological Sciences*. 2017; 12(4): 49-51
6. Fatima SS, **Arain FM**, Enam SA. Flipped classroom instructional approach in undergraduate medical education. *Pak J Med Sci.* 2017; 33(6): 1424-1428. **[IF: 0.696]**
7. Khan MU, Amin F, **Arain FM.** Challenges of conducting animal based research and teaching in medical colleges of Karachi, Pakistan. *J Pak Med Assoc*. 2017; 67(3): 487. **[IF: 0.616]**
8. Rehman R, Ali R, Khan R, **Arain FM**. An organizational challenge: reframing of leadership to introduce “Master’s program in Basic Science". *JBUMDC* 2017; 7(4): 254-256
9. Lissek T, Adams M, Adelman J, Ahissar E, Akaaboune M, Akil H, al'Absi M, **Arain F**, Arango-Lasprilla JC, Atasoy D, Avila JO, Badawi A1, Bading H, Baig AM et al. Building Bridges through Science. *Neuron.* 2017; 96(4): 730-735 **[14.31]**

2016

10. Khan MU, Amin F, **Arain FM**. Challenges of conducting animal based research and teaching in medical colleges of Karachi, Pakistan. *J. Pak Med Assoc*. 2017; 67(3): 487 **[IF: 0.488]**
11. Ahmad HR, **Arain FM**, Khan NA. A New Model of Master of Philosophy in Physiological Sciences. *Pak J Med Sci*. 2016; 32(5): 1296-1301**[IF: 0.544]**

12. Chand P, Ibrahim S, Alam MM, **Arain FM**, Khealani B. Acute Childhood Ischemic Stroke a Pakistan Tertiary Care Hospital Experience. *Pak J Neurological Sci*, 2016; 11(1): Article 2

2015

13. Rao S, Shah BA, Altaf N, and **Arain FA.** Misconceptional views about epilepsy exist across social class system of society. *Pak J Neurological Sci*. 2015; 10(3): 9-12.

14. **Arain FM**, Chand P. Hereditary Sensory Autonomic Neuropathy II, a rare disease in a large Pakistani family. *J. Pak Med Assoc*. 2015; 65(10): 1128-1130 **[IF: 0.488]**

15. **Arain F**, Chand P, Chaudhry TA. A rare Case of Simple Hereditary Recessive Optic Atrophy. *Pak J Neurological Sci*. 2015; 10(2): 34-35

16. **Arain F**, Zhou C, Ding L, Zaidi S, Gallagher MJ. The developmental evolution of the seizure phenotype and cortical inhibition in mouse models of juvenile myoclonic epilepsy. *Neurobiol Dis*. 2015; 82: 164-175 **[IF: 5.078]**

17. Khan MU, **Arain F**. The land of opportunities for research on rare genetic neurological disorders. *Pak J Neurological Sci*. 2015; 10(1): 38-39.

2013-2004

18. Zhou C, Huang Z, Ding L, Deel ME, **Arain FM**, Murray CR, Patel RS, Flanagan CD, Gallagher MJ. Altered cortical GABAA receptor composition, physiology, and endocytosis in a mouse model of a human genetic absence epilepsy syndrome. *J Biol Chem*. 2013; 288(29): 21458-72. **[IF: 4.651]**

19. **Arain FM**, Boyd KL, Gallagher MJ. Decreased viability and absence-like epilepsy in mice lacking or deficient in the GABAA receptor alpha1 subunit. *Epilepsia*. 2012; 53(8): e161-5. **[IF: 4.584]**

20. Shah Z, Ali M, Hussain I, Farooqui SZ, Ali AN, Ali AW, **Arain FM**, Allana SS, Aarabi SR, Khan SF, Arif M, Siddique S, Shafiq M, Lakhani AB. General practitioner's knowledge regarding the diagnosis and drug therapy for acute myocardial infarction. *J Pak Med Assoc.* 2009; 59(2): 118-22. **[IF: 0.488]**

21. Saeed M, Mekan SF, Rabbani MA, **Arain FM,** Arif M, Shaharyar S. Angiotensin converting enzyme (ACE) gene polymorphisms and lupus disease severity: a promising link. *Ann Rheum Dis*. 2005; 64(1): 164-5**. [IF: 9.2]**

22. Gallagher MJ, Song L, **Arain** F, Macdonald RL. The juvenile myoclonic epilepsy GABA(A) receptor alpha1 subunit mutation A322D produces asymmetrical, subunit position-dependent reduction of heterozygous receptor currents and alpha1 subunit protein expression. *J Neurosci*. 2004; 24(24): 5570-8. **[IF: 6.75]**

Grant Funding

1. *Diffusion MRI guided study of regional variation in glioblastoma multiforme pathology and gene expression,* University Research Council Grant, USD 15000, 2017-2019 (Co-Investigator)

2. *Alterations in GABA receptor expression reduces chemically induced seizure threshold in Aves*. AKU-Seed Money Grant, Rs.1,574,987.4, 2015-2017 (Principal Investigator).

Abstracts & Presentations

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1. Molecular biology of brain tumors; from bench to bedside. Department of Continuing Professional Education, Aga Khan University 2016

2. Molecular Genetic Basis of Epilepsy. Jinnah Medical & Dental College 2014

3. Untangling Epilepsy; from Molecules to Brain. Aga Khan University 2012.

4. Modulation of Dendritic Differentiation by Dopamine Receptors During Forebrain Development. Aga Khan University 2008.

5. The Juvenile Myoclonic Epilepsy GABAa Receptor α1 Subunit Mutation A322D Produces Asymmetrical Subunit Position Dependent Reduction of Heterozygous Receptor Currents and α1 Protein Expression. 1st Annual Symposium of DOW University of Health Sciences, Karachi, Pakistan.

6. Association of Weight Gain with the Use of Psychotropic Medications. 15th International Psychiatric Conference, Hotel Pearl Continental, Karachi, Pakistan

Poster Presentations at Neuroscience Conferences

1. *Australian parrots have lower threshold for PTZ-induced myoclonic jerks compared to sparrows*. Presented at 46th Annual Meeting of the Society for Neuroscience, November 12 – 16, 2016 in San Diego, CA. USA.

2. *Isolated Hemimegalencephaly with intractable epilepsy: a case report*: The 19th Health Sciences Research Symposium, Aga Khan University 2016.

3. *Seizure Model in birds, A Differential Response to PTZ in Two Species*. The 19th Health Sciences Reseach Symposium, Aga Khan University 2016.

4. *A unique opportunity to study hereditary sensory autonomic neurathy II*. Presented at 3rd Annual Research Day. Department of Biological and Biomedical Sciences. Aga Khan University 2015.

5. *Two GABAA receptor α1 subunit mutations cause developmentally-dependent epilepsy phenotypes in genetically modified mice.* Presented at Annual Neuroscience Retreat at Vanderbilt University 2013.

6. *Two epilepsy-associated GABAA receptor alpha 1 subunit mutations reduce viability and causes spontaneous EEG spike discharges and seizures in genetically modified mice*. Presented at Annual Neuroscience Retreat at Vanderbilt University 2012.

7. *Heterozygous loss of the epilepsy-associated GABAA receptor alpha 1 subunit reduces viability and causes spontaneous EEG spike discharges and absence seizures in two strains of genetically modified mice*. Presented at Annual Neuroscience Retreat at Vanderbilt University 2011.

8. *Heterozygous loss of the epilepsy-associated GABAA receptor alpha 1 subunit reduces viability and causes spontaneous EEG spike discharges and absence seizures in two strains of genetically modified mice*. Presented at Society of Neuroscience Conference 2011.

9. *Heterozygous loss of the epilepsy-associated GABAA receptor alpha 1 subunit reduces viability and causes spontaneous EEG spike discharges and absence seizures in two strains of genetically modified mice*. Presented at American Epilepsy Society Meeting 2011.
