

Publications:

Papers: (Total IF: 150, Citation: 700+)

Ibrar Rafique, Muhammad Arif Nadeem Saqib, Asif Mir, Muhammad Naeem (2018) Maturity Onset Diabetes of the Young—An Overview of Common Types. A Review, *Romanian Journal of Diabetes Nutrition and Metabolic Diseases*, 5 (2) 29-213

Rahman SB, Mir A, Ahmad N, Haider SH, Malik SA, Nasir M. (2018) Identification and association of recurrent ALOXE3 mutation with non-bullous congenital ichthyosiform erythroderma in two ethnically distinct Pakistani families. *Congenit Anom (Kyoto)*. doi: 10.1111/cga.12303.

Qazi TJ, Quan Z, Mir A, Qing H., (2018) Epigenetics In Alzheimer's Disease: Perspective Of DNA Methylation *Molecular Neurobiology* 55(2), 1026-1044 (IF 6.190)

Muhammad Ajmal, Asif Mir, Sughra Wahid, Chiea Chuen Khor, Jia Nee Foo, Saima Siddiqi, Mehran Kauser (2017) Identification and in silico characterization of a novel p.P208PfsX1 mutation in V-ATPase $\alpha 3$ subunit associated with autosomal recessive osteopetrosis in a Pakistani family, *BMC Medical Genetics* 18:148 (IF 2.198)

Muhammad Ajmal, Asif Mir, Muhammad Shoaib, Salman Akbar Malik and Muhammad Nasir (2017) Identification and in silico characterization of p.G380R substitution in FGFR3, associated with achondroplasia in a non-consanguineous Pakistani family, *Diagnostic Pathology* 2017 12:47 (IF 2.087)

Muhammad Saad Ahmed Sana Ikram Nousheen Bibi Asif Mir (2018) Hutchinson–Gilford Progeria Syndrome: A Premature Aging Disease. *Molecular Neurobiology*, 55(5):4417-4427, DOI 10.1007/s12035-017-0610-7 (IF 6.190)

R Harripaul, N Vasli, A Mikhailov, M A Rafiq, K Mittal, C Windpassinger, T I Sheikh, A Noor, H Mahmood, S Downey, M Johnson, K Vleuten, L Bell, M Ilyas, F S Khan, V Khan, M Moradi, M Ayaz, F Naeem, A Heidari, I Ahmed, S Ghadami, Z Agha, S Zeinali, R Qamar, H Mozhdehipanah, P John, A Mir, M Ansar, L French, M Ayub and J B Vincent (2017) Mapping autosomal recessive intellectual disability: combined microarray and exome sequencing identifies 26 novel candidate genes in 192 consanguineous families *Molecular Psychiatry*: 23, 973–984 (DOI: 10.1038/mp.2017.60) (IF 6.190)

Sobiah Rauf and Asif Mir (2016) Insight to FBXO31 novel mutation p.Cys283Asn causing Non-Syndromic autosomal recessive intellectual disability using computational methods, *Clinical Proteomics & Bioinformatics* 1: 1-9

Asif Mir, Syeda Naqsh e Zahra, Sobiah Rauf. Comparative Modeling and Molecular Docking Study of P53 and AKT1, Genes of Lung Cancer Pathways (2016). *International Journal of Clinical Oncology and Cancer Research*. 1: 6-14.

Asif Mir, Humaira Ismatullah, Sobiah Rauf, Umar HK Niazi (2016) Identification of bioflavonoid as fusion inhibitor of dengue virus using molecular docking approach, *Informatics in Medicine Unlocked*, 3:1-6

Muhammad Ilyas, Asif Mir, Sobiah Rauf, Sidrah Nazi, Humera Javed (2016) Huntington Gene Ontological Study And Orthological Analysis, *World Journal of Biotechnology*, 2:64-68

Sheikh Arslan Sehgal, Shazia Mannan,, Sumaira Kanwal, Ishrat Naveed, Asif Mir (2015) Adaptive evolution and elucidating the potential inhibitor against schizophrenia to target DAOA (G72) isoforms *Drug Design, Development and Therapy* 9:3471—3480 **(IF 2.822)**

Abdul Hameed, Asif Mir, Muhammad Nasir, and Muhammad Ajmal (2015) Bioinformatics evaluation of NPHS2 deletion mutation associated with congenital nephrotic syndrome in a consanguineous Pakistani family *Clinical Genetics* 87:599–601 **(IF 3.326)**

J.B. Vincent, T. Jamil, M.A. Rafiq, Z. Anwar, M. Ayaz, A. Hameed, T. Nasr, F. Naeem, N.A. Khattak, M. Carter, I. Ahmed, P. John, E. Wiame, D.M. Andrade, E.V. Schaftingen, A. Mir and M. Ayub (2015) Phosphoserine phosphatase (PSPH) gene mutation in an intellectual disability family from Pakistan *Clinical Genetics* 87: 296–298 **(IF 3.326)**

Aslam Khattak, N., & Mir, A. (2014). Computational Analysis of TRAPPC9: Candidate Gene for Autosomal Recessive Non-Syndromic Mental Retardation. *CNS & Neurological Disorders-Drug Targets (Formerly Current Drug Targets-CNS & Neurological Disorders)*, 13(4), 699-711. **(IF 2.506)**

Wadood, A., Jamal, S. B., Riaz, M., & Mir, A. (2014). Computational analysis of benzofuran-2-carboxylic acids as potent Pim-1 kinase inhibitors. *Pharmaceutical biology*, (52), 1170-1178. **(IF 1.916)**

Chang, Sunny L.-Y.; Hsieh, Chia-Hung; Chen, Yen-Ju; Wang, Chien-Ming; Shih, Chung-Shiuan; Huang, Pei-Wen; Mir, Asif; Lane, Hsien-Yuan; Tsai, Guochuan E.; Chang, Hao-Teng. (2014.) The C-Terminal Region of G72 Increases D-Amino Acid Oxidase Activity. *Int. J. Mol. Sci.* 15, no. 1: 29-43. **(IF 3.266)**

Asif Mir, Kumudesh Sritharan, Kirti Mittal, Nasim Vasli, Carolina Araujo, Talal Jamil, Muhammad Arshad Rafiq, Zubair Anwar, Anna Mikhailov, Sobiah Rauf, Huda Mahmood, Abdul Shakoor, Sabir Ali, Joyce So, Farooq Naeem, Muhammad Ayub, John B. Vincent (2014) Truncation of the E3 ubiquitin ligase component FBXO31 causes non-syndromic autosomal recessive intellectual disability in a Pakistani family, *Human Genetics*, 133, 975–984 . **(IF 4.367)**

Muhammad Nasir, Simeen Ber Rahman, Christian M. K. Sieber, Asif Mir, Amir Latif, Nafees Ahmad, Salman Akbar Malik, Abdul Hameed (2014) Identification of recurrent c.742G>T nonsense mutation in ECM1 in Pakistani families suffering from lipoid proteinosis, *Molecular Biology Reports* 4: 2085-2092 . **(IF 1.828)**

Sobiah Rauf and Asif Mir (2013) Exploring evolution of brain genes involved in microcephaly through phylogeny and synteny analysis *Theoretical Biology and Medical Modelling* 2013, 10:61**(IF 1.460)**

Muhammad S. Ahmed, Sobiah Rauf, Muhammad Naeem, Muhammad N. Khan, Asif Mir (2013) Identification of novel mutation in the HR gene responsible for atrichia with papular lesions in a Pakistani family. *Journal of Dermatology* 2013; 40: 1–2

Naureen Aslam Khattak, Arslan Sehgal and Asif Mir (2013) Bioinformatics and phylogenetic analysis of human Tp73 gene, 12 :4187-4193,

Rana Adnan Tahir, Sheikh Arslan Sehgal, Naureen Aslam Khattak, Jabar Zaman Khan Khattak and Asif Mir (2013) Tumor necrosis factor receptor superfamily 10B (TNFRSF10B): an insight from structure modeling to virtual screening for designing drug against head and neck cancer. *Theoretical Biology and Medical Modelling*, 10:38 (**IF 1.460**)

Sheikh Arslan Sehgal, Naureen Aslam Khattak, Asif Mir (2013) Structural, phylogenetic and docking studies of D-amino acid oxidase activator (DAOA), a candidate schizophrenia gene *Theoretical Biology and Medical Modelling*, 10:3 (**IF 1.460**)

Syeda Naqsh e Zahra, Naureen Aslam Khattak, Asif Mir (2013) Comparative modeling and docking studies of p16ink4/Cyclin D1/Rb pathway genes in lung cancer revealed functionally interactive residue of RB1 and its functional partner E2F1. *Theoretical Biology and Medical Modelling*, 10:1 (**IF 1.460**)

Naeem, Muhammad Kashif, Sobiah Rauf, Hina Iqbal, Nawaz Shah, Muhammad Kausar, and Asif Mir. In Silico Studies of C 3 Metabolic Pathway Proteins of Wheat (*Triticum aestivum*). *BioMed Research International* 2013:1-7 (**IF 2.476**)

Evaluation of inhibitory potential of some selective methanolic plants extracts on biological characteristics of *Acanthamoeba castellanii* using human corneal epithelial cells in vitro, *Parasitology Research* 112: 1179-1188 (**IF 2.329**)

Bilal, Samina, Shumaila Barkat Ali, Sahar Fazal, and Asif Mir. (2013) Generation of a 3D model for human cereblon using comparative modelling. *Journal of Bioinformatics and Sequence Analysis* 5:1 10-15.

Rauf S, Mir A (2012) Phylogenetic Analysis of ASPM, a Major Contributor Gene of Microcephaly. *J Proteomics Bioinform* 5: 252-255. doi:10.4172/jpb.1000245

Effect of Organic Manures With Recommended Dose Of Npk On The Performance Of Wheat (*Triticum Aestivum* L.) (2012) *The Journal Of Animal & Plant Sciences*, 22(3): 2012, Page: 683-687 (**IF 0.329**)

Samina Bilal, Hamid Rashid, Jabar Zaman Khan Khattak, Shehzad Ashraf Ch, Tahira Sultana And Asif Mir Structure Modeling And Mutational Analysis Of Gap Junction Beta 2 (GJB2) *African Journal Of Biotechnology* Vol. 11(27), Pp. 6965-6973. (**IF 0.5**)

Syed Babar Jamal, Zubair Anwar, Rizwan Ullah Khan, Talal Jamil, Arshia Iram, Asif Mir, Muhammad Waqar And Jabar Zaman Khan Khattak Haplotype Analysis For DFNB4/PDS Locus In Hearing Impaired Families Of Punjab (Pakistan) *Current Research Journal Of Biological Sciences* 4(4): 407-413, 2012

Shiraz Ahmad, Summera Tufail, Zubair Anwar, Hussain Mustatab Wahedi, Muhammad Abrar And Asif Mir Mapping Of Genes Involved In Bardet-Biedl Syndrome (BBS) In Pakistani Population, Current Research Journal Of Biological Sciences 4(4): 513-518,

Rizwana Kousar, Muhammad Jawad Hassan, Bushra Khan, Sulman Basit, Saqib Mahmood, Asif Mir, Wasim Ahmad and Muhammad Ansar Mutations in WRD62 gene in Pakistani Families with autosomal recessive primary microcephaly (2011) BMC Neurology 11-19 (**IF 2.5**)

Hina Iqbal, Tayyba Sarfaraz, Farida Anjum, Zubair Anwar and Asif Mir Identification of Missense Mutation (I12T) in the BSND Gene and Bioinformatics Analysis (2011) J Biomed Biotechnol 2011:1-11

Hina Iqbal, Asif Mir and Rani Faryal Molecular modeling of mutant kinase domain of Btk, a Tec family member, for structure prediction (2011) Afr J Biotechnol. 10:3274-3249 (**IF 0.5**)

Mohammad Haroon Khan, Hamid Rashid and Asif Mir Phylogenetic analysis of human Tp53 gene using computational approach (2011) Afr J Biotechnol. 10:344-349 (**IF 0.5**)

Sehrish Kanwal, Hina Iqbal, Alia Parveen, Jabber Zaman Khattak and Asif Mir CATSPER ion channels: Bioinformatics Analysis in Homo sapiens (2011) Afr J Biotechnol. 10:9017-9022 (**IF 0.5**)

Amber Afroz, Ghulam Muhammad Ali, Asif Mir, Setsuko Komatsu (2011) Application of Proteomics to investigate stress-induced proteins for improvement in crop protection. Plant Cell Rep 30:745-763 (**IF 2.869**)

Asif Mir, Farida Anjum, Naveeda Riaz, Hina Iqbal, Hussain Mustatab Wahedi, Muhammad Asrar Khan and S.A Malik (2010) Carbon Tetrachloride (CCl₄) – induced hepatotoxicity in rats: Curative role of Solanum nigrum. Journal of Medicinal Plants Research.4:2525-2532. (**IF 0.5**)

Iffat Farzana Anjum, Asif Mir and Naveeda Riaz. (2011). In Silico Analysis of Genes Implicated in alopecia areata. Pak.J. Zoo.43: 437-446. (**IF 0.4**)

Hina Iqbal, Iffat Farzana Anjum and Asif Mir, ATID: Analytical tool for inherited diseases, Journal of Computational Biology and Bioinformatics Research Vol. 3(3), pp. 38-41

Jabar Zaman Khan Khattak, Asif Mir, Zubair Anwar, Hussain Mustatab wahedi, Ghulam Abbas, Haider Zaman Khan Khattak and Humaira Ismatullah Concept of Halal Food and Biotechnology. Advance Journal of Food Science and Technology 3(5): 385-389

Zehra Agha, Asif Mir, Sarwat Jahan (2010) Effect of single oral dose of melatonin on plasma concentration of prolactin and cortisol in male rhesus monkeys Pak Physiol 6: 32-36

Hina Iqbal, Hussain Mustatab Wahedi, Fauzia Yusuf Hafeez and Asif Mir (2010) Molecular variants of Bardet-Biedl Syndrome. Journal of Cell Biology and Genetics 1, 1 - 11,
Farida Anjum and Asif Mir (2010) Susceptibility pattern of pseudomonas aeruginosa against various antibiotics African Journal of Microbiology Research 4: 1005-1012 (**IF 0.5**)

B. Pawlik, A. Mir H. Iqbal, Y. Li, G. Nürnberg, C. Becker, R. Qamar P. Nürnberg, B. Wollnik (2010) A Novel Familial BBS12 Mutation Associated with a Mild Phenotype: Implications for Clinical and Molecular Diagnostic Strategies *Mol Syndromol* 1:27–34

Masood ur Rehman Kayani, Umair Shahzad Alam, Farida Anjum and Asif Mir (2010) ClustPK: A windows-based cluster analysis tool *Journal of Computational Biology and Bioinformatics Research* 1:001-004

Asif Mir, Liana Kaufman, Abdul Noor, Talal Jamil, Matloob Azam, Mahdi M. Motazacker Kimia Kahrizi, Muhammad Arshad Rafiq, Rosanna Weksberg, Tanveer Nasr, Farooq Naeem, Andreas Tszchach, Andreas W. Kuss, H. Hilger Ropers Gisele E. Ishak, Dan Doherty, A. James Barkovich, Hossein Najmabadi, Muhammad Ayub, John B. Vincent (2009) Identification of mutations in TRAPPC9, which encodes the NIK and IKK- β binding protein (NIBP), in Non-Syndromic Autosomal Recessive Mental Retardation. *The American Journal of Human Genetics* 85, 909-915. (IF 12.5)

Samina Bilal, Hina Iqbal, Farida Anjum and Asif Mir (2009) Prediction of 3D structure of P2RY5 gene and its mutants via comparative homology modeling. *Journal of Computational Biology and Bioinformatics Research*: 1, 11–16.

Hussain T, Mazhar A, Din AU, Mir A (2009) CIT: A Cluster Identification Tool based on Biclustering and Hierarchical Clustering. *J Proteomics Bioinform* 2: 222-225

Fraz A Malik, Saima Ashraf, Mahmood A Kayani, Wen G Jiang, A Mir, M Ansar, Ishraat A Baloch, Rafshan Sadiq (2008) Contribution of BRCA1 germline mutation in patients with sporadic breast cancer *International Seminars in Surgical Oncology*, (05) 21

Mir A, Ansar M, Chahrour MH, Pham TL, Wajid M, Haque S, Yan K, Ahmad W, Leal SM (2005): Mapping of a novel autosomal recessive non-syndromic deafness locus (DFNB46) to chromosome 18p11.32-p11.31. *American Journal of Medical Genetics* 133A(1): 23-26. (IF 4.5)

Santos RL, Wajid M, Khan MN, McArthur N, Pham TL, Bhatti A, Lee K, Irshad S, Mir A, Yan K, Chahrour MH, Ansar M, Ahmad W, Leal SM. (2005) Novel sequence variants in the TMC1 gene in Pakistani families with autosomal recessive hearing impairment. *Hum Mutat.* 26:396. (IF 8.5)

Farida Anjum, Asif Mir and Najma Ayub Biodiversity of Soil Mycoflora of Islamabad, Pakistan, Using two isolation methods (2005) *Science, Technology & Development*, 24: 45-49

Asif Mir Hepatoprotective effects of *Solanum nigrum* extracts on Carbon Tetrachloride (CCl₄) Induced Hepatotoxicity in Rats (2006) *Science, Technology and Development* 25:, 31-39

Patents/Intellectual Property Rights:

1. Gene for autosomal recessive mental retardation: *TRAPPC9*: submitted.

Abstracts (2006-2012):

A. Noor, A. Mir, A. Mikhailov, A. Fennell, M. Ayub, J.B. Vincent. A novel locus for autosomal recessive non-syndromic mental retardation (NSMR) maps to 13q12.3-q13.2. American Society of Human Genetics, Honolulu 2009.

Asif Mir, Liana Kaufman, Abdul Noor, Muhammad Arshad Rafiq, Muhammad Ayub, John Vincent. Identification of TRAPPC9 as a Cause of Non-Syndromic Autosomal Recessive Mental Retardation. American Society of Human Genetics, Honolulu 2009.

A. Noor, A. Mir, A. Mikhailov, A. Fennell, M. Ayub, J.B. Vincent. A novel locus for autosomal recessive non-syndromic mental retardation (NSMR) maps to 13q12.3-q13.2. World Congress on Psychiatric Genetics, San Diego 2009.

Asif Mir, Liana Kaufman, Abdul Noor, Muhammad Arshad Rafiq, Muhammad Ayub, John Vincent. Identification of TRAPPC9 as a Cause of Autosomal Recessive Mental Retardation. World Congress on Psychiatric Genetics, San Diego 2009.

John B. Vincent, Abdul Noor, Narges Moghimi, Christian Windpassinger, Liana Kaufman, Muhammad Arshad Rafiq, Asif Mir, Ansar Muhammad, Tanveer Nasr, Farooq Naeem, Mina Ohadi, Muhammad Ayub. Homozygosity Mapping for Disease Gene Identification: Applications in Pakistani Non-Syndromic Mental Retardation Families and in Iranian Bipolar Disorder Families. The 15th Biennial Winter Workshop in Psychoses, 2009, Barcelona

Liana Kaufman, Asif Mir, Abdul Noor, Muhammad Arshad Rafiq, Muhammad Ayub, John Vincent, Identification of TRAPPC9 as a Cause of Autosomal Recessive Mental Retardation. 3rd Annual Canadian Human Genetics Conference, St Sauveur, Quebec, 2010

Abdul Matin^{1*}, Muhammad Shoaib², Asif Mir², Muhammad Ismail¹ and Suk-Yul Jung³, Impact of carbon nanotubes on virulence properties of *Acanthamoeba* (T4 genotype) *in vitro* National Symposium on Frontiers in Nanotechnology, NUST, Islamabad, Pakistan, May 2012

Graduate Student (Supervisor)

PhD: 04 (02 thesis submission)

MS/M.Phil: 30

MSc: 05

Undergrad Student Supervision:

Project supervisor for undergraduate student: 25

Awards:

HEC Best Paper Award 2009

Postdoctoral Fellowship 2012

Research Productivity Award 2012

Grants Held (last 5 years):

1.Genetic Mapping of Autosomal Recessive Non-Syndromic Mental Retardation Disorder in Pakistani Population, Asif Mir (PI), Higher Education Commission, 2009-2012:

2.Mapping of Potential Loci and Genes for Congenital Alopecia in Pakistani Families, Asif Mir (PI), Higher Education Commission,2013-2014

3. Molecular Pathogenesis of Inherited Bardet-Biedl Syndrome, Asif Mir (PI), Higher Education Commission, 2012-2013
4. Optimization of Conditions for the production of Alkaline Phosphatase from indigenous bacteria Asif Mir (Co-PI), Higher Education Commission, 2010-2011
5. Exclusion Mapping of Autosomal Recessive Non-Syndromic Mental Retardation Disorder, Asif Mir (PI), CIIT Research Grant, 2009-2010
6. Pathogenic Mutations Screening of Genes Causing Primary Microcephaly (MCPH) In Pakistani Cohort, Asif Mir (PI), HRSCIIUI, Research Grant, 2016-2017

Membership:

Member Board of Studies, Department of Biotechnology and Bioinformatics, IIUI, Islamabad
 Member Board of Studies, National Center for Bioinformatics, QAU, Islamabad.
 Member Board of Faculty, Faculty of Basic and Applied Sciences (FBAS), IIUI, Islamabad
 Chairman DTRC, BIBT, IIUI Islamabad

International Research Collaborations:

1. UCL Institute of Neurology, National Hospital for Neurology & Neurosurgery Queen Square, London WC1N 3BG
2. Molecular Neuropsychiatry & Development Lab
 Centre for Addiction & Mental Health (CAMH)
 250 College St, Toronto, ON, M5T 1R8, Canada
3. Institute of Human Genetics, University of Cologne
4. Kerpener Str. 34, 50931 Cologne, Germany

Professional Courses Participated:

PC-1 Preparation
 Basic Computer
 Data base Building with Oracle and SQL
 Gender Analysis and Project Preparation
 Laboratory Safety
 NGS data Analysis

Book Published:

1. Quick Guideline for Computational Drug Design (**eISBN:** 978-1-68108-603-3, 2018
ISBN: 978-1-68108-604-0)
2. Protein Modeling And Molecular Docking (ISBN 987-969-23-0950-9) (2016)
3. R&D Research Organizations by PCST (2005)