

CURRICULUM VITAE

OF

DR. MUHAMMAD IDREES



**Professor & Director,
Centre for Applied Molecular Biology (CAMB)
University of the Punjab, Lahore**

POSTAL ADDRESS:

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POSITIONS HELD:

June 18, 2016- to date:

PROFESSOR & DIRECTOR

Centre for Applied Molecular Biology (CAMB) University of the Punjab, Lahore.

July 01, 2015- June 17, 2016:

DIRECTOR

Centre for Applied Molecular Biology (CAMB) University of the Punjab, Lahore.

March 2013 – June 2015:

ASSOCIATE PROFESSOR/Head Division of Molecular Virology, National Centre of Excellence in Molecular Biology (CEMB), University of the Punjab, Lahore.

July 2006 – February 2013:

ASSISTANT. PROFESSOR/Head Molecular Virology & Molecular Diagnostics Groups, National Centre of Excellence in Molecular Biology (CEMB), University of the Punjab, Lahore.

December 2005 – June 2006:

SENIOR RESEARCH OFFICER/ Head Molecular Diagnostics, Centre for Applied Molecular Biology (CAMB) Ministry of Science & Technology, Lahore.

May 2000 - November 2005:

RESEARCH OFFICER/Lab Incharge
Centre for Applied Molecular Biology (CAMB) Lahore.

January 1999-April 2001:

Head Division of Molecular Diagnostics
The Medical Laboratories 34- Lawrence Lahore

QUALIFICATIONS:

- 2015 **FRCPath** Fellow Royal College of Pathologist (**FRCPath**) London United Kingdom (UK)-Member No. 20005720.
- 2006-2007 **Post Doctorate in Molecular Hepatitis**, Division of Viral Hepatitis, Coordinating Centre for Infectious Diseases, Centers for Disease Control and Prevention (CDC), Atlanta GA 30333 USA.
- 2001 - 2005: **Ph. D in Molecular Biology** (Molecular Virology), University of the Punjab, Lahore, Pakistan.
Thesis Title: *Genome variability studies in the 5'Non-coding region of Hepatitis C Virus and its clinical implications*
- 1997 - 1999: **M. Phil in Molecular Biology** (Molecular Bacteriology), University of The Punjab Lahore, Pakistan.
Thesis Title: *Molecular Studies on Multiple Drug Resistant Genes in Mycobacterium tuberculosis.*
- 1993 - 1995: **M. Sc. in Zoology** (Parasitology/Microbiology), University of Peshawar NWFP, Pakistan.
Thesis Title: *The Dilemma of Zoo prophylaxis: Cattle ownership can increase rater tan reduce Malaria in Pakistan.*
- 1995 - 1996: **B. Ed (Science)**, IER, Peshawar University NWFP, Pakistan.
- 1991 - 1993: **B. Sc. (Zoology, Chemistry, Botany)**, GPGJC, Peshawar University NWFP, Pakistan.

Other Appointments and Affiliations (Current & Past)

1. **Convener/Chairman**, Board of Studies (BOS), CAMB, University of the Punjab Lahore. From 2015-ongoing.
2. **Member**, Board of Faculty (BOF), University of the Punjab Lahore. From 2015-ongoing.
3. **Member** Board of Studies (BOS) Department of Genetics, Hazara University Garden Campus Mansehra, KPK-**From 2011-continue**
4. **Member**, Academic Council University of the Punjab Lahore. From 22-8-2015-ongoing.
5. **Member** Guidance & Examination Committee of Atta ur Rehman School of Applied Biosciences (previously known as NCVI) National University of Science & Technology (NUST) Islamabad- **From 2011- continue**
6. **Member** Board of Studies (BOS) Department of Molecular Biology, Virtual University of Pakistan M. A. Jinnah Campus Lahore. **From February 2016-continue**
7. **Group Leader**, Infectious Diseases & Molecular Virology Group CEMB, University of the Punjab- **From 2000- continue**
8. **Incharge Disease Diagnostic Facility**, CAMB, Ministry of Science & Technology Government of Pakistan- **From 2001- 2009.**

9. **Member of a team of four Scientist designated by CDC, USA to visit Pakistan (2006-07)** to meet with several public health officials from the Ministry of Health and the National Institute of Health to discuss various collaborative public health programs and activities that will support the Field Epidemiology & Laboratory Training Program (FELTP).
10. **Member** of Expert Committee for the preparation of guidelines of MERS CoV constituted by Advisor to Chief Minister on Health-2014.
11. **Member** Cabinet Committee on Dengue Control-Health Department Constituted by **Chief Minister**, Government of the Punjab. **From 2012-till date**
12. **Member** (Co-opted) of “**Technical Expert Committee of Medicine**” recommended by Steering Committee on **Prevention & Control of Hepatitis** Programme. **From 2013-till date**
13. **Member** of **Departmental Tenure Review Committee** (DTRC) of CEMB, University of the Punjab Lahore. **From 2013-till date**
14. **Member/Virology Group Leader** of Dengue Research Group (DRG) constituted by Vice Chancellor, University of the Punjab for the prevention and control of Dengue. **From 2009-till date.**
15. **Member** Biosafety & Bioresource Committee University of the Punjab to review the research proposals of the faculty members and Ph. D scholars before submission to Higher Education Commission (HEC) and Pakistan Science Foundation (PSF). From 22-9-2015-ongoing.
16. **Chairman/Convener**, Purchase Committee, Centre for Applied Molecular Biology, University of the Punjab-Lahore. **From 2015- continue**
17. **Chairman/Convener**, Technical Evaluation Committee, Centre for Applied Molecular Biology, University of the Punjab-Lahore. **From 2015- continue**
18. **Chairman/Convener**, Departmental Doctoral Program Committee (DDPC), Centre for Applied Molecular Biology, University of the Punjab-Lahore. **From 2015- continue**
19. **Chairman/Convener**, Scholarship Committee, Centre for Applied Molecular Biology, University of the Punjab-Lahore. **From 2015- continue**
20. **Memberships of International Societies:**
 - Fellow Royal College of Pathologist (**FRCPath**) London United Kingdom (UK)-Member No. 20005720
 - American Society of Microbiology (ASM)-**Member ID: 56817638**
 - European Society of Clinical Microbiology and Infectious Diseases (ESCMID)- **Member ID: 122577**
 - Hellenic Society of Virology
 - International Society for Antiviral Research
 - The Federation of European Microbiological Societies
 - Zoological Society of Pakistan
21. **Currently Editor of International Scientific journals such as**
 - World Journal of Clinical Infectious Diseases
 - Global Journal of Gastroenterology & Hepatology
 - World Journal of Virology
 - World Journal of Gastroenterology & Hepatology

- World Journal of Gastroenterology
- The Science
- Hepatoma Research
- Journal of Hepatitis Research

22. Reviewer of more than 20 International Scientific Journals (few are given below):

- **The Lancet Infectious Diseases**
- **Nature**
- **Emerging Infectious Diseases**
- **Virus Genes**
- **European J. Virological Methods,**
- **BMC Virology,**
- **BMC Infectious Diseases,**
- **Infection, Genetics, Evolution,**
- **Journal of Medical Virology**

23. Reviewer of grants in the field of Health Biotechnology for Higher Education Commission (HEC) of Pakistan.

24. Visiting Scientist of:

- CDC, US Department of Health & Human Services, Atlanta, USA.
- Ministry of Health Government of the Punjab.
- Lahore General Hospital Lahore, Pakistan
- Peshawar Medical Collage, Peshawar, NWFP, Pakistan
- Dow University of Health Sciences, Karachi
- Liaquat University of Medical & Health Sciences Jamshoro Sindh.
- Hazara University Mansehra KPK

PRIZES/HONORS/AWARDS

- 1. Young Scientist of the year award in Biology 2009 by Third World Academy of Science (TWAS) Italy.**
- 2. Research Productivity Award (RPA) 2015 by Pakistan Council for Science & Technology (PCST)-Category C**
- 3. Research Productivity Award (RPA) 2014 by Pakistan Council for Science & Technology (PCST)-Category B**
- 4. Performance Evaluation Award** for the period of from 1-1-2015 to 31-12-2015 to the PhD teacher by University of the Punjab Lahore-**Obtained numbers 70 (100%)**
- 5. Performance Evaluation Award** for the period of from 1-1-2014 to 31-12-2014 to the PhD teacher by University of the Punjab Lahore-**Obtained numbers 68.5 (91.3%)**
- 6. Research Productivity Award (RPA) 2013 by Pakistan Council for Science & Technology (PCST)-Category B**
- 7. Performance Evaluation Award** for the period of from 1-1-2013 to 31-12-2013 to the PhD teacher by University of the Punjab Lahore-**Obtained numbers 64 (85.33%)**

8. **Performance Evaluation Award for the period of from 1-1-2012 to 31-12-2012 to the PhD teacher by University of the Punjab Lahore-Obtained numbers 68 (90.67%)**
9. **Research Productivity Award (RPA) 2012** by Pakistan Council for Science & Technology (PCST)- **Category C**
10. **Research Productivity Award (RPA) 2011** by Pakistan Council for Science & Technology (PCST)- **Category E**
11. Merit Scholarships at school, college and university levels.
12. **Gold Medal for Best Research Paper Presentation** in 21st Annual congress of Pakistan Society of Gastroenterology and GI endoscopes, March 25-27, 2005, Peshawar Pakistan.
13. **Post doctorate fellowship by Government of Pakistan to Centre for Disease Control and Prevention (CDC) USA.**

PRINCIPAL INVESTIGATOR OF RESEARCH PROJECTS/GRANTS:

Principal/co-principal investigator of the following Research Projects.

Completed:

1. Establishment of Molecular (PCR-based) Diagnosis of infectious & genetic diseases Laboratory at Centre for Applied Molecular Biology (2001-2004, Ministry of Science & Technology PC1 PKR 39.46 Million). **PI**
2. Studies on the levels of Serum IL-8 and mutational analysis in the E2-PePD and NS5a-PKR-BD in Interferon- α responsive and non-responsive HCV patients (2003-2004, Pak-US co-operation on Science & Technology USD 11.72 Million). **Co-PI & Principal Researcher**
3. Role of IL-8 and mutations in E2 & NS5A genes of Hepatitis C Virus in resistance to anti-viral therapy (2004-2005, EMRO-COMSTECH, WHO.USD 15,000). **Co-PI & Principal Researcher.**
4. Prevalence of bovine tuberculosis in human, animal population and animal food products (HEC, 2004-2006; PKR 2.573 Million) **Co-PI**
5. Modifier Chemical Cocktail' and Its Role in Skin Tissue Regeneration in Mammals (2010-2010; Higher Education Commission PKR 0.50 Million). **Co-PI**
6. The Dilemma of Zoo prophylaxis: Cattle ownership can increase rather than reduce prevalence of malaria in Pakistan (1994-96, University of Peshawar). **PI-Internal**
7. Molecular studies of Multiple Drug Resistant Genes: Testing of *Mycobacterium tuberculosis* to commonly used anti-TB drugs and Detection of Rifampicin Resistant Mutants by PCR-SSCP (1996-1999, CEMB). **PI-Internal**
8. Establishment of Molecular Diagnostic Laboratory in Private Sector (1999-2000, The Medical Laboratories Lahore). **PI-Internal**
9. To find out the common genotypes of HCV present in Pakistan (1999-2000, The Medical Laboratories Lahore). **PI-Internal**
10. Comparison of various Genotyping & Serotyping assays for the accurate detection of HCV Genotypes (1999-2000, The Medical Laboratories Lahore). **PI-Internal**

11. Evaluation of various Commercial procedures/kits/systems for the quantification of HCV Virus. (1999-2000, The Medical Laboratories Lahore). **PI-Internal**
12. Influence of HCV Genotypes on Viral load and Disease outcome. (1999-2000, The Medical Laboratories Lahore). **PI-Internal**

Projects in progress/Process:

1. Application of Streamlined Molecular Approaches to Hepatitis C: Implications for Public Health and Patient Management. (PAK US JOINT COMMITTEE ON SCIENCE & TECHNOLOGY COOPERATION). PKR 53 Million. PI. **Awarded**
2. Development of HCV Vaccines and Experimental Animal Model for Chronic HCV patients. (2008-2013; PC1; PKR 37.49 Million). PI. **Accepted for Award**
3. Identification and transcriptome profiling of novel microRNAs in hepatitis C virus induced liver diseases by next generation sequencing (NGS) of small RNA cDNA libraries. (2012-2015; NRGPU PKR 3.37 Million). PI- **Awarded**
4. Studies on Efficient Molecular Approaches to Hepatitis C & their Implications for Patient Management-(2014-2017; NRGPU PKR 15.3 Million). PI- **Awarded**
5. Polymorphisms in Interferon Induced Genes: A Predictive Model of Treatment Outcome in Patients With Chronic HCV Infection-(2014-2017; NRGPU PKR 13.5 Million). PI- Submitted to HEC.
6. Molecular Characterization of Dengue Virus Serotypes Circulating in Pakistan. PI- Submitted to PSF in Dec 2015.

IMPORTANT CONTRIBUTIONS:

(A) Establishment of Commercial Molecular Diagnostic Facility:

In May-2000 Ministry of Science & Technology (MoST) Government of Pakistan appointed me as Research Officer/Head of Molecular Diagnostics and given me a task to establish a Molecular Diagnostic Laboratory in public sector. Only in six months time I was able to establish Molecular (PCR-based) Diagnostic Laboratory for the detection of infectious & genetic diseases at Centre for Applied Molecular Biology (CAMB), MoST and provided general public with reliable, accurate, rapid and more economical diagnostic service for most prevalent infectious and genetic diseases. Currently my developed DNA based diagnostic laboratory at CAMB provides **PCR-based Detection Methods** for the diagnosis of HCV, HBV, TB, CMV, HSV (type 1&2), TB, typhoid, and HCV genotyping, HCV viral load, MDR-TB. On daily basis this Lab is receiving more than 250 samples from different tertiary care hospital of the country that is the largest number of samples in the country. From the last 16 years this laboratory is providing the Molecular Diagnostic Facilities for most of the infectious agents circulating in Pakistan at about 1/10th of the charges offered by other commercial diagnostic laboratories. This endeavor has also generated a source of income for the Centre and MoST. **Present income of the Lab is about 5.0 million per month (60 million/year)**. In year 2013 an amount of 350 million was deposited to Government of Pakistan as generated revenue through MoST.

(B) Developed Molecular Diagnostic Kits:

As a part of these endeavors, to develop indigenous technologies, I have developed Molecular Diagnostic Kits for the qualitative detection of hepatitis B virus, hepatitis C virus, *M. tuberculosis* and HCV Genotyping at 1/10th the cost of the same kits manufactured by other companies in USA. This will help to overcome inherent constraints of practicing modern molecular tools for diseases diagnosis and encourage/contribute to the indigenous technologies in the area of Molecular diagnostics. All these kits are ready for marketing.

(C) Helped Prime Minister Program for Prevention & Control of Hepatitis

Due to vital importance of viral testing, as gesture and the noble consent, the Centre offered and directed me to provide Molecular Diagnostic Facilities (qualitative, quantitative and genotyping) to the patients booked for hepatitis B&C infection treatment in the 104 sentinel sites (teaching and district headquarter hospital) in the country under the PM's Program for Prevention & Control of Hepatitis. From September 2006 to July 2008 my group has performed more than 50,000 HCV quantitative/HCV genotyping and HBV quantitative tests free of charges to the poor patients. The market value of these tests is more than 113.00 million.

(D) Research:

Dr. Idrees's group is the first in the country to conduct studies on viral hepatitis and he is supervising a team of researchers to study the genome variations in hepatitis viruses and *Dengue Virus*. Dr. Idrees has made significant contributions to the field of Molecular Virology research. Specifically, Dr. Idrees's virology work relates to eight main themes which consist of Establishment of assays/methods to study viruses, Studies on Virus Genome characterization, variability, Genotyping/ Serotyping, Studies on viral genes/proteins and their role in disease outcome using Bioinformatics tools, Virus Prevalence and Molecular Epidemiology, Studies on Anti-viral therapy: role of various viral & host factors in treatment response rates and Studies on Virus association with other abnormal conditions/Diseases. Dr. Idrees has participated in other studies which include diseases of respiratory system, metabolism, cancer, Stem cells & it's Role in Skin Tissue Regeneration in Mammals, Zoo prophylaxis, etc.

He has supervised more than 60 PhD/M. Phil students and is currently supervising 8 PhD and 3 M. Phil research scholars. In addition he has trained/co-supervised more than 50 research scholars/scientists from other Universities of Pakistan. Dr. Idrees was the sole Virologist/scientist of the country who was actively involved in the molecular identification and serotype detection of Dengue outbreak-2011. Till date his group is providing dengue detection & serotyping facility free of charges to all provinces referred by WHO.

His contribution in Molecular Biology especially Molecular Virology has been recognized at home and abroad and his research work has been published in 109 peer reviewed research papers in national/international scientific journals with an overall impact factor more than 210 and of citation of more than 1600. He is the editor of several Internal Scientific journals. He has been the principal/co-principal investigator of several research projects funded by national and international funding agencies, namely Ministry of Science & Technology, HEC, EMRO-WHO and Pak-USA.

(E) Teaching Experience:

Lectures: at National Centre of Excellence in Molecular Biology, University of the Punjab to:

1. Molecular Virology (4 credit hours) to PhD/M. Phil Research Scholars (2003 - 2015).
2. Advance Course on Real-time PCR (4 credit hours) to PhD Research Scholars (2006 – 2016).

Demonstrator:

Viral Nucleic acid (DNA/RNA) extraction, cDNA synthesis, PCR, RT-PCR, Real-time PCR, qPCR, SSCP, RFLP, Cloning, sequencing etc to PhD Research Scholars (2001 – 2014).

(F) External Examiner (PhD/M. Phil level):

1. Baqai Medical University Karachi
2. University of Animal & Veterinary Sciences (UVAS) Lahore
3. Liaqat University of Medical & Health Sciences (LUMHS) Jamshoro Sindh.
4. Hazara University Mansehra KPK
5. Atta Ur Rahman School of Applied Biosciences (ASAB) National University of Science & Technology (NUST) Islamabad.
6. Lahore University Lahore, Punjab Pakistan.
7. Government College for women University Lahore
8. University of the Gujrat

(G) Other Expertise

My laboratory is also engaged in three clinical trials on HCV and HBV patients with three pharmaceutical sponsors such as MACTER International, GETZ Pharma and Biocare Pharma.

(H) Future Research

I am particularly interested in basic collaborative research involving virus-host interactions in host pathogenesis, viral transmission, viral persistence, various immune responses and antiviral resistance associated with hepatitis C virus and hepatitis B virus infections with national and international research institutes/hospitals.

(I) Industrial Relevance

Our research is highly relevant to industries interested in detection of infectious diseases such as HCV, HBV, HGV etc., production of recombinant HBV vaccines, understanding HCV replication, the various functions of HCV proteins and mechanisms of interferon resistance, insulin resistance and type 2 diabetes. With this knowledge, specific detection, prevention and improved therapies may be established for hepatitis viruses.

RESEARCH PUBLICATIONS (MOST SIGNIFICANT)

TOTAL IMPACT FACTOR 222.865 (UPDATED JUNE 30, 2016)

(A)Research Publication (Year-wise)

Publications in year 2016 (IF 15.502)

1. Butt A, Raja AJ, Siddique S, Khan JS, Shahid M, Tayyab GN, Minhas Z, Umar M, **Idrees M**, and Tong Y. Parallel expression profiling of hepatic and serum microRNA-122 associated with clinical features and treatment responses in chronic hepatitis C patients. *Nature Scientific Reports*. Article number: 21510 (2016). **IF 5.228**.
2. Shan MA, Hussain M, Shafique M, Shahzad M, Parveen R, **Idrees M**. Genetic distribution of 15 autosomal STR markers in the Punjabi population of Pakistan. *Int J Legal Med*. 2015, 00: 000-000. DOI 10.1007/s00414-016-1351-2. **IF 2.862**.
3. Akram M, **Idrees M**. Complete genome sequencing and comparative analysis of three dengue virus type 2 Pakistani isolates. *VirusDisease* March 2016, Volume 27, Issue 1, pp 27-33. **IF 0.364**.
4. Khalil A. T, Ali M, Tanveer F, Ovais M, **Idrees M**, Shinwari ZK, Hollenbeck JE. Emerging Viral Infections in Pakistan; Issues, Concerns and Future Prospects. *Nature Emerging Microbes and infection* (2016) 5, e36 (Accepted) **IF 4.012**.
5. Khubaib B, **Idrees M**, Hussain A. Construction of Mammalian Expression Vector of Core Gene of HCV of Pakistani Isolate Genotype 1a. *J Hum Virol Retrovirol* April, 2016, 3(3): 00089. **IF 1.974**.
6. Hussain A, Awan Z, **Idrees M**. Influence of Hepatitis B virus genetic heterogeneity on treatment response against Lamivudine and Interferon in Pakistani isolates *Anti-Infective Agents*, 2016, (Accepted)
7. Wahid B, Ali A, Rafique S, **Idrees M**. Zika: As an emergent epidemic. *Asian Pacific Journal of Tropical Medicine* 2016; (Accepted). **IF 1.062**.

Publications in year 2015 (IF 36.832)

8. Nasrullah I, Butt AM, Tahir S, **Idrees M**, Tong Y. Genomic analysis of codon usage show influence of mutation pressure, natural selection, and host features on Marburg virus evolution. *BMC Evolutionary Biology* 2015, 15:174. doi:10.1186/s12862-015-0456-4. **IF 3.37**
9. **Idrees M**, Shah AR. Association of aplastic anaemia with positive viral hepatitis serology, and its outcome after immunosuppressive therapy. *J Clinical Virology* August 2015, Volume 69, page 241. **IF 3.466**
10. Akram M, Fatima Z, Purdy MA, Sue A, Saleem S, Amin I, Shahid M, Nawaz R, **Idrees M**. Introduction and evolution of dengue virus type 2 in Pakistan: a phylogeographic analysis. *Virology Journal* (2015) 12: 148; **IF 2.362**
11. Butt AM, Castellano L, **Idrees M**. Next generation sequencing reveals differential expression profiles of hepatic microRNAs in chronic hepatitis C patients. *Journal of Hepatology*. 2015 vol. 62: S585. **IF 10.590**

12. Butt AM, Castellano L, **Idrees M**, Tong Y. Deep sequencing shows microRNA expression in hepatitis C patients is associated with the end treatment response. *Journal of Clinical Virology* Aug 2015; Volume 69, Page 234. **IF 3.466**
13. Amat-ur-Rasool H, Saghir A, **Idrees M**, Computational Prediction and Analysis of Envelop Glycoprotein Epitopes of DENV-2 and DENV-3 Pakistani isolates: A First Step towards Dengue Vaccine Development. *PLOS ONE*. 2015 Mar 16; 10(3): e0119854. doi: 10.1371/journal.pone.0119854. eCollection 2015. **IF 3.534**.
14. Khubaib B, **Idrees M**, Afzal S, Wasim M. The genotype CC of *IL-28B* SNP rs12979860 is significantly associated with a sustained virological response in chronic HCV Pakistani patients. *Journal of Digestive Diseases* 2015; **16**; 293–298. **IF 1.924**
15. Ali A, **Idrees M**. Expression of Hepatitis C Virus Core and E2 antigenic recombinant proteins and their use for development of diagnostic assays. *International Journal of Infectious Diseases* Mar 2015; 84 (2015): e84-e89. **IF 2.57**
16. Shaheen MA, **Idrees M**. Evidence-based consensus on the diagnosis, prevention and management of hepatitis C virus disease. *World J Hepatol* 2015 March 27; **7(3)**: 616-627. **IF 0.858**
17. Hussain M, **Idrees M**, Afzal S. Development of Global Consensus of Dengue Virus Envelope Glycoprotein for Epitopes based vaccine design. *Current Computer-Aided Drug Design*. 2015; 11(1): 84-97. **IF 1.94**
18. Hussain A, **Idrees M**, Asif M, Ali L, Rasool M. Phylogenetic and 2D/3D Analysis of HCV 1a NS4A Gene/Protein in, Pakistani Isolates. *Hepatitis Monthly*. Hepatitis Monthly. 2015 June; 15(6): e19936, DOI: [10.5812/hepatmon.15\(6\)2015.19936](https://doi.org/10.5812/hepatmon.15(6)2015.19936). **IF 1.796**
19. Afzal S, Maqbool A, Zaman S, **Idrees M**, Anjum AA, Shah SS, Fatima Z, Amin A and Latif M. Evidence of Transmission of Dengue Virus by Different Developmental Stages of Mosquitoes, *Aedes aegypti* and *Aedes albopictus*. *Pakistan J. Zool.*, 2015; vol. 47(3), pp. 887-890. **IF 0.478**
20. Shah SS, Maqbool A, Zaman S, Idrees M, Anjum AA, Afzal S,, Fatima Z, Amin A and Ahmad S. Role of *Aedes* and *Culex* in Dissemination of Dengue Virus. *Pakistan J. Zool.*, 2015; vol. 47(1), pp. 273-276. **IF 0.478**

Publications in year 2014 (IF 27.968)

21. Afzal S, **Idrees M**, Hussain M. De Novo modeling of Envelope 2 protein of HCV isolated from Pakistani patient and epitopes prediction for vaccine development. *Journal of Translational Medicine* 2014; **12**:115. doi:10.1186/1479-5876-12-115. **IF 3.694**.
22. Butt A, **Idrees M**, Tong Y. Identification and expression profiling of microRNAs in hepatitis C patients by using next generation sequencing. *Journal of Viral Hepatitis* Vol 21 (Suppl. S2), October 2014, 21–48. **IF 4.179**
23. Ali M. Rehman IU, **Idrees M**. Emergence of genetically variant Hepatitis C virus population in response to increased antiviral drug pressure, Pakistan. *Virus Genes*, June 2014, Volume 48, Issue 3, pp 543-549. **IF 1.77**
24. Shahid M¹, Idrees M, Nasir B, Raja AJ, Raza SM, Amin I, Rasul A, Tayyab GU. Correlation of biochemical markers and HCV RNA titers with fibrosis stages and grades in chronic HCV-3a patients. *Eur J Gastroenterol Hepatol*. 2014 Jul;26(7):788-94. doi: 10.1097/MEG.000000000000109. **IF 2.253**.

25. Sabri S, **Idrees M**. Studies on the role of NS3 and NS5A non-structural genes of HCV 3a local isolates in apoptosis *International Journal of Infectious Diseases*. 2014, 25(2014): e38-e44. IF **2.229**
26. Rafique S, **Idrees M**, Ali A and Iqbal M. Generation and using of HCV infectious pseudo typed particles for studying the role of CD81 & SRB1 receptors in HCV infection. *Molecular Biology Reports* June 2014, Volume 41, Issue 6, pp 3813-3819; IF **2.51**.
27. Rafique S, **Idrees M**, Ali A and Iqbal M. Studies on the role of neutralizing antibodies against envelope genes in resolving HCV pseudo-particles infectivity. *Molecular Biology Reports* June 2014, Volume 41, Issue 6, pp 3945-3950. DOI 10.1007/s11033-014-3262-y. IF **2.51**.
28. Waqar M, Khan AU, RehmanHU, **Idrees M***, Wasim M, Ali A, Niaz Z, Ismail Z, Rehman MU, Tariq M. Determination of Hepatitis C Virus Genotypes Circulating in Different Districts of Punjab Pakistan. *European J Gastroenterology & Hepatology*. 2014 Jan; 26(1): 59-64. doi: 10.1097/MEG.0b013e328362dc3f, IF **2.253**.
29. Butt, FA, Amin I, **Idrees M**, Iqbal M. Hepatitis delta virus genotype-1 alone cocirculates with hepatitis B virus genotypes A and D in Pakistan. *European Journal of Gastroenterology & Hepatology*. 2014 Mar; 26(3): 319-324. doi: 10.1097/MEG.0000000000000007. IF **2.253**.
30. Ali L, **Idrees M**, Ali M, Hussain A, Rehman IU, Ali A, Iqbal AS, Kamel ES. Inhibitory effect of kaolin minerals compound against hepatitis C virus in Huh-7 cell lines. *BMC Research Notes* 2014, 7: 247. doi:10.1186/1756-0500-7-247.
31. Rehman HU, Wasim M, Waqar Khan AU, **Idrees M**, Ismail Z, Ali A, Faisal, Seroprevalence of HBV infection and viral loads in outpatients attending a district hospital located in Mardan, Pakistan. *International Journal of Biosciences* 03/2014; 4(5): 28-34. DOI:10.12692/ijb/4.5.28-34. IF **0.553**
32. Ur Rehman I, Vaughan G, Purdy MA, Xia GL, Forbi JC, Rossi LM, Butt S, Idrees M, Khudyakov YE. Genetic History of Hepatitis C Virus in Pakistan. *Infection, Genetics and Evolution* 2014 Aug 13; 27C: 318-324. IF **3.264**
33. Wasim M., Biland B, Idrees M, et al., Assessment of Risk Factors and Clinical Presentations in a Liver Cirrhotic State-Pakistan. *World Applied Sciences Journal* 2014; 32 (7): 1252-1257. IF **0.5**

Publications in year 2013 (IF 08.41)

34. Hussain A, **Idrees M**. The first complete genome sequence of HCV-1a from Pakistan and a phylogenetic analysis with complete genomes from the rest of the world. *Virology Journal* 2013, 10: 211. IF **2.362**
35. Ullah S, Rehman HU, **Idrees M**. Mutations in the NS5a gene are associated with response to interferon + ribavirin combination therapy in patients with chronic hepatitis C virus 3a infection. *European Journal of Gastroenterology & Hepatology* 2013 Oct; 25(10):1146-1151. IF **2.253**.
36. Ali A, Rehman HU, Nisar M, Rafique S, Ali S, Hussain A, Nausheen, **Idrees M**. Seroepidemiology of dengue fever in Khyber Pakhtunkhawa, Pakistan *International Journal of Infectious Diseases* 2013, 17 (7): e518-e523. doi: 10.1016/j.ijid.2013.01.007. Epub 2013 Mar 21. IF **2.229**.

37. Fatima Z, Afzal S, Idrees M. Change in demographic pattern of dengue virus infection: evidence from 2011 dengue outbreak in Punjab, Pakistan. *Public Health*, 2013; Sep; 127(9): 875-877. **IF 1.566**

Publications in year 2012 (IF 18.983)

38. Butt AM, Feng D, Nasrullah I, Tahir S, **Idrees M**, Yigang Tong Y, Lu J. Computational identification of interplay between phosphorylation and O- β -glycosylation of human occludin as potential mechanism to impair hepatitis C virus entry. *Infection Genetics Evolution*. 2012 Aug; 12(6):1235-1245. **IF 2.768**.
39. Shah AR, **Idrees M**, Hepatitis E Virus Associated Aplastic Anemia: First case of its kind. *Journal of Clinical Virology*. 2012; 54: 96-97. **IF 3.466**
40. Butt A, Feng D, **Idrees M**, Tong Y, Lu J. Computational identification and modeling of crosstalk between phosphorylation, O-beta-glycosylation and methylation of FoxO3 and implications for cancer therapeutics. *International J Molecular Science* 2012; 13(3): 2918-2938; doi:10.3390/ijms13032918. **IF 3.257**
41. Badar S, Khubaib B, **Idrees M**. et al., Association of Hepatitis C Virus With Insulin Resistance: Evidences From Animal Studies and Clinical Studies. *Hepatitis Monthly*, 2012; 12(1): 11-15. **IF 1.932**
42. Ali A, Nisar M, **Idrees M***, Ahmad H. Prevalence of HBV infection in suspected population of conflict-affected area of war against terrorism in North Waziristan FATA Pakistan. *Infection, Genetics and Evolution*. 12(2012); 1865-1869. **IF 2.768**
43. **Idrees M**, Hussain W, Rehman HU, Tayyab GN. Dengue Virus Serotype 2 (DEN-2): the Causative Agent of 2011-Dengue Epidemic in Pakistan. *American J Biomed Sciences*. 2012; 2012(4): 307-315. doi: 10.5099/aj120400307 ICV=5.74.
44. Butt AM, Tahir S, Nasrullah I, **Idrees M***, Lu J, Tong Y. Mycoplasma genitalium: a comparative genomics study of metabolic pathways for the identification of drug and vaccine targets. *Infection Genetics and Evolution* 2012 Jan;12(1): 53-62. **IF 2.768**.
45. Butt AM, Khan IB, Hussain M, **Idrees M***, Lu J, Tong Y. Role of post translational modifications and novel crosstalk between phosphorylation and O-beta-GlcNAc modifications in human claudin-1, -3 and -4. *Molecular Biology Reports*. 2012 Feb; 39(2):1359-1369 **IF 2.024**.

Publications in year 2011(IF 74.214)

46. Butt, S., **Idrees M***, Rehman IR, Hussain A. High Prevalence of dual HCV infection. *Emerging Infectious Diseases*. 2011; 17(8) 1565-1567. **IF 7.327**.
47. Chaudhry S, Khan AA, Butt AK, **Idrees M**. Helicobacter pylori in Dental Plaque; Is it Related to Brushing Frequency, Plaque Load and Oral Health Status? *JCPCP* 2011, 21(10): 589-592. HEC W-category **IF 0.353**.
48. Khan AU, Waqar M, M, Zaib M, Wasim M, **Idrees M**. Bajwa MA. True prevalence of Twin HDV-HBV infection in Pakistan: A Molecular approach. *Virology Journal* 2011, **8:420. IF 2.362**.
49. Ali A, Nisar M, Ahmad A, **Idrees M***, Saif N, Bajwa MA. Determination of HCV genotypes and viral loads in chronic HCV infected patients of Hazara Pakistan *Virology Journal* 2011, **8:466. IF 2.362**.

50. Manzoor S, **Idrees M***, Ashraf A, Mehmood A, Butt S, Fatima K, Akbar H, Rehman IU, Qadri Q. Identification of ionotropic purinergic receptors in Huh-7 cells and their response towards structural proteins of HCV genotype 3a. *Virology Journal* 2011, 8: 431 doi:10.1186/1743-422X-8-431. **IF 2.362.**
51. Fatima Z, **Idrees M***, Bajwa MA, Tahir Z, Ullah O, Zia MQ, Hussain A, Akram M, Khubaib B, Afzal S, Munir S, Saleem S, Rauff B, Badar S, Naudhani M, Butt S, Aftab M, Ali L, Ali M. Serotype and genotype analysis of Dengue Virus by Sequencing followed by Phylogenetic analysis using samples from three mini outbreaks-2007-2009 in Pakistan. *BMC Microbiology* 2011, **11**: 200. **IF 3.10**
52. Butt, S., **Idrees M***, Rehman IR, Ali L, Hussain A, Ali M, Ahmad N. Establishment of stable Huh-7 cell lines expressing various Hepatitis C Virus Genotype 3a protein: An in-vitro testing system for novel anti-HCV drugs. *Genetic Vaccines and Therapy* 2011, 9:12. **IF 2.1.**
53. Khan F, Akbar H, **Idrees M**, Khan H, Shahzad K, Kayani MA. The prevalence of HBV infection in the cohort of IDPs of war against terrorism in Malakand Division of Northern Pakistan Journal: *BMC Infectious Diseases* 2011, **11**:176. **IF 2.690.**
54. Riaz M **Idrees M**, Kanwal H, Kabir F. An overview of Triple infection with Hepatitis B, C and D viruses. *Virology Journal* 2011, **8**: 368. **IF 2.362.**
55. Yousaf MZ, Idrees M, Saleem MZ, Ali M, Expression of core antigen of HCV genotype 3a and its evaluation as screening agent for HCV infection in Pakistan. *Virology Journal* 2011, **8**: 364. **IF 2.362.**
56. Faridi R, Zahra A, **Idrees M***, Khan K. Oncogenic potential of Human Papillomavirus (HPV) and its relation with cervical cancer. *Virology Journal* 2011, **8**: 269. **IF 2.362.**
57. Butt AM, Siddique S, Tahir S, Nasrullah I, Hussain M, **Idrees M***, Lu J, Tong Y. Comparative sequence, antigenic and phylogenetic analysis of avian influenza (H9N2) surface proteins isolated in Pakistan between 1999 and 2008. *J Infect Dev Ctries* 2011; 5(6):413-424. **IF 1.2**
58. Ali I, Khan S, Attaullah S, Khan SN, Khan J, Siraj S, Iqbal A, Swati ZA, **Idrees M**. Response to combination therapy of HCV 3a Infected Pakistani patients and the role of NS5A protein. *Virology Journal* 2011, 17: **8(1)**: 258. **IF 2.362.**
59. Akram M, **Idrees M***, Hussain A, Afzal S, Characterization of Hepatitis C Virus genotype 3a Hypervariable region 1 in patients achieved rapid virological response to alpha interferon and Ribavirin Combination therapy. *Virology Journal* 2011, 17: 8(1): 253. **IF 2.362.**
60. **Idrees M***. Rehman IU, Manzoor S. Akbar H. Butt S. Evaluation of three different HCV typing methods for detection of mixed-genotype infections. *J Dig Dis*. 2011, 12: 199-203. **IF 1.887.**
61. Akram M, **Idrees M***, Zafar S, Hussain A, Butt S. Effects of Host and virus related factors on Interferon-alpha+ribavirin and Pegylated-interferon+ribavirin treatment outcomes in Chronic Hepatitis C patients. *Virology Journal* 2011, 17: 8(1): 234. **IF 2.362**
62. Rafique S, **Idrees M***, Positional effect of phosphorylation sites 266 and 267 in the cytoplasmic domain of the E2 protein of hepatitis C virus 3a genotype and Interferon: Resistance through approach of Sequence Alignment. *Virology Journal* 2011, 8: 204. **IF 2.362**

63. Akbar H, **Idrees M***, Butt S, Sabar FM. High Baseline Interleukine-8 level is a Independent Risk Factor for the achievement of Sustained Virological Response in Chronic HCV Patients. *Infection, Genetics and Evolution* 2011; **11(6)**: 1301-1305. **IF 3.264.**
64. Ali M, **Idrees M***. Hepatitis B virus in Pakistan: A systemic review of prevalence, risk factors, awareness status and genotypes. *Virology Journal* 2011, **8**; **102**. **IF 2.362**
65. Rauff B, **Idrees M***. Hepatitis Associated Aplastic Anemia: A review. *Virology Journal* 2011, **8**: **87**. **IF 2.362**
66. Iqbal T, **Idrees M***. Isolation and characterization of two new Hepatitis E Virus Genotype 1 strains from two Mini-outbreaks in Lahore, Pakistan. *Virology Journal* 2011, **8**: **94**. **IF 2.362**
67. Afzal S, **Idrees M***, Ali M, Ilyas M, Akram M, Butt S, Salem S, Hussain A, Rehman IU, Ali L, Shahid M. Envelope 2 protein phosphorylation sites S75 & 277 of hepatitis C virus genotype 1a and interferon resistance: A sequence alignment approach. *Virology Journal* 2011, **8**:71 **IF 2.362**
68. Shehzadi A, Rehman SU, **Idrees M***. Promiscuous prediction and conservancy analysis of CTL binding epitopes of HCV 3a viral proteome from Punjab Pakistan: an In Silico Approach. *Virology Journal*, 2011, 8:55. **IF 2.362**
69. Shah SAR, **Idrees M***, Hussain A. Hepatitis G associated aplastic anemia in Pakistan: A recent case from Pakistan. *Virology Journal*, 2011, **8**: 30. **IF 2.362**
70. **Idrees M***, Lal A, Malik FA. Occult hepatitis C virus infection and associated predictive factors: the Pakistan experience. *Infection, Genetics and Evolution* 2011; **11(2)**: 442-45. **IF 3.264.**
71. Ali L, **Idrees M***. An overview of treatment response rates to various anti-viral drugs in Pakistani Hepatitis B Virus infected patients. *Virology Journal* 2011, **8**: 20. **IF 2.362**
72. Ullah I, **Idrees M***, Ahmad H, Ghafoor SU, Ali M, Ali L, Ahmad A Hepatitis C virus genotypes circulating in district Swat of Khyber Pakhtoonkhaw, Pakistan. *Virology Journal*. 2011; 8:16. **IF 2.362**
73. Butt S, **Idrees M***, Amin I, Younas S, Afzal S, Akbar H, Rehman IU. Change in hepatitis C virus clades: A cross-sectional study of chronic HCV in Pakistan from 2000-2010. *Eur. J. Clin Microbiol Infect.* 2011; **30**: 669-672. **IF 3.023**
74. Rehman IU, **Idrees M***, Ali M, Ali L, Butt S, Hussain A, Akbar H, Afzal S. Hepatitis C virus genotype 3a with phylogenetically distinct origin is circulating in Pakistan *Genetic Vaccines and Therapy* 2011, 9:2. **IF 2.1**
75. Amin I, Idrees M, Awan Z, Shahid M, Afzal S, Hussain A. PCR could be a method of choice for identification of both pulmonary and extra-pulmonary tuberculosis. *BMC Research Notes* 2011, **4**:332. **IF 1.39.**

Publications in year 2010 (IF 23.629)

76. Afzal S, **Idrees M***, Akram M, Awan Z. Mutations in the E2-PePHD region of hepatitis C virus genotype-3a and correlation with response to interferon and ribavirin combination therapy in Pakistani patients *Virology J.* 2010; 7: 377. **IF 2.362**
77. Butt AM, Siddique S, **Idrees M***, Tong Y. Avian influenza A (H9N2): computational molecular analysis and phylogenetic characterization of viral surface proteins isolated between 1997 and 2009 from the human population. *Virology J.* 2010; 7: 319. **IF 2.362**

78. Ali A, Ahmed H, Ali I, Khan S, Zaidi G and **Idrees M**, Prevalence of active Hepatitis C Virus infection in District Mansehra Pakistan'. *Virology J.* 2010; 7: 334. **IF 2.362**
79. Munir S, Saleem S, **Idrees M***. Hepatitis C Treatment: current and future perspectives. 2010. *Virology Journal.* 2010; 7: 296. **IF 2.362**
80. Zaidi G, **Idrees M***, Awan Z, Amin I, Shahid M, Younas S, Hussain R. Prevalence of Hepatitis Delta Virus in Hepatitis B surface antigen positive patients circulating in the largest province of Pakistan. *Virology Journal.* 2010; 7: 283. **IF 2.362**
81. Ali A, Ahmed H, **Idrees M***, Molecular epidemiology of Hepatitis C virus genotypes in Khyber Pakhtoonkhaw of Pakistan. *Virology J.* 2010; 7: 203. (doi:10.1186/1743-422X-7-203). **IF 2.362**
82. Butt S, **Idrees M***, Akbar H, Awan Z, Rehman IU, Hussain A, Afzal S, Shahid M, Manzoor S, Rafique S. The changing Epidemiology pattern and Frequency Distribution of hepatitis C virus in Pakistan. *Infection, Genetics and Evolution* 2010; 10(4): 595-600. **IF 3.264.**
83. Chaudhary S, **Idrees M***, Butt AK, Khan AA, Izhar M, Iqbal HA. Simultaneous amplification of two bacterial genes: more reliable method of Helicobacter pylori detection in dental plaque samples. *Curr. Microbiol.* **2010**; 14(6): 344-347. **IF 1.520**
84. Awan Z, **Idrees M***, Amin I, Butt S, Afzal S, Akbar H, Rehman IU, Younas S, and Shahid M. Pattern and Molecular Epidemiology of Hepatitis B virus genotypes circulating in Pakistan. *Infection, Genetics and Evolution.* **2010**; 10(6): 345-350. **IF 3.264.**
85. Rafique S, Nasim A, **Idrees M**. Riazuddin S. Stable expression of envelope glycoproteins of HCV genotype 3a in Huh-7 cell-lines. *Int. J. Appl. Biol. Pharma. Tech.* 2010; 1(2): 199-213. **IF 0.4**
86. Awan Z, **Idrees M***, Rafique S, Rehman IU, Akbar H, Butt S, Manzoor S, Khan LA. Hepatitis B virus YMDD-motif mutations with emergence of lamivudine-resistant mutants: a threat to recovery. *Gastroenterol Hepatol FBB*, 2010; **3(3):108-114. UIF 1.009.**
87. Khan AA, Inam S, **Idrees M**, Gul K and Akbar H. Effect of automobile workshop on the health status of auto mechanic in N.W.F.P Pakistan. *A. J. Environ Sci Technol* **2010**; **4 (4): 192-200. International**
88. Rafique S, **Idrees M***, Nasim A, Akbar H, Athar A. Transition metal complexes as potential therapeutic Agents. *Biotechnology and Molecular Biology Reviews* 2010; 5(2): 38-45. **International**
89. Jafri SSI, Ilyas M, **Idrees M***. Swine flu: A threat to human health. *Biotech Mol Biol.* 2010; 5(3): 46-50. **International**

Publications in year 2009 (IF 7.01)

90. **Idrees, M***, Riazuddin S. A study of best positive predictors for sustained virologic response to interferon alpha plus ribavirin therapy in naive chronic hepatitis C patients. *BMC Gastroenterology* **2009**, **9**:5. doi:10.1186/1471-230X-9-5. **IF 2.101.**
91. **Idrees, M***, Rafique S, Rehman I, Butt S, Riazuddin S. The impact of hepatitis C virus genotype 3a infection on the development of hepatocellular carcinoma: Pakistan experience. *World J Gastroenterology* **2009**; **15(40): 5080-5085. IF 2.547.**

92. **Idrees M***, Butt S, Awan Z, Aftab M, Khubaib B, Rehman IU, Akram M, Mamzoor S, Akbar H, Rafique S, Riazuddin S. Nucleotide identity and variability among different Pakistani hepatitis C virus isolates. *Virology J* 2009; 6: 130. doi:10.1186/1743-422X-6-130. **IF 2.362**
93. Akbar H, **Idrees, M***, Manzoor S, Rehman IU. Hepatitis C virus infection: A review of the current and future aspects and concerns in Pakistan. *J Gen Mol Virol* 2009; 1(2): **012-018. International**
94. Akbar H, Khan M, Khan AA, Khan MA, **Idrees M**, Comparative efficacy of Doxycycline and Flumequine. *J Veteran Med Anim Health*, 2009; 1(2): **017-022.**
95. Jaferi SSI, Ilyas M, **Idrees M***. AIDS Crisis in Pakistan. *J Gen Mol Virol* 2009; 1 (3): **033-034. International**

Publications in year 2008 (IF 7.019)

96. **Idrees M***, Development of a New HCV Genotyping Assay and its Suitability for the Detection of Common Genotypes in Hepatitis C Patients in Pakistan. *J Virological Methods* 2008; 150(1): 50-56. **IF 2.065**
97. **Idrees M***, Riazuddin S. High Prevalence of Hepatitis C Virus Infection in the Largest Province of Pakistan. *J. Dig. Dis* 2008; 9: 96-104. **IF 1.924**
98. **Idrees M***, Riazuddin S. Frequency Distribution of Hepatitis C Virus Genotypes in Different Geographical Regions of Pakistan and their Possible Routes of Transmission, *BMC Infectious Diseases*. 2008; 8: 69. **IF 3.03**

Publications in years 1998-2004 (IF 3.298)

99. **Idrees M***, Khan, S and Riazuddin. S. 2004. Common Genotypes of Hepatitis B Virus Present in Pakistan. *J. Coll. Phys. Surg.* 14 (6): 344-7). **IF 0.353**
100. *Waqar, A. B., Khan, S. and Idrees M**. Novelty in GB Virus C/ Hepatitis G Virus and its Controversy. *JAMC* 2002; 14 (3): 31-35. **IF 0.1.**
101. **Idrees M***, 2001. Detection of Six Serotypes of HCV in anti-HCV Positive Patients and rate of ALT/AST abnormalities. *P. J. Microbiol*, 1(2): 61-65.
102. **Idrees M***, 2001, Common genotypes of hepatitis C virus present in Pakistan. *Pak. J. Med. Res.* 40(2): 46-49. **IF 0.087**
103. **Idrees M***, Jan, A. H and Ahmad, H. 2001, Failure of passive Zoo prophylaxis: cattle ownership in Pakistan increases rather than reduce malaria transmission. *The Sciences*, 1(2): 52-54.
104. Iqbal, S., **Idrees M***, Shabbir, I., Khan, M. M., Riazuddin, S. TB case management by doctors: *Pak J Med Res* 2001; 40(2): 64-68. **IF 0.087**
105. **Idrees M***, Comparison of two systems: Murex HCV serotyping 1-6 assay and genotype-specific PCR for hepatitis C virus genotyping. *J Coll Phys Surg Pak* 2000; 11(11): 22-25. **IF 0.353**
106. **Idrees, M***, *Bhatti,A.H.,Khan,S.U.and Riazuddin,S.* Evaluation of PCR-SSCP: a rapid method for detection of rifampicin-resistant mutants in *M. tuberculosis*. *J Coll Physic and Surgeon* 2000; 10(5): 10-13. **IF 0.353**

107. **Idrees, M.**, Bhatti, A.H., Khan, S.U. and Riazuddin, S. Study of primary initial and acquired drug resistance in *M. tuberculosis* to anti-TB drugs in Lahore, *J Coll Physic and Surgeon*. 1998; 9(6): 257-260. **IF 0.353**
108. **Idrees M***, Bhatti, A. H., Khan, S. U. Riazuddin, S., Majeed, A., Waheed, K and Hussain, G. Mycobacterium tuberculosis susceptibility testing against first line anti-TB drugs. *Pak. J. Biol. Sci.* 1998; 2(2): (360-362).
109. **Idrees M***, Bhatti, A. H., Khan, S. U. Riazuddin, S., Majeed, A., Waheed, K and Hussain, G. Primary and acquired drug resistance in male and female TB patients in Lahore, Pakistan. In: Proceedings of 18th Pakistan Congress of Zoology, April 20-22. *Pak J Zool* 1998; 18: 123-129. **IF 0.478**
110. **Idrees M***, Bhatti, A. H., Khan, S. U. and Riazuddin, S., 1998, Drug resistance in *M. tuberculosis* isolated from a group of patients referred to MRC Research Centre Mayo hospital Lahore, Pakistan. *Pak J Zool* 1998; 30(4): 335-339. **IF 0.478.**

(B) ABSTRACTS

1. Imtiaz H, **Idrees M.** *Circulating microRNA expression profiling in HCV infected patients: A novel insight into diagnostic and therapeutic research.* In: International Symposium on Advances in Molecular Biology of Plants & Health Sciences. December 29-31, 2015, organized by CEMB, University of the Punjab Lahore-Pakistan. **Page-70.**
2. Shahid M, **Idrees M.** *Correlation of clinical markers, viral load with liver fibrosis stages and grades in chronic HCV patients with genotype 3a.* In: International Symposium on Advances in Molecular Biology of Plants & Health Sciences. December 29-31, 2015, organized by CEMB, University of the Punjab Lahore-Pakistan. **Page-73.**
3. Amin I, **Idrees M.** *Vertical transmission of dengue by Aedes sygepti.* In: International Symposium on Advances in Molecular Biology of Plants & Health Sciences. December 29-31, 2015, organized by CEMB, University of the Punjab Lahore-Pakistan. **Page-75**
4. Afzal S, **Idrees M.** *Global consensus sequence development of dengue virus for peptide based vaccine design against local dengue virus.* In: International Symposium on Advances in Molecular Biology of Plants & Health Sciences. December 29-31, 2015, organized by CEMB, University of the Punjab Lahore-Pakistan.
5. **Idrees M.** A newly developed Dengue-IgA rapid test shows higher levels of sensitivity for early detection of Dengue infection **In: 25th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID-2015), 25-28 April 2015, Copenhagen, Denmark. Abstract No. EV0899.**
6. Butt AM, Castellano L, **Idrees M.** Tong Y “Next generation sequencing reveals differential expression profiles of hepatic microRNAs in chronic hepatitis C patients” **EASLs-50th International liver Congress. Vienna (Austria), 22-26 April 2015. Journal of Hepatology 2015 vol. 62: S585.**
7. Ali M., **Idrees M.** 2014. Emergence of genetically variant Hepatitis C virus population in patients with low viral loads (<250 IU/mL) as a result of IFN and RBV combination therapy, Pakistan. **EMBO Workshop on Human RNA Viruses jointly sponsored by the ICGEB American Hospital, Istanbul (Turkey), 6-8 October 2014.**
8. Afzal S, Idrees M, Envelope protein 2 phosphorylation sites (s75 and s277): a possible candidate for resistance to hcv interferon therapy. **EMBO Workshop on Human RNA Viruses jointly sponsored by the ICGEB American Hospital, Istanbul (Turkey), 6-8 October 2014.**

9. Butt AM, Idrees M, Tong Y. Identification and expression profiling of microRNAs in hepatitis C patients by using next generation sequencing. Special Issue: Abstracts for the Viral Hepatitis Congress 2014, 9–11 October 2014, Frankfurt, Germany.
10. **Idrees M**-2014. “Prediction of dengue epidemic: Detection of Dengue Virus in Larvae and Adult Aedes Mosquitoes in Punjab”. **Dengue Seminar** organized by Dengue Research Group’s (DRG) University of the Punjab Lahore-Pakistan. September 22, 2014.
11. **Idrees M**, Ghias-un Nabi Tayyab, SM Raza, Bilal Nasir, Irum Amin, M. Shahid, 2013, “A Newly Developed Dengue-IgA Rapid Test Shows Higher Level of Sensitivity for Early Detection of Dengue Infection” The 37th annual conference of the Pakistan Association of Pathologists/2nd Joint Conference of the Societies of Pathology is being held in Lahore from the 20th to the 22nd of December 2013.
12. Nawaz R, **Idrees M**-2013. In: 11th Biennial Conference Molecular Biosciences Challenges and Opportunities November 25–28, 2013. University of the Punjab Lahore-Pakistan.
13. Sabr S, **Idrees M**-2013 “Studies on the role of NS3 and NS5A non-structural genes of HCV genotype 3a local Isolates in Apoptosis” In: 11th Biennial Conference Molecular Biosciences Challenges and Opportunities November 25–28, 2013. University of the Punjab Lahore-Pakistan. (Poster presentation).
14. Rafique S, **Idrees M**-2013. “Study of antigenic site in serine proteases gene of HCV 3a Genotype” In: 11th Biennial Conference Molecular Biosciences Challenges and Opportunities November 25–28, 2013. University of the Punjab Lahore-Pakistan (Poster presentation).
15. Ali A, **Idrees M**-2-13 “Prokaryotic Expression and Molecular Characterization of HCV-3a structural Antigenic Recombinant proteins” In: 11th Biennial Conference Molecular Biosciences Challenges and Opportunities November 25–28, 2013. University of the Punjab Lahore-Pakistan.
16. **Idrees M**, 2012, “Dengue diagnostic methods: Advances, diagnostic values & Challenges”. International Conference on dengue & its Control Lahore-Pakistan, 27-29 February 2012.
17. **Idrees M.**, 2011. “Changing pattern in HCV genotypes circulating in Pakistan”. In 1st Annual HCV Management Symposium 2011 NUST Center of Virology & Immunology Islamabad-Pakistan, 10-11 February 2011.
18. **Idrees, M.** and Riazuddin, S. 2006, “Association between Chronic Hepatitis C Infection with Different Genotypes and Hepatocellular Carcinoma in a Population of Pakistani HCV Patients. **UICC World Cancer Congress 2006, July 8-12, 2006, Washington, DC, USA.**
19. **Idrees, M.** and Riazuddin, S. 2006, “.Hepatitis in Pakistan **Centers for Disease Control and Prevention (CDC), US Department of Health and Human Services, September 21, 2006, Atlanta, GA, USA.**
20. Parveen S, **Idrees M**, Masood M, Sajjad R, Sadiq R, Riaz M, Akhtar N, Impact of HPV Infection on Response to Concomitant Chemo-Radiotherapy and Survival in Cervical Cancer Patients. **UICC World Cancer Congress 2006, July 8-12, 2006, Washington, DC, USA.**
21. **Idrees, M.**, Khan, S. U., Riazuddin, S. 2005, Role of IL-8, E2 and NS5A in interferon resistance in HCV. 21st Annual Congress Pakistan Society of Gastroenterology & G. I., Endoscopy March 25-27, 2005, Peshawar Pakistan. (**Gold Medal**).
22. **Idrees, M.** Khan S. U. and Riazuddin, S., 2005. Hepatitis C infection and Type 2 Diabetes Mellitus: Various Molecular Pathways confirm the direct involvement of the virus in the

- development of insulin resistance. 21st Annual congress of Pakistan Society of Gastroenterology and GI endoscopes, March 18-21, 2004, Peshawar Pakistan.
23. **Idrees, M.**, Khan, S. U., Riazuddin, S. 2004, Genome variability studies in 5'UTR region of HCV. In: International symposium on the application of biotechnology in health and agriculture. March 27 to March 31, 2004.
 24. **Idrees, M.** and Riazuddin, S., 2003. Role of IL-8 and mutations in E2 & NS5A region of HCV in interferon response rate. 19th Annual congress of Pakistan Society of Gastroenterology and GI endoscopes, Feb 28 to March 02, Lahore Pakistan.
 25. **Idrees, M.**, Khan, M. M., 2000. Genotyping and Serotyping of hepatitis C virus strains in chronic HCV infection and influence of genotypes on viral load. In: second International Science Conference, October 26-28, 2000, Lahore, Pakistan.
 26. **Idrees, M.**, Hussain, Z. 2000. Comparison of two systems: Murex HCV serotyping 1-6 assay and genotype-specific PCR for hepatitis C virus genotyping. In: the 20th Pakistan Congress of Zoology, March 29-31, University of Sindh, Jamshoro, Pakistan.
 27. **Idrees, M.** Hussain, Z., 2000. Detection of six types of hepatitis C virus by type-specific serological reactivity and rate of ALT and AST abnormalities in HCV patients. In: the third International Biennial Conference of Pakistan Society for Microbiology, March 28-30, 2000, Lahore, Pakistan.
 28. **Idrees, M.**, Bhatti, A. H., Khan, F. M., Khan, S. N. and Riazuddin, S. 1999. Detection of rifampicin-resistant mutants by rapid method: PCR-SSCP. In: the 19th Pakistan Congress of Zoology, April 19-21, 1999 Islamabad, Pakistan.
 29. **Idrees, M.**, and A. H. 1998. The Dilemma of Zoo prophylaxis: with special reference to the prevalence of Malaria in school going children in district Dir, N.W.F.P. Pakistan. In: the Fifth International Symposium Workshop on the application of Molecular Biology Research in Agriculture, Health and Environment, Oct: 14-15, 1997, Lahore, Pakistan.
 30. **Idrees, M.**, Bhatti, A. H., Khan, S. U. and Riazuddin, S., Rasual, S., Majeed, A., Waheed, K., Anwar, N and Hussain, G. 1998. A comparative study to prove the veracity and usefulness of conventional culture method VS PCR based method to diagnose TB by detecting *M. tuberculosis* in local isolates. In: the 16th International Conference on Tuberculosis and Chest Diseases March 8-11, 1998, Lahore, Pakistan.
 31. **Idrees, M.**, Bhatti, A. H., Khan, S. U. Riazuddin, S., Majeed, A., Waheed, K and Hussain, G. 1998. Testing of *M. tuberculosis* to first line anti-tuberculosis drugs at PMRC Centre Mayo Hospital, Lahore, Pakistan. In: the 18th Pakistan Congress of Zoology, April 20-22. Lahore, Pakistan.
 32. **Idrees, M.**, Bhatti, A. H., Rasual, A., Waheed, K. and Riazuddin, S. 1998. Detection and identification of *M. tuberculosis* by DNA amplification and conventional culture methods in local samples. In: National Conference on tuberculosis Update on November 8, 1998 organized by Pakistan Chest Society Faisalabad Chapter.

PARTICIPATION IN CONFERENCES, SIMINARS, WORKSHOPS AND TRAININGS:

In Year 2016:

1. Participated in “**DNA Strategy Symposium**” organized by British High Commission in collaboration to Punjab Forensic Science Agency hld from 18th – 19th January 2016 in PC-Lahore-Pakistan.
2. Participated in “**DNA Strategy Symposium**” organized by British High Commission in collaboration to Punjab Forensic Science Agency hld from 18th – 19th January 2016 in PC-Lahore-Pakistan.
3. Participated in “**5th Invention to Innovation Summit-2016**” March 02-04, 2016 organized by Office of Research Innovation & Commercialization (ORIC), University of the Punjab Lahore.

In Year 2015:

4. Participated and presented a paper on “A newly developed Dengue-IgA rapid test shows higher levels of sensitivity for early detection of Dengue infection” in **25th ECCMID European Congress of Clinical Microbiology & Infectious Diseases** organized by European Society of Clinical Microbiology & Infectious Diseases at Bella Center **Copenhagen, Denmark from 25-28 April 2015.**
5. Butt AM, Castellano L, **Idrees M.** Tong Y “Next generation sequencing reveals differential expression profiles of hepatic microRNAs in chronic hepatitis C patients” **EASLs-50th International liver Congress. Vienna (Austria), 22-26 April 2015. *Journal of Hepatology* 2015 vol. 62: S585.**
6. **Idrees M.** 2015. Molecular Characterization of Dengue Virus. **Workshop on Dengue Management sponsored by the Higher Education Commission & organized by Institute of Agricultural Sciences University of the Punjab Lahore December 21, 2015.**
7. Organized a Seminar and hands-on training on Cepheid (USA) next generation PCR **“Real-time PCR (GenXpert solution) results for Real-time Patient Managements”** **Wednesday 28th October at 9:30 am to 1:00 PM at CMB, University of the Punjab in collaboration to Cepheid Middle East & GMS.**
8. **Idrees M,** Up-dates on Dengue. **Dengue Seminar Dengue Research Group, University of the Punjab Wednesday, 4th November 2015.**
9. **Idrees M,** Prediction of Dengue in Punjab. **Dengue Seminar organized by Dengue Research Group, University of the Punjab Wednesday, March 2015.**

In Year 2014:

10. Training workshop on “New Trends in Biomedical Research-Grant writing” at Centre of Excellence in Molecular Biology, University of the Punjab. December 22, 2014.

11. Lahore Biotech Cluster Meeting: August 18, 2014. Department of Biological Sciences Forman Christian College University Lahore.
12. **ARAB HEALTH**, 27 - 30 January 2014; Dubai International Convention & Exhibition Centre, United Arab Emirates (UAE). My Unique Reference Number was (URN): 196527.

In Year 2013:

13. Software & hardware training on SaCycler newly developed State-of-the-art Real-Time PCR-April 11-15, 2013-**Como-Italy**
14. Technical training on Automated Nucleic Acid Extraction System-Magnesia® Real-time PCR System-April 09-10, 2013 Anatolia geneworks **Istanbul-Turkey**.
15. Participated in 37th Annual Conference of Pakistan Association of Pathologist/2nd Joint Conference of Societies of Pathology held at Pearl Continental Hotel, Lahore from 20th-22nd December, 2013.
16. The 37th annual conference of the Pakistan Association of Pathologists/2nd Joint Conference of the Societies of Pathology is being held in Lahore from the 20th to the 22nd of December 2013.
17. 11th Biennial Conference Molecular Biosciences Challenges and Opportunities November 25–28, 2013. University of the Punjab Lahore-Pakistan.

From 1999 to 2012:

18. International Conference on Dengue & its Control [Post DF/DHF Outbreak] Lahore-Pakistan. 27-29 February 2012 Organized by World Health Organization (WHO) & Government of the Punjab.
19. Participated in 36th Annual Conference of Pakistan Association of Pathologist/1st Joint Conference of Societies of Pathology held at Islamabad from 21st-23rd December, 2012.
20. Participated in **OIC Thematic Workshops on “DNA/Emerging Vaccine & Production Challenges”** from Sep 03-09, 2007, Islamabad Pakistan Organized by US EMBASSAY & US DEPARTMENT OF HSS.
21. Participated in **“Training workshop on Bio-security and Biosafety”**, Islamabad, June 18-19, 2007 **Organized by US Department of HHS and US Embassy in collaboration to NARC.**
22. Got Special training on **Biosafety and Bio-security, CDC, USA 2007.**
23. September 15, 2006; **Certificate of Course Mastery** recognized by the OFFICE OF HEALTH & SAFETY, CDC, USA for demonstrating a thorough understanding and ability to apply the principles of **“SAFETY SURVIVAL SKILLS PT-1: GENERAL RESPONSIBILITIES”**.
24. September 18, 2006; **Certificate of Course Mastery** recognized by the OFFICE OF HEALTH & SAFETY, CDC, USA for demonstrating a thorough understanding and ability to apply the principles of **“SAFETY SURVIVAL SKILLS PT-2: LABORATORY SAFETY”**.

25. November 04, 2006; **Certificate of Course Mastery** recognized by the Office of Health & Safety, CDC, USA for demonstrating a thorough understanding and ability to apply the principles of “**SUPERVISORY SKILLS**”.
26. November 08, 2006; **Certificate of Course Mastery** recognized by the Office of Health & Safety, CDC, USA for demonstrating a thorough understanding and ability to apply the principles of “**ACCIDENT INVESTIGATION**”.
27. November 08, 2006; **Certificate of Course Mastery** recognized by the Office of Health & Safety, CDC, USA for demonstrating a thorough understanding and ability to apply the principles of “**OCCUPATIONAL EMERGENCY PROGRAM**”.
28. **Training on Biosafety level 1 (BSL1), BSL2, BSL3 and BSL 4, CDC USA, 2006.**
29. **Training on Real-time PCR Kit/procedure principle-ITALY in the year 2013.**
30. **2nd National Conference on Infectious Diseases** from March 25-27, 2005, Lahore.
31. Participated in **7th International Symposium Workshop on the application of Molecular Biology Research in Agriculture and Health**, March 27-31, 2004, held at CEMB, Lahore, Pakistan and presented paper on “**Genome variability studies in HCV**”.
32. **7th Biennial Conference** on “Trends in Biochemistry & Molecular Biology, April 2-5, 2003 Institute of Biochemistry & Biotechnology, University of the Punjab.
33. **Nineteen Annual Congress** of Pakistan Society of Gastroenterology and GI endoscopies. February 28 to March 02, 2003. Lahore, Pakistan.
34. **Fifth International Symposium** on Typhoid Fever & Other Salmonellae’s February 6-7 (2002). Department of Pediatrics, The Agha Khan University Hospital Karachi, Pakistan.
35. **Workshop** on Molecular Methods in the Epidemiology & Diagnosis of Typhoid, February 4-5, 2002, Department of Pediatrics, The Agha Khan University Hospital Karachi, Pakistan.
36. **2nd International Science Conference**, 26-28 October 2000, Institute of Chemical Engineering & Technology University of the Punjab, Lahore.
37. **20th Pakistan Congress of Zoology**, March 29-31, 2000 University of Sindh, Jamshoro, Pakistan and presented a paper on comparison of serotyping genotyping systems.
38. **Third International Biennial Conference of Pakistan Society for Microbiology**, March 28-30, 2000, Lahore, Pakistan, and presented a paper on HCV genotyping.
39. **19th Pakistan Congress of Zoology**, April 19-21, 1999, held at the premises of NARC Islamabad and presented a paper on “PCR-SSCP:
40. **National Conference on Tuberculosis Update** November 8, 1998, organized by Pakistan Chest Society Faisalabad Chapter and delivered a lecture on “**Detection and Identification of M. tuberculosis by DNA amplification and conventional culture methods in local samples**”.
41. **18th Pakistan Congress of Zoology** April 20-22, 1998, held at Dept. of Zoology, University of the Punjab and presented a paper on “**Testing of M. tuberculosis susceptibility to first-line anti-TB drugs in Lahore, Pakistan.**
42. **International Symposium Workshop on Genomics and Computational Analysis**, October 16-18, 1997 at CAMB, University of the Punjab.
43. **16th International Conference on Tuberculosis and Chest Diseases**, March 8-11, 1998, organized by Pakistan anti-TB Association and Institute of Chest Medicine

King Edward Medical College, Lahore, Pakistan and delivered a lecture on “**A comparative study to understand the usefulness of conventional culture method and PCR based diagnosis of tuberculosis in local samples**”.

44. Participated in **5th International Symposium Workshop on the application of Molecular Biology Research in Agriculture, Health and Environment**, October 14-15, 1997, held at CEMB, Lahore, Pakistan and presented paper on “**The Dilemma of Zoo prophylaxis:**”

PATENTS:

- **Idrees, M** and Riazuddin, S. PCR-based diagnostic kit for the detection of Hepatitis C virus. (2003) Pak#138719.
- **Idrees, M** and Riazuddin, S. Molecular diagnosis of Hepatitis B virus. (2005) Application #857/2007.
- **Idrees, M** and Riazuddin, S. Diagnostic kit for Hepatitis G virus. (2004) In Preparation, Application #1011/2003.

COMPUTER SKILLS:

1. Bioinformatics tools
2. PCGENE, DNA STAR, GENE RUNNER, MEGA4 (Biological Software)
3. SPSS aal versions
4. Microsoft Word processing, Microsoft Windows, Introduction to Microsoft Excel, Microsoft PowerPoint
5. Well experience in Internet applications.

Citation indices & Citations to my articles (Updated on 30-June-2016)

Table: Citation indices

	All	Since 2009
Citations	1646	1495
h-index	22	22
i10-index	38	36

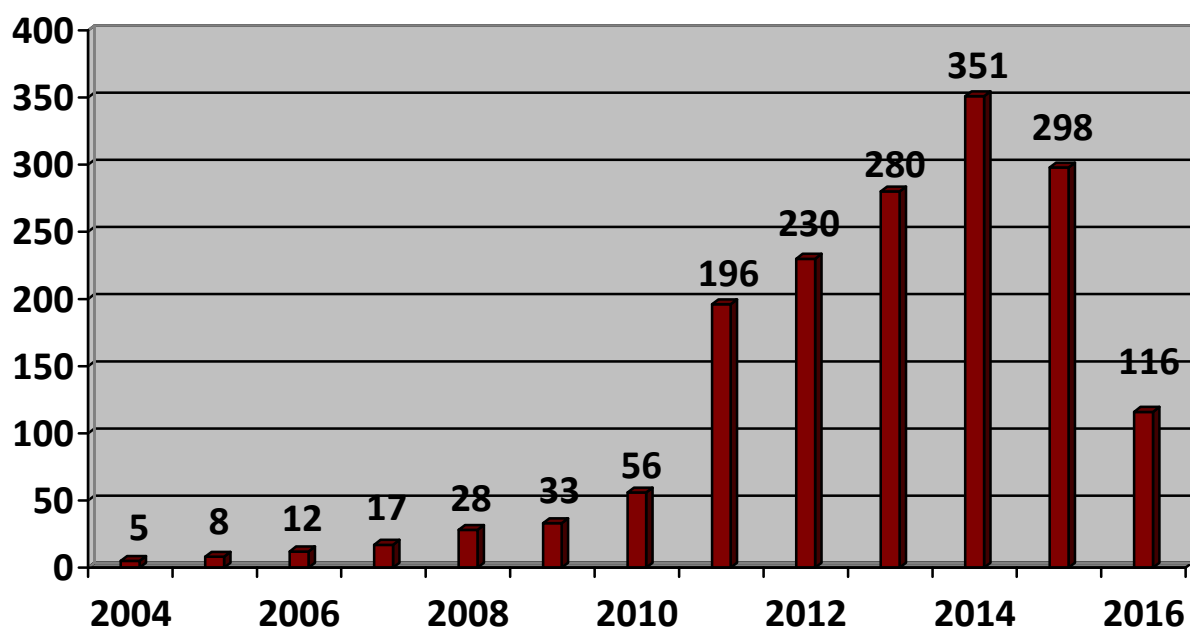


Figure: Citations to my articles

ACADEMIC SUPERVISION EXPERIENCE

- A. List of PhD Students Supervised by Dr. Muhammad Idrees and awarded PhD degrees:**

S.N O.	NAME OF STUDENT	TITLE OF THESIS	NAME OF UNIVERSITY	REGISTRATION DATE ----- COMPLETION DATE
1	Muhammad Zubair	Development of DNA Vaccine vectors against hepatitis C virus genotype 3a: The most prevalent genotype circulating in Pakistan	University of the Punjab	2004-2009
2	Shazia Rafique	Generation of virus like particles as potential therapeutic vaccine for hepatitis C virus using envelope glycoproteins of Pakistani strains	University of the Punjab	2004-2009
3	Sobia Manzoor	A study of Molecular mechanisms of hepatitis C induced liver fibrosis	University of the Punjab	2004-2009
4	Shahida AR Shah	Association of Aplastic Anemia with Positive Viral Hepatitis Serology, and its outcome after Immunosuppressive Therapy	Sheikh Zayed Hospital/University of the Punjab	2007-2012
5	Samia Afzal	Study of inhibition of interferon inducible genes by dephosphorylation of E2 Envelope Gene of HCV Genotype 1a	University of the Punjab	2007-2013
6	Irshad ur Rehman	Molecular Cloning and Sequencing of Entire HCV Genotype 3a cDNA of Pakistani Isolates and their Quasispecies Analysis	University of the Punjab	2007-2013
7	Sadia Butt	Establishment of stable cell lines expressing proteins of HCV Genotype 3a Pakistani isolate and their Molecular Characterization	University of the Punjab	2007-2013
8	Abrar Hussain	Cloning and Sequencing of full length Pakistani HCV-1a & its Quasi Species Analysis	University of the Punjab	2008-2013
9.	Sabeen Sabri	Studies on the role of NS3 and NS5a Non-structural genes of Hepatitis C Virus genotype 3a local isolates in apoptosis	University of the Punjab	2010-2015
10	Bushra Khubaib	Identification of IL28-B genetic variations associated with virological response of interferon therapy in chronic HCV infected patients	University of the Punjab	2011-2015
11	Zareen Fatima	Correlation of sequence heterogeneity of Dengue Virus with disease severity	University of the Punjab	2012-2016
12	Sana Saleem	Interferon Inducible Genes inhibition by Dephosphorylation of E2 Envelope Gene of HCV-1a genotype	University of the Punjab	2012-2016

B. List of PhD Students currently being supervised

S.N O.	NAME OF STUDENT	TITLE OF THE SYNOPSIS	STATUS	SESSION
1.	Azeem Mehmood Butt	Identification and transcriptome profiling of miRNA using next generation sequencing in HCV Patients	Bench work completed/Thesis writing	2010-2015
2.	Bushra Khubaib	Identification of IL28-B genetic variations associated with virological response of interferon therapy in chronic HCV infected patients	Bench work will be completed by December 2013	2011-2016
3.	Madiha Akram	Full length genome sequence analysis of dengue virus serotype-2 isolated in Pakistan and its genome variability studies	Bench work will be completed by December 2013	2011-2016
4.	Ayma Aftab	Identification of DNA Methylation profiles of promoter & regulatory genes during HCV 3a genotype infection	Synopsis approved by Advanced Studies & Research Board	2012-2017
5.	Maria Maryum	Identification of DNA methylation profiles of promoter of Ras genes (<i>H-ras</i> , <i>K-ras</i> , <i>N-ras</i>) during HCV 3a genotype Infection in Pakistani population	Synopsis approved by Advanced Studies & Research Board	2012-2017
6.	Muhammad Shahid	Pathway focused intrahepatic gene expression study of human Oxidative Stress and Anti-oxidant molecules in patients with chronic Hepatitis C Virus induced Liver Fibrosis	Synopsis approved by ASRB	2012-2017
7.	Rabia Nawaz	Development of DNA-based vaccine Vectors against Hepatitis C Virus	Synopsis approved by ASRB	2013-2018
8.	Sadia Shahid	Physico-chemical Conservancy Analyzer: A Novel tool to Pin-Point Functional Domains in Multiple sequence alignments	Synopsis approved by ASRB	2013-2018

C. List of M. Phil Students Supervised by Dr. Muhammad Idrees and awarded M. Phil degrees:

S.No	NAME OF STUDENT	TITLE OF THESIS	NAME OF UNIVERIST Y	REGISTRATION DATE ----- COMPLETION DATE
1	Attia Muqaddas	Cloning, sequencing and phylogenetic analysis of S-gene of hepatitis B virus	University of the Punjab	1999-2001
2	Maqsood Anwar	Occult hepatitis B virus infection in hepatitis C positive patients	University of the Punjab	1999-2001
3	Sajjad Iqbal	Genetic basis of Isoniazid and Pyrazinamide drugs resistance in Mycobacterium tuberculosis	University of the Punjab	2000-2002
4	Sana Ullah Khan	Common genotypes of hepatitis C virus circulating in Pakistan	University of the Punjab	2001-2003
5	Muhammad Hashim Raza	Detection of hepatitis G virus RNA in patients with hepatitis B virus, hepatitis C virus, Non-A-E and in general population using polymerase chain reaction	University of the Punjab	2001-2003
6	Dr. Ahmad Bilal Waqar	Detection of GB virus C/HGV replication sites in different human tissues using molecular techniques	University of the Punjab	2001-2003
7	Dr. Ejaz Khan	Role of mutations in NS5A genes of hepatitis C virus genotype 3a isolates and its correlation with treatment response	University of the Punjab	2002-2004
8	Abdul Ghafoor Khan	Mutational studies within E2 gene of hepatitis C virus genotype 3a isolates and its correlation with treatment response	University of the Punjab	2002-2004
9	Samia Afzal	Molecular identification, cloning and sequence studies of NS5A gene of hepatitis C virus genotype 3a	University of the Punjab	2002-2004
10	Fouzia Irshad	Molecular identification, cloning and sequence studies of E2 gene of hepatitis C virus genotype 3a	University of the Punjab	2004-2006
11	Nighat Yasmin	Molecular identification, cloning and sequence studies of NS3 gene of hepatitis C virus genotype 3a	University of the Punjab	2004-2006
12	Muhammad Jamil	Detection of Helicobacter pylori in liver tissues of hepatitis C virus infected patients and its possible role in the development of cirrhosis and hepatocellular carcinoma	University of the Punjab	2004-2006
13	Saifur Rehman	Common genotypes of hepatitis C and hepatitis B virus circulating in Afghanistan and its comparision with that of Pakistan.	University of the Punjab	2004-2006
14	Aaliya Tariq	Development of software based on various	University of	2005-2007

		HCV genes, chemokines/cytokines in relation to antiviral treatment outcome	the Punjab	
15	Ashiq Hussain	In silico study of pathogenicity and human gastric colonization of	University of the Punjab	2005-2007
16	Muhammad Tahir Iqbal	Cloning, sequencing and phylogenetic analysis of hepatitis E virus Pakistani isolates from two mini outbreaks	University of the Punjab	2006-2008
17	Sajjad Ullah	Association of HCV NS5a mutations with Interferon plus ribavirin standard therapy outcome	University of the Punjab	2007-2009
18	Zunaira Awan	Detection of ymmd mutations in hepatitis B virus infected patients and its role in lamuvidene resistance	University of the Punjab	2007-2009
19	Sadia Butt	Changing pattern in HCV genotypes circulating in Pakistan in last 10 years	University of the Punjab	2007-2009
20	Mehwish Aftab	Establishment of cell-lines expressing E2 gene of HCV genotype 3a Pakistani isolate	University of the Punjab	2008-2010
21	Madiha Akram	Mutational analysis studies of NS5A gene of HCV-3a and their impacts on treatment responses	University of the Punjab	2008-2010
22	Bushra Khubaib	Development of cell-lines expressing NS5A gene of HCV genotype 3a Pakistani isolate	University of the Punjab	2008-2010
23	Muhammad Ali	NS5B genome based HCV genotyping and evolutionary analysis using modern Bio-informatics tools	University of the Punjab	2008-2010
24	Liaqat Ali	Toxicological analysis and anti-viral effect of Kaolin derivatives in different cell-lines against HCV	University of the Punjab	2008-2010
25	Bisma Rauff	Cloning and expression of E2 gene of HCV-1a in a mammalian expression vector pCDNA3.1 and its transient expression	University of the Punjab	2008-2010
26	Zareen Fatima	Molecular characterization of dengue virus Serotypes/genotypes circulating in Dengue outbreak-2011-Punjab Pakistan	University of the Punjab	2008-2010
27	Mahrukh Naudhani	Cloning and expression of NS5A gene of HCV genotype 3a in pCDNA3.1 expression vector and its transient expression	University of the Punjab	2008-2010
28	Sadaf Badar	Mutational studies within E2 gene of hepatitis C virus genotype 3a isolates and its correlation with treatment response	University of the Punjab	2008-2010
29	Azeem Butt	Avian Influenza A (H9N2): Computational Molecular Analysis and Phylogenetic Characterization of Viral Surface Genes and Proteins Isolated between 1997 and 2009 from the Human Population	University of the Punjab	2009-2010

30	Sana Saleem	Cloning & Expression of HCV-E2 gene of Genotype 3b local isolate & its comparison with other genotypes	University of the Punjab	2009-2010
31	Madeha Fayyaz	Expression of HCV-3a envelope protein in mammalian expression vector	University of the Punjab	2010-2011
32	Ayma Aftab	Detection and Bio-informatics studies of mutations in Rifampicin and Isoniazid Resistant Strains of Mycobacterium Tuberculosis in Pakistan	University of the Punjab	2010-2012
33	Fatima Arshad Butt	Sequence-based genotyping of HDV and its correlation with HBV genotypes circulating in Pakistan.	University of the Punjab	2010-2012
34	Naveed Ahmad	Transient Expression of NS3 protein of HCV-3a in mammalian expression vector	University of the Punjab	2010-2012
35	Saima Younas	Detection of Salmonella typhi in Dengue Virus Sero-positive samples	University of the Punjab	2011-2012
36	Muhammad Shahid	Pathway focused intrahepatic gene expression study of human Oxidative Stress and Anti-oxidant molecules in patients with Hepatitis C Virus induced Liver Fibrosis	University of the Punjab	2011-2012
37	Sayed Mohsin Raza	Pathway focused intrahepatic gene expression study of Inflammatory Cytokines & Receptors and Extracellular Matrix and Adhesion Molecules in patients with Hepatitis C Virus induced Liver Fibrosis	University of the Punjab	2011-2012
38	Rabia Nawaz	Toxicological analysis and anti-viral effect of different natural compounds in different cell-lines against HCV	University of the Punjab	2011-2013
39	Noman Sharif	Expression of envelope genes of HCV-1a in a mammalian expression vector pCDNA3.1	University of the Punjab	2011-2013
40	Sara Basharat	Studies on gene expression Inflammatory Cytokines in patients with Hepatitis C Virus 1a induced Liver Fibrosis using pathway focused Mass Array	University of the Punjab	2011-2013
41	Tanzeel Yousaf	Establishment of Recombinant Huh-7 Mammalian Cell Line Expression Vector of NS5A Gene of HCV Genotype3a (Pakistani Isolate)	University of the Punjab	2012-2014
42	Wajeaha Naz	Construction of a Mammalian Expression Vector Expressing NS5B Gene of HCV-3a Pakistani Isolate	University of the Punjab	2012-2014
43	Anam Saghir	Studies on the role of genetic variation in SNP rs28416813 & SNP rs 4803219 in interferon resistance in chronic HCV infected patients	Bench work in progress	2013-2015

44	Hamna Imtiaz	Identification of blood miRNAs 141, 21, 126, 124 & 320 as a key to hepatitis C disease research	Bench work in progress	2013-2015
45	Iqra Almas	Studies on circulating miRNAs-122, 134,198, 1, Let 7a, 7b & 7e as biomarkers for HCV disease and treatment outcome	Bench work in progress	2013-2015

SUGGESTED REFEREES

1. **Yury Khudyakov, Ph.D**

Division of Viral Hepatitis, Coordinating Center for Infectious Diseases, Centre for Disease Control and Prevention (CDC), 1600 Clifton Road, NE Mailstop A33, Atlanta GA 30329-4018, USA.

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2. **Professor Mateen Izhar; BSc (Pb), MBBS (Pb), MSc (London), PhD (Cantab), FRCPath (UK)**

Head, Department of Microbiology & Virology
Shaikh Zayed Medical Complex

Lahore-54600, Pakistan

Tel: +92 42 3586 5731

Cell No. +92 300 844 7937; Email: mateen@cantab.net

FRCPath Membership: 0705576

3. **Saleem Kamili, Ph.D**

Deputy Branch Chief, Division of Viral Hepatitis, Coordinating Center for Infectious Diseases, Centre for Disease Control and Prevention (CDC), 1600 Clifton Road, NE Mailstop A33, Atlanta GA 30333, USA.

Tel: +1-404-639-4431; Fax: +1-404-639-1563; Email: SEK6@cdc.gov

4. **Dr. Shahida AR Shah MBBS, M. Phil, DCP, PhD**

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Fathima Memorial Hospital Lahore

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Email: profshahidashah@yahoo.com

Brief write-up of Idrees's contribution to science:

Dr. Muhammad Idrees obtained Ph. D. in Molecular Virology and subsequently he worked for his post-doctoral research at Division of Viral Hepatitis, Coordinating Centre for Infectious Diseases, Centers for Disease Control and Prevention (CDC), Atlanta GA-USA. Currently he is working as Associate Professor & Head Division of Molecular Virology. In May 2000, he had established PCR-based Diagnostic Division for the detection of infectious diseases at Centre for Applied Molecular Biology (CAMB) Ministry of Science & Technology. This Division is providing general public with reliable, accurate, rapid and more economical diagnostic services for most prevalent infectious and genetic diseases. His Diagnostic Division had generated a source of income for Centre and last year more than 350 million was deposited to Government of Pakistan by MoST. As a part of endeavors, to develop indigenous technologies, Dr. Idrees had developed Molecular Diagnostic Kits for the detection of HBV, HCV, *M. tuberculosis* and HCV Genotyping at 1/10th the cost of the same kits manufactured by other companies in Europe and America. This helped to overcome inherent constraints of practicing modern molecular tools for diseases diagnosis and encouraged/contributed to the indigenous technologies in the area of Molecular diagnostics. Due to vital importance of viral testing, as gesture and the noble consent, his group has performed more than 40,000 PCR tests free of charges to the poor patients booked for hepatitis treatment across the country under the Prime Minister's Program for Prevention & Control of Hepatitis. The market worth of these tests is more than 113.00 million.

Dr. Idrees has been awarded "TWAS Best Young Scientist of the Year-2009" in biology. He has also been award, "Research Productivity Award-2011" "RPA-2012" & "RPA-2013" for his excellent performance in the field of Molecular Biology/Virology. Dr. Idrees has also been awarded Certificate of appreciation for excellent lab support in detection of dengue fever cases during last outbreak in the year 2011 and shield for his expert opinion for "Lab Services in Case Detection for Dengue Fever" in International Conference on Dengue Prevention & Control 27-29 February 2012 by WHO.

Dr. Idrees's group is the first in the country to conduct studies on viral hepatitis and he is supervising a team of researchers to study the genome variations in hepatitis viruses and *Dengue Virus*. He has directly supervised 9 PhD & 45 M. Phil research scholars and is currently supervising 08 PhD and 3 M. Phil research scholars. In addition he has trained/co-supervised more than 40 research scholars/scientists from other Universities of Pakistan. Additionally, he was the sole Virologist/scientist of the country who was actively involved in the molecular identification and serotype detection of Dengue outbreak-2011. Till date his group is providing dengue detection & serotyping facility free of charges to all provinces referred by WHO & Government hospitals.

His contribution in Molecular Biology especially Molecular Virology has been recognized at home and abroad and his research work has been published in 110 peer reviewed research papers in national/international scientific journals with an overall impact factor more than 222 and of citation of more than 1600. He is the editor of several Internal Scientific Journals including World J Clin Inf Dis, Global J Gastroent & Hepatol, World J Virol, World J Gast Hept, World J Gastroent, etc He has been the principal/co-principal investigator of several research projects funded by national and international funding agencies, namely Ministry of Science & Technology, HEC, EMRO-WHO and Pak-USA.