

## CURRICULUM VITAE

### DR. MUHAMMAD SHAHID

Assistant Professor  
CEMB, University of the Punjab Lahore-Pakistan



#### CONTACT:

**Email:** shahidimran@cemb.edu.pk  
shahidimrangcu@gmail.com

**Phone:** Office: +92-42-35293141-45 (Ext. 129).  
Mobile: +92-345-4544446.

**Postal Address:** 87-West Canal Bank Road, Thokar Niaz Baig, Lahore-Pakistan (53700).

#### PROFESSIONAL EXPERIENCE:

<b>February, 2020-present</b>	<b>Assistant Professor</b> Centre of Excellence in Molecular Biology (CEMB), University of the Punjab, Lahore-Pakistan.
<b>January, 2010-February, 2020</b>	<b>Research Officer/Lecturer</b> Centre of Excellence in Molecular Biology (CEMB), University of the Punjab, Lahore-Pakistan
<b>April, 2008-December, 2009</b>	<b>Research Officer/Lecturer</b> Centre of Excellence in Molecular Biology (CEMB), University of the Punjab, Lahore-Pakistan
<b>April, 2006-March, 2008</b>	<b>Assistant Research Officer</b> Centre of Excellence in Molecular Biology (CEMB), University of the Punjab, Lahore-Pakistan

#### QUALIFICATIONS:

2012-18	<b>Ph.D in Molecular Biology</b> CEMB, University of the Punjab, Lahore-Pakistan <b>Thesis Title;</b> Identification and Correlation Analysis Of Host Genes Expression In Response To Hepatitis C Virus Infection And Therapy
2010-12	<b>M.Phil in Molecular Biology</b> CEMB, University of the Punjab, Lahore-Pakistan <b>Thesis Title;</b> Pathway Focused Intrahepatic Gene Expression Study of Human Oxidative Stress And Antioxidant Molecules In Patients With Hepatitis C Virus Induced Liver Fibrosis.
2003-05	<b>Msc. Chemistry</b> Govt. College University, Lahore-Pakistan

2008

**Thesis Title;** Production of Alpha Amylase from Thermophilic Bacillus Subtilis

**PGD in Total Quality Management**

IQTM, University Of The Punjab, Lahore-Pakistan

**Thesis Title;** Veterinary Hospital Management

#### **AWARDS:**

1. Award of International Research Support Initiative Program (IRSIP) by Higher Education commission (HEC) of Pakistan.
2. Performance Evaluation Award For the Year 2020 by University of the Punjab.
3. Performance Evaluation Award For the Year 2019 by University of the Punjab.
4. Performance Evaluation Award For the Year 2018 by University of the Punjab.
5. Performance Evaluation Award For the Year 2017 by University of the Punjab.
6. Performance Evaluation Award For the Year 2016 by University of the Punjab.
7. Performance Evaluation Award For the Year 2015 by University of the Punjab.
8. Research Incentive Award for the Year 2020 by University of the Punjab
9. Research Incentive Award for the Year 2019 by University of the Punjab.
10. Research Incentive Award for the Year 2017 by University of the Punjab.
11. Research Incentive Award for the Year 2016 by University of the Punjab.

#### **RESEARCH AREA (Area of interest):**

Viral hepatitis

Host-virus interaction

Role of Host-virus genes in therapy outcomes

Transcriptome study (mRNA, circRNA, lncRNA, miRNA, and piRNA)

Epidemiology of viral infectious Diseases

#### **PROFESSIONAL SKILLS:**

##### **Biochemistry & Molecular Biology (Techniques) Skills**

- Primer Designing
- RNA, DNA and Protein Extraction
- PCR / Multiplex PCR / Real Time PCR / Sequencing PCR
- Restriction Analysis
- PAGE & Agarose Gel Electrophoresis and documentation
- Western Blotting
- Chromatographic Techniques
- Direct and Indirect ELISA
- Spectrophotometry for Biomolecules
- Clinical Laboratory Technique
-

## Bioinformatician & Computer Skills

- Secondary and tertiary protein structure prediction
- Protein and DNA sequence and phylogenetic analysis
- Primer designing, BLAST, BLAT, CLUSTAL W, T Coffee, SPSS data Analysis

## RESEARCH PROJECTS (PROFESSIONAL):

- Working on project of Antiviral effects of Thiazolide derivatives on Hepatitis C Virus in Huh-7 cell line an characterization of HCV subgenomic replicons.
- Worked on Dengue Outbreaks 2011-2014 in Punjab, Pakistan.
- Worked in association with PhD Scholar on Establishment of stable cell lines of structural and non structural genes of Hepatitis C Virus Genotype 3a.
- Worked on Genotype based co-relation of Hepatitis D virus with Hepatitis B virus
- Worked on Prime Minister Program for prevention of Hepatitis B & C in Pakistan.
- Hepatitis B virus genotypes circulating in Pakistan

## DIPLOMA/ COURSES:

- A Basic Course on “*R-Language*” [1.4 ECTS], Erasmus MC, Rotterdam, Netherlands (2016).
- A “*Basic Introduction Course on SPSS*” [1.0 ECTS], Erasmus MC, Rotterdam, Netherlands (2016).
- A Basic Course on “*Analysis of microarray and RNA Seq expression data using R/BioC and web tools*” [2.0 ECTS], Erasmus MC, Rotterdam, Netherlands (2016).
- “*The course in Virology*” [1.8 ECTS], Erasmus MC, Rotterdam, Netherlands (2016).
- A Course on “*Survival Analysis*” [0.5 ECTS], Erasmus MC, Rotterdam, Netherlands (2016).
- A Course on “*Ensemble Workshop XII*” [0.6 ECTS], Erasmus MC, Rotterdam, Netherlands (2016).
- A Conference on “*molmed*” [0.3 ECTS], Erasmus MC, Rotterdam, Netherlands (2016).
- Diploma in “*Public Health Administration*” MIIM, Islamabad-Pakistan (2008).
- Diploma in “*Occupational Health, Safety and Environment*” MIIM, Islamabad-Pakistan (2008).
- Professional certificate in “*Total Quality Management*” Virtual University of Pakistan, 2009

## PUBLICATIONS:

S.NO	Publication	Impact factor
48	Butt, F., <b>Shahid, M.</b> , Hassan, M., Tawakkal, F., Amin, I., Afzal, S., Bhatti, R., Nawaz, R. and Idrees, M., 2022. A review on hepatitis C virus: role of	HEC-Y

	viral and host-cellular factors in replication and existing therapeutic strategies. <i>Egyptian Liver Journal</i> , 12(1), pp.1-8.	
47	Ahmed, A., Safdar, M., Sardar, S., Yousaf, S., Farooq, F., Raza, A., <b>Shahid, M.</b> , Malik, K. and Afzal, S., 2022. Modern vaccine strategies for emerging zoonotic viruses. <i>Expert Review of Vaccines</i> , (just-accepted).	5.21
46	Syyam, A., Nawaz, A., Ijaz, A., Sajjad, U., Fazil, A., Irfan, S., Muzaffar, A., <b>Shahid, M.</b> , Idrees, M., Malik, K. and Afzal, S., 2022. Adenovirus vector system: construction, history and therapeutic applications. <i>BioTechniques</i> .	2.74
45	Ahmed, A., Safdar, M., Sardar, S., Yousaf, S., Farooq, F., Raza, A., <b>Shahid, M.</b> , Malik, K. and Afzal, S., 2022. Modern vaccine strategies for emerging zoonotic viruses. <i>Expert Review of Vaccines</i> , (just-accepted).	5.21
44	Munir, R., Rafique, S., Ali, A., Amin, I., Ahmed, S., Vajeeha, A., <b>Shahid, M.</b> , Samiullah, T.R., Idrees, M., Tao, Y.J. and Khan, M.U., 2022. Molecular characterization of recombinant premembrane protein of dengue virus serotype-2 for development of diagnostic assay. <i>Journal of Basic Microbiology</i> .	2.65
43	Aamir, S., Mir, I., <b>Shahid, M.</b> , Amin, I., Afzal, S., Rafique, S., Bhatti, R., Nawaz, A., Butt, F., Munir, R. and Idrees, M., 2022. Insights into the Structure, Replication, and Pathogenesis of the Severe Acute Respiratory Syndrome Coronavirus 2. <i>Re: GEN Open</i> , 2(1), pp.85-92.	
42	Samia Afzal, Iram Amin, <b>Muhammad shahid</b> , Muhammad Idrees. Frequency of Hepatitis D Viral Infection in Chronic Hepatitis B Patients Circulating in Pakistan. <i>Pakistan Journal of Zoology</i> .2022	IF=0.687
	<b>2022</b>	
41	Hassan, M., Hassan, A., Farooq, M., Afzal, S., Khan, M.A., Amin, I., <b>Shahid, M.</b> , Idrees, M. and Shahid, A.A., 2021. Dengue Vaccines: Ongoing Challenges and Current Status in the Advancement of Different Candidates. <i>Critical Reviews™ in Eukaryotic Gene Expression</i> , 31(5).	2.156
40	Hassan, M., Zalkifal, M., Wahab, A., Afzal, S., Rafique, S., <b>Shahid, M.</b> , Khan, M., Ahmed, N., Idrees, M. and Shahid, A.A., 2021. Novel Coronavirus: A Review from Origin to Current Status of Therapeutic Strategies. <i>Critical Reviews™ in Eukaryotic Gene Expression</i> , 31(3).	2.156
	<b>2021</b>	
39	Zahid, S., Andleeb, S., Anjum, S., Afzal, S., Amin, I., <b>Shahid, M.</b> , Rafique, S. and Idrees, M., 2020. A Molecular Based Approach to Characterize Untypable HCV Genotype. <i>International Journal of Pathology</i> , 18(4), pp.128-135.	HEC-Y Category
38	Almas, I., Afzal, S., Imtiaz, H., Shaheen, M.A., Daud, M., Saghir, A., Amin, I., <b>Shahid, M.</b> and Idrees, M., 2020. Drug Resistance in Hepatitis C Virus: Future Prospects and Strategies to Combat It. <i>Critical Reviews™ in Eukaryotic Gene Expression</i> , 30(4).	2.156
37	Bukhari, M.M.M., Mir, I., Idrees, M., Afzal, S. and <b>Shahid, M.</b> , 2020. Role of MicroRNAs in Establishing Latency of Human Immunodeficiency Virus. <i>Critical Reviews™ in Eukaryotic Gene Expression</i> , 30(4).	2.156
36	Shaheen, M., Afzal, S., Khubaib, B., Amin, I., <b>Shahid, M.</b> and Idrees, M., 2020. Association of Interleukin 28B Polymorphism with Clearance of	2.156

	Hepatitis C Virus: A Mini Review. <i>Critical Reviews™ in Eukaryotic Gene Expression</i> , 30(3).	
35	Ali, S., Afzal, S., Yousaf, M.Z., <b>Shahid, M.</b> , Amin, I., Idrees, M. and Aftab, A., 2020. Paradoxical Role of Dengue Virus Envelope Protein Domain III Antibodies in Dengue Virus Infection. <i>Critical Reviews™ in Eukaryotic Gene Expression</i> , 30(3).	2.156
34	<b>Shahid, M.</b> , Idrees, M., Butt, A.M., Raza, S.M., Amin, I., Rasul, A. and Afzal, S., 2020. Blood-based gene expression profile of oxidative stress and antioxidant genes for identifying surrogate markers of liver tissue injury in chronic hepatitis C patients. <i>Archives of Virology</i> , pp.1-14.	2.261
33	Hassan, A., Saeed, A., Afzal, S., <b>Shahid, M.</b> , Amin, I. and Idrees, M., 2020. Applications and hazards associated with carbon nanotubes in biomedical sciences. <i>Inorganic and Nano-Metal Chemistry</i> , pp.1-12.	0.685
32	Zahid, K., Shakoor, S., Sajid, H.A., Afzal, S., Ali, L., Amin, I., <b>Shahid, M.</b> and Idrees, M., 2020. Advancements in developing an effective and preventive dengue vaccine. <i>Future Virology</i> , (00).	0.730
31	Afzal, S., Zahid, S., Amin, I., <b>Shahid, M.</b> and Idrees, M., 2020. Prevalence and Upcoming Threats of Chikungunya Virus in Pakistani Population. <i>Pakistan Journal of Zoology</i> , 52(4), pp.1623-1626.	0.750
30	Sherzada, S., Khan, M.N., Babar, M.E., Idrees, M., Wajid, A., Sharif, M.N., Iqbal, M.S., Amin, I. and <b>Shahid, M.</b> , 2020. Identification of Three Cyprinidae Family Members through Cytochrome Oxidase I. <i>Pakistan J. Zool</i> , 52(1), pp.417-420.	0.750
29	Nazir, A., Malik, K., Qamar, H., Basit, M.H., Liaqat, A., <b>Shahid, M.</b> , Khan, M.I., Fatima, A., Irshad, A. and Sadia, H., 2020. 9. A review: Use of plant extracts and their phytochemical constituents to control antibiotic resistance in <i>S. aureus</i> . <i>Pure and Applied Biology (PAB)</i> , 9(1), pp.720-727.	HEC-Y Category
	<b>2020</b>	
28	<b>Shahid, M.</b> , Idrees, M., Butt, A.M., Raza, S.M., Amin, I., Rasul, A., Afzal, S., Zahid, S. and Nawaz, R., 2019. Short article: Hepatitis C and G virus coinfection in Punjab, Pakistan: incidence and its correlation analysis with clinical data. <i>European journal of gastroenterology &amp; hepatology</i> , 31(3), pp.389-392.	2.198
27	Amin, I., Younas, S., Afzal, S., <b>Shahid, M.</b> and Idrees, M., 2019. Herpes Simplex Virus Type 1 and Host Antiviral Immune Responses: An Update. <i>Viral immunology</i> , 32(10), pp.424-429.	1.417
26	Amin, I., Vajeaha, A., Younas, S., Afzal, S., <b>Shahid, M.</b> , Nawaz, R., Khan, M.U. and Idrees, M., 2019. HSV-1 Infection: Role of Viral Proteins and Cellular Receptors. <i>Critical Reviews™ in Eukaryotic Gene Expression</i> , 29(5).	1.927
25	<b>Shahid, M.</b> , Amin, I., Afzal, S., Fatima, Z. and Idrees, M., 2019. Comparative Analysis of Immunological and Genomic Outcomes of Dengue Virus Outbreak in Pakistan. <i>Pakistan Journal of Zoology</i> , 51(5), pp.1971-1974.	0.750
24	Kausar Malik*, Aleem Razzaq, Hafiz Ghufraan, Muhammad Abid Naseer, Yahya Tariq, Zaheer Abbas, Muhammad Hamza Basit, Arshia Nazir,	0.00

	Adeena Saeed, Rashid Bhatti, <b>Muhammad Shahid</b> , Areeba Fatima, Haleema Sadia Urgency of novel anti-tuberculosis strategies: a prospective challenge International Journal of Biosciences   IJB   Vol. 15, No. 2, p. 281-296, 2019	
	<b>2019</b>	
23	Almas, I., Afzal, S., Idrees, M., Ashraf, M.U., Amin, I., Shahid, M., Zahid, K. and Zahid, S., 2017. Role of circulatory microRNAs in the pathogenesis of hepatitis C virus. <i>Virusdisease</i> , 28(4), pp.360-367.	0.96
22	Khubaib, B., Idrees, M., Fatima, Z., Akram, M., Afzal, S., Amin, I., <b>Shahid, M.</b> and Wasim, M., 2017. Evaluation of three techniques for detection of IL28B SNP: A prognostic tool for HCV treatment outcome. <i>Journal of digestive diseases</i> , 18(7), pp.404-409.	1.689
21	<b>Shahid, M.</b> , Amin, I., Afzal, S., Fatima, Z., Zahid, S., Ashraf, U. and Idrees, M., 2017. Prevalence and molecular detection of dengue virus in 2013 outbreak in KPK and Punjab, Pakistan. <i>Pakistan Journal of Zoology</i> , 49(3).	0.750
20	Nawaz, R., Zahid, S., Idrees, M., Rafique, S., <b>Shahid, M.</b> , Ahad, A., Amin, I., Almas, I. and Afzal, S., 2017. HCV-induced regulatory alterations of IL-1 $\beta$ , IL-6, TNF- $\alpha$ , and IFN- $\gamma$ operative, leading liver en-route to non-alcoholic steatohepatitis. <i>Inflammation Research</i> , 66(6), pp.477-486.	3.174
19	Manzoor, F., Amin, I., <b>Shahid, M.</b> , Afzal, S., Ramzan, H., Samiullah, T.R. and Idrees, M., 2017. Aedes aegypti is the Major Vector for Transmission of Dengue Virus in Lahore, Pakistan. <i>Pakistan Journal of Zoology</i> , 49(2).	0.750
18	Javeed, S., Almas, M., <b>Shahid, M.</b> , Sumrin, A., Bashir, H., Bilal, M., Saleem, Z., Jahangir, G.Z., Afzal, S., Idrees, M. and Amin, I., 2017. Nrf2: A MASTER REGULATOR OF CELLULAR DEFENSE MECHANISM AND A NOVEL THERAPEUTIC FACTOR. <i>Pak. J. Biotechnol. Vol, 14(1)</i> , pp.121-126.	HEC-Y Category
17	Afzal, S., Idrees, M., Almas, I., Rafique, S., Amin, I. and <b>Shahid, M.</b> , 2017, January. Study of inhibition of interferon inducible genes by dephosphorylation of E2 envelope gene of HCV genotype 1a. In <i>2017 14th International Bhurban Conference on Applied Sciences and Technology (IBCAST)</i> (pp. 183-188). IEEE.	0.00
	<b>2017</b>	
16	Amin, I., Naz, S., <b>Shahid, M.</b> , Afzal, S., Ashraf, U., Rasheed, A., Rasul, A., Nawaz, R., Zahid, S., Almas, I. and Zahid, K., 2016. Inhibitory Effects of Thiazolide Compounds against Hepatitis C virus: in vitro Study. 2016, 5(2): 27-33	0.00
15	Awan, Z., Idrees, M., Hussain, A., Ur Rehman, I., Ali, M., Afzal, S., Ali, L., Butt, S., Saleem, S., Amin, I. and <b>Shahid, M.</b> , 2016. Influence of Hepatitis B Virus Genetic Heterogeneity on Treatment Response Against Lamivudine and Interferon in Pakistani Isolates. <i>Anti-Infective Agents</i> , 14(2), pp.121-125.	RG 0.28
14	Butt, A.M., Raja, A.J., Siddique, S., Khan, J.S., <b>Shahid, M.</b> , Minhas, Z., Umar, M., Idrees, M. and Tong, Y., 2016. Parallel expression profiling of hepatic and serum microRNA-122 associated with clinical features and treatment responses in chronic hepatitis C patients. <i>Scientific reports</i> , 6, p.21510.	4.120

13	Younas, S., Amin, I., <b>Shahid, M.</b> , Fatima, Z. and Idrees, M., 2016. Detection of Salmonella enterica, Subsp. enterica Serovar Typhi in Dengue Virus Seropositive Samples. <i>Pakistan Journal of Zoology</i> , 48(6).	0.750
12	Akram, M., Fatima, Z., Purdy, M.A., Sue, A., Saleem, S., Amin, I., <b>Shahid, M.</b> , Idrees, M. and Nawaz, R., 2015. Introduction and evolution of dengue virus type 2 in Pakistan: a phylogeographic analysis. <i>Virology journal</i> , 12(1), p.148.	2.646
	<b>2016</b>	
11	<b>Shahid, M.</b> , Butt, A., Amin, I., Rasul, A. and Idrees, M., 2015. Gene expression profiling of human oxidative stress and antioxidant genes in patients with hepatitis C virus induced liver fibrosis: P26. <i>Journal of Viral Hepatitis</i> , 22, pp.36-37.	3.770
	<b>2015</b>	
10	<b>Shahid, M.</b> , Idrees, M., Nasir, B., Raja, A.J., Raza, S.M., Amin, I., Rasul, A. and Tayyab, G.U., 2014. Correlation of biochemical markers and HCV RNA titers with fibrosis stages and grades in chronic HCV-3a patients. <i>European journal of gastroenterology &amp; hepatology</i> , 26(7), pp.788-794.	2.251
	<b>2014</b>	
9	Fatima, Z., Afzal, S., Idrees, M., Rafique, S., Akram, M., Khubaib, B., Saleem, S., Amin, I. and <b>Shahid, M.</b> , 2013. Change in demographic pattern of dengue virus infection: evidence from 2011 dengue outbreak in Punjab, Pakistan. <i>Public health</i> , 127(9), pp.875-7.	1.806
	<b>2013</b>	
8	Idrees, M., Hussain, W., Rehman, H.U., Tayyab, G.N., Afzal, S. <b>Shahid, M.</b> , and Fatima, Z., 2012. Dengue virus serotype 2 (DEN-2): the causative agent of 2011-dengue epidemic in Pakistan. <i>Am J Biomed Sci</i> , 4(4), pp.307-315.	0.00
	<b>2012</b>	
7	Amin, I., Idrees, M., Awan, Z., <b>Shahid, M.</b> , Afzal, S. and Hussain, A., 2011. PCR could be a method of choice for identification of both pulmonary and extra-pulmonary tuberculosis. <i>BMC Research Notes</i> , 4(1), p.332.	1.340
6	Butt, S., Idrees, M., Rehman, I.U., Akbar, H., <b>Shahid, M.</b> , Afzal, S., Younas, S. and Amin, I., 2011. Mixed genotype infections with hepatitis C virus, Pakistan. <i>Emerging infectious diseases</i> , 17(8), p.1565.	6.810
5	Butt, S., Idrees, M., <b>Shahid, M.</b> , Amin, I., Younas, S., Afzal, S., Akbar, H. and Ur Rehman, I., 2011. Change in hepatitis C virus clades: A cross-sectional study of chronic HCV patients in Pakistan from 2000–2010. <i>European journal of clinical microbiology &amp; infectious diseases</i> , 30(5), pp.669-672.	2.914
4	Afzal, S., Idrees, M., Ali, M., Ilyas, M., Hussain, A., Akram, M., Butt, S., Saleem, S., Rehman, I., Ali, L. and <b>Shahid, M.</b> , 2011. Envelope 2 protein phosphorylation sites S75 & 277 of hepatitis C virus genotype 1a and interferon resistance: A sequence alignment approach. <i>Virology Journal</i> , 8(1), pp.1-6.	2.646
	<b>2011</b>	
3	Awan, Z., Idrees, M., Amin, I., Butt, S., Afzal, S., Akbar, H., Rehman, I.U., Younas, S., <b>Shahid, M.</b> , Lal, A. and Saleem, S., 2010. Pattern and molecular	2.670

	epidemiology of Hepatitis B virus genotypes circulating in Pakistan. <i>Infection, Genetics and Evolution</i> , 10(8), pp.1242-1246.	
2	Zaidi, G., Idrees, M., Malik, F.A., Amin, I., <b>Shahid, M.</b> , Younas, S., Hussain, R., Awan, Z., Tariq, A. and Parveen, K., 2010. Prevalence of hepatitis delta virus infection among hepatitis B virus surface antigen positive patients circulating in the largest province of Pakistan. <i>Virology journal</i> , 7(1), p.283.	2.646
1	Butt, S., Idrees, M., Akbar, H., ur Rehman, I., Awan, Z., Afzal, S., Hussain, A., <b>Shahid, M.</b> , Manzoor, S. and Rafique, S., 2010. The changing epidemiology pattern and frequency distribution of hepatitis C virus in Pakistan. <i>Infection, Genetics and Evolution</i> , 10(5), pp.595-600.	2.670
	<b>2010</b>	

## CONFERENCE PROCEEDINGS:

### Abstract

Sr.no	Abstract	
17	<b>(4188)</b> Adenosine Deaminase Acting on Rna (adar): A Liver Based Biomarker Associated with Therapy Response in Hepatitis C Virus Infection has been accepted for a presentation at ASM Microbe 2022 in Washington, DC, June 9-13, 2022	
16	General knowledge and opinion regarding covid-19 vaccination and policy barrier to effective mass immunization in pakistan Zainab Ahmad, Amna Qamar, Aqsa Sarwar, Rabia Nawaz Muhammad shahid Department Of Biological Science, The Superior University, Lahore 21-22-3-2022	
15	<b>(CS21-47)</b> Frequency of hemochromatosis (HFE) gene mutation (C282Y) in beta-thalassaemia patients Fatima Butt, Muhammad Shahid 4th International Symposium on Advances in Molecular Biology of Plants and Health Sciences 23 - 24th December, 2021	
14	<b>(CS21-01)</b> Prokaryotic Expression And Purification Of Antigen For In House Elisa Development Iram Amine, Muhammad Shahid 4th International Symposium on Advances in Molecular Biology of Plants and Health Sciences 23 - 24th December, 2021	
13	General Awareness, Perception and Behavior Of Pakistan Rural Population During Covid 19 Pandemic Aqsa Sarwar, Rabia Nawaz, Nimra Saqib, Muhammad Shahid Department Of Biological Science, The Superior University, Lahore 21-22-3-2022	
12	HEPATIC GENE EXPRESSION PROFILE OF CXCL10 (C-X-C MOTIF CHEMOKINE LIGAND 10) IN CHRONIC HCV PATIENTS TO IDENTIFY THE THERAPY RESPONSE At the 20th Shaukat Khanum Cancer Symposium Held in Lahore, Pakistan. November 5 – 7, 2021	



11	<b>FA21-R08</b> HCV co-prevalence in HBV positive clinical samples of Pakistani population Muhammad Alamgir Khan, Muhammad Shahid, Rabia Nawaz* * rabia.nawaz@superior.edu.pk	
10	<b>FA21-R07</b> HCV prevalence in unsuspected clinical samples of vitamin D deficiency in Pakistani population na Sajjad, Muhammad Shahid, Rabia Nawaz* rabia.nawaz@superior.edu.pk	
9	<b>FA21-R06</b> HCV prevalence in unsuspected clinical samples of beta human chorionic gonadotropin (beta HCG) in Pakistani Population Muhammad Rizwan Ali, Muhammad Shahid, Rabia Nawaz* * rabia.nawaz@superior.edu.pk	
8	Evaluation of CRISPR/CAS13A-based targeting of hepatitis C virus RNA as a programmable antiviral strategy in mammalian cells Muhammad usman Ashraf, Samia Afzal, Muhammad Idrees, Safee ullah Chaudhary, Muhammad Shahid, Iram Amin (Pakistan) International Conference held by the Academy of Sciences of Turkmenistan on June 12-13, 2021	
7	<b>Control #: 5873- MICROBE</b> Abstract Title: Interferon Induced Protein with TetratricopepInterferon Induced Protein with Tetratricopeptide Repeats 1 (IFIT1): A Blood-based Biomarker Associated with Therapy Response in Hepatitis C Virus Infection World Microbe Forum June 20 - 24, 2021.	
6	<b>Control/Tracking Number: 2020-EA-1921-MICROBE</b> Interferon Alpha-Inducible Protein 27 (IFI27) Expression Profile Is Strong Predictor Of Treatment Response In Chronic Hepatitis C Patients Author Block: M. Shahid1, I. Amin1, A. Rasul2, S. Afzal1, M. Idrees1; 1Ctr. for Excellence in Molecular Biology (CEMB), Univ. of the Punjab, Lahore, Lahore, Pakistan, 2Lahore Coll. for Women Univ., Lahore, Pakistan	
5	Samia Afzal, Muhammad Idrees, Iqra Almas, Shazia Rafique, Iram Amin, <b>Muhammad Shahid</b> : <i>Study of inhibition of interferon inducible genes by dephosphorylation of E2 envelope gene of HCV genotype 1a</i> . 2017 14th International Bhurban Conference on Applied Sciences and Technology (IBCAST); 01/2017, DOI:10.1109/IBCAST.2017.7868053	
4	Khadija Zahid, Zahid Iqbal, Samia Afzal, Iram Amin, <b>Muhammad Shahid</b> , Muhammad Idrees. <i>Development of Global Consensus Sequence &amp; Identification Of Conserved Domains In Hcv Ns5b Protein</i> . CEMB, 2017, 2nd International Symposium on Advances in Molecular Biology of Plants and Health Sciences.21-23 November, 2017, Lahore-Pakistan.	
3	Samia Afzal, Muhammad Idrees, Iram Amin, <b>Muhammad Shahid</b> . <i>Global consensus sequence development of dengue virus for peptide based vaccine design against local Dengue Virus</i> . CEMB, 2015, 1st International Symposium	

	on Advances in Molecular Biology of Plants and Health Sciences, 29-31 December, 2015, Lahore-Pakistan.	
2	<b>Muhammad Shahid</b> , Muhammad Idrees, Iram Amin, samia Afzal. <i>Correlation of clinical marker, viral load with liver fibrosis stages and grades in chronic HCV patients with genotype 3a</i> . CEMB, 2015, 1st International Symposium on Advances in Molecular Biology of Plants and Health Sciences, 29-31 December, 2015, Lahore-Pakistan.	
1	Iram Amin, Muhammad Idrees, <b>Muhammad Shahid</b> , Samia Afzal. <i>Vertical Transmission Of Dengue By Aedes aygepti</i> . CEMB, 2015, 1st International Symposium on Advances in Molecular Biology of Plants and Health Sciences, 29-31 December, 2015, Lahore-Pakistan.	

### STUDENT SUPERVISED:

#### Student Supervised MPhil

S.NO	NAME OF STUDENT	TITLE OF THESIS	NAME OF UNIVERSITY	SESSION
7	Fatima Butt	<i>EXPRESSION PROFILE OF CIRC RNAs IN PATIENTS INFECTED WITH HEPATITIS C VIRUS INFECTION AND THERAPY RESPONSE</i>	University Of The Punjab	2020-22
6	Amjad Nawaz	In silico designing and expression study of Glycoprotein 63 (GP63) gene as candidate subunit vaccine against Leishmania tropica	University Of The Punjab	2020-22
5	Hira Raheem Akbar	ASSOCIATION OF INTERLEUKIN-10 GENE SNPs WITH DAAs TREATMENT RESPONSE IN HEPATITIS C VIRUS PATIENTS	University Of The Punjab	2020-22
4	ANUM SYAM	ANALYSIS OF HOST RESPONSE TO GENETIC POLYMORPHISM IN CYTOKINES IN RECURRENCE OF CHRONIC HCV INFECTION AFTER DAAS TREATMENT	University Of The Punjab	2020-22
3	Sania Amir	LONG NON-CODING RNA (HOTAIR) AND MESSENGER RNAs (CCL5 AND TNF- $\alpha$ ) AS POTENTIAL BIOMARKERS IN CHRONIC HEPATITIS C VIRUS INFECTED PAKISTANI PATIENTS	University Of The Punjab	2019-21

2	Iqra Mir	BLOOD BASED EXPRESSION ANALYSIS OF LONG NON-CODING RNA (HULC) AND MESSENGER RNA (CXCL10 AND CTGF) IN PATIENTS INFECTED WITH HEPATITIS C VIRUS GENOTYPE-3a	University Of The Punjab	2019-21
1	Muhammad Farooq	IDENTIFICATION OF SNPs IN IL-28 GENE AND THEIR ROLE IN THE TREATMEN OF HCV PATIENTS IN ASSOCIATED WITH DDAs TREATMENT	University Of The Punjab	2019-21

### PROJECTS (FUNDED):

**NHCG-22/R2-60:** "Identification and comprehensive analysis of competing endogenous RNA networks in human immunodeficiency virus infection and treatment responses".

**HEC Project as PI # HEC/R&D/RGA/NRPU/2021/19603 (submitted):** Exosomal circRNA, lncRNA, miRNA, and piRNA genes expression profiling analysis in patients with Hepatitis C and B Virus-induced liver cancer [PKR 8.64 million]

**HEC NRPU Project (# 13151):** Identification and Comprehensive Analysis of Competing Endogenous RNA (CeRNA) Network in Hepatitis C Virus-induced Hepatocellular Carcinoma by using Next-Generation Sequencing.

**Punjab Innovation and Research Challenge Award (PIRCA/F01)** "Identification and Comprehensive Analysis of Competing Endogenous RNA (CeRNA) Network in Hepatitis C Virus-induced Hepatocellular Carcinoma by using Next-Generation Sequencing"

### WORKSHOPS/ CONFERENCES/ SEMINARS:

- A course on "Molecular Epidemiology" WILEY 7-26 2022
- A Webinar on "MONKEYPX is a treat" ASM 01-01 2022
- Achievement Inequality monitoring in HIV, TB and malaria DIVISION OF DATA, ANALYTICS & DELIVERY FOR IMPACT August 30, 2022
- A course on "HIV, TB and malaria DIVISION OF DATA, ANALYTICS & DELIVERY FOR IMPACT" August 30, 2022
- A course on Engaging the private sector to deliver COVID-19 tools and achieve Health for All March 13, 2022
- A course on Standard precautions: The role of personal protective equipment (PPE) March 22, 2022
- A course on "COVID-19 vaccine-specific resources" March 21, 2022
- A course on "Bloodstream infections" December 31, 2022
- A course on "Introduction to Nipah virus disease" December 30, 2022
- A course on "cholera" December 30, 2022
- A course on "Bloodstream infections" December 31, 2022

#### Webinar

- Attended a one-hour webinar and Q&A session entitled Transmission Raman: A versatile tool for pharmaceutical formulation development to end-product testing Tuesday 3rd May 2022
- Attended a one-hour webinar and Q&A session entitled Scaling sample throughput in your NGS workflow Friday 20th May 2022
- Attended a one-hour webinar and Q&A session entitled NanoDrop innovations and the classroom: Inspiring the next generation of scientists Wednesday 11th May 2022
- Attended a one-hour webinar on virtual microbiology and infectious diseases summit 2022 17th May 2022
- Attended a one-hour webinar Monkeypox is a threat?: What we need to know Date: 01st June 2022
- Online webinar on Molecular epidemiology 26-7-2022

## **2022**

- Attended **the EMBL Conference: SARS-CoV-2 - Two years on: Science Meets the Challenge**
- 10 December 2021, Virtual
- **CERTIFICATE OF PRESENTATION:** Presented the following e-Poster HEPATIC GENE EXPRESSION PROFILE OF CXCL10 (C-X-C MOTIF CHEMOKINE LIGAND 10) IN CHRONIC HCV PATIENTS TO IDENTIFY THE THERAPY RESPONSE At the 20th Shaukat Khanum Cancer Symposium Held in Lahore, Pakistan The AACME Accreditation Review Committee designates this educational activity for maximum of **30.00 category I AACME credit hours**. November 5 – 7, 2021
- Participated in international webinar "AGRICULTURAL NANOTECHNOLOGY" organized by faculty of agriculture UNIVERSITY OF THE PUNJAB LAHORE JULY 29, 2021
- Participated in international webinar "PLASTIC POLLUTION FREE PAKISTAN" organized by faculty of agriculture UNIVERSITY OF THE PUNJAB LAHORE JULY 29, 2021
- Attended international webinar "Targeted DNA integration without double-strand breaks using CRISPR RNA-guided transposons" August 30th, 2021
- Attended a one-hour webinar and Q&A session entitled "An Agilent and Atturo pathway for the development of routine automated targeted protein biomarker measurements for precision medicine" August 26th, 2021
- Attended a one-hour webinar and Q&A session entitled A new era of "RNA detection: Exploring new technologies and prospects" July 6th, 2021
- Attended a webinar "Coronavirus—SARS-CoV-2 Update for Clinical Laboratories". Stay up to date with the latest on SARS-CoV-2 in the clinical laboratory. SPONSORS: ASM Press and Wiley – Aug 12, 2021

## **2021**

- Three day "CancerBio Conference 2020" held University of the Punjab, Lahore, February 13-15 2020
- One day symposium "Brain, Neurogenetics and Regenerative Medicine" held Centre of Excellence in Molecular Biology, University of the Punjab, Lahore, October 03, 2019
- One day conference on "Web Of Science Conference" held Centre of Excellence in Molecular Biology, University of the Punjab, Lahore, March 11, 2019
- Workshop on "Basic Tool In Bioinformatic: Molecular Modeling" GC University, Lahore March 7-8, 2019

- One day seminar on “Risk Assessment of Genetically Modified Crops” held Centre of Excellence in Molecular Biology, University of the Punjab, Lahore, July 20, 2018
- One day symposium on “Industrial Biotech And Bioreforefinig” held Centre of Excellence in Molecular Biology, University of the Punjab, Lahore, July 20, 2018
- 17<sup>th</sup> shaukat khanum cancer symposium held in Pearl continental hotel Lahore Pakistan, 2 -4 November 2018
- One day seminar on “Biosefty training” held in Centre for Applied Molecular Biology, University of the Punjab, Lahore, November 29, 2018
- International Symposium on Advances in Molecular Biology of Plants and Health Sciences held in Centre of Excellence in Molecular Biology, University of the Punjab, Lahore, December 19-21, 2018
- 6<sup>th</sup> INVENTION TO INNOVATION SUMMIT 2017 held Punjab University. March 08-09, 2017.
- 2<sup>ND</sup> International Symposium In Advance in Molecular Biology of Plants and Health Sciences held at CEMB Punjab University. November 21-23, 2017.
- 16<sup>th</sup> shaukat khanum cancer symposium held in Pearl continental hotel Lahore Pakistan, 10 -12 November 2018
- A seminar on “Advances in PCR Technology” held at CEMB Punjab University. April 5, 2017.
- Workshop on behavioral based “Communication and Negotiation Interlock” held at CEMB Punjab University. April 25, 2017.
- Bioinformatics Workshop: Hands on Training on analysis Of Biological Data Using R Virtual University Of Pakistan, Lahore. January5,2016
- A seminar on “Advances in Nucleic Acid Technology” held at CEMB Punjab University. September 1, 2017.
- INVENTION TO INNOVATION SUMMIT 2016 held Punjab University. November 17-17, 2016.
- Workshop on behavioral based “Bciosafety culture” held at CEMB Punjab University. August 23, 2017.
- Workshop on “Communication skill” held at CEMB Punjab University. April 25, 2017.
- Seminar on “Congo virus” held in CEMB, University of Punjab, 5 September 2016.
- Awareness Seminar on “Lungs and Bronchial Diseases” held in CEMB, University of Punjab, and November 17, 2017.
- Seminar on “A Day with Biosafety” held in CEMB, University of Punjab, 25 October 2016.
- Recent Advancements in “Stem Cell Research” institute of Biochemistry and Biotechnology, University of the Punjab

- One day Workshop on “introduction to Next Generation Data Analysis and its application in agricultural science” hold in Institute of agricultural science, University of the Punjab, Lahore, April 14, 2015.
- Hands-On Training Workshop on “Next Generation Data Analysis” held in Centre of Excellence in Molecular Biology, University of the Punjab, Lahore, October 14-16, 2015.
- 38<sup>th</sup> annual conference/3<sup>rd</sup> joint conference of societies of pathology collaboration of royal collage of pathologist and British association of Pakistan pathologist hold in Pearl continental hotel Lahore Pakistan, 6<sup>th</sup> -8<sup>th</sup> November 2015.
- Hands-On Training Workshop on “GeneXpert (real time PCR system by Cepheid, USA)” held in Centre of Applied in Molecular Biology, University of the Punjab, Lahore, 28<sup>th</sup> October 2015
- International Symposium on Advances in Molecular Biology of Plants and Health Sciences hold in Centre of Excellence in Molecular Biology, University of the Punjab, Lahore, October 14-16, 2015.
- Training Workshop on “New Trends in Biomedical Research Grant writing” in Centre of Excellence in Molecular Biology (CEMB), University of the Punjab, Lahore-Pakistan on 22 December 2014
- Attended the International Workshop on “Biosafety” in University of Veterinary and Animal Sciences, Lahore-Pakistan dated 18-20 December 2014.
- Attended the Dengue Seminar organized by Dengue Research Group (DRG), University of the Punjab, Lahore-Pakistan in September 2014 on “Detection of Dengue Virus in Larvae and adult Aedes Mosquitoes in Punjab”
- Attended and presented the poster in “Lahore Biotech Cluster meeting”: August 18, 2014, Department of Biological Sciences in Forman Christian College University Lahore.
- Attended the Dengue Seminar organized by Dengue Research Group (DRG), University of the Punjab, Lahore-Pakistan in February 2014 on “Dengue Progress Report 2013-2014”
- DNA DAY AND NAYS EMERGING IDEASE CONFERENCE held in Centre Of Excellence In Molecular Biology (Cemb), University Of The Punjab, Lahore-Pakistan On April 25, 2013
- 2<sup>nd</sup> One Day Workshop On Young Researchers Skill Development And Naysemerging Ideas Conference held in Centre Of Excellence In Molecular Biology (Cemb), University Of The Punjab, Lahore-Pakistan On January 07, 2012
- 11<sup>th</sup> Shaukat Khanum Memorial Cancer Symposium. November 09-11, 2012
- Attended workshop on “Literature Review And Managing Reference Using Endnote Software” 31 March- 1 April, 2011
- 10<sup>th</sup> Shaukat Khanum Memorial Cancer Symposium. November 18-20, 2011
- Participated in 2<sup>nd</sup> one workshop on “Young Researcher Skill Development and Nays Emerging Idea” conference at CEMB university of Punjab 7-January 2012.

- One day workshop on young researcher skill development NUST Islamabad, 26 November 2011.
- Pakistan association of medical laboratory science 27-28 February 2011
- 9th Shaukat Khanum Memorial Cancer Symposium. 26-28 November 2010
- Workshop on Separation Science and omics University of Punjab, 6-10 April 2009.
- International symposium on Glycoprotein in Health and Disease University of Punjab 27-29 April 2008.
- Short course on ISO 17025-2005 IQTM Punjab University. June 21-22, 2008
- Short course on autocad IQTM Punjab University. June 29, 2011
- Short course on autocad IQTM Punjab university. June 12-13, 2008