

CURRICULUM VITAE

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WORK EXPERIENCE (RESEARCH):

Associate Professor (Nov 2021 to date)

- Centre of Excellence in Biotechnology Research, College of Applied Medical Sciences, King Saud University, Riyadh-11451, (KSA).

Assistant Professor (Sept 2010 to Nov 2021)

- Centre of Excellence in Biotechnology Research, College of Science, P.O.Box-2455, King Saud University, Riyadh-11451, (KSA).

EDUCATIONAL BACKGROUND:

Ph. D. Biotechnology (2008)

Department of Biotechnology, All India Institute of Medical Sciences, New Delhi, India.

Master of Sciences (M.Sc) in Biosciences (1997)

Jamia Millia Islamia, New Delhi, India

Bachelor of Sciences (B. Sc) in Biosciences (1995)

Jamia Millia Islamia, New Delhi, India

PROJECTS ACCOMPLISHED:

- NPST Project Titled- "**VIRAL AETIOLOGY OF ACUTE RESPIRATORY TRACT INFECTIONS AND MOLECULAR CHARACTERIZATION OF RESPIRATORY SYNCYTIAL VIRUS STRAINS OBTAINED FROM CHILDREN IN RIYADH, SAUDI ARABIA**".

Principal Investigator, Code Number: 12-MED2886-02, NPST-KACST-June 2022.

- NPST Project Titled- "**CHAPERONES AND PROTEASES IN THE QUALITY CONTROL OF PROTEIN MISFOLDING DISEASE**"

Co-Investigator, Code Number: 12-MED2928-02, NPST-KACST-June 2018.

- KACST Project Titled- "**OPTIMIZATION OF EXPRESSION OF CAMELUS DROMEDARIU GLUCOSE TRANSPORTER 4 (GLUT4) IN E. COLI AND ITS**

PURIFICATION.”

Principal Investigator, .Code Number: m-p 35-80, KACST-July 2017.

- **The Research Group Program (RGP-1439-74)** - King Saud University-Vice Rectorate for Graduate Studies and Scientific Research, Deanship of Scientific Research, Riyadh, Kingdom of Saudi Arabia- P.O:2454 Riyadh 11451

Principal Investigator: Code Number: RGP-1439-74 (Genes and Proteins), October 2018.

- **The Research Group Program (RGP-1439-74)** - King Saud University-Vice Rectorate for Graduate Studies and Scientific Research, Deanship of Scientific Research, Riyadh, Kingdom of Saudi Arabia- P.O:2454 Riyadh 11451

Principal Investigator: Code Number: RGP-1439-74 (Genes and Proteins), October 2020.

PROJECT ONGOING:

- NPST Project Titled- **“WHOLE GENOME SEQUENCING AND PHYLOGENETIC ANALYSIS OF HUMAN RESPIRATORY SYNCYTIAL VIRUS STRAINS FROM RIYADH, SAUDI ARABIA.”**

Principal Investigator, Code Number: 13-MED1947-02, NPST-KACST-Jan 2022.

PUBLICATIONS:

1. **Anwar Ahmed**, Alhetheel A, Parveen S, Almajhdi FN, AlkubaisiNA & Al-Saadi MM. Human RSVA-ON1, the only genotype present during 2019–2020 winter season in Riyadh, Saudi Arabia: a retrospective study. **Future Virol.19 Dec 2023. <https://doi.org/10.2217/fvl-2023-0173>**
2. A Islam, F Deeba, B Tarai, E Gupta, IH Naqvi, M Abdullah, R Dohare, **Ahmed A** ...Global and local evolutionary dynamics of Dengue virus serotypes 1, 3, and 4. **Epidemiology & Infection 151, 2023. E127.**
3. Dudin GA, Aziz IM, Alzayed RM, **Anwar Ahmed**, Hussain T, Somily AM, Alsaadi MM, Almajhdi FN. Genetic Diversity and Evolutionary Kinetics of Influenza A Virus H3N2 Subtypes Circulating in Riyadh, Saudi Arabia. **Vaccines (Basel). 2023 Mar 20;11(3):702.**
4. Shafat Z, **Anwar Ahmed**, Parvez MK, Parveen S. Intrinsic disorder in the open reading frame 2 of hepatitis E virus: a protein with multiple functions beyond viral capsid. **J Genet Eng Biotechnol. 2023 Mar 16;21(1):33.**
5. Alzayed RM, Aziz IM, Alsaleh AN, Dudin GA, **Anwar Ahmed**, Hussain T, Alshememry AK, Somily AM, Alsaadi MM, Almajhdi FN. ON-1 and BA-IX Are the Dominant Sub-Genotypes of Human Orthopneumovirus A&B in Riyadh, Saudi Arabia. **Genes (Basel). 2022 Dec 5;13(12):2288.**
6. Shafat Z, Ahmed MM, Almajhdi FN, Hussain T, Parveen S, **Anwar Ahmed**. Identification of the Key miRNAs and Genes Associated with the Regulation of Non-Small Cell Lung Cancer: A Network-Based Approach. **Genes (Basel). 2022 Jun 29;13(7):1174.**
7. Shafat Z, **Anwar Ahmed**, Parvez MK, Parveen S. Decoding the codon usage patterns in Y-domain region of hepatitis E viruses. **J Genet Eng Biotechnol. 2022 Apr 11;20(1):56.**

8. Shafat Z, **Anwar Ahmed**, Parvez MK, Parveen S. Analysis of codon usage patterns in open reading frame 4 of hepatitis E viruses. **Beni Suef Univ J Basic Appl Sci.** **2022;11(1):65.**
9. A Malik, JM Khan, M Hisamuddin, AS Alhomida, **Anwar Ahmed**, H Odeibat. Taxon-specific zeta-crystallin of camel eye lens: A comparative in silico studies. **Journal of King Saud University-Science.** **2022 June; 34 (4):101973**
10. **Anwar Ahmed**, AM Alsenaidy, KF Mobaireek, MM AlSaadi. Viral etiology of acute respiratory infections during 2014–2016 in Riyadh, Saudi Arabia. **Future Virology.** **2022 May 17 (5), 269-280**
11. IM Aziz, MA Farrag, R Bhat, **Anwar Ahmed**, NA Alkubaisi, RM Alzayed, et. al. Development and Validation of Rapid In-House Diagnostic ELISA Kits for Detection of Human Orthopneumovirus in Clinical Samples. **Diagnostics (Basel).** **2022 Apr 6;12(4):912.**
12. Z Shafat, **Anwar Ahmed**, MK Parvez, A Islam, S Parveen The dark proteome of rodent hepatitis E virus: Analysis of intrinsically disordered regions. **Archives of Hepatitis Research.** **2022 Feb 8 (1), 005-011**
13. Shafat Z, **Anwar Ahmed**, Parvez MK, Parveen S. Sequence to structural analysis of ORF5 protein in Norway rat Hepatitis E Virus. **Bioinformation.** **2022 Jan 31;18(1):19-25.**
14. Shafat Z, **Anwar Ahmed**, Parvez MK, Islam A, Parveen S. Intrinsically disordered regions in the rodent hepevirus proteome. **Bioinformation.** **2022 Feb 18(2), 111-118**
15. BK Boruah, T Ali, Z Shafat, **Anwar Ahmed**, MK Parvez. A study of the total graph in genetic code algebra. **Network Biology.** **2022 12 (1), 1-10**
16. Khan JM, Malik A, Ahmed MZ, **Anwar Ahmed**. SDS modulates amyloid fibril formation and conformational change in succinyl-ConA at low pH. **Spectrochim Acta A Mol Biomol Spectrosc.** **2022 Feb 15;267(Pt 1):120494.**
17. Hamza A, Samad A, Parray ZA, Ara S, **Anwar Ahmed**, Almajhdi FN, Hussain T, Islam A Parveen S. Mutation in the CX3C Motif of G Protein Disrupts its Interaction with Heparan Sulfate: A Calorimetric, Spectroscopic, and Molecular Docking Study. **Int. J. Mol. Sci.** **2022,23, 1950.**
18. Hamza A, Samad A, Imam MA, Faizan MI, **Anwar Ahmed**, Almajhdi FN, Hussain T, Islam A, Parveen S. Structural Characterization of Ectodomain G Protein of Respiratory Syncytial Virus and Its Interaction with Heparan Sulfate: Multi-Spectroscopic and In Silico Studies Elucidating Host-Pathogen Interactions. **Molecules.** **2021 Dec 6;26(23):7398.**
19. Nasreen K, Parray ZA, Shamsi A, Ahmad F, **Anwar Ahmed**, Malik A, Lakhrm NA, Hassan MI, Islam A. Crowding Milieu stabilizes apo-myoglobin against chemical-induced denaturation: Dominance of hardcore repulsions in the heme devoid protein. **Int J Biol Macromol.** **2021 Jun 30;181:552-560.**
20. Parray ZA, Ahmad F, Hassan MI, **Anwar Ahmed**, Almajhdi FN, Malik A, Hussain T, Islam A. Structural Refolding and Thermal Stability of Myoglobin in the Presence of Mixture of Crowders: Importance of Various Interactions for Protein Stabilization in Crowded Conditions. **Molecules.** **2021 May 10;26(9):2807.**
21. Hamza A, Shafat Z, Parray ZA, Hisamuddin M, Khan WH, **Anwar Ahmed**, Almajhdi FN, Farrag MA, Mohammed AA, Islam A, Parveen S. Structural Characterization and Binding Studies of the Ectodomain G Protein of Respiratory Syncytial Virus Reveal the Crucial Role of pH with Possible Implications in Host-Pathogen Interactions. **ACS Omega.** **2021 Apr 7;6(15):10403-10414.**

22. Alazoumi KKM, **Anwar Ahmed**, Alamery SF, Shamsi A, Ahmad B, Islam A, Farooqi H. Effect of Antioxidants on Heavy Metals Induced Conformational Alteration of Cytochrome C and Myoglobin. **Protein Pept Lett.** **2021;28(1):31-42.**
23. Tazeen A, Deeba F, Alam A, Ali R, Ishrat R, **Anwar Ahmed**, Ali S, Parveen S*. Virtual Screening of Potential Therapeutic Inhibitors against Spike, Helicase, and Polymerase of SARS-CoV-2 (COVID-19). **Coronaviruses**, **2021, Jan;1(2), 89-105.**
24. Hoque, Md Anamul ; Mahbub, Shamim ; (...); **Anwar Ahmed**, Mohammad Z. Influence of NaCl and temperature on the interaction between cephradine monohydrate and surfactants: Conductivity and UV-visible measurements. *Journal of Molecular Liquids*. April 2021 328(15)-115418
25. Shafat Z, **Anwar Ahmed**, Parvez MK, Parveen S. Role of "dual-personality" fragments in HEV adaptation-analysis of Y-domain region. **J Genet Eng Biotechnol.** **2021 Oct 12;19(1):154.**
26. Shafat Z, **Ahmed A**, Parvez MK, Parveen S. Sequence to structure analysis of the ORF4 protein from Hepatitis E virus. **Bioinformation.** **2021 Sep 30;17(9):818-828.**
27. Islam A, Abdullah M, Tazeen A, Naqvi IH, Kazim SN, **Anwar Ahmed**, Alamery SF, Malik A, Parveen S Circulation of dengue virus serotypes in hyperendemic region of New Delhi, India during 2011-2017. **J Infect Public Health.** **2020 Dec;13(12):1912-1919.**
28. Khan MR, Khan MS, **Anwar Ahmed**, Malik A, Qamar W. Optimization of expression and purification of mitochondrial HSP 40 (Tid1-L) chaperone: Role of mortalin and tid1 in the reactivation and amyloid inhibition of proteins. **Saudi Journal of Biological Science.** **2020 Nov;27(11):3099-3105**
29. Deeba F, Haider MSH, **Ahmed A**, Tazeen A, Faizan MI, Salam N, Hussain T, Alamery SF, Parveen S*. Global transmission and evolutionary dynamics of the Chikungunya virus. **Epidemiology and Infection** **2020 Feb 19;148.**
30. Shafat Z, Hamza A, Deeba F, Faizan MI, Khan N, Islam A, **Ahmed A**, Alamery SF, Parveen S Optimization of parameters for expression and purification of ectodomain G protein of respiratory syncytial virus. **Future Virology**, **15: 4(2020).**
31. Al-Hassinah S, Parveen S, Somily AM, AlSaadi MM, Alamery SF, Haq SH, **Ahmed A***. Evolutionary analysis of the ON1 genotype of subtype a respiratory syncytial virus in Riyadh during 2008–16. **Infection, Genetics and Evolution** **79, 104153 (2020).**
32. Nasreen K, Parray ZA, Ahamad S, Ahmad F, **Ahmed A**, Alamery SF, Hussain T, Hassan MI, and Islam A. Interactions under Crowding Milieu: Chemical-induced denaturation of myoglobin is determined by the extent of heme dissociation on interaction with crowders. **Biomolecules**, **2020 Mar 23;10(3).**
33. Islam A, **Ahmed A**, Naqvi IH, Parveen S, Emergence of deadly severe acute respiratory syndrome coronavirus-2 during 2019–2020. **VirusDis.** **8 April 2020.**
34. Khan J, **Ahmed A**, Alamery SF, Alghamdi O, Azmi S.et al., Perturbation of anionic surfactant induced amyloid fibrillation by chemical chaperone: A biophysical study. **Journal of Molecular Liquids**, **315 (2020) 113717**
35. Khan JM Malik A, Sen P, Ahmad A, Anwar A, Atiya A. Deciphering the role of premicellar and micellar concentrations of sodium dodecyl benzenesulfonate surfactant in insulin fibrillation at pH 2.0. **International Journal of Biological Macromolecules** **148 (2020) 880–886.**

36. Khan JM, Malik A, Ahmed A, Alghamdi OHA, Ahmed M. SDS induces cross beta-sheet amyloid aswell as alpha-helical structure in conconavalin A. **Journal of Molecular Liquids** **319** (2020) 114154.
37. Hussain T, Naushad SM, **Ahmed A**, Alamery S, Mohammed AA, Abdelkader MO, Alkhmr NAN. Association of vitamin D receptor Taql and Apal genetic polymorphisms with nephrolithiasis and end stage renal disease: a meta-analysis. **BMC Med Genet.** **2019 Dec 10;20(1):193.**
38. Khan JM, Malik A, **Ahmed A**, Rehman MT, AlAjmi MF, Khan RH, Fatima S, Salman Freeh Alamery, Abdullah EM. Effect of cetyltrimethylammonium bromide (CTAB) on the conformation of a hen egg white lysozyme: A spectroscopic and molecular docking study. **Spectrochimica Acta Part A: 219** (2019) 313–318
39. Naved Azum, **Ahmed A**, Malik Abdul Rub, Abdullah M. Asiri, Salman Freeh Alamery. Investigation of aggregation behavior of ibuprofen sodium drug under the influence of gelatin protein and salt. **Journal of Molecular Liquids** **290** (2019) 111187
40. Khan JM, **Ahmed A**, Salman Freeh Alamery, Mohammad Abul Farah, Tajamul Hussain, Mohmmad Imran Khan, Rizwan Hasan Khane, Ajamaluddin Malik, Sadaf Fatima, Priyankar Sen. Millimolar concentration of sodium dodecyl sulfate inhibit thermal aggregation in hen egg white lysozyme via increased α -helicity. **Colloids and Surfaces A** **572** (2019) 167–173
41. Parveen N, Islam A, Tazeen A, Hisamuddin M, Abdullah M, Naqvi IH, Faizan MI, Gulyani D, **Ahmed A**, Parveen S. Circulation of single serotype of Dengue Virus (DENV-3) in New Delhi, India during 2016: A change in the epidemiological trend. **J Infect Public Health.** Jan - Feb;12(1):49-56. (2019)
42. Khan JM, Malik A, Sen P, **Ahmed A**, Ahmed M, Alamery SF, Almaharfi HA, Choudhry H, Khan MI. Different conformational states of hen egg white lysozyme formed by exposure to the surfactant of sodium dodecyl benzenesulfonate. **Int J Biol Macromol.** **2019 Jan 22;128:54-60.**
43. Faizan MI, Naqvi AT, Hassan MI, Abdullah M, Tazeen A, Shafat Z, Malik H, Alam A, Ali S, Sher Ali, Farooqui A, Hamza A, Parveen N, Deebea F, **Ahmed A** and Parveen S* Structure Based Identification of Potential Inhibitors of NS3 Protein of Zika virus. **Letters in Drug Design & Discovery**, **2019, 16, 1 - 14 (14)**
44. **Anwar Ahmed**, Shama Parveen, Sarah M. Al-Hassinah, Salman F. Al-Amery. An overview of respiratory syncytial virus infections in Saudi Arabia. **J Infect Dev Ctries** **2018; 12(11):929-936**
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46. Haider MSH, Deebea F, Khan WH, Naqvi IH, Ali S, **Ahmed A**, Broor S, Alsenaidy HA, Alsenaidy AM, Parveen S. Global distribution of NA1 genotype of respiratory syncytial virus and its evolutionary dynamics assessed from the past 11 years. **Infect Genet Evol.** Jun;60:140-150 (2018).
47. Hisamuddin M, Tazeen A, Abdullah M, Islamuddin M, Parveen N, Islam A, Faizan MI, Hamza A, Naqvi IH, Verma HN, Malik A, **Ahmed A**, Parveen S. Co-circulation of Chikungunya and Dengue viruses in Dengue endemic region of New Delhi, India during 2016. **Epidemiol Infect.** **2018 Oct;146(13):1642-1653 (2018).**
48. Deebea F, Malik MZ, Naqvi IH, Haider MSH, Shafat Z, Sinha P, Ishrat R, **Ahmed A**, Parveen S. Potential entry inhibitors of the envelope protein (E2) of

- Chikungunya virus: in silico structural modeling, docking and molecular dynamic studies. **VirusDis. (January–March) 28 (1):39–49 (2017)**
49. Khan JM, Khan MS, Alsenaidy MA, **Ahmed A**, Sen P, Oves M, Al-Shabib NA and Khan RH. Sodium lauryl sarcosinate (sarkosyl) modulate amyloid fibril formation in hen egg white lysozyme (HEWL) at alkaline pH: a molecular insight study. **Journal of Biomolecular Structure and Dynamics. May 28:1-16 (2017)**
 50. Khan MS, **Ahmed A**, Tabrez S, Islam B, Rabbani N, Malik A, Ismael MA, Alsenaidy MA, Alsenaidy AM. Optimization of expression and purification of human mortalin (Hsp70): Folding/unfolding analysis. **Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 187, 98–103 (2017)**
 51. Alharbi M, Alsenaidy AM, Aldaihan, Aldaihan S, **Ahmed A**. Gene cloning and expression analysis of mitochondrial glutathione reductase from Arabian camel (*Camelus dromedarius*) liver in Escherichia coli. Source: **TURKISH JOURNAL OF VETERINARY & ANIMAL SCIENCES 41(5):656-666 (2017)**
 52. Molla MR, Rub MA, **Ahmed A**, Hoque MA. Interaction between tetradecyltrimethylammonium bromide and benzyldimethylhexadecylammonium chloride in aqueous/urea solution at various temperatures: An experimental and theoretical investigation. **Journal of Molecular Liquids 238 (2017) 62–70**
 53. Tanzeem A, Afreen N, Abdullah M, Deebe F, S. H. Haider SH, Kazim SN, Ali S, Naqvi IH, Broor S, **Ahmed A** and Parveen S. Occurrence of co-infection with dengue viruses during 2014 in New Delhi, India. **Epidemiol. Infect. 145, 67–77. (2017)**
 54. Tazeen A, Abdullah M, Hisamuddin M, Ali S, Naqvi IH, Verma HN, **Ahmed A**, Parveen S. Concurrent Infection with Plasmodium vivax and the Dengue and Chikungunya Viruses in a Paediatric Patient from New Delhi, India in 2016. **Intervirology.60(1-2):48-52 (2017)**
 55. **Anwar Ahmed**, Arshad M, Malik A, Parveen S, Alsenaidya MA. Camelus dromedarius glucose transporter 4: in silico analysis, cloning, expression, purification and characterisation in *E. coli*. **ARCHIVES OF PHYSIOLOGY AND BIOCHEMISTRY, Oct;123(4):254-264 (2017)**
 56. Khan JM, Khan MS, Qadeer A, Alsenaidy MA, **Ahmed A**, Al-Shabib NA, Khan RH. Cationic gemini surfactant (16-4-16) interact electrostatically with anionic plant lectin and facilitates amyloid fibril formation at neutral pH. **Colloids and Surfaces A: Physicochem. Eng. Aspects 522, 494–502 (2017)**
 57. Kumar N, Abdullah M, Faizan MI, Dohare R, **Ahmed A**, Parveen S*. Progression dynamics of Zika fever outbreak in El Salvador during 2015-16: A mathematical modeling approach. **Future Virology 12 (5): 271-281 (2017).**
 58. Faizan MI, Abdullah M, Ali S, Naqvi IH, **Ahmed A**, Parveen S. Zika virus induced microcephaly and its possible molecular mechanism. **Intervirology 59 (3) 152-158 (2017)**
 59. Hoque, MA, Alam, MM, Molla, MR, Shahed R, Malik AR, Mohammad AH, Mohammed AK, **Anwar A**. Effect of salts and temperature on the interaction of levofloxacin hemihydrate drug with cetyltrimethylammonium bromide: Conductometric and molecular dynamics investigations. **Journal of Molecular Liquids 244 (2017) 512–520**
 60. **Anwar Ahmed**, Haider SH, Parveen S, Arshad M, Alsenaidy HM, Baaboud AO, Mobaarek KF, AlSaadi MM, Alsenaidy AM, Sullender WM. Co-circulation of 72bp Duplication Group A and 60bp Duplication Group B Respiratory Syncytial Virus (RSV) strains in Riyadh, Saudi Arabia during 2014. **Plos One Nov 11;11(11) (2016).**

61. **Anwar Ahmed**, Malik A, Jagirdar H, Rabbani N, Khan MS, Al-Senaigy AM, Ismael MA. Copper-Induced Inactivation of Camel Liver Glutathione S-Transferase. **Biol Trace Elem Res. Jan;169 (1):69-76 (2016)**
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64. Islam A, Abdullah M, Tazeen A, Afreen N, Deebea F, Naqvi IH, Kazim SN, Broor S, **Ahmed A**, S Parveen. Detection of all the four Serotypes of Dengue virus in New Delhi, India during post monsoon season of 2015. **Indian Journal of Health Sciences and Care 3 (1) 24-29 (2016).**
65. Afreen N, Naqvi IH, Broor S, **Ahmed A**, Kazim SN, Dohare R, Kumar M, Parveen S. Evolutionary analysis of dengue serotype 2 viruses using phylogenetic and bayesian methods from New Delhi, India. **PloS Neglected Trop Dis. 10(3): e0004511 (2016) (IF 4.4).**
66. Deebea F, Islam A, Kazim SN, Naqvi IH, Broor S, **Ahmed A**, S Parveen. Chikungunya Virus: Recent Advances in Epidemiology, Host Pathogen Interaction & Vaccine Strategies. **FEMS: Pathogens and Disease Dec 10 (2015) (IF 2.5).**
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68. Malik A , Jagirdar H, Rabbani N, Khan MS, **Anwar Ahmed**, Al-Senaigy AM & Mohamed A. Ismael **2015** Optimization of storage and stability of camel liver glutathione S-transferase. **PREPARATIVE BIOCHEMISTRY AND BIOTECHNOLOGY, OCT 3;45(7):650-66.**
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71. **Anwar Ahmed**, Kavita Gaadhe, Guru Prasad Sharma *et al.* **2012.** Novel insights into the regulation of malarial calcium-dependent protein kinase 1. **The FASEB Journal, Aug;26(8):3212-21.**
72. Divya Thomas, **Anwar Ahmed**, Tim Wolfe Gilberger and Pushkar Sharma. **2012.** Regulation of Plasmodium falciparum Glideosome Associated Protein 45 (PfGAP45) Phosphorylation. **PLoS ONE, 7(4):e35855. Epub 2012 Apr 27.**
73. Bora H, Das MK, **Ahmed A**, Sharma YD. **2009.** Variations in the mitochondrial DNA markers in the Anopheles (Cellia) sundaicus population from the Andaman and Nicobar Islands, India. **Acta Trop. Jul 10. [Epub ahead of print] PMID: 19595665.**
74. Ranjan R., **Ahmed A.** Gourinath S and Sharma P. **2009.** Dissection of Mechanisms Involved in the Regulation of Plasmodium falciparum Calcium Dependent Protein Kinase 4 (PfCDPK4). **J Biol Chem. May 29;284(22): 15267-76.**

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76. Mehndiratta P L., Bhalla P, **Ahmed A**, Sharma Y D. **2009.** Molecular typing of methicillin-resistant *Staphylococcus aureus* (MRSA) strains by PCR-RFLP of spa gene: A reference laboratory perspective. **Indian J Med Microbiol. Apr-Jun;27(2):116-22.**
77. **Ahmed, A** and Sharma, Y. D. **2008.** Ribozyme cleavage of *Plasmodium falciparum* gyrase A gene transcript affects the parasite growth. **Parasitol Res. Sep;103(4):751-63.**
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80. **Ahmed, A.**, D. Bararia, S. Vinayak, M. Yameen, S. Biswas, V. Dev, A. Kumar, M. A. Ansari, and Y. D. Sharma. **2004.** *Plasmodium falciparum* isolates in India exhibit a progressive increase in mutations associated with sulfadoxine-pyrimethamine resistance. **Antimicrob. Agents Chemother. 48:879-889.**

ABSTRACT:

- **Ahmed, A.**, Bararia, D., Yameen, M., Biswas, S., Dev, V., Kumar, A., Ansari, M. A. and Sharma, Y. D., Prevalence of point mutations in *dhfr* and *dhps* genes of *Plasmodium falciparum* in Indian isolates. **Modern Trends in Malaria. Abstracts of an international symposium. New Delhi, India, 13-15 February 2003. Biosci Rep. 2003 Feb; 23(1):1-45.**

BOOK CHAPTER:

Anwar Ahmed, Fahad N. Almajhdi, Md Imam Faizan, Tanveer Ahmad, Shama Parveen. **COVID-19: Current Diagnostic Approaches** in a book entitled “**The COVID-19 Pandemic: Epidemiology, Molecular Biology and Therapy** (ISBN 978-981-14-8185-7) published by Bentham Science in 2021

Deeba F, Afreen N, Islam A, Naqvi IH, Broor S, **Ahmed A**, Parveen S. Contributed book chapter entitled “**Co-infection in Dengue and Chikungunya viruses**” in a book entitled “**Current Topics in Chikungunya**” (ISBN 978-953-51-4627-8) published by Intech Open Science in 2016

WORKSHOPS/TRAININGS/CONFERENCES:

- Workshop: Conducted. Title “**GENE CLONING IN BACTERIAL SYSTEM**” at Centre of Excellence in Biotechnology Research, College of Applied Medical Science, King Saud University, Riyadh on 20th and 21st November, 2024.
- Workshop: Conducted. Title “**PCR, Real Time PCR and Gel Electrophoresis**” at Centre of Excellence in Biotechnology Research, College of Applied Medical Science, King Saud University, Riyadh on 4th and 5th September, 2024.
- Workshop: Conducted. Title “**Diagnostic Techniques**” at Centre of Excellence in Biotechnology Research, College of Applied Medical Science, King Saud University, Riyadh on 13th December, 2023.
- Workshop: Conducted. Title “**PCR and Gel Electrophoresis**” at Centre of Excellence in Biotechnology Research, College of Applied Medical Science, King Saud University, Riyadh on 10th December, 2023
- Workshop: Speaker. Title-“**Human Coronaviruses-Current Diagnostic Tools, sequence and Phylogenetic analysis**” at Centre of Excellence in Biotechnology Research, College of Science, King Saud University, Riyadh on 7th November, 2022.
- Conducted Workshop on ‘**Gene Cloning, Expression and Purification of Recombinant Proteins from E. coli**’ at Centre of Excellence in Biotechnology Research, College of Science, King Saud University, Riyadh on 2nd March, 2021.
- Training course: Conducted one month comprehensive training course on “**Expression, Purification and Characterization of Proteins**”, organized by Protein Research Chair, King Saud University (July 17-Aug 07, 2016).
- Training course: Conducted one-month comprehensive training course on “**Expression, Purification and Characterization of Proteins**”, organized by Protein Research Chair, King Saud University (July 26-Aug 20, 2015).
- Training course: Conducted one-month advance training course on “**Protein Production and Characterization**”, organized by Protein Research Chair, King Saud University (June 08-July 03, 2014)
- Training course: Conducted one-month advance training course on “**Basic protein chemistry techniques**”, organized by Protein Research Chair, King Saud University (June 23-July 18, 2012).
- Participated in a conference “The Saudi International Biotechnology Conference 2012” organized by King Abdulaziz City for Science and Technology (Sept 18-19, 2012).
- Conducted workshop on **Basic protein chemistry techniques**, organized by Protein Research Chair, King Saud University (May 14-15, 2011).
- Conducted workshop on **Protein purification: Principles and Practices**, organized by Protein Research Chair, King Saud University (Feb 26- Mar 01, 2011).

GenBank SUBMISSIONS:

- Partial G gene sequences of human respiratory syncytial viruses (RSV) from Saudi Arabia in 2019-20 (accession numbers **KY711303, KY711309- KY711336** for RSV group A)
- Partial G gene sequences of human respiratory syncytial viruses (RSV) from Saudi Arabia in 2016 (accession numbers **KY711303, KY711309- KY711336** for RSV group A and **KY711304- KY711308** for RSV group B)

- Partial G gene sequences of human respiratory syncytial viruses (RSV) from Saudi Arabia in 2014 (accession numbers **KU726066-KU726088** for RSV group A and **KU726061-KU726065** for RSV group B)
- Partial *spa* gene sequences of Indian isolates (accession numbers **EF562604 to EF562613**).

OTHERS:

Fellowships:

- Junior Research Fellowship (April 2001 to March 2003) from Council of Scientific and Industrial Research, New Delhi, India.
- Senior Research Fellowship (April 2003 to March 2006) from Council of Scientific and Industrial Research, New Delhi, India.

National Level Tests:

- Qualified Joint CSIR-JRF and eligibility for Lectureship-NET held on Jun 2000 conducted by CSIR, New Delhi, India
- Qualified Graduate Aptitude Test in Engineering (GATE) in 1997 conducted by IIT, New Delhi, India

Postdoctoral Research (Sept 2007 to Aug 2010)

- Eukaryotic Gene Expression Lab-II, National Institute of Immunology, New Delhi, India
- Project: "Regulation of Calcium Dependent Kinases in *P. falciparum*".

Doctoral research: (April 2001 to July 2007)

- Department of Biotechnology, All India Institute of Medical Sciences, New Delhi, India
- Thesis title "Studies on the silencing of putative apicoplast targeted *gyrA* gene of human malaria parasite *Plasmodium falciparum*".

Junior Research Fellow (July 2000 to March 2001)

- Institute of Pathology, ICMR, Sufdarjung Hospital Campus, New Delhi, India
- Project title "Collection of well characterized *Chlamydia trachomatis* isolates and development of suitable diagnostic assays".

Senior Research Fellow (Jan 1999 to April 2000)

- Department of Biosciences, Jamia Millia Islamia, New Delhi, India
- Project title "Salt stress induced alterations in the activities of ribulose 1,5-biphosphate carboxylase/Oxygenase in *Brassica juncea*"
 - In-vitro growth of plant (*B. juncea*) in salt stress conditions by supplementing the culture medium with different combinations of growth regulators.
 - Purification of ribulose 1,5-biphosphate Carboxylase/Oxygenase from *B. juncea*.
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Achievements:

- Established infrastructure for the processing and detection of respiratory viruses by Real Time PCR in the lab
- Submitted 60 Respiratory Syncytial Virus (RSV) group A and group B partial G gene sequences from Saudi Arabia to GenBank (<https://www.ncbi.nlm.nih.gov/genbank>)
- First time reported the presence of two RSV variants from Riyadh, KSA.
- Established Molecular Biology lab with facilities for cloning, expression, purification of recombinant proteins
- Established Western blotting and 2D-PAGE system in lab
- Completed two NPST-KACST funded projects, ongoing is one NPST-KACST project.
- Completed one KACST funded projects
- Completed one DSR project, ongoing is another DSR project.
- Mentored master students towards accomplishment of their research projects.

**Anwar Ahmed
(November-2024)**