

Imran Shahid

Permanent Address:

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Present Address:

Department of Pharmacology
and Toxicology, College of
Pharmacy, Umm Al-Qura
University, Makkah,
Saudi Arabia
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00966582118538

Education and training:

- 1995-1997 Matriculation [Secondary School Certificate]
Government Model High School, Tehsil and District Toba Tek Singh,
Province Punjab, Pakistan.
86.47%, Grade A⁺.
- 1997-1999 Higher Secondary School Certificate [F.Sc. Pre Medical]
Government Municipal Degree College, Tehsil and District Toba Tek Singh,
Province Punjab, Pakistan.
71.72%, Grade A.
- 2000-2004 Bachelor of Pharmacy [B. Pharm]
The Islamia University of Bahawalpur, Bahawalpur, Pakistan.
66.89%, Gold Medalist [Distinction as the 1st position in the whole program].
- 2004-2006 Bachelor of Science [B.Sc.]
The Islamia University of Bahawalpur, Bahawalpur, Pakistan.
65%, Grade B.
- 2005 Registered Pharmacist to Punjab Pharmacy Council
Lahore, Punjab, Pakistan
Pharmacy License No: 003569-A/05
- 2006-2008 Master of Philosophy [M.Phil. Molecular Toxicology]
National Center of Excellence in Molecular Biology (NCEMB)
The University of the Punjab, Lahore, Pakistan.
76.81%, CGPA 3.3.
- 2009-2013 Doctor of Philosophy [Ph.D. Molecular Pharmacology]
National Center of Excellence in Molecular Biology (NCEMB)
The University of the Punjab, Lahore, Pakistan.

Professional Experience

- 2012-Present **Assistant Professor**, Department of Pharmacology and Toxicology, College of Pharmacy, Umm Al Qura University, Al Abidiyah, P.O. Box 13578, Makkah, Postal Code 21955, Saudi Arabia.
- Teaching Pharmacogenomics, Pharmacology and Toxicology.

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2016

- Supervising bachelor student research program.
 - Acting personal in charge for one research project and Co-PI for another approved by the AAAS, USA and funded by King Abdullah City for Science and Technology (KACST), Riyadh, Saudi Arabia.
- 2009-2011 **Lecturer in Pharmacology**, Fatima Memorial College of Medicine and Dentistry, Jail Road, Shadman, Lahore, Pakistan, 54000.
- Teaching to the medical students of the college (MBBS & BDS)
 - Practical work related to the medical student's curriculum.
 - Conducting research work for final year medical students.
 - Preparation of tutorial and curriculum for the college students.
 - Developing SOPs for lab and lab equipment.
- 2005-2008 **Retail Pharmacist**, Guardian Pharmacy, Lahore, Pakistan
- Patient's prescription handling, counseling of patients and customers.
 - Quality control of narcotics and vaccination record.
 - Extemporaneous preparations of liquid, cream, and ointment dosage forms.
- 2005-2006 **Senior Production Pharmacist**, Star Laboratories, Lahore, Pakistan
- Supervision of dispensing, Solid (Tablets & Capsules), Liquid (Syrups & Suspensions) and semisolid (Creams & Ointments) Manufacturing Areas.
 - Batch manufacturing of liquid dosage forms.
 - Worked for *GMP Certification* (Good Manufacturing Practices) in collaboration with German Experts Team from *Heinz Hupt Company, Germany*.

Research Grants

Research grants are approved by the American Association for the Advancement of Science (AAAS) USA and funded by King Abdullah City for Science and Technology (KACST), Riyadh, Saudi Arabia.

Active:

1. **13-MED-782, NSTIP, KACST.** Treatment of breast cancer and/or colon cancer using novel compounds that target multi-tyrosine kinase pathways.
2. **13-MED-944, NSTIP, KACST.** Comparative study to evaluate the effects of the structural genes of hepatitis C virus 4a and 1a genotype in HCV pathogenesis in Saudi Population.

Publications

- Waleed Hassan AlMalki, El-Shaimaa A.Arafa, Amal Y. Abdallah, Amal M. Mahfoz, Afaf O. Osman, Hekma A. Abd El-Latif, **Imran Shahid**: **Zinc Chloride protects against streptozotocin-induced diabetic nephropathy in rats.** *Pharmacy & Pharmacology*, Vol.7 No.8, Pub. Date: August 29, 2016.
- Ashraf Nabil Abdalla, Waleed Hassan AlMalki, Mohammed Hassan Moktar, Firoz Anwar, **Imran Shahid**, Salah Ali Menshawi, Tagreed Sadeek AlSulimani: **Ameliorative influence of dietary dates on doxorubicin-induced cardiac toxicity.** *Pharmacy & Pharmacology*, Vol.7 No.8, Pub. Date: August 30, 2016.

- **Imran Shahid**, Waleed Hassan AlMalki, Shaia Saleh R. Almalki, Ismail Muhammad AlTurkestany, Hassan Ali AlGhamdi, Saleh Ali AlMenshaw: **Inhibition of Hepatitis C Virus Genotype 1a Non-Structural Proteins by Small Interference RNA in Human Hepatoma Cell Lines**. *Pharmacology & Pharmacy*, Vol.6 No.11, Pub. Date: November 24, 2015.
- **Shahid I**, AlMalki WH, Hafeez MH, Hassan S: **Hepatitis C virus infection treatment: An era of game changer direct-acting antivirals and novel treatment strategies**. *Crit Rev Microbiol*. 2014 Nov 6:1-13.
- Abdella Emam Abdella Baragob, Waleed Hassan AlMalki, **Imran Shahid**, Ragia Mahmood Hegazy, Khojali Salwa Muhammed, Samia Abdella: **Determination of the Potency of Extracted, Purified and Formulated Insulin from the Pancreatic Organs of the Sudanese Beef Cattle**. *Pharmacology & Pharmacy*, Vol.4 No.6, Pub. Date: September 3, 2013.
- Abdella Imam Abdella Baragob, Waleed Hassan AlMalki, **Imran Shahid**, Hanouf Saeed Bafhaid, Fatimah Abdullah Bakhdhar, Salwa Muhamed Khojali, Samia Abdella: **Determination of the Stability Studies of the Sudanese Camel Insulin**. *Pharmacology & Pharmacy*, Vol.4 No.7, Pub. Date: October 25, 2013.
- Abdella Emam Abdella Baragob, Waleed Hassan AlMalki, **Imran Shahid**, Fatimah Abdullah Bakhdhar, Hanouf Saeed Bafhaid, Omar Muhammad Izz Eldeen: **The hypoglycemic effect of the aqueous extract of the fruits of *Balanites aegypticea* in Alloxan-induced diabetic rats**. *Pharmacognosy Research*, Year 2014, Volume 6, Issue 1 [p. 1-5].
- Muhammad Ovais Omer, Waleed Hassan AlMalki, **Imran Shahid**, Shahzada Khuram, Imran Altaf, Saeed Imran: **Comparative study to evaluate the anti-viral efficacy of *Glycyrrhiza glabra* extract and ribavirin against the Newcastle disease virus**. *Pharmacognosy Research*, Year 2014, Volume 6, Issue 1 [p. 6-11].
- Waleed Hassan AlMalki, **Imran Shahid**, Abeer Yousaf Mehdi, Muhammad Hassan Hafeez: **Assessment methods for angiogenesis and current approaches for its quantification**. *Indian Journal of Pharmacology*, Year 2014, Volume 46, Issue 3 [p. 251-256].
- **Shahid I**, Ahmad W, Ijaz B, Javed FT, Gull S, Kausar H, Sarwar MT, Asad S, Sumrin A, Khaliq S, Jahan S, Pervaiz A, Hassan S: **Stable Huh-7 cell line development expressing HCV non-structural proteins of genotype 1a**. (*J Virol Met*. 2013 Jan 4;11:4)
- **Shahid I**, Ahmad W, Ijaz B, Javed FT, Gull S, Kausar H, Sarwar MT, Asad S, Sumrin A, Khaliq S, Jahan S, Pervaiz A, Hassan S: **Development of persistent HCV genotype 3a infection cell culture model in huh-7 cell**. *Virol J*. 2012 Jan 10; 9:11.
- Ansar M, Ashfaq UA, **Shahid I**, Sarwar MT, Javed T, Rehman S, Hassan S, Riazuddin S: **Inhibition of full length hepatitis C virus particles of 1a genotype through small interference RNA**. *Virol J* 2011, 8:203.
- Ahmad W, Ijaz B, Javed FT, Jahan S, **Shahid I**, Khan FM, Hassan S: **HCV genotype distribution and possible transmission risks in Lahore, Pakistan**. (2010) *World J Gastroenterol*, 16(34):4321-4328.

- Ahmad W, Ijaz B, Javed FT, Gull S, Kausar H, Sarwar MT, Asad S, **Shahid I**, Sumrin A, Khaliq S, Jahan S, Pervaiz A, Hassan S: **A comparison of four fibrosis indexes in chronic HCV: development of new fibrosis-cirrhosis index (FCI)**. *BMC Gastroenterol* 2011, **11**:44.
- Ijaz B, Ahmad W, Javed FT, Gull S, Sarwar MT, Kausar H, Asad S, Jahan S, Khaliq S, **Shahid I**, Sumrin A, Hassan S: **Association of laboratory parameters with viral factors in patients with hepatitis C**. *Virologia* 2011, **8**(1):361.
- Sarwar MT, Kausar H, Ijaz B, Ahmad W, Ansar M, Sumrin A, Ashfaq UA, Asad S, Gull S, **Shahid I**, Hassan S: **NS4A protein as a marker of HCV history suggests that different HCV genotypes originally evolved from genotype 1b**. *Virologia* 2011, **8**:317.
- Ahmad W, Ijaz B, Javed FT, Kausar H, Sarwar MT, Gull S, Asad S, **Shahid I**, Hassan S: **HCV genotype-specific correlation with serum markers: Higher predictability for genotype 4a**. *Virologia* 2011, **8**:293.
- Ahmad W, Ijaz B, Gull S, Asad S, Khaliq S, Jahan S, Sarwar MT, Kausar H, Sumrin A, **Shahid I**, Hassan S: **A brief review on molecular, genetic and imaging techniques for HCV fibrosis evaluation**. *Virologia* 2011, **8**(1):53.
- Ahmad W, Shabbiri K, Ijaz B, Asad S, Sarwar MT, Gull S, Kausar H, Fouzia K, **Shahid I**, Hassan S: **Claudin-1 required for HCV virus entry has high potential for phosphorylation and O-glycosylation**. *Virologia* 2011, **8**:229.
- Ahmad W, Shabbiri K, Ijaz B, Asad S, Nazar N, Nazar S, Fouzia K, Kausar H, Gull S, Sarwar MT, **Shahid I**, Hassan S: **Serine 204 phosphorylation and O-beta-GlcNAc interplay of IGFBP-6 as therapeutic indicator to regulate IGF-II functions in viral mediated hepatocellular carcinoma**. *Virologia* 2011, **8**:208.
- Sumrin A, Ahmad W, Ijaz B, Sarwar MT, Gull S, Kausar H, **Shahid I**, Jahan S, Asad S, Hussain, M and Riazuddin, S: **Purification and medium optimization of α -amylase from *Bacillus subtilis* 168**. (2011) *African Journal of Biotechnology* Vol. 10(11), pp. 2119-2129.

Book Chapters

- **Imran Shahid**, Waleed Hassan AlMalki, Mohammed W. AlRabia, Muhammad H. Hafeez, and Muhammad Ahmed: **Hepatitis C virus infection treatment: Recent advances and new paradigms in treatment strategies**. Advances in treatment of hepatitis C and B. InTech Publisher (2016) [Article in typeset].
- **Imran Shahid**, Waleed Hassan AlMalki, Mohammed W. AlRabia, Muhammad H. Hafeez, Muhammad Ahmed, Mohammad Tarique Imam, Khalid Saif Ullah: **Recent advances in angiogenesis assessment methods and their clinical applications**. InTech Publisher (2016) [Manuscript in Preparation].

Sequences published in Genbank

Hepatitis C virus isolate PK/FG1 non-structural protein NS2 gene, partial cds.

- ACCESSION No. HM135516

Sarwar, M.T., Sumrin, A., Kausar, H., Ansar, M., Ashfaq, U.A., Ahmad, W., Ijaz, B., **Shahid, I.**, Hussain, M., Asad, S. and Hassan, S.

Hepatitis C virus isolate PK/FG2 non-structural protein NS4a gene, partial cds.

- ACCESSION No. HM135517

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Sarwar,M.T., Sumrin,A., Kausar,H., Ansar,M., Ashfaq,U.A., Ahmad,W.,Ijaz,B., **Shahid,I.**, Hussain,M., Asad,S. and Hassan,S.

Hepatitis C virus isolate PK/FG3 non-structural protein NS4a gene, partial cds.

- ACCESSION No. HM135518

Sarwar,M.T., Sumrin,A., Kausar,H., Ansar,M., Ashfaq,U.A., Ahmad,W.,Ijaz,B., **Shahid,I.**, Hussain,M., Asad,S. and Hassan,S.

Hepatitis C virus isolate PK/FG4 non-structural protein NS4b gene, partial cds.

- ACCESSION No. HM135519

Sarwar,M.T., Sumrin,A., Kausar,H., Ansar,M., Ashfaq,U.A., Ahmad,W.,Ijaz,B., **Shahid,I.**, Hussain,M., Asad,S. and Hassan,S.

Hepatitis C virus isolate PK/FG5 non-structural protein NS5b gene, partial cds.

- ACCESSION No. HM135520

Sarwar,M.T., Sumrin,A., Kausar,H., Ansar,M., Ashfaq,U.A., Ahmad,W.,Ijaz,B., **Shahid,I.**, Hussain,M., Asad,S. and Hassan,S.

Invited Lectures/Oral Presentations (As community service)

1. **Shahid, I.** Toxicology lecture series presented to Pharm-D students at Poison Control & Forensic Chemistry Center Jeddah, General Directorate of Health Affairs of Jeddah Region, Ministry of health, Kingdom of Saudi Arabia. 8-9th August 2016.
2. **Shahid, I.** “Organophosphorus Poisoning and its clinical impact on human and environment”, presented a seminar to Poison Control & Forensic Chemistry Center Jeddah, General Directorate of Health Affairs of Jeddah Region, Ministry of health, Kingdom of Saudi Arabia. 9th February 2016.
3. **Shahid, I.** Molecular Toxicology and Molecular Biology lecture series presented to MBBS students at Poison Control & Forensic Chemistry Center Jeddah, General Directorate of Health Affairs of Jeddah Region, Ministry of health, Kingdom of Saudi Arabia. 1-20th February 2016.
4. **Shahid, I.** A lecture series on the safe use of medications, drug pharmacokinetics and pharmacodynamics presented to MBBS students at Poison Control & Forensic Chemistry Center Jeddah, General Directorate of Health Affairs of Jeddah Region, Ministry of health, Kingdom of Saudi Arabia. 1-20th February 2016.
5. **Shahid, I.** A training course consisting of a series of lecture on drug-drug interactions, infection control, and antibiotic use, organized for the hospital pharmacist, Paramedical staff and general physician at Al Aziziah Maternity & Children Hospital, Jeddah, Ministry of health, Kingdom of Saudi Arabia. 1st September-28th February 2013.

Student research projects:

1. Activity of antibiotics used for respiratory and urinary tract infections in the King Faisal hospital, Makkah. Conducted in 2013
2. Determination of analgesic potential of an ethanolic extract of *Brassica campestris* leaves in mice. Conducted in 2015

Seminars/Training/Workshops

1. **National Bio Forum 2008:** Organized by National Centre of Excellence in Molecular Biology, (NCEMB), University of the Punjab, Lahore, Pakistan. 25th- 29th September

- 2008.
2. **Symposium on “Future Trends of molecular biological research in agriculture and health”**. Organized by National Centre of Excellence in Molecular Biology, (NCEMB), University of the Punjab, Lahore, Pakistan. 25th-28th March 2009.
 3. **1st International Scientific Meeting of Faculty of Pharmacy entitled, “Emerging Molecular Targets in Cancer Therapy and Drug Development” (From Research laboratories to Pharmaceutical Industries)**, held in Makkah, Saudi Arabia. 16th- 18th March 2013.
 4. **A scientific seminar on, “Biostatistics and using SPSS program”** held in King Abdul Aziz Historical Hall, Umm AlQura University, Makkah, Saudi Arabia. 17th February 2014.
 5. **A scientific seminar on, “Credible and Contributory Research”** held in King Abdul Aziz Historical Hall, Umm AlQura University, Makkah, Saudi Arabia. 4th March 2014.
 6. **2nd Scientific Meeting of Faculty of Pharmacy**, held in Makkah, Saudi Arabia. 3rd April 2014.
 7. **A seminar and practical workshop on “Critical Thinking and its implementation in academics and research”**, held in Umm AlQura University, Makkah, Saudi Arabia. 9th March 2015.
 8. **A seminar on “problem-based learning”**, held in Umm AlQura University, Makkah, Saudi Arabia. 11th March 2015.
 9. **A practical workshop on “Bio Safety implementation in clinical laboratories”**, held in Umm AlQura University, Makkah, Saudi Arabia. 11th January 2016.

Honors/Awards

1. Throughout merit scholarship in secondary and higher secondary school education.
2. 2000 -2004: Merit Scholarship in B-Pharm, the Islamia University of Bahawalpur, Bahawalpur, Pakistan.
3. 2006 -2011: Higher Education Commission (HEC) Pakistan Indigenous M.Phil/Ph.D Scholarship for M-Phil & Ph.D studies.

Research Interests

1. Mapping host-virus networks in HCV disease progression: Target identification for intervention.
2. Virus-host system networks mapping in HCV disease.
3. HCV replication and immune responses in HIV coinfection.
4. Viral host interactions in HCV.
5. Natural phenotypic diversity of HCV NS3/4a protease.
6. Anti-HCV drug screening assays

Technical Skills

Molecular Biology Polymerase chain reaction (PCR, RT-and Real-Time), DNA sequencing and computer analysis, DNA restriction and ligase reaction, gene cloning of large fragments (1-6 kb), bacterial transformation, plasmid DNA isolation, generation and analysis of recombinant vectors (both mammalian and bacterial expression vectors), polyacrylamide and agarose

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| | gel electrophoresis, Viral RNA extraction from HCV patient's blood, serum and liver biopsy samples, cDNA synthesis, siRNA construction and synthesis. |
| Molecular Virology | Hepatitis C virus patient blood, serum and liver biopsy sample handling, HCV and HBV genotype analysis, HCV qualitative and quantitative analysis by nested PCR and Real-Time PCR. |
| Cell Biology | Tissue culture maintenance, transient and stable transfection of mammalian cells (HeLa, CHO, Huh 7, HepG2) with viral plasmids, MTT cell proliferation assay, Trypan Blue Assay, stable cell line generation, Viral RNA and protein extraction from cells for quantitative mRNA and protein analysis. Anti-HCV drug screening and toxicological analysis in cell lines. |
| Biochemistry | Western blotting, ELISA, protein purification and ECL detection system, RFLP. |
| Microbiology | Disinfections and sterilization, lab safety, specimen collection and processing, smear examination, cultures and isolation of microbes, biochemical examination. |
| Computer Skills | MS Word, MS Excel, MS PowerPoint, and other window packages, Internet applications and biological and genome analysis software (primer3, BLAST, DNA STAR, MEGA 3, BIOEDIT, USCS, human genome browser, siRNA designing tool). |
| Linguistic Skills | Being an employee of an internationally accredited university in the Kingdom of Saudi Arabia, it is very common to talk the students, foreign teachers, delegations and at the same time, be in personal contact with the locals. All these opportunities have refined my English language reading, writing and speaking skills. |
| Co & extra Curricular Activities | Apart from my academics, I take an active part in extracurricular activities to enjoy the very colors of my life. I take an interest in the following activities: <ul style="list-style-type: none">• Internet Browsing• Reading Scientific Journals, Books• Watching football & cricket matches |

References

Available on request.