**DR. JAVID IQBAL DASTI**

Ph.D., Post Doc (Goettingen), Post Doc (Freiburg), Germany

**Associate Professor (Tenured)**

**HEC Approved Research Supervisor**

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**Qualification**

Ph.D. (Mol. Microbiology) University of Goettingen, Germany

**Post PhD Experience/Research & Teaching**

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| **Institution**  | **Position Held**  | **Period**  |
| **From**  |  **To**  |
| Dept. of Microbiology, Quaid-i-Azam University, Islamabad | Associate Professor, TTS | 17 Dec 2018 to June 16 2022 3 years, 6 months |
| Dept. of Microbiology, Quaid-i-Azam University, Islamabad | Assistant Professor, TTS | Sep. 03, 2012 to 17 Dec, 2018  6 years, 3 months |
| Dept. of Microbiology, Quaid-i-Azam University, Islamabad | Assistant Professor, IPFP | Aug 01, 2011 to Aug 31, 2012 1 year  |
| Institute of Medical Microbiology, University of Goettingen, Germany | DFG funded Post-Doctoral fellow | Jan. 01, 2010 toJan 03, 2011 1 year |
| Centre for Chronic Immunodeficiency, University of Freiburg, Germany | NIH funded Post-Doctoral Fellow | 01-01-2009 to 31-10-2009 10 months |
| Institute of Medical Microbiology, University of Goettingen, Germany | UMG funded Post-Doctoral Fellow | 01-08-2007 to 31-07-2008 1 year |

**Exposure to techniques**

* Construction of Tn5 Transposons and transposomes, transposition of bacterial genomes, RNA isolation, Northern blotting, in situ hybridization, Biosynthetic Labelling, Immuncyto & histochemistry, Laser scan microscopy, Electrophysiological characterization of sodium-dicarboxylate co-transporters expressed in Xenopus laevis oocytes, In situ hybridisation to visualise pancreas and liver development in Xenopus embryos, The use of a lasercapture microscope, High resolution digital microscopy and multi-fluorescence imaging (cell culture and cytopsin), Florescence-activated cell sorting.Screening of mutants by using high through-put screening methods. Screening of bacterial mutants by using *in vitro* cell culture models and variety of physiological conditions. To design bacterial knockout and gene complementation strategies.

**Core skills**

* To design and implement bacterial knockout and gene complementation strategies. To design strategies and assays for phenotypic screening and functional characterization of bacterial mutants. Epidemiological characterization and virulence profiling of bacterial pathogens. Host pathogen interaction of bacterial and viral infections.

### Scientific Projects Completed

* Virulence profiling and [whole genome sequencing of a (NDM-1) carbapenemase-producing multidrug-resistant, hypervirulent Klebsiella pneumoniae ST11](https://scholar.google.com.pk/citations?view_op=view_citation&hl=en&user=D0yJ51gAAAAJ&cstart=20&pagesize=80&citation_for_view=D0yJ51gAAAAJ:eGYfIraVYiQC) (Funded Commonwealth split site grant, University of Reading, United Kingdom). Completed year 2021
* Whole genome sequencing and ST-Typing of multi-drug resistant Uropathogenic *E. coli* strains (Funded Commonwealth split site grant, University of Reading, United Kingdom). Completed year 2020.
* Virulence Profiling and molecular epidemiology of Uropathogenic *E. coli* (Funded by HEC-IRSIP and [Center for Molecular and Clinical Epidemiology of Infectious Diseases](https://sites.google.com/a/umich.edu/mac-epid/home) [University of Michigan](https://en.wikipedia.org/wiki/University_of_Michigan), USA). Completed year 2019.
* Deciphering Molecular Mechanisms of virulence of Campylobacter infection, University of Göttingen, Germany (Funded by DFG). Completed in year 2011
* Establishment of *in vitro* model airways to investigate the role of Toll-like receptors in mucociliary clearance and pneumococcal infection, University of Freiburg, Germany (Funded by DFG).
* To investigate Interplay of TLR2 and lipoproteins in group B streptococcal sepsis, University of Freiburg, Germany (Funded by NIH, USA in collaboration with Pasteur Institute, Paris, France
* Identification and characterization of *Campylobacter jejuni* factors relevant for the infection process, University of Göttingen, Germany (Funded by DFG, via GRK335).

**Editorial experiences**

* Journal of Medical Microbiology
* Journal of Microbial Drug Resistance
* Journal of Infection and Immunity
* Journal of Virology
* Journal of coastal life medicine

**Awards**

* Year 2003: Three year PhD Scholarship award by German Research Foundation, Germany.
* Year 2007: Post-Doc Fellowship award by Washington-State University, USA (Not-availed).
* Year 2007: One-year Post-Doc Fellowship Award by University of Goettingen, Germany.
* Year 2009: Two-year Post-Doc Fellowship award by NIH USA in University of Freiburg.
* Year 2010: Three-year Post-Doc Fellowship award by German Research Foundation, Germany

**Participated in international scientific conferences**

* International Conference on Medical Biological and Pharmaceutical Sciences (ICMBPS), Berlin, Germany, November, 29th, 2015 (**verbal presentations).**
* 30th August to 4th September 2014, Session: CSI-02\_Inflammation & disease **(Poster),** FEBS EMBO 2014 Conference, Paris, France
* 10-13th May 2014, New Challenges and Frontiers in infectious diseases, Islamabad, Pakistan**(Posters & verbal presentations)**
* February 22-23, 2013 10th Annual Conference of Infectious Diseases, Pakistan.
* March 26- 30, 2012, exploring the hidden potential of Microorganisms, German Academic Exchange Service (DAAD), and Pakistan.
* 2010, WHO Symposium Hannover, Germany
* 25th Symposium in Jena, 2-3, Juni 2008, Campylobacter infection, Germany (verbal presenataion)
* Annual scientific meeting Indonesian association of clinical microbiology 17-27 March 2008, Indonesia.
* October, 30th - November 4th 2007, Annual Meeting of German Society for Hygiene and Microbiology and Federation of European Microbiological Societies, Germany.
* September, 2-5. 2007, 14th International workshop on Campylobacter, Helicobacter and Related Organisms, Zoonosis and public health, Rotterdam, the Netherlands.
* October 4th 2006, Annual Meeting of German Society for Hygiene and Microbiology, Germany.
* September, 25-28, 2005. Annual Meeting of German Society for Hygiene and Microbiology and the Association for General and Applied Microbiology (VAAM), Germany. Horizons in Molecular Biology. Decoding Nature: Hierarchy of Interactions. March 17-19, 2005. Goettingen, Germany.
* Candida and Candidiasis today: Where are we, and where to go? (IFOCAN) 2005, Germany.

**Coordinatedconference and symposium**

 Nov 2-5-2013, DAAD-HEC International Summer School “Food Security in times of climate changes” COMSATS Islamabad, Pakistan

Oct. 08-09, 2013, Symposium on: Donate to the Deserving: from diagnosis to blood transfusion in thalassemia patients

**Research supervision**

* PhD thesis supervised 05
* M. Phil thesis supervised 60
* M. Phil students under supervision 07
* PhD students under supervision 03

**Teaching Experience**

Level: M. Sc, M. Phil, Ph. D

Courses taught (2011- 2015)

* Medical Microbiology 3 credit hr
* Advances in Medical Microbiology 3 credit hr
* Advances in Microbial Genetics 3 credit hr
* LabIII 3 credit hr

**Collaborated Work**

* Pakistan Council of Scientific and Industrial Research
* Pakistan Agricultural Research council
* Veterinary Research Institute
* National Institute of Health
* Hayatabad Medical Complex
* Pakistan Institute of Medical Sciences
* Islamabad Diagnostic Centre

**Selected publications**

**Work published in impact factor, W category journals listed in ISI Web of Knowledge**

1. IMTIAZ, W., SYED, Z., RAFAQUE, Z., ANDREWS, S. C. & DASTI, J. I. 2021. Analysis of Antibiotic Resistance and Virulence Traits (Genetic and Phenotypic) in Klebsiella pneumoniae Clinical Isolates from Pakistan: Identification of Significant Levels of Carbapenem and Colistin *Resistance. Infect Drug Resist*, 14, 227. **JCRIF 4.323**

2. IMTIAZ, W., DASTI, J. I. & ANDREWS, S. C. 2021. Draft genome sequence of a carbapenemase-producing (NDM-1) and multidrug-resistant, hypervirulent Klebsiella pneumoniae ST11 isolate from Pakistan, with a non-hypermucoviscous phenotype associated with rmpA2 mutation. *J Glob Antimicrob Resist*, 25, 359-362. **JCRIF 3.611**

3. RAFAQUE, Z., ABID, N., LIAQAT, N., AFRIDI, P., SIDDIQUE, S., MASOOD, S., KANWAL, S. & DASTI, J. I. 2020. In-vitro Investigation of Antibiotics Efficacy Against Uropathogenic Escherichia coli Biofilms and Antibiotic Induced Biofilm Formation at Sub-Minimum Inhibitory Concentration of Ciprofloxacin. *Infect Drug Resist*, 13, 2801. **JCRIF 4.332**

4. JALIL, I., ARSHAD, M., KHAN, S. & DASTI, J. I. 2020. PNPLA3 and TM6SF2, but Not MBOAT7, Are Associated with Steatosis and HBV Viral Persistence in Pakistani Population. *Jundishapur J Microbiol*, 13. **JCRIF 1.499**

5. JALIL, I., ARSHAD, M., KHAN, S. & DASTI, J. I. 2020. The STAT4 and not the IFNL3 variant is associated with hepatitis B virus clearance in a population from the Khyber Pakhtunkhwa region of Pakistan. *Arab J Gastroenterol*, 21, 91-94. **JCRIF 1.541**

6. ALI, I., RAFAQUE, Z., AHMED, I., TARIQ, F., GRAHAM, S. E., SALZMAN, E., FOXMAN, B. & DASTI, J. I. 2019. Phylogeny, sequence-typing and virulence profile of uropathogenic Escherichia coli (UPEC) strains from Pakistan. *BMC Infect Dis*, 19, 1-9. **JCRIF 3.401**

7. ARSHAD, M., JALIL, I., RAZA, A., MALIK, S. & DASTI, J. I. 2019. Novel polymorphism in the promoter region of HLA-DQB1 is a predictor of anti-HCV therapy response. *Jundishapur J Microbiol*, 12. **JCRIF 1.499**

8. RAFAQUE, Z., DASTI, J. I. & ANDREWS, S. C. 2018. Draft genome sequence of a multidrug-resistant CTX-M-15 β-lactamase-producing uropathogenic Escherichia coli isolate (ST131-O25b-H30) from Pakistan exhibiting high potential virulence. *J Glob Antimicrob Resist*, 15, 164-165. **JCRIF 3.611**

9. ALI, I. & DASTI, J. I. 2018. Chikungunya virus; an emerging arbovirus in Pakistan. *J Pak Med Assoc*, 68, 252-7. **JCRIF 0.929**

10. KAUSAR, A., ANWAR, S., SIDDIQUE, N., AHMED, S. & DASTI, J. I. 2018. Prevalence of avian influenza H9N2 virus among wild and domesticated bird species across Pakistan. *Pak J Zool,* 50, 1347-1354. **JCRIF 0.768**

11. NAEEM, A. H., MUMTAZ, S., HALEEM, A., QAZI, M. A., MALIK, Z. A., DASTI, J. I. & AHMED, S. 2017. Isolation and molecular characterization of biosurfactant-producing bacterial diversity of Fimkassar oil field, Pakistan. *Arab J Sci Eng*, 42, 2349-2359. **JCRIF 1.71**

12. ALI, I., RAFAQUE, Z., AHMED, S., MALIK, S. & DASTI, J. I. 2016. Prevalence of multi-drug resistant uropathogenic Escherichia coli in Potohar region of Pakistan. *Asian Pac J Trop Biomed*, 6, 60-66. **JCRIF 1.545**

13. DASTI, J. I. 2016. Zika virus infections: an overview of current scenario. *Asian Pac J Trop Med*, 9, 621-625. **JCRIF 2.285**

14. JALIL, I., ARSHAD, M., RAFAQUE, Z., RAZIQ, F., WAZIR, R., MALIK, S. & DASTI, J. I. 2016. Seroprevalence of HDV among non-hospitalized HBsAg positive patients from KPK-region of Pakistan. *Asian Pac J Trop Biomed*, 6, 609-613. **JCRIF 1.545**

15. ULLAH, R. W., ZAHUR, A. B., LATIF, A., DASTI, J. I., IRSHAD, H., AFZAL, M., RASHEED, T., MALIK, A. R. & QURESHI, Z.-U.-A. 2016. Detection of peste des petits ruminants viral RNA in fecal samples of goats after an outbreak in Punjab province of Pakistan: A longitudinal study. *Biomed Res Int*, 2016. **JCRIF 3.362**

16. ALSUHAIBANI, E., KIZILBASH, N., MALIK, S., DASTI, J., AL BELADI, F. & EL-MORSHEDI, N. 2016. Polymorphisms in promoter regions of IL-6 and IL-10 genes in breast cancer: a case-control study. *Genet Mol Res*, 15, 56. **JCRIF 0.765**

17. ALI, I., RAFAQUE, Z., AHMED, S., MALIK, S. & DASTI, J. I. 2016. Prevalence of multi-drug resistant uropathogenic Escherichia coli in Potohar region of Pakistan. *Asian Pac J Trop Biomed*, 6, 60-66. **JCRIF 1.545**

18. ULLAH, S., DASTI, J. I. & MALIK, S. 2015. Descriptive epidemiology of hereditary musculoskeletal and limb defects in the isolated population of Chitral, North-West Pakistan. *Res J Med Sci*, 31, 1047. **JCRIF 0.754**

19. ULLAH, R. W., ZAHUR, A. B., LATIF, A., IQBAL, J., ZAHRA, D. R. & SAEED-UL-HASSAN, K. 2015. Mild form of peste des petits ruminants virus (PPRV) in Pakistan. *Pak J Zool*, 47.

 **JCRIF 0.768**

20. FAHIM, H., DASTI, J. I., ALI, I., AHMED, S. & NADEEM, M. 2014. Physico-chemical analysis and antimicrobial potential of Apis dorsata, Apis mellifera and Ziziphus jujube honey samples from Pakistan. *Asian Pac J Trop Biomed,* 4, 633-641. **JCRIF 1.545**

21. BERESWILL, S., FISCHER, A., PLICKERT, R., HAAG, L.-M., OTTO, B., KÜHL, A. A., DASTI, J. I., ZAUTNER, A. E., MUÑOZ, M. & LODDENKEMPER, C. 2011. Novel murine infection models provide deep insights into the “menage a trois” of Campylobacter jejuni, microbiota and host innate immunity*. PLoS One*, 6, e20953. **JCRIF 3.788**

22. TAREEN, A. M., DASTI, J. I., ZAUTNER, A. E., GROß, U. & LUGERT, R. 2011. Sulphite: cytochrome c oxidoreductase deficiency in Campylobacter jejuni reduces motility, host cell adherence and invasion. *Microbiology*, 157, 1776-1785. **JCRIF 2.871**

23. DASTI, J. I., TAREEN, A. M., LUGERT, R., ZAUTNER, A. E. & GROß, U. 2010. Campylobacter jejuni: a brief overview on pathogenicity-associated factors and disease-mediating mechanisms. *Int J Med Microbiol*, 300, 205-211. **JCRIF 4.768**

24. TAREEN, A. M., DASTI, J. I., ZAUTNER, A. E., GROß, U. & LUGERT, R. 2010. Campylobacter jejuni proteins Cj0952c and Cj0951c affect chemotactic behaviour towards formic acid and are important for invasion of host cells. *Microbiology*, 156, 3123-3135. **JCRIF 2.871**

25. DASTI, J.I., GROß, U., POHL, S., LUGERT, R., WEIG, M. AND SCHMIDT-OTT, R. 2007. Role of the plasmid-encoded tet (O) gene in tetracycline-resistant clinical isolates of Campylobacter jejuni and Campylobacter coli*. J Med Microbiol*, 56, 833-837. **JCRIF 2.836**