

Short CV



I. GENERAL

i. Syed Habib Bukhari (Commonwealth & Fulbright Fellow; Member Executive Board of USEFP)

- ii. Professor of Microbiology & Immunology
- iii. Vice Chancellor University- Kohsar University, Murree

2. Professional Training/Education/Qualifications

Education/Training	Degree/Year/Specialization		
Institution & Location	Degree	Year(s)	Field
Quaid-i-Azam University Islamabad	MSc.	1995	Biochemistry
Quaid-i-Azam University Islamabad	M.Phil.	1997	Biotechnology
University of Glasgow, UK	Ph.D.	2002	Microbiology & Immunology/Infection & Immunity
George Mason University, U.S.A.	Postdoc	2005-2006	Environmental Complexities
London School of Hygiene & Tropical Medicine, UK & Sanger Centre, UK	Postdocs Commonwealth Fellow)	2009- 2010/2013	Microbial Pathogenesis/Glycoengineering Microbial Genomics
Dept. Microbiology, Perelman School of Medicine, UPENN	Postdoc (Fulbright Fellow)	2017-2017	Gene Regulation/Microbiome

Employment

1996-1999	Lecturer, Islamia University Bahawalpur,
2002-2010	Assistant Professor, Department of Biosciences, CU, Islamabad
2010-2013	Associate Professor & HOD, Department of Biosciences, CU, Islamabad
2012-2015	Professor & Chairman, Department of Biosciences, CU, Islamabad
2015-Present	Professor, Department of Biosciences, CU, Islamabad
2018-2021-	Professor & Chairman, Department of Biosciences, CU, Islamabad
March 2021-Present	VC Kohsar University, Murree

RESEARCH Profile.	General Research Publications or Activity/Research & Out Reach Activity wrt Proposed Project		
	a.	International publication	>140 research papers
Research supervision.	2006 till to date		
	a.	Supervised PhD-International Students 2 (Nigeria & Egypt)	Ph.D. 7 Completed; 5 Under Supervision
			M.Phil./ MS >50 Completed
		M.Sc. or equivalent	>50 Completed
Total Impact Factor publications Total Relevant Publication wrt the proposed study		>110	H Index: 25 I-10 Index: >58 Citations (Google Scholar): >2300 Impact factor >350
Previous/Ongoing Grants	<p>“Strengthening Biotechnology Industry in the Country: Developing an educational tool kit for training undergraduate students as well as for research purposes: Lab to Commercialization-HEC” Development of an integrated system comprising of engineered bacteria based Biosensors for the detection of bioavailable toxic metals from environment-HEC” Development of an integrated whole-cell based biosensors to detect bioavailable organophosphates from environment-HEC” Epidemiological investigation of Pertussis infection in Pakistan: With RIVM, Bilthoven, Netherlands-PSF” Mosquitome of Flying Syringes-Aedes aegypti and Aedes albopictus & their Fitness vis a vis their Competency to Transmit Infection With Changing Climate: As PI-ANSO; Source Tracking and Surveillance System Of Diarrhea causing Bacterial Pathogens In Pakistan: & “Campylocacter Control in Poultry Through Training for Commercial Poultry Farm Workers” As PI, In collaboration with London School of Hygiene & Tropical Medicine, Keppel Street, London, WC1E 7HT (British Council: Pak-UK linkage)” Analyzing the Gut Microbiota of Pediatric Patients Showing Stunted Growth under Prevailing Environmental Stress Conditions-uBiome</p>		
TEACHING PROFILE	Graduate/Undergraduate Courses Taught: Microbial Forensics; Advances in Microbiology; Advanced Topics in Microbiology; Medical Microbiology; Research Techniques; Fundamentals of Genomics & Proteomics; Microbial Pathogenesis; Microbiology & Immunology; Fundamentals of Bioinformatics; Cell Biology; Introduction to Genomics		

Publications: (Few Selected-Relevant of >140

1. Fawad Tariq, Rafaqat Hussain, Zobia Noreen, Aneela Javed, A. Shah, Arshad Mahmood, Muhammad Sajjad, Habib Bokhari, Shams ur Rahman. **2022**. Enhanced antibacterial activity of visible light activated sulfur-doped TiO₂ nanoparticles against *Vibrio cholerae*. *Materials Science in Semiconductor Processing*. 147(10100):106731- DOI: 10.1016/j.mssp.2022.106731
2. Oluwatoyin B. Olaniran, · Olufemi E. Adeleke, · Ahmed Donia, · Ramla Shahid, **Habib Bokhari**. **2022**. Incidence and Molecular Characterization of Carbapenemase Genes in Association with Multidrug-Resistant Clinical Isolates of *Pseudomonas aeruginosa* from Tertiary Healthcare Facilities in Southwest Nigeria. *Current Microbiology* 79(1):3; DOI: 10.1007/s00284-021-02706-3
3. Viqar Sayeed Saraf, Theophilus Bhatti, Sundus Javed, Habib Bokhari. **2022**. Antimicrobial Resistance Pattern in *E. coli* Isolated from Placental Tissues of Pregnant Women in Low-Socioeconomic Setting of Pakistan. *Curr Microbiol*. 5;79(3):83.doi: 10.1007/s00284-022-02769-w.
4. Muhammad Qasim, James M. Carpenter, Syed Habib Ali Bokhari, Muhammad Rafique Khan, Muhammad Ather Rafi, Muhammad Amin, Junaid Ali Siddiqui & Muhammad Asghar Hassan **2022**. Vespidae (Insecta: Hymenoptera) of Multan Region, Pakistan. *Oriental Insects*. : <https://doi.org/10.1080/00305316.2021.2024465>
5. Muhammad Sohail, Syed Ali Musstjab Akber Shah Eqani, **Habib Bokhari**, Muhammad Zaffar Hashmi, Nadeem Ali, Ambreen Alamdar, Joel E Podgorski, Dave Adelman, Rainer Lohmann. **2022**. Freely Dissolved Organochlorine Pesticides (OCPs) and Polychlorinated Biphenyls (PCBs) along the Indus River Pakistan: Spatial pattern, Air-water Exchange and Risk Assessment. *Environmental Science & Pollution Research*. DOI: <https://doi.org/10.21203/rs.3.rs-554439/v1>
6. Habiba Tariq, Zobia Noreen, Aftab Ahmad, Laraib Khan, Mashood Ali, Muhammad Malik, Aneela Javed, Faisal Rasheed, Tanil Kocagoz, Ugur Sezerman, **Habib Bokhari**. **2022**. Colibactin possessing *E. coli* isolates in association with colorectal cancer and their genetic diversity among Pakistani Population. **Accepted. PLOS ONE**
7. Ahmed Donia, Ramla Shahid, Muhammad Nawaz, Tahir Yaqub, **Habib Bokhari**. **2021**. Can we develop oncolytic SARS-CoV-2 to specifically target cancer cells? *Ther Adv Med Oncol*. DOI: 10.1177/17588359311061988
8. Ahmed Donia, Muhammad, Furqan Shahid, Sammerul Hassan, Ramla Shahid, Aftab Ahmad, Aneela Javed, Muhammad Nawaz, Tahir Yaqub, **Habib Bokhari**. Integration of RT-LAMP and Microfluidic Technology for Detection of SARS-CoV-2 in Wastewater as an Advanced Point-of-care Platform. *bioRxiv*. DOI: 10.1101/2021.08.18.456880
9. Sammer-ul Hassan, Aamira Tariq, Zobia Noreen, Ahmed Donia, Syed Zohaib Javaid Zaidi, **Habib Bokhari**, Xunli Zhang. **2021**. Capillary-driven flow microfluidics: An emerging technique for point-of-care diagnostics.: *Diagnostics*., 10(8), 509; <https://doi.org/10.3390/diagnostics10080509>
10. Salma Saeed Khan et al., **2021**. Design and Prototyping of Genetically Encoded Arsenic Biosensors Based on Transcriptional Regulator AfArsR. *Biomolecules* 2021, 11(9), 1276; <https://doi.org/10.3390/biom11091276>
11. Arbab Saddique, Habib Bokhari et al. **2021**. Prevalence and Associated Risk Factor of COVID-19 and impacts of meteorological and social variables on its propagation in Punjab, Pakistan", **Accepted for publication in Earth Systems and Environment**.
12. A Donia, S Hassan, X Zhang, L Al-Madboly, H Bokhari. COVID-19 Crisis Creates Opportunity towards Global Monitoring & Surveillance. *Pathogens* 10 (3), 256
13. Sammer-ul Hassan, Ahmed Donia, Usman Sial, Xunli Zhang, **Habib Bokhari**. **2020**. Glycoprotein and Lectin-Based Approaches for Rapid Detection of Pathogens. *Pathogens*; 9(9):694 doi:10.3390/pathogens9090694
14. Salma Saeed Hira Mehreen, Umud Gerlevik, Aamira Tariq, Saira Manzoor, Zobia Noreen, Ugur Sezerman, **Habib Bokhari**. **2020**. HriGFP Novel Fluorescent Protein: Expression and Applications. *Microbial Biochemical Technologies*- <https://doi:10.1007/s12033-020-00243-1>
15. Muhammad Imran, Saba Waqar, Koji Ogata, Mahmood Ahmed, Zobia Noreen, Sundus Javed, Nazia Bibi, **Habib Bokhari**, Asma Amjad and Muhammad Muddassar. **2020**. Identification of novel bacterial urease inhibitors through molecular shape and structure based virtual screening approaches. : *RSC Adv.*, 10, 16061
16. Arbab Saddique, Habib Bokhari et al. **2021**. Prevalence and Associated Risk Factor of COVID-19 and impacts of meteorological and social variables on its propagation in Punjab, Pakistan", **Accepted for publication in Earth Systems and Environment**.
17. A Donia, S Hassan, X Zhang, L Al-Madboly, H Bokhari. COVID-19 Crisis Creates Opportunity towards Global Monitoring & Surveillance. *Pathogens* 10 (3), 256
18. Ahmed Donia & **Habib Bokhari**. **2020**. "Apoptosis Induced by SARS-CoV-2: Can we target it?". *Apoptosis*. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7844099/>.
19. Ahmed Donia & **Habib Bokhari**. **2020**. RNA interference as a promising treatment against SARS-CoV-2. *International Microbiology*. doi:10.1007/s10123-020-00146-w
20. Arbab Saddique, Muhammad Suleman Rana, Muhammad Masroor Alam, Amer Ikram, Muhammad Usman, Muhammad Salman, Rani Faryal, Umair Massab, **Habib Bokhari**, Muhammad Sufian Mian, Israr Asiya, Safiullah.

- Emergence of co-infection of COVID-19 and dengue: A serious public health threat. Journal of Infection.* <https://doi.org/10.1016/j.jinf.2020.08.009>
21. Sammer-ul Hassan, Aamira Tariq, Zobia Noreen, Ahmed Donia, Syed Zohaib Javaid Zaidi, **Habib Bokhari**, Xunli Zhang *Capillary-driven flow microfluidics: An emerging technique for point-of-care diagnostics.: Diagnostics.* **2020**,10(8), 509;<https://doi.org/10.3390/diagnostics10080509>
 22. Sammer-ul Hassan, Ahmed Donia, Usman Sial, Xunli Zhang, **Habib Bokhari**. **2020**. Glycoprotein and Lectin-Based Approaches for Rapid Detection of Pathogens. *Pathogens*; 9(9):694 doi:10.3390/pathogens9090694
 23. Mahnoor Ali Rafaqat Hussain Fawad Tariq, Zobia Noreen, Arbab Mohammad Touiq, **Habib Bokhari**, Naureen Akhtar, Shams ur Rahman. **2019**. Highly effective visible light-activated cobalt-doped TiO₂ antibacterial coatings against *Campylobacter jejuni*. *Applied Nanoscience* .<https://doi.org/10.1007/s13204-019-01193-0>
 24. Zobia Noreen, N. R. Khalid, Rashda Abbasi, Sundus Javed, Imran Ahmad, **Habib Bokhari**, **2019**. Visible light sensitive Ag/TiO₂/Graphene Composite as a potential coating material for control of *Campylobacter jejuni*. *Materials Science & Engineering C*. doi.org/10.1016/j.msec.2018.12.087. 98 (125-133).
 25. T Niaz, S Shabbir, T Noor, A Rahman, **H Bokhari**, M Imran. **2018**. Potential of polymer stabilized nano-liposomes to enhance antimicrobial activity of nisin Z against foodborne pathogens. *LWT*. 96, 98-110
 26. Zobia Noreen, Imran Ahmad, Fairha Siddiqui, AB Ziya, Tahir Abbas, **Habib Bokhari**. **2017**. Size dependent structural, anti-bacterial and anti-biofilm properties of Er doped Li-Ni ferrites synthesized by the sol-gel auto-combustion route. *Ceramics International*. **Ceramics International** . 43 (14), 10784-10790
 27. Farah Masood, Tariq Yaseen, **Habib Bukhari**, Muhammad Mujahid. **2016**. Characterization and application of roxithromycin loaded cyclodextrin based nanoparticles for treatment of multidrug resistant bacteria. *Materials Science and Engineering C*. 61. 1-7. doi:10.1016/j.msec.2015.11.076
 28. Umair Manzoor, Sumera Siddique, Rafay Ahmed, Zobia Noreen, **Habib Bokhari**, Iftikhar Ahmad **2016**. Antibacterial, Structural and Optical Characterization of Mechano-Chemically Prepared ZnO Nanoparticles. *PLOS ONE*. 11(5):e0154704 <http://dx.doi.org/10.1371/journal.pone.0154704>
 29. Bushra Jamil, Rashda Abbasi, Shahid Abbasi, Muhammad Imran, Siffat U. Khan, Ayesha Ihsan, Sundus Javed, **Habib Bokhari**, and Muhammad Imran. **2016**. Encapsulation of cardamom essential oil in chitosan nanocomposites: In-vitro efficacy on antibiotic resistant bacterial pathogens and cytotoxicity studies. *Frontiers in Microbiology*. 7: 1580. doi:10.3389/fmicb.2016.01580
 30. Bushra Jamil, Shahid Ahmed Abbasi, Habib Nisar, A Rahman, Asma, **Habib Bokhari**, M. Imran. **2016**. Cefazolin loaded chitosan nanoparticles to cure multi drug resistant pathogens *Carbohydrate Polymers* 136: 682-691.
 31. Muhammad Ali Syed, Umair Manzoor, Ismat Shah and **Habib Ali Bukhari**. **2010**. Antibacterial effects of Tungsten nanoparticles on the *Escherichia coli* strains isolated from catheterized urinary tract infection (UTI) cases and *Staphylococcus aureus*. *New Microbiologica*. 33(4):329-35.
 32. Muhammad Ali Syed, Shaista Babar, A. S. Bhatti, & **Habib A. Bokhari**. **2009** Antibacterial effects of silver nanoparticles on the bacterial strains isolated from catheterized urinary tract infection cases. *Journal of Biomedical Nanotechnology*. 5: 209-214.
 33. Siddiqui F, Champion O, Akram M, Studholme D, Eqani SAMAS, Wren BW & **Bokhari H**. (2015). Molecular detection identified a type six secretion system in *Campylobacter jejuni* from various sources but not from human cases. *Journal of Applied Microbiology*, 118(5), 1191-1198. doi: 10.1111/jam
 34. Mahwish Younas, Fariha Siddiqui, Zobia Noreen, Syeda Sadia Bokhari, Oscar G. Gomez-Duarte, Brendan W. Wren, **Habib Bokhari**. Characterization of enteropathogenic *Escherichia coli* of clinical origin from pediatric population in Pakistan. *Trans. Royal Soc of Trop. Med. Hyg.* **2016**. 110(7):414-20. doi: 10.1093/trstmh/trw047.
 35. Noreen Z, Siddiqui F, Javed S, Wren BW, **Bokhari H**. Transmission of multidrug resistant *Campylobacter jejuni* to children from different sources in Pakistan. *Journal of Global Antimicrobial Resistance*. **2019**. S2213-7165(19)30184-5. doi: 10.1016/j.jgar.2019.07.018
 36. Kanwal S, Noreen Z, Aalam V, Akhtar J, Masood F, Javed S, **Bokhari H**. Variation in antibiotic susceptibility and presence of type VI secretion system in *Campylobacter jejuni* isolates from various sources. *Comparative Immunology, Microbiology & Infectious Diseases*: **2019**. 25;66:101345. doi: 10.1016/j.cimid.2019.101345
 37. James W. Harrison , Tran Thi Ngoc Dung , Fariha Siddiqui , Sunee Korbrisate , **Habib Bukhari**, My Phan Vu Tra , Nguyen Van Minh Hoang , Juan Carrique-Mas, Juliet Bryant , James I. Campbell , David J. Studholme , Brendan W. Wren, Stephen Baker, Richard W. Titball, Olivia L. Champion. **2014**. Identification of Possible Virulence Marker from *Campylobacter jejuni* Isolates. *Emerging Infectious Diseases*, 20(6):1026-9.
 38. Syed M Shah, Ankur Mutreja, Nick Thomson, Stephen Baker, Julian Parkhill, Gordon Dougan, **Habib Bokhari** and Brendan W. Wren **2014**. Genomic Epidemiology of *Vibrio cholerae* O1 associated with Floods, Pakistan, 2010. *Emerging Infectious Diseases* 20 (1): 13-20.
 39. Noreen Z, Siddiqui F, Javed S, Wren BW, **Bokhari H**. Transmission of multidrug resistant *Campylobacter jejuni* to children from different sources in Pakistan. *Journal of Global Antimicrobial Resistance*. **2019**. S2213-7165(19)30184-5. doi: 10.1016/j.jgar.2019.07.018

40. Kanwal S, Noreen Z, Aalam V, Akhtar J, Masood F, Javed S, **Bokhari H**. Variation in antibiotic susceptibility and presence of type VI secretion system in *Campylobacter jejuni* isolates from various sources. **Comparative Immunology, Microbiology & Infectious Diseases**: 2019. 25;66:101345. doi: 10.1016/j.cimid.2019.101345
 41. Fiza Rana, Ayesha Khan, Sidra Sidiqui, **Habib Bokhari**. 2016. Resistance patterns of diversified phylogroups of *Escherichia coli* associated with mothers having history of preterm births in Pakistan. **The Journal of Maternal-Fetal & Neonatal Medicine**. 30 (1), 68-73. DOI:10.3109/14767058.2016.1163538
 42. Syed M Shah, Ankur Mutreja, Nick Thomson, Stephen Baker, Julian Parkhill, Gordon Dougan, **Habib Bokhari** and Brendan W. Wren 2014. Genomic Epidemiology of *Vibrio cholerae* O1 associated with Floods, Pakistan, 2010. **Emerging Infectious Diseases** 20 (1): 13-20.
 43. **Bokhari H**, Shah MA, Asad S, Sania A, Akram M and Wren BW. 2013. *Escherichia coli* pathotypes in Pakistan from consecutive floods in 2010 and 2011. **Am J Trop Med Hyg**, 88(3):519-525.
 44. Asma Sadiq, Nazish Bostan, **Habib Bokhari**, Kwe Claude Yinda, Jelle Matthijnsens. 2019. Whole genome analysis of selected human group A rotavirus strains revealed evolution of DS-1-like single-and double-gene reassortant rotavirus strains in Pakistan during 2015-2016. **Frontiers in Microbiology**. 10:2641. doi: 10.3389/fmicb.2019.02641.
 45. Asma Sadiq, **Habib Bokhari**, Zobia Noreen, Rai Muhammad Asghar and Nazish Bostan. 2019. Magnitude of rotavirus a and campylobacter jejuni infections in children with diarrhea in twin cities of Rawalpindi and Islamabad, Pakistan. **BMC Infectious Diseases**. DOI: 10.1186/s12879-019-4575-1..
 46. Asma Sadiq, Nazish Bostan, **Habib Bokhari**, Jelle Matthijnsens, Kwe Claude Yinda, Saqlain Raza, Tayyab Nawaz. 2019. Molecular characterization of Human group A Rotavirus genotypes circulating in Pakistan during 2015-2016. **Plos One**. 14(7):e0220387. doi: 10.1371/journal.pone.0220387. eCollection
- Chapters:**
1. Noor Malik, Ahmed Donia, **Habib Bokhari** *Microbial Nanobiotechnology in Nanocatalysis: Degradation of Pollutants and Sensing Applications*. **Springer Nature**
 2. Ahmed Donia, Lamiaa, **Habib Bokhari**. *Microbial Nanotechnology*. **MedDocs Publishers, USA**