DR. MD. ZAHID HASSAN

Assistant Professor

Dept. of Genetic Engineering and Biotechnology Jagannath University, 9-10 Chittaranjan Avenue Dhaka-1100, Bangladesh

Email: <u>zahid@geb.jnu.ac.bd</u>; <u>zahizahid10vu@gmail.com</u> https://www.linkedin.com/in/drzahidhassan/

https://www.jnu.ac.bd/dept/portal/faculty/genetic/faculty_members.html

Phone: +8801712004343

RESEARCH INTERESTS

Microbial ecology, Bioremediation, Medical genomics, Emerging pathogens, Food microbiology, Virology and oncology

TEACHING INTERESTS

Microbiology, Basic Biotechnology, Microbial and Pharmaceuticals biotechnology, Extremophiles, Environmental biotechnology, Virology, Food biotechnology, Molecular biology and Bioinformatics

HARD SKILL

Ample academic knowledge with ten years experience in Molecular Immunovirology, Microbiology, Bioinformatics, Molecular Biology, Microscopy, Quality Control (QC) analysis, Tissue culture, Vaccine trial, Biological safety level 1-3 (BSL-1 to 3), Supervision and responsibility in research, Documentary of lab results, ICH Good Clinical Practice, GLP, SOPs, Project management, Scientific Writing, Reviewer and Editorial board member of peer reviewed journals.

SOFT SKILL

Flexible, self-reliant, dedication, integrity and reliability to work

EDUCATION

Institution	Degree	Year (s)	Field of study
Dept. of Molecular Cell Biology, <i>Vrije Universiteit</i> Amsterdam, the Netherlands	PhD (Advisors: Dr. Hans V. Westerhoff and Late dr. Wilfred F. M. Röling)	Nov 2010- Nov 2016	Microbial Ecology (Metagenomics)
Dept. of Microbiology, University of Dhaka	M. Phil	2005-2007	Molecular Virology

ACADEMIC AND RESEARCH EMPLOYMENTS

July 2017 to present Assistant professor

Dept. of Genetic Engineering and Biotechnology

Jagannath University, Dhaka-1100, Bangladesh

May 2017 to Aug 2017 Adjunct Assistant Professor

Dept. of Genetic Engineering and Biotechnology

East West University, Dhaka, Bangladesh

Zahid Hassan Curriculum Vitae

Dec 2016 to Jan 2017	Postdoctoral fellow, Molecular Cell Physiology, Vrije Universiteit Amsterdam, the Netherlands
Nov 2010 to Nov 2016	PhD scholar, Molecular Cell Physiology, Vrije Universiteit Amsterdam, the Netherlands
Sep 2009 to Oct 2010	Senior Research Officer, Virology laboratory, Laboratory Sciences Division, icddrb
Jul 2004 to Aug 2009	Research Officer, Virology laboratory, Laboratory Sciences Division, icddrb
Jul 2000 to Jun 2004	Senior Research Assistant, Environmental Microbiology laboratory, Laboratory Sciences Division, icddrb

SELECTED HONORS AND DISTINCTIONS

2016	Recognition of reviewer award for the contribution of journal GROUNDWATER FOR SUSTAINABLE DEVELOPMENT
2014	Travel Grant was awarded for the Ninth International Symposium on Subsurface Microbiology (ISSM 2014) at Pacific Grove, San Francisco, USA.
2010	PhD scholarship was awarded from WOTRO Science for Global Development, a part of the NWO (Netherlands Organization for Scientific Research)
2005	Academic scholarship was awarded by the University of Dhaka for carrying out studies towards M. Phil (Master of Philosophy)
1997	Government scholarship was awarded by the University of Dhaka for excellent results in B.Sc. (Honors) Exam

TRAININGS

2013	Scientific Writing
	University of Bergen Norway and ICDDRB, Bangladesh
2009	HIV biology (Cultivation and harvest of viral Particles)
	Gunma University Graduate School of Medicine, Japan; invited by JSPS
2007	Introductory Course on Epidemiology and Biostatistics
	ICDDRB (International Centre for Diarrheal Disease Research, Bangladesh)
2006	Bioinformatics (Nucleotide sequence analysis)
	ICDDRB
2005	ICH Good Clinical Practice
	ICDDRB and GlaxoSmithKline Biologicals
2004	Molecular Ecological Techniques (DGGE, FISH, Ribotyping, Southern blot,
	Chromosomal and Plasmid DNA extraction)
	Joint collaboration between the University of Bergen, Norway and University of
	Dhaka, Bangladesh

REFFERED PUBLICATIONS

2019	Hassan Z , Sultana M, Khan SI, Braster M, Röling WF & Westerhoff, HV. Ample arsenite biooxidation activity in Bangladesh drinking water wells: a bonanza for bioremediation? <i>microorganisms</i> , 8 :7(8) 246 (Impact Factor: 4.167)
2019	Hassan Z, Ahmed AU, Talukder HK, Salmeen A, Alam KK, Westerhoff, HV & Hassan Z. Activities Reducing the Stress among Undergraduate Medical Students: The Students' Perception. <i>Bangladesh Journal of Medical Education</i> , 10(1) : 20-24
2016	Hassan Z , Sultana M, Westerhoff HV, Khan SI & Röling WF. Iron cycling potentials of arsenic-contaminated groundwater in Bangladesh as revealed by enrichment cultivation. <i>Geomicrobiology Journal</i> , 33 :779-792 (Impact Factor: 1.609)

- 2015 Rahman M, Bakker M, Patty C, **Hassan Z**, Röling W, Ahmed K & van Breukelen B. Reactive transport modeling of subsurface arsenic removal systems in rural Bangladesh. *Science of the Total Environment* **537**: 277-293 (Impact Factor: 5.589)
- 2015 **Hassan Z**, Sultana M, van Breukelen BM, Khan SI & Röling WF. Diverse arsenic and iron-cycling microbial communities in arsenic-contaminated aquifers used for drinking water in Bangladesh. *FEMS Microbiology Ecology* **91**: doi: 10.1093/femsec/fiv1026 (Impact Factor: 4.098)
- Afrad MH, **Hassan Z**, Farjana S, Moni S, Barua S, Das SK, Faruque ASG, Azim T & Rahman M. Changing profile of rotavirus genotypes in Bangladesh, 2006–2012. *BMC Infectious Diseases* **13**: 320 (Impact Factor: 2.62)
- 2010 Matthijnssens J, Rahman M, Ciarlet M, Zeller M, Heylen E, Nakagomi T, Uchida R, **Hassan Z**, Azim T & Nakagomi O. Reassortment of human rotavirus gene segments into G11 rotavirus strains. *Emerging Infectious Diseases* **16**: 625-630 (Impact Factor: 7.15)
- 2011 Rahman M, Alamgir A, Saiada F, **Hassan Z**, Faruque AS, Cravioto A, Azim T & Rahman M. Co-circulation of G1, G2 and G9 rotaviruses in hospitalized patients in Bangladesh during 2006-2009. *Human Vaccines* **7**: 929-933 (Impact Factor: 3.643)
- Rahman M, Matthijnssens J, Saiada F, **Hassan Z**, Heylen E, Azim T & Van Ranst M. Complete genomic analysis of a Bangladeshi G1P [8] rotavirus strain detected in 2003 reveals a close evolutionary relationship with contemporary human **Wä**ke strains. *Infection, Genetics and Evolution* **10**: 746-754 (Impact Factor: 2.611)
- 2010 Rahman M, **Hassan Z**, Nahar Z, Faruque ASG, Van Ranst M, Rahman S & Azim T. Molecular detection of noroviruses in hospitalized patients in Bangladesh. *European Journal of Clinical Microbiology and Infectious Diseases* **29**: 937-945 (Impact Factor: 2.591)
- 2007 Rahman M, **Hassan ZM**, Zafrul H, Saiada F, Banik S, Faruque AS, Delbeke T,Matthijnssens J, Van Ranst M & Azim T. Sequence analysis and evolution of group B rotaviruses. *Virus Research* **125**: 219-225 (Impact Factor: 2.736)
- 2007 Rahman M, Sultana R, Ahmed G, Nahar S, **Hassan ZM**, Saiada F, Podder G, Faruque AS, Siddique A & Sack DA. Prevalence of G2P [4] and G12P [6] rotavirus, Bangladesh. *Emerging Infectious Diseases* **13**: 18-24 (Impact Factor: 7.15)
- 2016 <u>Published book</u>: Microbial Ecology of Arsenic Contaminated Aquifers and Potential Bioremediation

CONFERENCE PROCEEDINGS (ABSTRACTS AND ORAL PRESENTATIONS)

- Dec 26-28, 2015 Zahid Hassan, Munawar Sultana, Rob J. M. van Spanning, Sirajul I. Khan, Martin Braster, Wilfred F.M. Röling, Hans V. Westerhoff. Insight in bacterial arsenic cycling in contaminated groundwaters in Bangladesh. International Conference organized by Bangladesh Society of Microbiologists (BSM) themed on "Microbes for Benefit of the Society", held at University of Dhaka
- Oct 5-10, 2014 **Zahid Hassan**, Munawar Sultana, Boris M. van Breukelen, Sirajul I. Khan, Wilfred F.M. Röling. Diverse arseniænd iron-cy cling microbial communities in arsenic-contaminated drinking water wells in Bangladesh. Ninth International Symposium on Subsurface Microbiology Pacific Grove, California USA
- Sep 19-21, 2009 M. Rahman, E.I. Chowdhury, M. Reza, M.S. Alam, , M.S. Sarker, Z.M. Hassan, M.Z. Rahman and T. Azim. Coinfection of HIV with hepatitis B and hepatitis C viruses in injecting drug users in Dhaka, Bangladesh. US-Japan Joint Hepatitis-AIDS Meeting Portland, Oregon
- Mar 8-10, 2005 Rahman, M., Matthijnssens, J., Iftekharuddin, N., **Hassan M.Z.**, Zafrul, H., Saiada, F., Azim, T. andVan Ranst, M. Origin and evolution of human G12 rotaviruses. 11th Asian Conference on Diarrhoeal Disease and Nutrition (ASCODD), Bangkok

TECHNIQUES MASTERED

Metagenomics (DNA and RNA), PCR, Real-time RT-PCR, Electrophoresis (DGGE, ARDRA)/RFLP, PAGE), Molecular cloning, Genotyping and Sequencing (SANGER), 16S rRNA next generation illumina sequencing, Bioinformatics, ELISA, Western blot, Microbial enrichment cultivation (Aerobic, microaerophilic and anaerobic), Tissue culture, Maintenance of cell lines, Cultivation and harvesting of rotavirus and influenza virus, Statistical analysis (SPSS, EPI Info, PAST, Principal component analysis, non-metric multidimensional scaling, Kruskal-Wallis), EndNote

REFERENCES

Dr. Hans V. Westerhoff Professor Synthetic Systems Biology, University of Amsterdam Systems Biology, MCISB, University of Manchester Faculty of science, Molecular Cell Biology Vrije Universiteit Amsterdam 1081 HV Amsterdam, the Netherlands

Phone: +31 020 5987230 Email: <u>h.v.westerhoff@vu.nl</u>; hans.westerhoff@manchester.ac.uk

Dr. Mustafizur Rahman Scientist Emerging Infections Infectious Disease Division, icddr,b Mohakhali, Dhaka-1212, Bangladesh Phone: +8802-8860523-32; Ext#3454

Fax: +8802-8812529

Email: mustafizur@icddrb.org