

## **CURRICULUM VITAE**

**AFSAR ALI, Ph. D.**

Department of Environmental and Global Health  
School of Public Health & Health Professions &  
Emerging Pathogens Institute (EPI)  
University of Florida at Gainesville  
2055 Mowry Road, Room No. 276  
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### **RESIDENTIAL STATUS**

US Citizen

### **EDUCATION**

**Ph.D.** in Molecular Biology/Biotechnology, December 1998. Department of Marine-Estuarine-Environmental-Sciences, University of Maryland at College Park, Maryland.

**M. S.** in Clinical Microbiology, August 1993. Department of Microbiology, University of Maryland at College Park, Maryland.

**M. S.** in Microbiology, 1985. University of Dhaka, Bangladesh

**B. S.** in Soil Microbiology, 1983. University of Dhaka, Bangladesh

### **PROFESSIONAL POSITION HELD**

**07/01/2010 to date-** Research Associate Professor. Department of Environmental and Global Health, College of Public Health and Health Professions, and Emerging Pathogens Institute (EPI), University of Florida at Gainesville.

**07/01/08 -06/30/2010-** Research Assistant Professor. Emerging Pathogens Institute (EPI) & Environment and Global Health (a Courtesy Appointment from April 1, 2010) School of Public Health and Health Professions; University of Florida at Gainesville

**03/01/04-06/30/08** - Assistant Professor. Department of Epidemiology & Preventive Medicine, School of Medicine, the University of Maryland at Baltimore.

**11/01/2000-02/29/04** -Instructor (Microbiologist). Department of Epidemiology & Preventive Medicine, School of Medicine, the University of Maryland at Baltimore.

**03/01/2000-10/31/2000** - Postdoctoral Research Fellow, Department of Epidemiology

and Preventive Medicine, the University of Maryland at Baltimore.

**01/01/99-02/29/00** - Research Fellow, Department of Hospital Epidemiology, the University of Maryland at Baltimore, Baltimore, Maryland

**01/95-12/31/98** - Graduate Research Associate, the University of Maryland at Baltimore, Center for Vaccine Development (CVD) Baltimore, Maryland.

**7/93-12/94** - Research Associate, John Hopkins University, and the University of Maryland at Baltimore, (CVD) Baltimore, Maryland.

**1/90-6/93** - Research Assistant. Department of Microbiology, the University of Maryland at College Park, Maryland.

**1/90-6/93** - Teaching Assistant. Department of Microbiology, the University of Maryland at College Park, Maryland.

**8/86-12/90** - Microbiologist. International Center for Diarrhoeal Disease Research, Bangladesh (ICDDR, B), Dhaka, Bangladesh.

**12/85-7/86** - Quality Control Microbiologist, Bangladesh Organon Limited (Multinational Pharmaceutical Industry), Dhaka, Bangladesh.

### **ACADEMIC AWARDS**

(1) The University of Dhaka, Bangladesh awarded scholarships for outstanding performance in undergraduate studied (1983-1985)

(2) The University of Maryland awarded a full scholarship in the form of both teaching and research assistantship for graduate studies (1990-1998)

### **PROFESSIONAL MEMBERSHIP**

American Society for Microbiology

Bangladesh Society of Microbiologists

### **CURRENT GRANTS & CONTRACTS**

#### **Current Grants:**

(1) NIH/NIAID: RO1 AI03929. Epidemiology and Ecology of *Vibrio cholerae* in Bangladesh (July 1, 2010-June 30-2015)

Role: PI of the subcontract; total direct cost \$ 8,234,000

Principal PI: Dr. Bradley Sack (Bloomberg School of Public Health, Johns Hopkins University)

(2) NIH/NIAID: RO1 AI097405. Cholera transmission in Gressier region, Haiti. (December 1, 2011-November 30, 2015. Co-Investigator; PI: J. G. Morris, Jr.; total direct cost \$2,456,189.00

### **Completed grants and contracts**

1. AFHSC/GEIS-DOD-GEIS: C0654 12 UN (February 15, 2012-September 30, 2012). Clinical surveillance for cholera and other enteric pathogens in Haiti. Role: Principal Investigator. Total direct cost \$ 220,000. 00

2. National Institute of Health (NIH), RO1 AI039129 “Epidemiology and Ecology of *Vibrio cholerae* in Bangladesh” 02/01/03 to 02/28/08 \$650,000; ( Role: PI of the subcontract). PI: R. Bradley Sack of Johns Hopkins University.

3. Establishment of University of Florida/DOD Enteric Disease Laboratory Capacity in Haiti (June 1-September 30) Role: Co-Principal Investigator, PI. J. Glenn Morris, Jr.; total direct cost \$120,000.

### **Grants pending review and in preparation:**

1. Clinical surveillance for diarrheal pathogens among individuals visiting in Different NGOs in Haiti (Funding Agency DoD-GEIS; In review)  
Role: PI

2. Epidemiology and Ecology of *Vibrio cholerae* in Africa (Funding Agency NIH/NIAID \_RO1-5years-In review) Role: Co-investigator

3. Cholera in Haiti (renewal application to be submitted in March 2015) RO1-role-co-Investigator

4. *Vibrio* phages and its role in cholera transmission in Haiti (New RO1-In preparation to be submitted in February) role-co-investigator)

### **Post-doctoral Fellows:**

1. Mustafizur Rahman, Ph.D.: Dr. Rahman had worked worked as a post-doctoral fellow in my laboratory from March 1, 2013 to February 28, 2014.

2. Huang Xia Ning, Ph.D.: Dr. Huang had worked as a post-doctoral fellow in my laboratory between November 1, 2013 to November 28, 2014

## Mentoring Graduate Students

I have had mentored as either primary advisor or as a member of the advisory committee for following graduate students:

| <u>Students Name:</u> | <u>Served as:</u>             | <u>Institution affiliation</u>          | <u>Year of graduation</u> |
|-----------------------|-------------------------------|---|---------------------------|
| 1. Shrestha Sinha Ray | Primary advisor<br>Rotation-  | Department of Microbiology              | active                    |
| 2. Meer Taifur Alam   | Primary Advisor               | University of Florida<br>at Gainesville | Active                    |
| 3. Alex Weepleman     | Primary adviser               | University of Florida at<br>Gainesville | Active                    |
| 4. Mohammad Jubair    | Primary adviser               | University of Florida at<br>Gainesville | Active                    |
| 5. Mohammed H. Rashid | Primary advisor               | Univ. of MD at Baltimore                | 2006<br>(Ph.D)            |
| 6. Yuansha Chen       | Member                        | Univ. of MD at College,<br>Park         | 2006<br>(Ph.D)            |
| 7. Patricia Anderson  | Member<br>2010<br><br>(Ph.D.) | Univ. of MD at Baltimore                |                           |

## Mentoring Voluntary Graduate, Undergraduate, and high School Summer Program Students

1. Camille Nalini Chun: An undergraduate student majoring in Microbiology and physiology has been working in my research team since June 10, 2013 to date
2. Ilya Sakharuk-a Microbiology undergraduate major is currently working with my research team. He has been working in my laboratory since January 28, 2013 to date.
3. Yaser A. Alshafi – A MPH graduate student worked in my laboratory (between January 1, 2012 and August 31, 2012). His project title is: Transfer of genetic marker from a donor *Vibrio cholerae* DNA to a recipient *V. cholera* strains.
4. Chad Weber – A MPH student served as a voluntary researchers in my laboratory (May 1, 2011 to January 28, 2013). Mr. Chad was assigned to detect *V. cholerae* from

aquatic reservoirs using both conventional and genetic methods. He worked for transferring his expertise to local Haitian Laboratory technicians.

5. Melissa Gouse - A MPH student served as a voluntary researchers in my laboratory (May 1 to December 31, 2011).

6. Benjamin Stewart – served as a laboratory technician under my direct supervision from March 1, 2010 to December 2010.

7. Chelsea Solmo – an undergraduate student majoring in Microbiology worked in my laboratory (pre-med track) (July 2009 to December, 2010)

8. Marzana Ahmed – an undergraduate student (pre-med track) enrolled in University of Florida at Gainesville. She worked in my laboratory between July 1, 2008 to 12/21.2009.

9. Kum Fernando - an undergraduate student in the department of Medical Technology (Sept-December, 2006)

10. Lauren Isa - A Baltimore high school summer student was trained in my laboratory (June-august, 2005)

11 Mohammed Khayuun - A Catonsville high school student was trained in my laboratory (June-August, 2004).

#### FOREIGN SCHOLARS TRAINED IN MY LABORATORY

1. Drs Zahid Hyat Mahmud and Shafiqul Islam, both associate scientists of International center for diarrhoeal disease research, Bangladesh (ICDDR, B) are being trained in my laboratory on the genetics and bioinformatics aspects of enteric pathogens (between October 23 to November 6, 2013).

2. Zahid H. Mahmud (home institution: International Centre for Diarrheal Disease Research, Bangladesh). Mr. Mahmud was trained in my laboratory in the University of Maryland at Baltimore from October 1, 1999, May 31, 2000. Research topic: Detection of *Vibrio cholerae* from colony blots using radio-labeled *ctx*-probe.

3. Nur-A. Hasan (home institution: International Centre for Diarrheal Disease Research, Bangladesh). Mr. Hasan was trained in my laboratory in the University of Maryland at Baltimore from July1, 2004-October 31, 2004. Research topic: Metagenomic approach to detect *Vibrio cholerae* from environmental samples.

#### Peer Review

I regularly review manuscripts submitted for publication in different journals, including Infection and Immunity, Applied and Environmental Microbiology, Journal of Bacteriology, and Journal of Infectious diseases. I also reviewed manuscript submitted into Journal of Health, Population and nutrition published by International Center of Diarrhoeal Disease Research, Bangladesh (ICDDR ,B).

#### **Grant Review:**

I reviewed the following grants on request from Grant Agency:

- Wellcome Trust “Senior Investigator Award” proposal November 12, 2014
- an RO1 submitted to NIH/NIAID (2002)
- a grant submitted to NRICGP (2005).

#### **Book Chapter**

(1) Horneman and **A. Ali**. “Aeromonas”. Manual of Clinical Microbiology. 2011. (Editor, James Zersalovic; 10<sup>th</sup> Edition, Volume 1. Chapter 38. pg. 658-665.

(2) Horneman, A, **A. Ali**, and S. Abbott. “Aeromonas”. Manual of Clinical Microbiology. 2006. (Editor, Patrick R. Murray; 10<sup>th</sup> Edition) ASM Press pg. 716-722.

(3) **Ali A.** “ Genetics of O-antigen biosynthesis, capsule and rugose exopolysaccharide production of *V. cholerae*. 2008. Genomics of *Vibrio cholerae* (eds. S. M. Faruque and G. B. Nair). New Horizon Publishers, UK; pages 101-122.

#### **Other Activities, Including Departmental Services.**

1. Nominated to serve as a member of the committee (forged by dean of the school of public health) suggesting how to improve the diversification of minorities in the school. January 1, 2012 to Date
2. Nominated by the Dean of School of Public Health and Health profession (University of Florida at Gainesville to serve as a member of Internationalization Task Force (ITF) from July1, 2010 to July 31, 2011.
3. Served as a co-Chair and a Rapporteur in the symposium titled “Bacterial water-borne and emerging infectious diseases in North Africa and the Middle East: Opportunities for Collaboration:” was held between January 31-February 3, 2011.
4. Serving as a academic council member in the school of public health and health professions from July 1, 2001 to date.
5. During my tenure at University of Maryland at Baltimore, I served as a chair of seminar committee for the Department of Epidemiology & Preventive Medicine from 2006-2007.

### **Guest speaker by invitation**

1. Presented a lecture (by invitation) titled “Cholera in Haiti, 210-2013” for a graduate course (Public Health Concepts in Infectious Diseases; PHC 6517, section 1816) taught by Dr. Robert Cook in the department of Epidemiology in the school of public health and health professions. Date of presentation 10/21/2013

### **Latest Oral Presentations**

1. Presented a seminar to the external and internal advisory committee members on the updates of cholera in Haiti (February 15, 2013).

2. Invited to give a lecture on “Cholera in Haiti: an Overview” as a guest lecture for Public Health Microbiology offered by Joseph Dillano in the Department of Environmental Engineering in the University of Florida at Gainesville (November 26, 2012).

3. Invited to give a talk on “Emergence of highly virulent strains of *Vibrio vulnificus* in the aquacultures in Bangladesh. The symposium titled “Bacterial water-borne and emerging infectious diseases in North Africa and the Middle East: Opportunities for Collaboration:” was held between January 31-February 3, 2011.

4. Invited to give a talk on “Cholera in Haiti: why now” to the national and international participants during the inaugural ceremony of UF public Health Laboratory in Haiti (November 8, 2011).

5. The genetic and physiologic analyses of rugose variant of *V. cholerae* (presented in Emerging Pathogens Institute, University of Florida at Gainesville on June 6, 2009.

6. The genetic and physiologic analyses of rugose variant of *V. cholerae* (presented in Food and Drug Administration on 9/26/08)

7. Rugose vibrio – an environmental survival phenotype of *V. cholerae*? (Presented in Coppin State University on 10/27/07)

8. Type II secretion system of *Vibrio cholerae* and its involvement in the secretion of rugose exopolysaccharide production. Department of Microbiology and Immunology in the University of Maryland at Baltimore (12/03/2006)

9. Rugose variant of *Vibrio cholerae*: its role in the environmental persistence of *V. cholerae*. International centre for Diarrhoeal disease research (ICDDR, B) (7/15/2006)

10. Type II secretion system of *Vibrio cholerae* and its involvement in the secretion of rugose exopolysaccharide production. Department of Microbiology, Department of Microbiology and Biochemistry, University of Dhaka, Bangladesh. (7/25/2006)

11. Mechanisms of environmental persistence of *Vibrio cholerae*: the potential role of Pst-system. Department of Microbiology and Immunology, University of Maryland at Baltimore. ( 9/14/06)

### **Requested Interviews for NEWS Media.**

After the outbreak of cholera Haiti after in October, 2010, following 60 years of silence, the different media solicited interviews best on my prediction of cholera in Haiti which I made after my first trip to Haiti in August 2010.

The list of such interviews is as follows:

[http://www.usatoday.com/news/world/2010-11-16-Cholera-Haiti\\_N.htm](http://www.usatoday.com/news/world/2010-11-16-Cholera-Haiti_N.htm)

<http://www.tampabay.com/news/health/medicine/university-of-florida-professor-says-he-predicted-haiti-cholera/1130348>

<http://news.ufl.edu/2010/11/04/st-petersburg-times-afsar-ali/>

[http://www.gatorcountry.com/gatorbeat/University/UF\\_researchers\\_go\\_to\\_Haiti\\_to\\_mitigate\\_cholera\\_threat\\_explore\\_possible\\_sources](http://www.gatorcountry.com/gatorbeat/University/UF_researchers_go_to_Haiti_to_mitigate_cholera_threat_explore_possible_sources)

<http://www.gainesville.com/article/20101027/articles/101029566><http://www.gainesville.com/article/20101027/articles/101029566>

[http://www.alligator.org/news/campus/article\\_1cb1c82e-ec8b-11df-8256-001cc4c002e0.html](http://www.alligator.org/news/campus/article_1cb1c82e-ec8b-11df-8256-001cc4c002e0.html)

<http://www.examiner.com/health-care-in-miami/cholera-keeps-uf-undergrads-from-haiti>

<http://www.americantowns.com/fl/gainesville/news/usa-today-afsar-ali-2756623>

<http://chalkboard.blogs.gainesville.com/2010/10/uf-restricts-haiti-travel-due-to-cholera-outbreak/><http://chalkboard.blogs.gainesville.com/2010/10/uf-restricts-haiti-travel-due-to-cholera-outbreak/>

<http://www.tampabay.com/news/health/medicine/university-of-florida-professor-says-he-predicted-haiti-cholera/1130348>

<http://www.wtsp.com/news/local/story.aspx?storyid=156932>

<http://www.gainesville.com/article/20101027/articles/101029566>



<http://www.examiner.com/health-care-in-miami/cholera-keeps-uf-undergrads-from-haiti>  
<http://www.examiner.com/health-care-in-miami/cholera-keeps-uf-undergrads-from-haiti>

<http://www.wtsp.com/news/local/story.aspx?storyid=156932>

<http://topics.gannett.com/Allstate+Sugar+Bowl/?template=courierpostonline>

[http://www.desi-radio.com/listArtist\\_Afsar.php](http://www.desi-radio.com/listArtist_Afsar.php)

<http://www.voanews.com/english/news/americas/Researchers-Tracking-Cholera-to-Understand-Haiti-Outbreak-108998224.html>

<http://www.123people.co.uk/s/afsar+ali>

<http://bloximages.chicago2.vip.townnews.com/alligator.org/content/tncms/assets/editorial/0/a3/1cc/0a31ccc4-ec8d-11df-ae12-001cc4c002e0-revisions/4cda305824ed3.pdf.pdf>

<http://www.guardian.co.uk/environment/2010/nov/22/haiti-cholera-un-weather>

<http://www.scidev.net/en/news/haiti-s-cholera-epidemic-caused-by-weather-say-scientists.html>

<http://www.mnn.com/home-blog/green-news-roundup/blogs/daily-briefing-mon-85>

[http://www.promedmail.org/pls/apex/f?p=2400:1001:3860874250838194::NO::F2400\\_P1001\\_BACK\\_PAGE,F2400\\_P1001\\_PUB\\_MAIL\\_ID:1000,85949](http://www.promedmail.org/pls/apex/f?p=2400:1001:3860874250838194::NO::F2400_P1001_BACK_PAGE,F2400_P1001_PUB_MAIL_ID:1000,85949)  
[http://www.promedmail.org/pls/apex/f?p=2400:1001:3860874250838194::NO::F2400\\_P1001\\_BACK\\_PAGE,F2400\\_P1001\\_PUB\\_MAIL\\_ID:1000,85949](http://www.promedmail.org/pls/apex/f?p=2400:1001:3860874250838194::NO::F2400_P1001_BACK_PAGE,F2400_P1001_PUB_MAIL_ID:1000,85949)

[http://current.com/news/92795505\\_cholera-in-haiti-the-climate-connection.htm](http://current.com/news/92795505_cholera-in-haiti-the-climate-connection.htm)

[http://realflorida.biz/index.php?option=com\\_content&task=view&id=326&Itemid=107](http://realflorida.biz/index.php?option=com_content&task=view&id=326&Itemid=107)

<http://www.thehimalayantimes.com/fullNews.php?headline=%27Weather%20caused%20Haiti%20cholera%27&NewsID=266688>  
<http://www.thehimalayantimes.com/fullNews.php?headline=%27Weather%20caused%20Haiti%20cholera%27&NewsID=266688>

10/22/2010: A radio interview that were aired at 4:00PM in 89.1 WUFT channel in Gainesville

10/25/2010: St. Petersburg Times reported my interview in its papper

Gainesvill Sun quoted my interview on the future of cholera in Haiti

Gainesville Sun: Press release

CBS news radio: 11/12/10 after my coming back from Haiti (11/11/2010)

## **Regular Teaching**

1. I developed a graduate course entitled “ Water Quality and Human Health (Course No. 6937)” and offered that course in the fall semester in the School of Public health and Health Professions in the University of Florida at Gainesville. The major goals of this course are to familiarize the students on the importance of clean and safe water (drinking, bathing and recreational waters) for the wellbeing of human health. The students learn how the clean water is affected by pollutant (mostly microbiological contaminants) released by human activities, animal wastes, population growth, industrial revolutions and climate change. The students also learn how this important commodity is fast dwindling from our planet and what measures could be taken to sustain water resources which are central to our life.

2. As a teaching assistant in the Department of Microbiology and Biology program (1990-1993) in the University of Maryland at College Park, I instructed students (40-45 students in each semester) enrolled in different laboratory courses (**pathogenic microbiology, microbial genetics, biology, and general microbiology**), conducted and graded exams, projects, and terms papers. In addition, I helped respective course masters to conduct their exams and grading the answering papers.

## **Professional Publications**

### **Journal Articles**

1. Meer T. Alam, Thomas A. Weppelmann, Ira Longini, Valery Madsen Beau De Rochars, J. Glenn Morris, Jr., and **Afsar Ali**. Increased Isolation Frequency of Toxigenic *Vibrio cholerae* O1 from Environmental Monitoring Sites in Haiti (**In Press**)

2. Beau de Rochers, V., M. T. Alam, T. Telisma, S. Chavannes, G. M. Anillis, H. Jean-Guillaume, G. Gelin, E. Kirkpatrick, O. Bernard, T. A. Weppelmann, M. H. Rashid, S. Karst, J. A. Johnson, **A. Ali**, and J. G. Morris, Jr. 2014 (**In Press**)

3. Azarian, T., **A. Ali**<sup>\*</sup>, J. A. Johnson, D. Mohr, M. Prosperi, N. M. Versa, M. Jubair, S. L. Strickland, M. H. Rashid, M. T. Alam, T. A. Weppelmann, L. S. Katz, C. > Tarr, R. R. Colwell, J. G. Morris, Jr., and M. Salemi. 2014. Phylodynamic analysis of clinical and Environmental *Vibrio cholerae* isolates from Haiti reveals diversification driven by positive selection. mBio. DOI:10.1128/mBio.01824-14.

4. Rahman, M., M. Jubair, M. T. Alam, T. A. Weppelmann, T. Azarian, M. Salemi, I. A. Sakharuk, M. H. Rashid, J. A. Johnson, M. Yasmin, J. G. Morris, Jr., and **A. Ali**. 2014. High-frequency rugose exopolysaccharide production by *Vibrio cholerae* strains isolated in Haiti. PLoS ONE. 9(11):e112853:doi:10.1371.

5. Weppelmann, T. A., M. T. Alam, J. Wildmer, D. Morrissey, M. H. Rashid, V. M. Beau De Rochers, J. G. Morris, Jr., **A. Ali**, J. A. Johnson. Feasibility of the hydrogen sulfide test for the assessment of drinking water quality in post-Earthquake Haiti. *Environ. Monit. Assess.* Sep 2014 (Epub-ahead of print).
6. Widmer JM, Weppelmann TA, Alam MT, Morrissey BD, Redden E, Rashid MH, Diamond U, **Ali A**, De Rochars MB, Blackburn JK, Johnson JA, Morris JG Jr. (2014). "Water-Related Infrastructure in a Region of Post-Earthquake Haiti: High Levels of Fecal Contamination and Need for Ongoing Monitoring." *Am J Trop Med Hyg* Jul 28:14-0165 [Epub ahead of print].
7. Bluckburn, J. K., U. Diamond, I. Kracalik, J. Widmer, W. Brown, B. D. Morrissey, K. A. Alexander, A. Curtis, **A. Ali**, and J. G. Morris, Jr. 2014. Household-level spatio-temporal patterns of cholera in Haiti 2011. 2014. *Emer. Infect. Dis.* DOI: 10.3201/eid2009.131882
8. Jubair, M., K. R. Atanasova, M. Rahman, K. E. Klose, M. Yasmin, O. Yilmaz, J. G. Morris, Jr., and **A. Ali**. 2014. *Vibrio cholerae* persisted in microcosms for 700 days inhibits motility but promotes biofilm formation in Nutrient-poor lake water microcosms. *PLoS ONE*. 9:e92883.
9. Alam, M. T., T. A. Weppelmann, C. D. Weber, J. A. Johnson, M. H. Rashid, C. A. Birch, B. A. Brumback, V. E. M. Beau de Rochers, J. G. Morris, Jr., and **A. Ali**. 2014. Monitoring water sources for environmental reservoirs of toxigenic *Vibrio cholerae* O1, Haiti. *Emerg. Infect. Dis.* 20: 356-363.
10. Jubair M., J. G. Morris, Jr., and **A. Ali**. 2012. Survival of *Vibrio cholerae* in nutrient-poor environments is associated with a novel "persister" phenotype. *PLoS ONE*. 7:e45187.
11. **Ali. A.**, Y. Chen, J. A. Johnson, E. Redden, Y. Mayette, M. H. Rashid, O. C. Stine, and J. G. Morris, Jr. 2011. Recent clonal origin of *Vibrio cholerae* in Haiti. 2011. *Emerg. Infect. Dis.* 17:699-701
12. Hasan, N. A., W. B. Chowdhury, N. Rahim, M. Sultana, S. A. Shabnam, V. Mai, **A. Ali**, J. G. Morris, R. B. Sack, A. Haque, R. R. Colwell, H. p. Endtz, A. Cravioto, M. Alam. 2010. Metagenomic 16S rDNA targeted PCR-DGGE in determining bacterial diversity in aquatic ecosystem. *Bangladesh J. Microbiol.* 27: 46-50.
13. Mahmud, Z. H., J. G. Morris, A. C. Wright, J. A. Johnson, P. A. Gulig, and **A. Ali**. 2010. Genetic characterization of *Vibrio vulnificus* strains from Tilapia in Bangladesh. *Appl. Environ. Microbiol.* 76: (4890-4895)

14. Grim, C. J., Y. Zo, N. A. Hasan, **A. Ali**, W. B. Chowdhury, A. Islam, M. H. Rashid, M. Alam, J. G. Morris, Jr., A. Huq and R. R. Colwell 2009. RNA-colony blot hybridization method for enumeration of culturable *Vibrio cholerae* and *Vibrio mimicus* bacteria. Appl. Environ. Microbiol. **75**: 5439-5444.
15. Chen, Y., P. Bystricky, J. Adeyeye, P. Panigrahi, **A. Ali**, J. A. Johnson, C. A. Busch, J. G. Morris, Jr., O. C. Stine. 2007. The capsule biogenesis genes are embedded in the LPS region in non-O1 *Vibrio cholerae* NRT36S. BMC Microbiol. **15**: 7-20.
16. Seshadri, R., S. W. Joseph, A. K. Chopra, J. Sha, J. Shaw, J. Graf, D. Haft, M. Wu, O. Ren, M. J. Rosovitz, R. Madupu, L. Tallon, M. Kim, S. Jin, H. Vuong, O. C. Stine, **A. Ali**, A. J. Horneman, J. F. Heidelberg. Genome Sequence of *Aeromonas hydrophila* ATCC 7966T: The Jack of All Trades. J. Bacteriol. 2006. **188**: 8272-82
17. Alam, M, Sultana M, Nair, G. B., Sack, R. B., Sack, D. A., Siddique, A. K., **Ali, A.**, Huq, A., and Colwell, R. R. 2006. Toxigenic *Vibrio cholerae* in the aquatic environment of Mathbaria, Bangladesh. Appl. Environ. Microbiol. **72**: 2849-2855.
18. **Ali, A.**, J. G. Morris, Jr., and J. A. Johnson. 2005. Sugars inhibit expression of the rugose phenotype of *Vibrio cholerae*. J. Clin. Microbiol. **43**:1426-1429.
19. Huq, A., R. B. Sack, A. Nizam, I. M. Longini, G. B. Nair, **A. Ali**, J. G. Morris, M. N. H. Khan, A. K. Siddique , M. Yunus, M. J. Albert, D. A. Sack, and R. R. Colwell . 2005. Critical factors influencing the occurrence of *Vibrio cholerae* in the environment of Bangladesh. Appl. Environ. Microbiol. **71**:4645-4654.
- 20 Rashid, M. H., C. Rajanna, D. Zhang, V. Pasquale, L. S. Magder, **A. Ali**, S. Dumontet, D. K. R. Karaolis. 2004. Role of exopolysaccharide, the rugose phenotype and VpsR in the pathogenesis of epidemic *Vibrio cholerae*. FEMS Microbiol. Letts. **230**:105-113.
21. Ranjanna, C., J. Wang, D. Zhang, Z. Xu, **A. Ali**, Y. M. Hou, and D. K. Karaolis. 2003. The *Vibrio* Pathogenicity Island of Epidemic *Vibrio cholerae* forms precise extrachromosomal circular excision products. J. Bacteriol. **185**: 6893-6901.
22. Rashid, M. H., C. Ranjanna, **A. Ali**, and D. K. Karaolis. 2003. Identification of genes involved in the switch between the smooth and rugose phenotypes of *Vibrio cholerae*. FEMS Microbiol. Letts. **227**: 113-119.
23. Sack, R. B., A. K. Siddique, I. M. Longini, Jr., A. Nizam, M. Yunus, M. S. Islam, J. G. Morris, Jr., **A. Ali**, A. Huq, G. B. Nair, F. Qadri, S. M. Faruque, D. A. Sack, and R. R. Colwell. 2003. A 4-year study of the epidemiology of *Vibrio cholerae* in four rural areas of Bangladesh. J. Infect. Dis. **187** : 96-101.

24. **Ali, A.**, M. H. Rashid, and D. K. R. Karaolis. 2002. High-frequency rugose exopolysaccharide production by *Vibrio cholerae*. Appl. Environ. Microbiol. **68**: 5773-5778.
25. **Ali, A.**, Z. H. Mahmud, J. G. Morris, Jr., S. Sozhamannan, and J. A. Johnson. 2000. Sequence analysis of *TnphoA* insertion sites in *Vibrio cholerae* mutants defective in rugose polysaccharide production. Infect.Immun. Vol. **68**: 6857-6864.
26. **Ali, A.**, J. A. Johnson, A. A. Franco, D. J. Metzger, T. D. Connell, J. G. Morris, Jr., and S. Sozhamannan. 2000. Mutations in the extracellular protein secretion pathway genes (*eps*) interfere with rugose polysaccharide production in and motility of *Vibrio cholerae*. Infect. Immun. Vol. **68**: 1967-1974.
27. Davis, B. M., E. H. Lawson, M. Sandkvist, **A. Ali**, S. Sozhamannan, and M. K. Waldor. 2000. Convergence of the secretory pathways for cholera toxin and the filamentous phage, CTX $\phi$ . Science Vol. **288**: 333-335.
28. Harrison, L. H., **A. Ali**, D. M. Dwyer, J. P. Libonati, M. W. Reeves, J. A. Elliott, L. Billmann, T. Lashkerwala, and J. A. Johnson. 1995. Relapsing invasive group B streptococcal infection in adults. Ann. Intern. Med. **123**: 421-427.
29. **Ali, A.**, A. M. Carnahan, M. Altwegg, J. Luthy-Hottenstein, J. M. Janda, and S. W. Joseph. 1994. *Aeromonas bestiarum*, sp. Nov., (formerly genospecies DNA group 2 *A. hydrophila*), a new species isolated from non-human sources. Med. Microbiol. Letts. **5**:156-165.
30. Joseph, S. W., and **A. Ali**. 1993. *Aeromonas aerolysin*-when systematics and genetics collide. Med. Microbiol. Letts. **2**: 314-321.
31. Carnahan, A., T. Chakraborty, G. R. Fanning, D. Verma, **A. Ali**, J. M. Janda, and S. W. Joseph. 1991. *Aeromonas trota* sp. Nov. an ampicillin- susceptible species isolated from clinical specimens. J. Clin. Microbiol. **29**: 1206-1210.
32. Huq, A., R. R. Colwell, R. Rahman, **A. Ali**, M. A. R. Chowdhury, S. A. Parveen, D. A. Sack, and Russekcohen. 1990. Detection of *Vibrio cholerae* O1 in the aquatic environment by fluorescent-monoclonal antibody and culture methods. Appl. Environ. Microbiol. **56**: 2370-2373.

### **Symposium presentations**

1. Azarian T, **Ali A**, Johnson JA, Mohr D, Mattia P, Veras N, Jubair M, Strickland SL, Rashid M, Alam MT, Weppelmann TA, Katz L, Tarr C, Colwell R, Morris JG Jr, Salemi

- M. Phylodynamic Analysis of clinical and environmental *Vibrio cholerae* from Haiti reveals diversification driven by positive selection. 49th U.S.-Japan Joint Conference on Cholera and Other Bacterial Enteric Infections, University of Florida, Gainesville, Florida, Jan 14-16, 2015.
2. Jubair M, Morris JG Jr, **Ali A.** Comparative Gene Expression Profile between *V. cholerae* N16961 and Its Growth Advantage Stationary Phase (GASP-700) phenotype. 49th U.S.-Japan Joint Conference on Cholera and Other Bacterial Enteric Infections, University of Florida, Gainesville, Florida, Jan 14-16, 2015.
3. Weppelmann TA , Alam MT, Jubair M, Johnson JA, Morris JG Jr, **Ali A.** Increased Isolation of Toxigenic *Vibrio cholerae* O1 strains from Environmental Reservoirs in Haiti. 49th U.S.-Japan Joint Conference on Cholera and Other Bacterial Enteric Infections, University of Florida, Gainesville, Florida, Jan 14-16, 2015.
4. Alam MT, Jubair M, Alam MT, Weppelmann TA, Azarian T, Salemi M, Sakharuk IA, Rashid MH, Johnson JA, Yasmin M, Morris JG Jr, **Ali A.** High-frequency Rugose Exopolysaccharide Production by *Vibrio cholerae*. 49th U.S.-Japan Joint Conference on Cholera and Other Bacterial Enteric Infections, University of Florida, Gainesville, Florida, Jan 14-16, 2015.
5. Shrestha RS, Jubair M, Weppelmann TA, Morris JG Jr , Ali A. Construction of a plasmid containing mutated cholera toxin (CT) gene with a Kanamycin resistance cassette for Marker-exchange Mutagenesis. Microbiology and Cell Science Symposium, Orlando, Florida, Aug 22, 2014.
6. M. Jubair, K. R. Atanasova, M. Rahman, K. E. Klose, M. Yasmin, Ö. Yilmaz, J. G. Morris, Jr. and **A. Ali.** 2014. *Vibrio cholerae* Persisted in Microcosm for 700 days Inhibits Motility but Promotes Biofilm Formation in Nutrient-poor Lake Water Microcosms. Abstract submitted in Public Health and Health Professions Research Day, 2014 to be held in University of Florida at Gainesville, Florida at April 9, 2014.
7. T. A. Weppelmann, M. T. Alam, J. Widmer, J. A. Johnson, J. K. Blackburn, M. H. Rashid, V. E. Madsen Beua de Rochars, **A. Ali**, and J. G. Morris Jr. 2014. Regional Surveillance of Drinking Water Quality from a Coastal Flood Plain in Post-Earthquake Haiti. . Abstract submitted in Public Health and Health Professions Research Day, 2014 to be held in University of Florida at Gainesville, Florida at April 9, 2014.
8. M. Salemi, **A. Ali**, T. Azarian, J. A. Johnson, M. Jubair, S. Strickland, M.T. Alam, T. A. Weppelmann, J. G. Morris, Jr. 2014. Phylodynamics of *Vibrio cholerae* O1 in Haiti demonstrates evidence of population bottlenecks driven by positive selection. Abstract submitted in Emerging Pathogens Institute Research Day, 2014 to be held in University of Florida at Gainesville, Florida at February 20, 2014.

9. M. Rahman, M. Jubair, M. T. Alam, I. A. Sakharuk, J. A. Johnson, M. H. Rashid, M. Yasmin, J. G. Morris, Jr. and **A. Ali**. 2014. High-frequency Rugose Exopolysaccharide Production by *Vibrio cholerae*. Abstract submitted in Emerging Pathogens Institute Research Day, 2014 to be held in University of Florida at Gainesville, Florida at February 20, 2014.
10. M. Jubair, K. R. Atanasova, M. Rahman, K. E. Klose, M. Yasmin, Ö. Yilmaz, J. G. Morris, Jr. and **A. Ali**. 2014. *Vibrio cholerae* Persisted in Microcosm for 700 days Inhibits Motility but Promotes Biofilm Formation in Nutrient-poor Lake Water Microcosms. Abstract submitted in Emerging Pathogens Institute Research Day, 2014 to be held in University of Florida at Gainesville, Florida at February 20, 2014.
11. T. A. Weppelmann, M. T. Alam, J. Widmer, J. A. Johnson, J. K. Blackburn, M. H. Rashid, V. E. Madsen Beua de Rochars, **A. Ali**, and J. G. Morris Jr. 2014. Regional Surveillance of Drinking Water Quality from a Coastal Flood Plain in Post-Earthquake Haiti. Abstract submitted in Emerging Pathogens Institute Research Day, 2014 to be held in University of Florida at Gainesville, Florida at February 20, 2014.
12. **A. Ali**, M. T. Alam, C. Weber, J. A. Johnson, M. Jubair, J. G. Morris, Jr. 2013. Evolution of Virulence Genes of *Vibrio cholerae* Isolated from Clinical and Environmental Samples in Haiti. Abstract submitted in the American Society for Microbiology 113<sup>th</sup> General Meeting to be held in Denver, Colorado at May 18-21, 2013.
13. Thomas A. Weppelmann, Meer T. Alam, Jocelyn Widmer, Judith A. Johnson, Jason K. Blackburn, Mohammad H. Rashid, Valery E. Madsen Beua de Rochars, **A. Ali**, and J. Glenn Morris Jr. Post-earthquake Drinking Water Surveillance in the Ouest Department of Haiti during the Great Haitian Cholera Epidemic. The Modern Day John Snow. American Society for Tropical Medicine and Hygiene Annual Conference 2014 , New Orleans, La.
14. Meer T. Alam, Thomas A. Weppelmann, Judith A. Johnson, Mohammad H. Rashid, Babette A. Brumback, Valery E. Madsen Beau de Rochars, J. Glenn Morris Jr., and **A. Ali**. Monitoring Water Sources for Environmental Reservoirs of Toxigenic *Vibrio cholerae* O1, Haiti. University of Florida College of Public Health and Health Profession Research day 2013
15. **Ali, A.**, M. T. Alam, C. Weber, J. A. Johnson, M. Jubair, J. G. Morris, Jr. 2013. Evolution of virulence genes of *Vibrio cholerae* isolated from clinical and environmental samples in Haiti. Abstract published in the American Society for Microbiology 113<sup>th</sup> General Meeting, 2013 (held in Denver, Colorado between May 18-21, 2013).

16. Alam, M. T., T. A. Weppelmann, M. Jubair, J. A. Johnson, J. G. Morris, Jr., and **A. Ali**. 2013. Surveillance of *Vibrio cholerae* from clinical and environmental samples in Haiti. Abstract presented in the Emerging pathogens Research Day held in February 14, 2013.
- 17.. Alam, M. T., T. A. Weppelmann, M. Jubair, J. A. Johnson, J. G. Morris, Jr., and **A. Ali**. 2013. Surveillance of *Vibrio cholerae* from clinical and environmental samples in Haiti. Abstract presented in the PHHP Research day held in April 16, 2013 in the Public Health and Health Profession Building.
18. Jubair, M., J. G. Morris, Jr., and A. Ali. 2013. Survival of *Vibrio cholerae* in nutrient-poor environment is associated with a novel “persister” phenotype. Abstract presented in the Emerging pathogens Research Day held in February 14, 2013.
19. Birch, C., M. T. Alam, A. Cantrell, T. A. Weppelmann, M, B-de Rochars, M. H. Rashid and A. Ali. 2013. Evaluating the role of *V. cholerae* in the aquatic environment with special focus on seafood and aquatic plants in Gressier, Haiti.
20. Jubair, M., J. G. Morris, Jr., and **A. Ali**. 2013. Survival of *Vibrio cholerae* in nutrient-poor environment is associated with a novel “persister” phenotype. Abstract presented in the PHHP Research day held in April 16, 2013 in the Public Health and Health Profession Building.
21. Jubair, M., J.A. Johnson, A.S. Kane, J.G. Morris, Jr., **A. Ali**. 2012. Isolation and identification of *V. cholerae* non-O1 strains from the aquatic reservoirs in Haiti. Abstract submitted in Emerging Pathogens Institute Research Day, 2012 (February 23, 2012).
22. Jubair, M., J.A. Johnson, A.S. Kane, J.G. Morris, Jr., **A. Ali**. 2012. Isolation and identification of *V. cholerae* non-O1 strains from the aquatic reservoirs in Haiti. Abstract submitted in Public Health and Health Professions Research Day, 2012 (April 18, 2012).
23. Jubair, M., J.A. Johnson, A.S. Kane, J.G. Morris, Jr., **A. Ali**. 2012. Isolation and identification of *V. cholerae* non-O1 strains from the aquatic reservoirs in Haiti. Abstract published in the American Society for Microbiology 112<sup>th</sup> General Meeting, 2012 (held in San Francisco, California between June 16-19, 2012)
24. **Ali A.**, Y. Chen, J. A. Johnson, E. Redding, Y. Mayette, M. H. Rashid, O. C. Stine, J. G. Morris. 2011. Cholera in Haiti. Published in EPI Day Abstract.
25. Ahmed, M., J. G. Morris, Jr., and **A. Ali**. 2011. Persistence of *Vibrio cholerae* in filter sterilized lake water. Abstract published in a meeting held in Rabat, Morocco between June 28 to July 1. The symposium titled “Bacterial water-borne and emerging infectious diseases:”was sponsored by NIAID and NIH.



26. Jubair, M. J. A. Johnson, A. A. Kane, J. G. Morris, Jr., and **A. Ali**. Isolation and identification of *V. cholerae* non-O1 strains from the aquatic reservoirs in Haiti. 97th Annual Meeting, Southeastern Branch of American Society of Microbiology. Gainesville, FL October 20 - 22, 2011.
27. Gulig, P. A., N. Rezaie, R. Sharma, Z. H. Mahmud, A. C. Wright, M. J., J. A. Johnson, J. G. Morris, and **A. Ali**. Emergence of Pathogenic Strains of *Vibrio vulnificus* Isolated from Tilapia in Bangladesh. *Vibriosis in the Environment*, 2010. Biloxi, MS November 2010.
28. Z. H. Mahmud, Mohammad S. Islam, J. Glenn Morris, Jr., and **A. Ali**. 2010. Isolation and characterization of *Vibrio vulnificus* and *Vibrio parahaemolyticus* from Diarrhoeal patients affected by cyclone Aila in Bangladesh. Abstract published in the 110th ASM meeting held between May 23-27 in San Diego, CA.
29. Z. H. Mahmud, A.C. Wright, M. K. Jones, M. S. Islam, J. Daei, J. A. Johnson, J. G. Morris, and **A. Ali**. 2009. Genetic analyses of *Vibrio vulnificus* strains isolated from tilapia fish in Bangladesh. 44<sup>th</sup> U.S.-Japan cholera and other bacterial enteric infections joint panel meeting held in San Diego, CA. October, 2009.
30. **Ali, A**, Anderson, P. E., M. H. Rashid, Y. Chen, O. C. Stine, J. A. Johnson, J. B. Kaper, and J. G. Morris, Jr. 2005. Differential gene Expression profile of *Vibrio cholerae* persisting in a nutrient-poor lake water microcosm and growing in a nutrient-rich medium. 40<sup>th</sup> U.S.-Japan cholera and other bacterial enteric infections joint panel meeting held in Boston, MA. December, 2006
31. Rashid, M. H., **A. Ali**, and D. K. R. Karaolis. Genetic Analysis of High-Frequency Rugose Exopolysaccharide Production (HFRP) in Epidemic *Vibrio cholerae*. Presented in 103<sup>rd</sup> ASM conference held in Washington DC (May, 2003)
32. M. H. Rashid, **A. Ali**, D. K. R. Karaolis; Analysis of the genetic switch for phenotypic conversion between the smooth and rugose exopolysaccharide phenotypes of *Vibrio cholerae*. Abstract. 102<sup>nd</sup> Gen. Mtg. ASM, 2002. I-100.
33. Wang, J., J. Xu, **A. Ali**, D. K. R. Karaolis. Genetic analysis of the plasmid form of the *Vibrio cholerae* pathogenicity island. Abst. 101th Gen. Mtg. ASM, 2001. B-15.
34. Sozhamannan, S., **A. Ali**, Z. H. Mahmud, M. Li, J. A. Johnson, and J. G. Morris. O-Antigen switching in *Vibrio cholerae*. Abst. 100<sup>th</sup> Gen. Mtg. ASM, 2000. B-349.
35. Li, M., **A. Ali**, J.A. Johnson, J.G. Morris and S. Sozhamannan  
O- antigen switching in *Vibrio cholerae* by homologous recombination  
Cold Spring Harbor Symposium on Microbial Pathogenesis and Host Response,

Sep 22-26,1997, CSHL, CSH, NY

36. **Ali, A.**, J. A. Johnson, J. G. Morris, and S. Sozhamannan. The type II secretion system is involved in the expression of rugose polysaccharide by *Vibrio cholerae*. Abst. 99<sup>th</sup> Gen. Mtg. ASM, 1999. B/D-373.
37. **Ali, A.**, S. Sozhamannan, S. Daugherty, J. G. Morris, and J. A. Johnson. Physiologic factors affecting expression of the rugose phenotype of *Vibrio cholerae*. Abst. 99<sup>th</sup> Gen. Mtg. ASM, 1999. N-91.
38. U. S.-Bangladesh Cholera Working Group (Sack RB, Sack DA, Colwell RR, Huq A, Chun J, Zo Y, Grim C, Morris JG, Johnson JA, **A. Ali**, Longini IM, Nizam A, Siddique AK, Islam MS, Yunus MD, Faruque SM, Qadri F, and Albert MJ). Epidemiology and ecology of *Vibrio cholerae* in Bangladesh. 34<sup>th</sup> Joint Conference on the U.S.-Japan Cooperative Medical Science Program-Cholera and Related Diarrheal Diseases, Japan, December 1998.
39. Fiore, C., **A. Ali**, J. G. Morris, Jr., and S. Sozhamannan. Genes flanking the O1 antigen biosynthesis regions are conserved in other serogroups of *Vibrio cholerae*. Abst. 98<sup>th</sup> Gen. Mtg. ASM, 1998, B-181, P-85.
40. Sozhamannan, S., **A. Ali**, J. A. Johnson, and J. G. Morris, Jr. Mechanism of horizontal gene transfer-The *Vibrio cholerae* O139 paradigm. Cold Spring Harbor Symposium on Microbial Pathogenesis and Host Response, Sep 10-14, 1997, CSHL, CSH, NY.
41. **Ali, A.** and R. J. Johnson. Prolonged survival of *Vibrio cholerae* O1, O139, and non-O1 in lake water microcosms. Abst. 96<sup>th</sup> Gen. Mtg. ASM, 1996. Q-398, p 455.
42. **Ali, A.**, A. A. Franco, J. G. Morris Jr., R. J. Johnson, and J. A. Johnson. Insertion of Tn<sub>phoA</sub> into *epsD* prevents expression of the rugose phenotype in *Vibrio cholerae* N16961. Abst. 97<sup>th</sup> Gen. Mtg. ASM, 1997. D-89, p 223.
43. **Ali, A.**, V. Zaki, F. M. Hetrick, and S. W. Joseph. Comparison of the distribution of *Aeromonas* genospecies in clinical versus environmental samples. Abst. 93<sup>rd</sup> Gen. Mtg. ASM, 1993. C-452. P. 526
44. **Ali, A.**, A. M. Carnahan, M. Altwegg, J. M. Janda, and S. W. Joseph. Proposal of a new *Aeromonas* sp., *Aeromonas bestiarum*, sp., nov., (formerly DNA hybridization group 2). Abst. 93<sup>rd</sup> Gen. Mtg. ASM, 1993. R-4. P. 294.
45. Johnson, J. A., M. J. Albert, P. Panigrahi, J. Michalski, **A. Ali**, R. J. Johnson, J. B. Kaper, and J. G. Morris, Jr. 1993. Characterization of non-O1 *Vibrio cholerae* strains from the Bangladesh epidemic. 33<sup>rd</sup> Interscience Conference on Antimicrobial Agents

and Chemotherapy.

46. Carnahan, A. M., S. Behram, **A. Ali**, D. Jacobs, and S. W. Joseph. 1990. Systematic assessment of geographically diverse *Aeromonas* spp. As a correlate to accurate biotyping of clinical aeromonads. Abst. 90<sup>th</sup> Gen. Mtg. ASM, 1990. R-15. P. 248
47. Harrison, L. H., J. A. Johnson, **A. Ali**, J. A. Elliott, M. W. Reeves, L. Billmann, D. M. Dwyer, and the Maryland Bacterial Invasive Disease Surveillance Group. 1994. Relapsing group B streptococcal bacteremia among adults. 34<sup>th</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy.
48. Huq, A., R. R. Colwell, R. Rahman, K. M. B. Hossain, **A. Ali**, and D. A. Sack. 1989. Presence of *Vibrio cholerae* O1 in the aquatic environment as detected by fluorescent monoclonal antibody and culture methods. 5<sup>th</sup> International Symposium on Microbiol Ecology, Kyoto, Japan.
49. **Ali, A.** 1993. Taxonomy, Virulence and Distribution of *Aeromonas* species recovered from clinical, environmental and other sources (Masters thesis submitted to the University of Maryland, College Park for partial fulfillment of the M. S. degree)
50. **Ali, A.**, A. Huq, A. Felsenstein, R. Rahman, M. S. Islam, and K. M. Beleyt. 1988. Detection and isolation of *Vibrio cholerae* O1 from plankton by conventional culture method and indirect fluorescence antibody technique. Abstr. 7<sup>th</sup> Anu. Meet. Bangla. Soc. Microbiol..
51. **Ali, A.**, G. K. Joarder, A. A. Chowdhury, and N. Chowdhury. 1988. Isolation of cellulolytic fungi from environmental sources of Bangladesh. Abstr. 7<sup>th</sup> Anu. Meet. Bangla. Soc. Microbiol.

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