

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
P.O bOx 100009

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 studies (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 \$ 457,000

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 cost \$2,456,189.00

(3) AFHSC/GEIS-DOD-GEIS: C0654_12_UN (January 1, 2012-September 30, 2012). Clinical surveillance for enteric pathogens in Haiti. Role: Principal Investigator. Total direct cost \$ 220,000. 00

Completed grants and contracts

1. 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.

2. 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.

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. Mohammad Jubair	Primary adviser	University of Florida at Gainesville	Active
2. Mohammed H. Rashid	Primary advisor	Univ. of MD at Baltimore	2006 (Ph.D)
3. Yuansha Chen	Member	Univ. of MD at College, Park	2006 (Ph.D)
4. Patricia Anderson	Member	Univ. of MD at Baltimore	2010 (Ph.D.)

MENTORING VOLUNTARY GRADUATE, UNDERGRADUATE, AND HIGH SCHOOL SUMMER PROGRAM STUDENTS

1. Chad Weber – A MPH student serving as a voluntary researchers in my laboratory (May 1 to date)

2. Melissa Gouse - A MPH student serving as a voluntary researchers in my laboratory (May 1 to date)
3. Benjamin Stewart – serving as a laboratory technician under my direct supervision from March 1, 2010 to December 2010.
4. Chelsea Solmo – an undergraduate student majoring in Microbiology (pre-med track) (July 2009 to December, 2010)
5. Marzana Ahmed – an undergraduate student (pre-med track) enrolled in University of Florida at Gainesville (July 1, 2008-12/21.2009)
6. Kum Fernando - an undergraduate student in the department of Medical Technology (Sept-December, 2006)
7. Lauren Isa - A Baltimore high school summer student was trained in my laboratory (June-august, 2005)
8. Mohammed Khayuum - A Catonsville high school student was trained in my laboratory (June-August, 2004)

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 have reviewed two grant proposals, including an RO1 submitted to NIH (2002) and a grant submitted to NRICGP.

BOOK CHAPTER

- (1) Horneman and **A. Ali**. *Aeromonas*". Manual of Clinical Microbiology. 2011. (Editor, James Zersalovic; 10th Edition, Volume 1. Chapter 38. pg. 658-665.
- (1) Horneman, A, **A. Ali**, and S. Abbott. "*Aeromonas*". Manual of Clinical Microbiology. 2006. (Editor, Patrick R. Murray; 10th Edition) ASM Press pg. 716-722.
- (2) **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 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 July 1, 2010 to July 31, 2011.
2. Serving as an academic council member in the school of public health and health professions
3. 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.

LATEST ORAL PRESENTATIONS

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:” will be sponsored by NIAID and NIH.

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).

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

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

12/03/2006. 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

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

7/25/2006. 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

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

REQUESTED INTERVIEWS.

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 are as follows:

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 in...

Gainesville Sun: Press release

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

ON-LINE TEACHING

I was appointed and taught Biochemistry for undergraduate students enrolled in the Creighton University, Nebraska during the academic year 2001-2002. My tasks include the design of course work, answering questions raised and posted online by students on daily basis, communicating other teachers involved in this course, group discussion, conduct exams and projects given to the students.

REGULAR TEACHING

In the University of Florida at Gainesville, I will offer undergraduate and graduate courses, including Molecular Biology of Infectious Diseases, Ecology of Pathogenic bacteria and Food Microbiology courses beginning the Spring, 2009.

During my tenure at University of Maryland at Baltimore, I offered courses, including Molecular Epidemiology of Infectious Diseases (PREV 780) and Advanced Topics in Laboratory Sciences (MEDT 654) to graduate and medical students.

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. **Ali, A.**, Y. Chen, J. A. Johnson, E. Redden, Y. Mayette, M. H. Rashid, O. C. Stine, and J. G. Morris, Jr. Recent clonal origin of *Vibrio cholerae* in Haiti. 2011. Emerg. Infect. Dis. 2011;17:699-701

2. 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.

3. 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)
4. 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.
5. 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.
6. 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
7. 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.
8. **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.
9. 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.
10. 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.
11. 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.
12. 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.

13. 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.
14. **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.
15. **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.
16. **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.
17. 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 ϕ . Science Vol. **288**: 333-335.
18. 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.
19. **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.
20. Joseph, S. W., and **A. Ali**. 1993. *Aeromonas* aerolysin-when systematics and genetics collide. Med. Microbiol. Letts. **2**: 314-321.
21. 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.
22. 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. P. A. Gulig, N. Rezaie, R. Sharma, Z. H. Mahmud, A. C. Wright, M. Jones, J. G. Morris, Jr.,

- J. A. Johnson and **A. Ali**. 2010. Emergence of Pathogenic strains of *Vibrio vulnificus* isolated from tilapia in Bangladesh. Abstract submitted in International Conference on Emerging Infectious Diseases to be held in Atlanta, Georgia between July 11-14, 2010.
2. M. Ahmed, J. G. Morris, Jr., and **A. Ali**. 2010. Persistence of *Vibrio cholerae* in filter sterilized lake water. Abstract submitted for publication in a meeting to be held in Rabat, Morocco between June 28 to July 1. The symposium titled “Bacterial water-borne and emerging infectious diseases:” will be sponsored by NIAID and NIH.
3. 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. Accepted for publication in 110 ASM meeting to be held between May 23-27 in San Diego, CA.
4. 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. 44th U.S.-Japan cholera and other bacterial enteric infections joint panel meeting held in San Diego, CA. October, 2009.
5. **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. 40th U.S.-Japan cholera and other bacterial enteric infections joint panel meeting held in Boston, MA. December, 2006
6. 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 103rd ASM conference held in Washington DC (May, 2003)
7. 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. 102nd Gen. Mtg. ASM, 2002. I-100.
8. 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.
9. Sozhamannan, S., **A. Ali**, Z. H. Mahmud, M. Li, J. A. Johnson, and J. G. Morris. O- Antigen switching in *Vibrio cholerae*. Abst. 100th Gen. Mtg. ASM, 2000. B-349.
10. 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

11. **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. 99th Gen. Mtg. ASM, 1999. B/D-373.
12. **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. 99th Gen. Mtg. ASM, 1999. N-91.
13. 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. 34th Joint Conference on the U.S.-Japan Cooperative Medical Science Program-Cholera and Related Diarrheal Diseases, Japan, December 1998.
14. 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. 98th Gen. Mtg. ASM, 1998, B-181, P-85.
15. 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.
16. **Ali, A.**, and R. J. Johnson. Prolonged survival of *Vibrio cholerae* O1, O139, and non-O1 in lake water microcosms. Abst. 96th Gen. Mtg. ASM, 1996. Q-398, p 455..
17. **Ali, A.**, A. A. Franco, J. G. Morris Jr., R. J. Johnson, and J. A. Johnson. Insertion of Tnp_{phoA} into *epsD* prevents expression of the rugose phenotype in *Vibrio cholerae* N16961. Abst. 97th Gen. Mtg. ASM, 1997. D-89, p 223.
18. **Ali, A.**, V. Zaki, F. M. Hetrick, and S. W. Joseph. Comparison of the distribution of *Aeromonas* genospecies in clinical versus environmental samples. Abst. 93rd Gen. Mtg. ASM, 1993. C-452. P. 526
19. **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. 93rd Gen. Mtg. ASM, 1993. R-4. P. 294.
20. 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. 33rd Interscience Conference on Antimicrobial Agents and Chemotherapy.
21. 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. 90th Gen. Mtg. ASM, 1990. R-15. P. 248

22. 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. 34th Interscience Conference on Antimicrobial Agents and Chemotherapy.
23. 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. 5th International Symposium on Microbiol Ecology, Kyoto, Japan.
24. **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)
25. **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. 7th Anu.Meet. Bangla. Soc. Microbiol..
26. **Ali, A.**, G. K. Joarder, A. A. Chowdhury, and N. Chowdhury. 1988. Isolation of cellulolytic fungi from environmental sources of Bangladesh. Abstr. 7th Anu. Meet. Bangla. Soc. Microbiol.

Research Note: Using a laboratory-based microcosm I have shown (manuscript submitted) that *Vibrio cholerae* and *Vibrio vulnificus* can survive in fresh water and artificial sea water (salinity 10 ppt) for more than a year with 1-2 log reduction of counts originally contributed to the inoculums.

In another study, we have demonstrated that polysaccharide encased *V. cholerae* (best known as 'rugose' *V. cholerae*) can survive in high level chlorinated phosphate buffered saline compared to the smooth counterpart of the same bacterium.