

**CURRICULUM VITAE**  
**Salina Parveen, Ph.D.**

May, 2020

**USINESS ADDRESS**

2116 Center for Food Science and Technology  
University of Maryland Eastern Shore  
Princess Anne, MD 21853, U.S.A

**CONTACT NUMBERS**

Phone: 410-651-8339  
Fax: 410-651-8498  
E-mail: sparveen@umes.edu

**CITIZENSHIP: U.S.A**

**EDUCATION**

**Ph.D. Food Science and Human Nutrition, Specializing  
in Microbiology and Molecular Biology. 1997 (GPA 3.82)**  
University of Florida, Gainesville, Florida.

**M.Sc. Microbiology, 1988 (First class second)**  
University of Dhaka, Dhaka, Bangladesh.

**B.Sc. Major: Botany; Minor: Biochemistry and Zoology, 1985 (First class first)**  
University of Dhaka, Dhaka, Bangladesh.

**EMPLOYMENT**

<u>Date</u>	<u>Employer</u>	<u>Position</u>
2013 (summer)-present	Professor (50% teaching and 50% research) Graduate Faculty and Univ. System of MD Marine, Estuarine, Environmental Sciences (USM MEES) faculty	Food Science and Technology Ph.D. Program, Dept. of Agriculture, Food and Resource Sciences, Food and Resource Sciences Univ. of Maryland Eastern Shore (UMES), Princess Anne, MD 21853
2002 (fall)-2008	Associate Professor (50% teaching and 50% research) Graduate Faculty and USM MEES faculty	Food Science and Technology Ph.D. Program, Dept. of Agriculture, Food and Resource Sciences, Food and Resource Sciences Univ. of Maryland Eastern Shore (UMES), Princess Anne, MD 21853
2001-2002	Visiting Scientist	USDA, ARS Microbial Food Safety Research Unit Delaware State

1999 - 2000	Visiting Assistant In (Faculty Rank)	University Dover, DE 19901 Dept. of Microbiology and Cell Science, Univ. of Florida, Gainesville, FL 32611
1997- 1999	Post Doctoral Associate & Visiting Assistant In	Food Safety Laboratory Inst.of Food and Agricultural Sciences, Univ. of Florida, Gainesville, FL 32611
1993 - 1997	Research Assistant	Food Safety Laboratory Inst.of Food and Agricultural Sciences, Univ. of Florida, Gainesville, FL 32611
1988 - 1993	Microbiologist	International Center for Diarrheal Disease Research, Bangladesh (ICDDR.B); Biman Flight Catering Center (BFCC) of Bangladesh Airlines; Diphtheria, Pertussis and Tetanus (D.P.T) Vaccine Development Project, Institute of Public Health (IPH), Dhaka, Bangladesh

## AWARDS AND RECOGNITION

- Outstanding Research and Mentorship, Certificate of Appreciation, School of Agricultural and Natural Sciences, UMES, 2019.
- Board of Regents award in Scholarship, Research or Creative Activity, the University System of Maryland, 2019.
- Morrison Evans Outstanding Scientist award, Association for research Directors (ARD), 2019.
- Member, Editorial Advisory board, Heliyon, 2019-present.
- Member, Editorial Board, Heliyon (peer-reviewed journal; Elsevier). 2018-2019.
- Member, Editorial board, Food Microbiology. 2014-present.
- Associate Editor, Frontiers in Environmental Health. 2013-present.
- Member, Editorial board, Journal of Food Protection. 2015-2017.
- Distinguished scholar award, School of Graduate Studies, UMES, 2014.
- Member, Editorial board, Infection and Drug Resistance. 2008-present.
- Member, Editorial board, Food and Nutrition Sciences. 2012-present.

- Member, National Advisory Committee on Microbiological Criteria for Foods (NACMCF), USDA. 2013-2017.
- Outstanding Mentor Award, School of Graduate Studies, UMES. 2012.
- Outstanding Women Award, UMES, 2009.
- American Society for Microbiology Minority Travel Grant, 2007 and 2009.
- Listed with Biography in the Marquis Who's Who in America, Who's Who in American Women, Who's Who Registry of Executives and Professionals, and Who's Who in American Education, 2005-2008.
- Outstanding New Faculty Award, School of Agricultural and Natural Sciences, UMES, 2004.
- Gamma Sigma Delta, elected member, The Honor Society of Agriculture, 1997.
- Graduate Research Assistantship, University of Florida, 1993-1997.
- Chancellor Award, Govt. of Bangladesh, 1985 (for securing First class First position in B.Sc).
- Book Award, Dhaka University, 1985 (for securing First class First position in B.Sc).
- Merit Scholarship, Dhaka University (1985-1988).

#### **MEMBERSHIP TO PROFESSIONAL ORGANIZATIONS**

- American Society for Microbiology, 1996-present.
- Institute of Food Technology, 1997-present.
- International Association for Food Protection, 2003-present.
- Member, Dhaka University Microbiology Alumni Association, 2000-present
- Bangladesh Environmental Society, 2005-present.
- Global Network of Bangladeshi Biotechnologists, 2005-present.
- Bangladesh Society of Microbiologists, 2015-present (Life member)

#### **TEACHING EXPERIENCE**

##### **Course Developed and Taught:**

- Advanced Food Microbiology (FDST 692) -Average student evaluation -3.8/4.0
- Food Microbiology Lab. (FDST 693) - Average student evaluation -3.9/4.0
- Advanced Food Toxicology (FDST 802) - Average student evaluation - 3.5/4.0
- Seminar in Food Sci. and Tech. (FDST 700) - Average student evaluation- 3.9/4.0
- Doctoral Dissertation Research (FDST 899) Average student evaluation -3.8/4.0

##### **Course Updated and Taught:**

- Food and Agricultural Sciences Seminar (AGSC 600) Average student evaluation -3.5/4.0
- Master's Thesis Research (AGSC 799) Average student evaluation -3.5/4.0

- Individual Studies in Food and Nutrition (NUTD 680) Average student evaluation -3.8/4.0
- Undergraduate Research (BIOL 499) Student evaluation- 4.0/4.0
- Independent Study (BIOL 498) Average student evaluation- Not available
- Agricultural Sciences Seminar (AGSC 600)-Average student evaluation-Not available.
- Seminar in Research (AEED 798) - Average student evaluation-4.0/4.0.
- Special Topic in Anim/Poul SC (ANTP 499) - Average student evaluation-Not available.

## **RESEARCH INTERESTS**

The major focus of my research is Food Safety, Food and Environmental Microbiology, and Water Quality.

### **My research objectives are:**

- Improvement of safety and quality of seafood, poultry, meat and fresh produce.
- Application of genotypic and phenotypic methods for tracking sources of food- and water-borne pathogens in food processing plants and in aquatic environments.
- Development and application of rapid molecular and immunological methods for detection of water- and food -borne pathogens.
- Development of predictive models for the growth and survival of food-borne pathogens in seafood and poultry.
- Investigation of antimicrobial resistance, pathogenicity, genomics, metagenomics and control of food- and- water borne pathogens.

## **CURRENT LABORATORY PERSONNEL**

- Edwina Barnett--M.S. Student
- Tahirah Johnson--M.S. Student
- Ms. Ava Ellett--M.S. Student
- Mr. Anuradha Jeewantha-- Ph.D. Student
- Mr. Esam Almuhaideb--Ph.D. Student
- Ms. Jasmine Small--Ph.D. Student
- Ms. Chenelle White—Ph.D. Student
- Loretta Nimoh--B.S. Student
- Ms. Joan Meredith--Research Laboratory Technician
- Joey Haymaker—Research Assistant

## **COLLABORATORS (48 months)**

Paulinus Chigbu, Fawzy Hashem, Joseph Pitula, Jurgen Schwarz, and Cathy Liu (UMES); Henry Williams (Florida A and M University); Amy Sapkota, Debu Biswas and Qin Wang (UMD, College Park); Jennie Dubios and Clare Narod (JIFSAN), Thomas Oscar, John Luchansky, Pat Milner, Mannan Sharma and Gary Richards (USDA); Angelo DePaola, John Bowers, Becky Bell, Maria Hoffman, Chris Grim and Andrea Ottesen, (FDA); Kathy Brohawn (MD Department of the Environment); Eric McLamore (University of Florida); Michael Jahncke

(Virginia Tech.); Robert Moxley (University of Nebraska); Tom Rippen (MD Sea Grant); Paul Gulig (Univ. of Florida); John Jacobs (NOAA); Mark L. Tamplin (Univ. of Tasmania, Australia); Bob Vimini (Perdue Poultry Industry); Aminul Islam (Washington University); Morgan Fu (Fujian Agriculture and Forestry University, China); Nur A Hasan (CosmosID) and Marilia Miotto (Brazil).

## **SIGNIFICANT RESEARCH OUTCOMES**

- Development of methods for tracking sources of contamination in food and the aquatic environments.
- Development of methods for the detection of food- and water-borne pathogens in seafood.
- Development of cost-effective methods for the reduction of food- and water-borne pathogens in seafood and poultry.
- Development of mathematical models to control the growth and survival of food- and water-borne pathogens in seafood.
- Filled data gap for national [US Food and Drug Administration (FDA), Maryland Department of the Environment (MDE) and seafood industries] and international [the United Nations World Health Organization (WHO), and Food and Agriculture Organization (FAO)] risk assessment to control *Vibrio* bacteria in oysters.

Technology transfer to seafood processors, state and regulatory agencies for tracking sources of contamination, and controlling growth and survival of food- and water-borne pathogens in seafood.

## **SIGNIFICANT PROFESSIONAL ACCOMPLISHMENTS**

- Please also see the significant research outcomes' section.
- Received external grant funding of more than **\$17** million and several internal grants.
- Established National (FDA, USDA, NOAA, Maryland Dept. of the Environment, Maryland Sea Grant, Cornell Univ., Univ. of MD, and Virginia Tech.) and international (Univ. of Tasmania, Australia, Federal University of Santa Catarina, Brazil; Fujian Agriculture and Forestry University, China) collaboration with renowned scientists in the areas of Food Safety, Food and Environmental Microbiology.
- Established a Food Safety, Food and Environmental Microbiology laboratory at UMES.
- Added modern biotechnology equipment to the laboratories.
- Developed a nationally and internationally recognized research program on Food Safety, Food and Environmental Microbiology at UMES.
- Published **55** manuscripts in nationally and internationally recognized peer-reviewed journals and more than **149** abstracts in regional, national and international scientific meetings.
- One manuscript was **most widely read and top ten down load article** of Journal of Food Protection in 2010.
- Made more than **60** invited presentations.

- **Six** manuscripts are under review by co-authors and a Journal.
- Published **three book** chapters.
- According to Google Scholar Citation Reports 2020, all published articles were extensively cited by peers nationally and internationally (**a total of 2650**).
- Published more than **35** popular press and technical reports.
- Served as an invited speaker at regional, national and international professional meetings.
- Developed and taught **5** graduate level courses.
- Updated and taught **8** graduate level courses.
- Served/serving as chair (major advisor) and member on **30** Ph.D. and **16** M.S. committees.
- Served/serving as chair on **17** Ph.D. and **7** M.S. committees.
- Served as research advisor for more than **70** graduate, undergraduate and high school students.
- Trained more than **100** graduate and undergraduate students, more than **30** educators and scientists (national and international), more than **eight** technicians, and **five** postdoctoral associates/visiting scholar
- Member of editorial board of **three** peer-reviewed journals (Food Microbiology, Hliyon, and Food and Nutrition Sciences) and associate editor of Frontiers in Environmental Health.
- Reviewer for more than **15** national and international journals (Applied and Environmental Microbiology, Food Microbiology, Journal of Food Protection etc.) and funding agencies (USDA, NOAA, Sea Grant etc.).
- Invited review panelist, NOAA/UNH, Water quality and Health Bureau, Health Canada, and USDA AFRI.
- Served as judge and moderator for poster and oral research sessions at the national and international professional meetings.
- Served as chair and member for various committees at program, department, university and national and international levels.

#### **STUDENTS' ACOMPLISHMENTS (Dr. Parveen's Laboratory)**

- Five students have received Perdue Scholarship for their outstanding academic performance.
- Two students received 6-month co-op with Perdue Farms Inc. in the Research and Development Department.
- Students have received **17** awards for outstanding research presentations.
- Two students received American Society of Microbiologists (ASM) travel grants in 2017.
- One student received Food Marketing Institute Foundation Scholarship (travel grant) in 2016
- Two students received travel awards for attending vibrios in the environment conference in 2010 (Through the Univ. of North Carolina, Charlotte, NC).
- Published more than **30** peer-reviewed journal articles.

- Published more than **100** abstracts and made more than **100** presentations.
- **Six** manuscripts are under review by co-authors.
- **Six** graduated students are faculty in academia and **four** graduated students are federal employees.

## PUBLICATIONS

### Refereed Journal Publications

**\*Indicates Advisor of the Student and Postdoctoral Associate/Corresponding Author**

- Sharma, M., Handy, E.T., East, C.L., Kim, S., Jiang, C., Callahan, M.T., Allard, S.M., Micallef, S., Craighead, S., Anderson-Coughlin, B., Gartley, S., Vanore, A., Kniel, K.E., Haymaker, J., Duncan, R., Foust, D., White, C., Taabodi, M., Hashem, F., **Parveen, S.**, May, E., Bui, A., Craddock, H., Kulkarni, P., Murray, R.T., and Sapkota, A.R. 2020. Prevalence of *Salmonella* and *Listeria monocytogenes* in non-traditional irrigation waters in the Mid-Atlantic United States is affected by water type, season, and recovery method. PLOS ONE. 15:e0229365. doi.org/10.1371/journal.pone.0229365.
- Miotto, M., Barretta, C., Ossai, S.O., Silva, H.S., Kist, A., Vieira, C.R.W. and **Parveen\***, S. 2020. Optimization of a PMA-qPCR method for *Escherichia coli* quantification in raw seafood. International Journal of Food Microbiology 318:108467  
DOI: [10.1016/j.ijfoodmicro.2019.108467](https://doi.org/10.1016/j.ijfoodmicro.2019.108467)
- Tasmin, R., Gulig, P., **Parveen, S\***. 2019. Detection of virulence plasmid-encoded genes in *Salmonella* Typhimurium and *Salmonella* Kentucky isolates recovered from commercially processed chicken carcasses. Journal of Food Protection. 82(8):1364-1368.
- Hawkins, J.A , Uknalis, J., Oscar, T.P., Schwarz, J.G., Vimini, B. and **Parveen, S\***. 2019. The effect of previous life cycle phase on the growth kinetics, morphology and antibiotic resistance of *Salmonella* Typhimurium DT104 in brain heart infusion and ground chicken extract, DOI: 10.3389/fmicb.2019.01043.
- Haymaker., Sharma, M., **Parveen, S.**, Hashem, F., May, E. B., Handy, E.T., White, C., East, C., Bradshaw, R., Micallef, S. A., Callahan, M. T., Allard S., Anderson, B., Craighead, S., Gartley, S., Vanore, A., Kniel, K.E., Solaiman, S., Bui, A., Murray R., Hillary A., Craddock, H. A., Kulkarni, P., Foust, D., Duncan, R., Taabodi, M., and Sapkota A. R. 2019. Prevalence of Shiga-toxigenic and atypical Enteropathogenic *Escherichia coli* in untreated surface water and reclaimed water in the Mid-Atlantic U.S. Environ. Res. doi: 10.1016/j.envres.2019.02.019.
- Taabodi, M., · Hashem, F.M., Oscar, T.P., **Parveen, S.**, and May, E.B. 2019. The possible roles of *Escherichia coli* in the nitrogen cycle. Int. J. Environ. Res. <https://doi.org/10.1007/s41742-019-00191-y>.
- Panthi, S., Sapkota A. R., Raspanti, G., Allard, **Parveen, S.**, Hashem, F., May, E. B., Kniel, K., Pop., Mihai, Ravisankar, S., and Sapkota, A. 2019. Pharmaceuticals, herbicides, and

disinfectants in agricultural water sources. Environ. Res. 174. DOI: 10.1016/j.envres.2019.04.011.

- Richards, G. P., Chintapenta, L. K., Watson, M. A., Abbott, A. G., Ozbay, G., Uknalis, J., Oyelade, A. G., and **Parveen, S.** 2019. Bacteriophages against pathogenic Vibrios in Delaware Bay oysters (*Crassostrea virginica*) during a period of high levels of pathogenic *Vibrio parahaemolyticus*. Food Environ. Virol. doi: 10.1007/s12560-019-09365-5.
- Miotto, M., Júnior, A.A., Barretta, C., da Silva, H., Pellizzaro, T., Vieira, C.R., **Parveen, S.**, and Prudêncio, E.S. 2019. Development and application of a real-time Polymerase Chain Reaction method for quantification of *Escherichia coli* in oysters (*Crassostrea gigas*). Food Microbiol. DOI: [10.1016/j.fm.2018.08.015](https://doi.org/10.1016/j.fm.2018.08.015) .
- Mwangi S, Timmons, J, Fitz-Coy, S., and **Parveen, S\***. 2019 Characterization of *Clostridium perfringens* recovered from broiler chicken affected by necrotic enteritis. Poult. Sci. doi: 10.3382/ps/pey332.
- Zhu, L., Torres, M., Betancourt, W. Q., Sharma, M., Micallef, S. A., Gerba, C., Sapkota, A. R., Sapkota, A., **Parveen S.**, Hashem, F., May, E., Kniel, K., Pop, M., Ravishankar, S. 2018. Incidence of fecal indicator and pathogenic bacteria in reclaimed and return flow waters in Arizona, USA. Environ. Res. 170: 122–127.
- Miotto, M., Ossai, S. A., Meredith, J. E., Barretta, C., Kist, A., Vieira, C.R.W., Prudencio, E.S., and **Parveen, S\***. 2018. Genotypic and phenotypic characterization of *Escherichia coli* isolated from mollusks in Brazil and United States. Microbiol.Open, DOI: 10.1002/mbo3.738.
- Elmahdi, S., **Parveen, S\*** Ossai, S., L., DaSilva, Jahncke, M., Bowers, J., and Jacobs, J. 2018 Characterization of *Vibrio parahaemolyticus* and *Vibrio vulnificus* recovered from oysters during an oyster relay study. Appl. Environ. Microbiol. 84:e1790-17.
- Elbashir, S., **Parveen, S.,\*** Schwarz, J., Rippen, T., Jahncke, M., and DePaola, A. 2018. Seafood Pathogens and Information on Antimicrobial Resistance: A Review. Food Micro. 70:85-90.
- Ossai, S., Ramachandran, P., Ottesen, A., Reed, E., DePaola, A., and **Parveen, S.\***. 2017. Microbiomes of American oysters (*Crassostrea virginica*) harvested from two sites in the Chesapeake Bay. Genome Annou.5: e00729-17.
- **Parveen, S.**, White, C., and Tamplin, M.L., 2017. Predictive model for growth of *Listeria monocytogenes* in pasteurized blue crab (*Callinectes sapidus*). J. Food. Prot. 13:1872-1876.
- Tasmim, R., Hasan, N., Grim, C., Grant, A., Alam, S.M., Bell, R., Cavanaugh, C., Balan, K., Babu, U., and **Parveen, S\***. 2017. Characterization of multidrug resistant *Salmonella* Typhimurium and *Salmonella* Kentucky strains recovered from chicken carcasses using genotypic and phenotypic methods. PLOS ONE. DOI: 10.1371/journal.pone.0176938.
- Grant, A., **Parveen, S.,\*** Schwarz, J., Hashem, F., and Vimini, B. 2017. Reduction of *Salmonella* in ground chicken using a bacteriophage. Poult. Sci. doi: 10.3382/ps/pex062.



- Grant, A. and **Parveen, S.\*** 2017. Natural clean-label antimicrobials that can be used during poultry processing. *J. Food Prot.* 80 (4):540-544.
- **Parveen, S.\***, Jahncke, M., Elmahdi, S., Crocker, H., Bowers, J., White, C., Gray, S., and Brohawn K. 2016. High salinity relaying to reduce *Vibrio parahaemolyticus* and *Vibrio vulnificus* in Chesapeake Bay oysters. *J. Food Sci.* 82(2):484-491.
- Hawkins, J.L., Vimini, B., Schwarz, J.G., Nichols, P., and **Parveen, S.\***. 2016. Application of antimicrobial agents via commercial spray cabinet to inactivate *Salmonella* on skinless chicken meat. *J. Food Prot.* 79: 569–573.
- Grant, A.K., Hashem, F., and **Parveen, S.\***. 2016. *Salmonella* and *Campylobacter*: Antimicrobial resistance and bacteriophage control in poultry. *Food Microbiol.* 53(Pt B):104-9.
- Korir, C.R., **Parveen, S.\***, Hashem, F., and Bowers, J. 2016. Microbiological quality of fresh produce obtained from retail stores on the Eastern Shore of Maryland, United States of America. *Food Microbiol.* 56:29-34.
- Mohamed, T., **Parveen, S.\*** and T. Oscar. 2015. Chlorine inactivation of antibiotic resistant and non-resistant *Salmonella* Kentucky isolated from pre- and post-chill whole broilers carcasses. *J. Food Prot.* 78(2):414-8.
- Rodgers, C., **Parveen, S.\***, Chigbu, P., Ishaque, A., Jacobs, J., Rhodes, M., and Harter-Dennis, J. 2014. Prevalence of *Vibrio parahaemolyticus*, and *Vibro vulnificus* in Blue Crabs (*Callinectes sapidus*), Seawater, and Sediments of the Maryland Coastal Bays. *J. Appl. Microbiol.* 117(4):1198-1209.
- Mudoh, F.M., **Parveen, S.\***, Schwarz, J., Rippen, T., and Chaudhuri, A. 2014. The effects of storage temperature on the prevalence of *Vibrio parahaemolyticus*, and physical and sensory properties of oysters. *Front. Public Health.* 2:45. doi: 10.3389/fpubh.2014.00045. eCollection 2014.
- Mohamed, T., Zhao, S., White, D., and **Parveen, S.\*** 2014. Molecular characterization of antibiotic resistant *Salmonella* Typhimurium and *Salmonella* Kentucky isolated from pre- and post-chill whole broilers carcasses. *Food. Microbiol.* 38:6-15.
- Oscar, T.P., Tamsin, R., and **Parveen, S.** 2013. Chlorine inactivation of non-resistant and antibiotic resistant strains of *Salmonella* Typhimurium isolated from chicken carcasses. *J. Food Prot.* 76(6):1031-4.
- **Parveen, S.**, DaSilva, L., DePaola, A., Bowers, J., White, C., Munasinghe, K.A., Brohawn, K., Mudoh, M., and Tamplin, M.L. 2013. Development and validation of a predictive model for the growth of *Vibrio parahaemolyticus* in post-harvest shellstock oysters. *Int. J. Microbiol.* 161:1-6.
- Tkachenko, A., DaSilva, L., Hearne, J.L., **Parveen, S.**, and Waguespack, Y. 2013. An assay to screen bacterial adhesion to mucus biomolecules. *Letters in Appl. Microbiol.* 2012 Sep. 28. doi: 10.1111/lam.12003.
- Pagadala, S., **Parveen, S.\***, Rippen, T., Luchansky, J.B., Call, J.E., Tamplin, M.L., and Porto-Felt, A.C. 2012. Prevalence, characterization and sources of *Listeria monocytogenes* in blue

crab meat (*Callinectes sapidus*) and blue crab processing plants. Food Microbiol. 31(2):263-270.

- DaSilva, L.V., **Parveen, S.**<sup>\*</sup>, DePaola, A., Bowers, J., and Tamplin, M.L. 2012. Development and validation of a predictive model for the growth of *Vibrio vulnificus* in post-harvest shellstock oysters. Appl. Environ. Microbiol. 78 (6):1675-168.
- Pagadala, S., **Parveen, S.**<sup>\*</sup>, Rippen, T., Schwarz, J., and Luchansky, J.B. 2011. Comparison of automated BAX polymerase chain reaction and standard culture methods for detection of *Listeria monocytogenes* in blue crab meat (*Callinectes sapidus*) and blue crab processing plants. J. Food Prot. 74 (11): 1930-1933.
- Oscar, T.P., Rutto, G.K., Ludwig, J.B., and **Parveen, S.**<sup>\*</sup>. 2010. Qualitative map of *Salmonella* contamination on young chicken carcasses J. Food Prot. 73 (9):1596-603 (**Most widely read and top ten down load Journal article**).
- Whitley, N.C., Cazac, D., Rude, B.J., Jackson-O'Brien, D.J., and **Parveen, S.** 2009. Use of a commercial probiotic supplement in meat goat. J. Anim. Sci. 87(2):723-8.
- **Parveen, S.**, Hettiarachchi, K.A., Bowers, J.C., Nordstrom, J.L., Tamplin, M.L., McKay, R., Beatty, W., Brohawn, K., DaSilva, L., and DePaola, A. 2008. Seasonal distribution of total and pathogenic *Vibrio parahaemolyticus* in Chesapeake Bay oysters and waters. Int. J. Food. Microbiol. 128:354-361.
- **Parveen, S.**<sup>\*</sup>, Taabodi, M., Schwarz, J.P., Oscar, T.P., Harter-Dennis, J., and White, D. 2007. Prevalence and antimicrobial resistance of *Salmonella* spp. in processed poultry. J. Food. Prot. 70(11):2466-2472.
- **Parveen, S.**, Lukasik, J., Scott, T.M., Tamplin, M.L., Portier, K.M., Sheperd, S., Braun, K., and Farrah, S.R. 2006. Geographical variation in antibiotic resistance patterns of *Escherichia coli* isolated from swine, poultry, beef and dairy cattle farms in Florida. J. Appl. Microbiol. 100:50-57.
- Richards, G.P., Watson, M.A., and **Parveen, S.** 2005. Development of a simple and rapid fluorogenic procedure for the identification of Vibrionaceae family members. Appl. Environ. Microbiol. 71(7):3524-3527.
- Richards, G.P. and **Parveen, S.** 2005. A survey for phosphoglucose isomerase with lysyl Aminopeptidase activity in Vibrionaceae and non-Vibrio pathogens. Biochimica et Biophysica Acta (BBA). 1748 (1):128-33.
- Richards, G.P., Hammer, C.H., Garfield, M.K., and **Parveen, S.** 2004. Characterization of lysyl aminopeptidase activity from phosphoglucose isomerase of *Vibrio vulnificus*. Biochimica et Biophysica Acta (BBA). 1700:219-229.
- **Parveen, S.**, Farrah, S.R., Gonzalezbonilla, C., Zamudio, A.V., and Tamplin, M.L. 2003. Characterization of a clinical *Vibrio cholerae* O139 isolate from Mexico. Can. J. Microbiol. 49 (1):65-70.
- Scott, T.M., **Parveen, S.**, Portier, K.M., Rose, J.B., Tamplin, M.L., Farrah, S.R., and Lukasik, J. 2003. Geographical Variation in ribotype profiles of *Escherichia coli* isolated from humans, swine, poultry, beef and dairy cattle in Florida. Appl. Environ. Microbiol. 69 (2):1089-1092.

- **Parveen, S.**, Hodge, N.C., Stall, R.E., Farrah, S.R., and Tamplin, M.L. 2001. Genotypic and phenotypic characterization of human and nonhuman *Escherichia coli*. *Water Res.* 35 (2):379-386.
- Gallman, A.M., Doyle, T.J., Tamplin, M.L., **Parveen, S.**, Skinner, S.C., Bomeisl, P.E., and Gulig, P.A. 2000. Pathogenesis of infection by virulent and naturally attenuated strains of *Vibrio vulnificus* in subcutaneously inoculated, iron dextran-treated mice. *Infect. Immun.* 68 (10):5785-93.
- **Parveen, S.**, Portier, K.M., Robinson, K., Edmiston, L., and Tamplin, M.L. 1999. Discriminant analysis of ribotype profiles of *Escherichia coli* for differentiating human and nonhuman sources of fecal pollution. *Appl. Environ. Microbiol.* 65(7):3142-3147.
- **Parveen, S.**, Murphree, R., Edmiston, L., Kaspar, C.W., Portier, K.M., and Tamplin, M.L. 1997. Association of multiple-antibiotic-resistance profiles with point and nonpoint sources of *Escherichia coli* in Apalachicola Bay. *Appl. Environ. Microbiol.* 63(7):2607-2612.
- **Parveen, S.**, Islam, M.S., and Huq, A. 1995. Abundance of *Aeromonas* spp. in river and lake waters in and around Dhaka, Bangladesh. *J. Diarrheal Dis. Res.* 13(3):183-186.
- Huq, A., **Parveen, S.**, Quadri, F., Sack, D.A., and Colwell, R.R. 1993. Comparison of *Vibrio cholerae* 01 strains isolated from patients and the aquatic environment. *J. Trop. Med. Hyg.* 96:86-92.
- **Parveen, S.**, Huq, A., Hassan, J.A.K., and Aziz, K.M.S. 1992. Occurrence of hemolysin producing *Aeromonas* spp. in the aquatic environments. *Microbios.* 70:67-70.
- Huq, A., Alam, M., **Parveen, S.**, and Colwell, R.R. 1992. Occurrence of resistance to Vibriostatic compound 0/129 in *Vibrio cholerae* 01 isolated from clinical and environmental samples in Bangladesh. *J. Clin. Microbiol.* 30(1):219-221.
- **Parveen, S.** and Huq, A. 1990. Enterotoxicity of *Aeromonas* spp. isolated from environmental sources. *Bangladesh J. Microbiol.* 7(2):89-93.
- Huq, A., Colwell, R.R., Rahman, R., Ali, A., Chowdhury, M.A.R., **Parveen, S.**, Sack, D.A., and Russek-Cohen, E. 1990. Detection of *Vibrio cholerae* 01 in the aquatic environment by fluorescent-monoclonal antibody and culture methods. *Appl. Environ. Microbiol.* 56(8): 2370-2373.
- Morshed, M.G., Sayeed, S., **Parveen, S.**, Ahmed, A.U., and Hossain, A. 1989. *Coliform* bacteria during peak flood period in Dhaka city-a case study. *Bangladesh J. Life Sci.* 2: 41-45.
- **Parveen, S.**, Huq, A., and Aziz, K.M.S. 1988. Antibiotic resistance patterns of *Aeromonas* spp. isolated from environmental and clinical sources. *Bangladesh J. Microbiol.* 5(2): 25-32.

#### **Book Chapters:**

- **Parveen, S.** and Tamplin, M.L. *Vibrio vulnificus*, *Vibrio parahaemolyticus*, and *Vibrio cholera*. 2013. Willey Blackwell, UK. Pages: 116-162.
- Chigbu, P. and **Parveen, S.** 2013. Bacteriological analysis of water. CRC Press, Inc., New York, NY. Pages: 148-179.

- **Parveen, S.** and Tamplin, M.L. 2002. Sources of Fecal Contamination. Encyclopedia of Environmental Microbiology. vol. 3, pp: 1256-1264. John Wiley and Sons, Inc. New York, NY.

**Abstracts and Scientific Presentations (oral and poster):**

- Craighead, S., Anderson-Coughlin, B. L., Gartley, S., Kelly, A., Omar, A., Vanore, A., Jiang, C., Haymaker, J., Foust, D., Duncan, R., White, C., East, C., Handy, E., Allard, S., Murray, R., Callahan, M. T., Solaiman, S., Betancourt, W., Gerba, C., **Parveen, S.**, Hashem, F., Micallef, S., Sapkota, A., Sapkota, A. R., Sharma, M., and Kniel, K. 2020. The relationship between season, climatic variables, physicochemical properties and the presence of *Cryptosporidium* spp., *Toxoplasma gondii*, and *Giardia intestinalis* in potential alternative sources of agricultural water: a CONSERVE project. International Association for Food Protection (IAFP) annual meeting, Aug. 02-05, 2020. Cleveland, OH **(Accepted)**.
- Anderson-Coughlin B. L., Craighead, S., Kelly, A., Gartley, S., Vanore, A., Jiang, C., Haymaker, J., White, C., Foust, D., Duncan, R., East, C., Handy, E. T., Bradshaw, R., Allard, S., Murray, R., Kulkarni, P., Callahan, M. T., Solaiman, S., Betancourt, W., Gerba, C., **Parveen, S.**, Hashem, F., Micallef, S., Sapkota, A., Sapkota, A. R., Sharma, M., and Kniel, K. E. 2020. Evaluation of non-traditional irrigation water sources for atmospheric, physicochemical, and viral indicators of viral enteric pathogens: a CONSERVE study. IAFP annual meeting, Aug. 02-05, 2020. Cleveland, OH **(Accepted)**.
- **Parveen, S.**, Elbashir, S., Bowers, J., Rippen, T., Schwarz, J., Jahncke, M., and DePaola, A. 2020. Prevalence, antibiotic resistance and genetic diversity of *Salmonella* recovered from imported and domestic seafood. IAFP annual meeting, Aug. 02-05, 2020. Cleveland, OH **(Accepted)**.
- Handy, E. T., Kim, S., Behal, S., Kim, D., East, C. L., Callahan, M. T., Allard, S., Micallef, S., Craighead, S., Anderson, B., Gartley, S., Kniel, K. E., Haymaker, J., White, C., Hashem, F., **Parveen, S.**, May, E., Craddock, H., Murray, R. T., Sapkota, A. R., and Sharma, M. 2020. Recovery of *Salmonella enterica* and *Listeria monocytogenes* in surface waters by rapid and culture-based methods. IAFP annual meeting, Aug. 02-05, 2020. Cleveland, OH **(Accepted)**.
- Sharma, M., Kim, S., Handy E., East, C., Kniel, K., Micallef, S., **Parveen, S.**, Hashem, F., and Sapkota, A. R. 2020. Factors affecting *Salmonella enterica* and *Listeria monocytogenes* survival in irrigation water: a CONSERVE project. International Association for Food Protection (IAFP) European symposium, Apr. 7-9, 2020. Munich, Germany **(Abstract accepted; meeting is cancelled due to COVID-19)**.
- Barnas, M., Jeewantha, A., McNaughton, J., Auman, S., Parveen, S., Schwarz, J., Roberts, M. 2020. An evaluation of sodium ferrate as a green processing chemistry. 2020 International Poultry Scientific Forum. Jan. 27-28, Atlanta, Georgia.
- Hernandez, R., and **Parveen, S\***. 2019. Prevalence of *Shewanella* in oysters and seawater in Maryland. 2020 Emerging Researchers National (ERN) Conference in STEM on February 6-8, in 2020. Washington, D.C.

- **Parveen, S\***, Jacobs, J., Ozbay, G., Chintapenta, K., Almuhaideb, E., Meredith, J., Ossai, S., Abbott, A., Grant, A. K., Brohawn, K. Chigbu, P., and Richards, G. 2019. Seasonal and geographical differences in total and pathogenic *Vibrio parahaemolyticus* and *Vibrio vulnificus* levels in the mid-Atlantic area as determined by several methods. AGNR's 2nd Annual Cornerstone Event: Ensure a Clean and Healthy Chesapeake Bay. Oct. 29, 2019. University of Maryland, College Park, MD.
- **Parveen, S.**, Jacobs, J., Ozbay, G., Chintapenta, K., Meredith, J., Ossai, S., Abbott, A., Almuhaideb, E., Grant, A. K., Brohawn, K. Chigbu, P., and Richards, G. 2019. Comparison of methods for detection of total Vibrionaceae as an indicator of pathogenic *Vibrio* species in oysters and seawater. International Association of Food Protection (IAFP) annual meeting, July 21-24, 2019. Louisville, KY.
- Haymaker, J., Sharma, M., **Parveen, S.**, Hashem, F., May, E., Handy, E., White, C., East, C., Bradshaw, R., Micallef, S.A., Callahan, M.T., Allard, S., Anderson, B., Craighead, S., Gartley S., Vanore, A., Kniel, K., Solaiman, S., Bui, A., Murray, R., Craddock, H., Kulkarni, P., and Sapkota, A. 2019. Evaluation of nontraditional irrigation water sources for Shiga Toxin-Producing and atypical Enteropathogenic *Escherichia coli* in the United States Mid-Atlantic region. IAFP annual meeting, July 21-24, 2019. Louisville, KY.
- White, C., Hashem, F., **Parveen, S.**, May, E., Haymaker, J., Handy, E., East, C., Allard, S., Micallef, S.A., Sharma, M., Kniel, K., and Sapkota, A. 2019. Presence of *Salmonella* and *Listeria monocytogenes* in reclaimed and surface irrigation water sources on Maryland's Eastern Shore: A Conserve Study. IAFP annual meeting, July 21-24, 2019. Louisville, KY.
- Allard, S., Suri, M., Solaiman, S., Callahan, M.T., White, C., Goeringer, P., Pee, D., Haymaker, J., Hashem, F., May, E., **Parveen, S.**, Kniel, K., Sharma, M., Micallef, S.A., Goldstein, R.R. and Sapkota, A. 2019. Comparison of Mid-Atlantic grower perceptions and nontraditional irrigation water realities: A Conserve Study. IAFP annual meeting, July 21-24, 2019. Louisville, KY.
- Anderson-Coughlin, B., Craighead, S., Kelly, A., Gartley S., Vanore, A., Jiang, C., Betancourt, W., Haymaker, J., White, C., Foust, D., Duncan, R., Allard, S., Callahan, M.T., Gerba, C., **Parveen, S.**, Hashem, F., Micallef, S.A., Sapkota, A., and Kniel, K. 2019. Optimization and evaluation of a viradel method for viral detection in environmental source waters: A Conserve Study. IAFP annual meeting, July 21-24, 2019. Louisville, KY.
- Craighead, S., Anderson, B., Gartley S., Kelly, A., Omar, A., Vanore, A., Jiang, C., Betancourt, W., Gerba, C., Haymaker, J., Foust, D., Duncan, R., White, C., **Parveen, S.**, Hashem, F., Allard, S., Sapkota, A., and Kniel, K. 2019. The Presence of *Cryptosporidium* spp., *Cyclospora cayetanensis*, *Toxoplasma gondii*, and *Giardia intestinalis* in potential alternative sources of agricultural water: A Conserve Study. IAFP annual meeting, July 21-24, 2019. Louisville, KY.
- Handy, E., East, C., Bradshaw, R., Callahan, M.T., Allard, S., Micallef, S.A., Craighead, S., Anderson-Coughlin, B., Gartley S., Kniel, K., Haymaker, J., White, C., Hashem, F., **Parveen, S.**, May, E., Craddock, H., Murray, R., Sapkota, A., and Sharma, M. 2019. Prevalence of

*Salmonella enterica* and *Listeria monocytogenes* in irrigation waters as determined by culture-based and rapid molecular methods. IAFP annual meeting, July 21-24, 2019. Louisville, KY.

- Solaiman, S., Callahan, M.T., Handy, E., East, C., Allard, S., Murray, R., Bui, A., Haymaker, J., White, C., Craighead, S., Anderson, B., Vanore, A., Gartley, **Parveen, S.**, Hashem, F., May, E., Kniel, K., Sharma, M., Sapkota, A., and Micallef, S.A. 2019. Distribution of pathogenic *E. coli* in surface and reclaimed water: A Conserve Study. IAFP annual meeting, July 21-24, 2019. Louisville, KY.
- Zhu, L., Torres, M., Betancourt, W., Sharma, M., Micallef, S.A., Gerba, C., Sapkota, Amy, Sapkota, Amir, **Parveen, S.**, Hashem, F., May, E., Kniel, K., Pop, M., and Ravishankar, S. 2019. Incidence of fecal indicator and pathogenic bacteria in reclaimed and return flow waters in Arizona, United States. IAFP annual meeting, July 21-24, 2019. Louisville, KY.
- Gartley S., Craighead, S., Anderson-Coughlin, B., Sharma, M., Handy, E., Joerger, R., Hoover, D., and Kniel, K. 2019. Evaluation of survival and infectivity of environmental *Listeria monocytogenes* isolates in tidal brackish irrigation water. IAFP annual meeting, July 21-24, 2019. Louisville, KY.
- Kim, S., Bradshaw, R., Kulkarni, P., Chiu, P., Allard, S., Sapkota, A., Handy, E., East, C., Kniel, K., and Sharma, M. 2019. Evaluation of zero valent iron filtration to reduce *Escherichia coli* in agricultural irrigation water in laboratory and field trials. IAFP annual meeting, July 21-24, 2019. Louisville, KY.
- Liu, C., R. Mu, **Parveen, S.**, D. Webster, and J. Pang, 2019. Optimization of wet-storage process for purging *V. parahaemolyticus* (Vp) from aquacultured Eastern Oysters (*Crassostrea virginica*). IFT Annual Meeting, June 2-5, 2019. New Orleans, LA.
- DaSilva, L.V., S. Ossai, P. Chigbu and **Parveen, S.** 2019. Characterization of *Vibrio vulnificus* isolated from environment and blue crab samples collected from Maryland Coastal Bays. ASLO meeting. Feb. 2019, San Juan, PR.
- **Parveen, S.**, Hawkins, J.L. Fratamico, P.M. Gunther, N., Baranzoni, G.M. and Kim, G. 2019. The effect of the life cycle phase on the proteomic and transcriptomic profiles of *Salmonella* in brain heart infusion and ground chicken extract. The Association for Research Directors (ARD) 19<sup>th</sup> Biennial Research Symposium. March 30-April 03, 2019, Jacksonville FL.
- Adeoye, O.C., Meredith, J., and **Parveen, S.** 2019. Detecting *Vibrio parahaemolyticus* in oyster and water in the Chesapeake Bay region of Maryland. The Association for Research Directors (ARD) 19<sup>th</sup> Biennial Research Symposium. March 30-April 03, 2019, Jacksonville FL.
- Handy, E., East, C, Bradshaw, R., Kulkarni, P., Callahan, M.T., Allard, S., Micallef, S.A., Craighead, S., Anderson-Coughlin, B., Gartley, S., Vanore, A., Kniel, K., Haymaker, J., White, Hashem, F., **Parveen, S.**, May, E., Craddock, H., Murray, R., Sapkota, A., and Sharma, A., 2019. Prevalence of *Salmonella* spp. and *Listeria monocytogenes* in irrigation water sources in

the Mid-Atlantic U.S.: A CONSERVE Project. 2019. European IAFP meeting. Apr. 24-26, 2019. Nantes, France.

- Ellett, A., Jacobs, J., **Parveen, S.**, Paranjpye, 2019. Growth comparison of *Vibrio parahaemolyticus* strains in live oysters and culture. Aquaculture 2019. Mar. 07-11, 2019. New Orleans, LA.
- Rosales, D., Ozbay, G., **Parveen, S.**, Jacobs, J., and Pitula, J. 2019. Harmful algal succession and *Vibrio* association in the Delaware Island Bays. Aquaculture 2019. Mar. 07-11, 2019. New Orleans, LA.
- Hawkins, J.L., **Parveen, S.**, Fratamico, P.M. Gunther, N., Baranzoni, G.M. and Kim, G. 2019. The effect of the life cycle phase on the proteomic and transcriptomic profiles of *Salmonella* in brain heart infusion and ground chicken extract. The second Delmarva Poultry University-Industry Partnership Summit. Mar. 13, 2019, Salisbury, MD.
- Haymaker, J. R., Hashem, F. M., **Parveen, S.**, Sharma, M., May, E. B., White, C. L., Micallef, S. A., and Sapkota, A. R. 2019. Prevalence of Shiga toxin producing *Escherichia coli* within nontraditional irrigation water sources on the Delmarva Peninsula. The second Delmarva Poultry University-Industry Partnership Summit. Mar. 13, 2019, Salisbury, MD.
- Haymaker, J. R., Hashem, F. M., **Parveen, S.**, Sharma, M., May, E. B., White, C. L., Micallef, S. A., and Sapkota, A. R. Evaluating nontraditional irrigation water sources for shiga toxin producing *Escherichia coli* on the Delmarva Peninsula. One Health Symposium. Apr. 30, 2019. University of Delaware, Newark, DE.
- White, C., Hashem, F., **Parveen, S.**, May, E., Haymaker, Handy, E.T., East, C.L., Allard, S., Micallef, S., Sharma, M., Kniel, K. E., and Sapkota. A.S. Incidence of *Salmonella* and *Listeria monocytogenes* in nontraditional irrigation water. One Health Symposium. Apr. 30, 2019. University of Delaware, Newark, DE.
- Anderson-Coughlin, B.L. Craighead, S., Solaiman, S., Panthi, S., Allard, S., Kelly, A., Vanore, A., Gartly, S., Haymaker, J., Foust, D., Duncan, R., White, C., **Parveen, S.**, Hashem, F., A.R. Sapkota, S. Micallef, Sharma, M., Gerba, C., Betancourt, Sapkota, A. and Kniel, K. Presence of viral, bacterial and chemical indicators in recycled, surface and processing water used for crop irrigation. One Health Symposium. Apr. 30, 2019. University of Delaware, Newark, DE.
- Craighead, S., Anderson-Coughlin, B.L., Gartly, S., Kelly, A., Omar, A., Vanore, A., Jiang, C. Solaiman, S., Panthi, S., Allard, S., Haymaker, J., Foust, D., Duncan, R., White, C., **Parveen, S.**, Hashem, C., Betancourt, Gerba, C., Haymaker, J., Foust, D., Duncan, R., White, C., Parveen, S., Hashem, H., Allard, S., Sapkota, A., and Kniel, K. 2019. The presence of protozoan parasites in potential alternative sources of Agricultural water. One Health Symposium. Apr. 30, 2019. University of Delaware, Newark, DE.

- Adeoye, O.C., Meredith, J., and **Parveen, S.** 2019. Frequency of *Vibrio parahaemolyticus* in oysters and water in the Chesapeake Bay region of Maryland. 10<sup>TH</sup> Regional Research Symposium Program. Apr. 16, 2019. University of Maryland Eastern Shore, Princess Anne, MD 21853.
- Owolabi, B.A., Wiredu, A., Meredith, J., and **Parveen, S.** 2019. Investigating the Frequency of *Vibrio vulnificus* in oysters and water in the Chesapeake Bay region of Maryland. 10<sup>TH</sup> Regional Research Symposium Program. Apr. 16, 2019. University of Maryland Eastern Shore, Princess Anne, MD 21853
- White, C., Hashem, F., **Parveen, S.**, May, E., Haymaker, J., Handy, E.T., East, C.T., Allard, S., Micallef, S., Sharma, M., Kniel, K.E., and Sapkota, A.A. 2019. Prevalence of *Salmonella* and *Listeria monocytogenes* in reclaimed and surface irrigation water sources on Maryland's Eastern Shore: A Conserve Study. 10<sup>TH</sup> Regional Research Symposium Program. Apr. 16, 2019. University of Maryland Eastern Shore, Princess Anne, MD 21853. & 19<sup>TH</sup> Biennial Research Symposium, The association of 1890 Research Directors. Mar. 30-Apr. 3, 2019. Jacksonville, FL.
- Merges, H., Almuhaideb, E., Small, J., and **Parveen, S.** 2018. Prevalence of *Vibrio vulnificus* in blue crabs (*Callinectes sapidus*) and seawater of the Maryland Coastal Bays. REU presentation. August 2018. UMES, Princess Anne. MD.
- Haymaker, J. R., Hashem, F. M., **Parveen, S.**, Sharma, M., May, E. B., White, C. L., Micallef, S. A., and Sapkota, A. R. 2018. Evaluating nontraditional irrigation water sources for shiga toxin-producing *Escherichia coli* on the Delmarva Peninsula. Ecological Society of America, Aug. 5-10, 2018. New Orleans, LA.
- Owolabi, B.A., Wiredu, A., Meredith, J., **Parveen, S.** 2018. Prevalence of *Vibrio vulnificus* in oysters and water in the Chesapeake Bay region of Maryland. National Collegiate Honors Council (NCHC), Nov 7-1, 2018. Boston, MA.
- Ossai, S., Ramachandran, P., Ottesen, A., Reed, E., DePaola, A., and **Parveen, S.** 2018. The effects of microbiome on the abundance of *Vibrio parahaemolyticus* and *Vibrio vulnificus* in oysters. International Association for Food Protection (IAFP) Annual Meeting. Jul. 8-11, Salt Lake City, UT.
- Adnan, A., Elbashir, S., Hashem, F., and **Parveen, S.** 2018. Prevalence and virulence genes of *Salmonella* recovered from seafood. IAFP Annual Meeting. Jul. 8-11, Salt Lake City, UT.
- Hawkins, J., Fratamico, P., Gunther, N., Baranzoni, G., Kim, G., and **Parveen, S.** 2018. The effect of the previous life cycle phase on the proteomic and transcriptomic profiles of *Salmonella* Typhimurium DT104 in brain heart infusion and ground chicken extract. IAFP Annual Meeting. Jul. 8-11, Salt Lake City, UT.
- Jung, Y., Porto-Fett, A., Shoyer, B., Henry, E., Trauger, Z., Osoria, M., Shane, L., Rupert, C. L., Chapman, B., and **Parveen, S.**, Meredith, J., Schwarz, G., Moxley, R., Luchansky, J.B.



2018. Recovery of regulated non-O157 serogroups of Shiga toxin-producing *Escherichia coli* from ground veal and ground beef collected from retail stores in the Mid-Atlantic region of the United States. (IAFP) Annual Meeting. Jul. 8-11, Salt Lake City, UT.
- Solaiman, S., Callahan, M.T., Allard, S., Handy, E.T., East, C., Kulkarni, P., Murray, R., Bui, A., Haymaker, J., Gurley, S., May, E., Hashem, F., **Parveen, S.**, Kniel, K., Sharma, M., Sapkota, A.R., and Micallef, S.A. 2018. Prevalence of fecal indicators in surface and recycled water: a CONSERVE study. IAFP Annual Meeting. Jul. 8-11, Salt Lake City, UT.
  - Handy, E.T., East, C.L., Callahan, M.T., Allard, S., Craddock, H., Micallef, S., Kniel, K., Hashem, F., **Parveen, S.**, Sharma, S. 2017. Prevalence of *E. coli*, *Salmonella* spp. and *Listeria monocytogenes* in non-traditional irrigation waters in the Mid-Atlantic United States: A CONSERVE Project. IAFP Annual Meeting. Jul. 8-11, Salt Lake City, UT.
  - Handy, E.T., Bui, A., Allard, S., Solaiman, S., Callahan, M.T., Kelbick, H.C., Murray, R., Haymaker, J., Foust, D., Duncan, R., Taabodi, M., Gartley, S., Vanore, A., May, E., Hashem, F., **Parveen, S.**, Kniel, K.E., Sharma, S., Handy, E.T., East, C., Micallef, S.A., Sapkota, A.R. 2018. Prevalence of generic *E. coli* and comparison to FSMA Water Quality Standards in Mid-Atlantic surface and nontraditional irrigation water sources: A CONSERVE Study. IAFP Annual Meeting. Jul. 8-11, Salt Lake City, UT.
  - Handy, E.T., East, C.L., Callahan, M.T., Solaiman, S., Micallef, S., Allard, S., Murray, R., Bui, A., Sapkota, A., Gartley, S., Kniel, K., **Parveen, S.**, White, C., Haymaker, J., Hashem, F., May, E., Colvecchio, A., Goodridge, L., and Sharma, M. 2018. Phylogenetic diversity of *Escherichia coli* isolated from Mid-Atlantic irrigation water sources: a CONSERVE study. American Society for Microbiologists (ASM) Microbe 2018. Jun. 7-11, 2018. Atlanta. GA.
  - **Parveen, S.**, Jacobs, J., Meredith, J., Ossai, S., Grant, A., Chigbu, P., Brohawn, K., and Richards, G. 2017. A rapid, simple and reliable tool for monitoring pathogenic *Vibrios* in oysters and seawater. Third International Conference on Global Food Security, Dec. 02-07, Cape Town, South Africa.
  - Handy, E.T., East, C.L., Callahan, M.T., Allard, S., Craddock, H., Micallef, S., Kniel, K., Hashem, F., **Parveen, S.**, and Sharma, S. 2017. Prevalence of *E. coli*, *Salmonella* spp. and *Listeria monocytogenes* in non-traditional irrigation waters in the Mid-Atlantic United States. Third International Conference on Global Food Security, Dec. 02-07, Cape Town, South Africa.
  - **Parveen, S.**, Tasmin, R., Hasan, N., Grim, C., Grant, A., Alam, S.M., Bell, R., Cavanaugh, C., Balan, K., and Babu, U., 2017. Characterization of antibiotic resistant *Salmonella* Typhimurium and *Salmonella* Kentucky strains recovered from chicken carcasses using genotypic and phenotypic methods. International Association for Food Protection (IAFP) Annual Meeting. July 8-12, Tampa, FL.
  - Elmahdi, S., Ossai, S., DaSilva, L., Jacobs, J., Jahncke, M., and **Parveen, S.** 2017. Characterization of *Vibrio parahaemolyticus* and *Vibrio vulnificus* recovered from oysters during the salinity relaying process. IAFP Annual Meeting. July 8-12, Tampa, FL.

- Solaiman, S., Callahan, M.T. Allard, S., Handy, E., East, C., May, E., Hashem, F., **Parveen, S.**, Kniel, K., Sharma, M., Sapkota, A., and Micallef, S. 2017. Assessment of indicator bacteria and *Aeromonas* spp. in surface and nontraditional irrigation water: A Conserve Study. IAAP Annual Meeting. July 8-12, Tampa, FL.
- Haymaker, J., Hashem, **Parveen, S.**, May, E., Sharma, M., White, C., Micallef, S., Taabodi, M., and Sapkota, A. 2017. Screening of non-traditional irrigation water sources for Shiga Toxin-Producing *Escherichia coli* in the Mid-Atlantic Region of the United States: A Conserve Study. IAAP Annual Meeting. July 8-12, Tampa, FL.
- Allard, S., Solaiman, S., Callahan, M.T., Handy, E., East, C., Craddock, H., Murray, K.R., Bui, A., Haymaker, J., Foust, D., Gartley, S., Vanore, A., **Parveen, S.**, Hashem, F., Taabodi, M., May, E., Kniel, K., Sharma, M., Micallef, S., and Sapkota, A. 2017. Generic *E. coli* levels in surface and nontraditional irrigation water in the Mid-Atlantic in relation to FSMA water quality standards: A CONSERVE Study. IAAP Annual Meeting. July 8-12, Tampa, FL.
- Handy, E., East, C., Callahan, M.T., Allard, S., Craddock, H., Micallef, S., Kniel, K., Hashem, F., **Parveen, S.**, Sharma, M., Sapkota, A., and Micallef, S. 2017. Prevalence of *E. coli*, *Salmonella* spp. and *L. monocytogenes* in non-traditional irrigation waters in the Mid-Atlantic U.S.: A CONSERVE Project. IAAP Annual Meeting. July 8-12, Tampa, FL.
- Alam, M. J., J. McPherson, J. Marinda, A. Thrall, V. Ngo, A. Apu, A. Anu, A. R. Kessinger, D. Biswas, W. Q. Chowdhury, **Parveen, S.**, A. Romero, F. N. Baliraine, and K.W. Garey. 2016. Prevalence and ribotype diversity of toxigenic *Clostridium difficile* in animals. Texas ASM Annual Meeting. November 10-12, 2016. The University of Texas, Dallas.
- Grant, A., Bell, M. Hoffmann, J. Zheng, E. Brown, and **Parveen, S.** 2017. Genotypic and phenotypic characterization of *Salmonella* isolated from chicken during pre- and post- chill broiler carcasses. ASM Microbe 2017. May 1-5, 2017, New Orleans, LA.
- Miotto, M., S. A. Ossai, J. E. Meredith, H. S. da Silva, C. Barretta, R. Cleide, W. Vieira, and **Parveen, S.** 2017. Characterization of *Escherichia coli* isolated from bivalve mollusks in Santa Catarina, Brazil and Chesapeake Bay, United States, ASM Microbe 2017. May 1-5, 2017, New Orleans, LA.
- Mu, R., S. Elmahdi, **Parveen, S.**, and C. Liu. 2017. Effects of Temperature and Salinity on the Efficacy of Purging *V. parahaemolyticus* from American oysters (*Crassostrea virginica*) during controlled re-circulating wet-storage process. Institute of Food Technologist (IFT) 2017, June 25-29, 2017, Las Vegas, NV.
- Grant, A., **Parveen, S.**, J. Schwarz, and F. Hashem, and B. Vimini. 2017. Reduction of *Salmonella* in ground chicken using a bacteriophage. The Association for Research Directors (ARD) 18<sup>th</sup> Biennial Research Symposium. April 1-4, 2017. Atlanta, GA (**First place graduate student oral presentation**).
- Hawkins, J.L, T.P. Oscar, J.G. Schwarz, **Parveen, S.**, and B. Vimini. 2017. The effects of growth stage on the growth kinetics of *Salmonella* Typhimurium DT104. ARD 18<sup>th</sup> Biennial Research Symposium. April 1-4, 2017. Atlanta, GA (**Second place graduate student oral presentation**).

- Haymaker, J., Hashem, F., May, E., **Parveen, S.**, Taabodi, M., White, C.L., Sharma, M., and Sapkota, A. 2017. Conserve: A center of Excellence at the Nexus of Sustainable Water Reuse, Food, and health. ARD18<sup>th</sup> Biennial Research Symposium. April 1-4, 2017. Atlanta, GA.
- Chintapenta, L.K., Abbott, A., Ozbay, G., and **Parveen, S.** 2017. Molecular tools to assess the oyster quality and validate the novel identification method used to detect Vibrionaceae species. ARD 18<sup>th</sup> Biennial Research Symposium. April 1-4, 2017. Atlanta, GA.
- Taabodi, M., May, E.B. Hashem, F., and **Parveen, S.** 2017. Potential use of *E. coli* as an indicator species for nitrogen cycling. ARD 18<sup>th</sup> Biennial Research Symposium. April 1-4, 2017. Atlanta, GA.
- Begum, K., Alam, M.J., Hossain, F., Amadio, J., McPherson, J., Miranda, J., Hoque, M.J., **Parveen, S.**, Romero, A., Islam, M.A. and Garey, W. 2017. Prevalence of CRISPR1-Cas1 and vancomycin resistant genes in clinical, animal and environmental Enterococcus. In: Antibiotic Resistance Symposium: Novel Frontiers in Antimicrobial Research, Houston, TX. January 19-20, 2017.
- Haymaker, J., Hashem, F., May, E.B. **Parveen, S.**, White, C., Taabodi, M., Sharma, M., and Sapkota, A., 2017. Conserve: A Center of Excellence at the Nexus of Sustainable Water Reuse, Food, and health. Third Graduate education week and 8<sup>th</sup> Annual Regional Research Symposium. April 17 -21, 2017, University of Maryland Eastern Shore, Princess Anne, MD.
- Hawkins, J., Oscar, T., Vimini, B., Schwarz, J., and **Parveen, S.** 2017. The effects of growth phase on the growth kinetics of *Salmonella* Typhimurium. Third Graduate education week and 18<sup>th</sup> Annual Regional Research Symposium. April 17 -21, 2017, University of Maryland Eastern Shore, Princess Anne, MD (**Second place graduate student oral presentation**).
- Grant, A.K., **Parveen, S.**, Schwarz, J., Vimini, B., and Hashem, F. 2016. The Control of *Salmonella* with commercially available bacteriophage during ground chicken processing. 2016. IAFP Annual Meeting. Jul. 31-Aug. 3, 2016. St. Louis, MI.
- **Parveen, S.**, Meredith, J., Mudoh, M., Hrechka, B., Ossai, S., Schwarz, J.G., Grant, A., Porto-Fett, A.C.S., McNorton, M., Stahler, L., Shoyer, B., Nagaraja, T.G., Shridhar, P.B., Renter, D., Moxley, R., and Luchansky, J.B. 2016. Prevalence and pathogenic potential of *Escherichia coli* O157:H7 recovered from retail ground veal in Mid-Atlantic region of the United States. IAFP Annual Meeting. Jul. 31-Aug. 3, 2016. St. Louis, MI.
- DaSilva, L.V., Ossai, S., Chigbu, P., and **Parveen, S.** (2016). Serotyping and antimicrobial profile of *Vibrio parahaemolyticus* isolated from environmental and blue crab samples collected from Maryland Coastal Bays. IFT Annual Meeting. July 16-19, 2016. Chicago, IL.
- Alam, M.J., Miranda, J., McPherson, j., Anu, A., Apu, a., Kao, E., Wasko, K.R., Chowdhury, W., Ali, M., **Parveen, S.**, Masuoka, J., and Garey, K.W. 2016. Ribotype diversity of *Clostridium difficile* strains from diverse environmental sources and geographical areas. ASM Microbe 2016. Jun. 16-20, 2016. Boston. MA.
- Hashem, F.M., Smith, B.D., Khairi, T., **Parveen, S.**, Allen, A., and Millner, P.D. 2016. Transport of pathogens in runoff from soil amended with manures. IAFP Annual Meeting. Jul. 31-Aug. 3, 2016. St. Louis, MI.

- Ossai, S., Meredith, J., Richards, G.P., and **Parveen, S.** 2016. Enumeration of total Vibrionaceae in oysters and seawater using Colony Overlay Procedure Peptidases (COPP) assay. UMES Research Symposium. Apr. 19. 2016 (**Second place poster presentation**).
- Dashiell, G., Hashem, F., White, C., **Parveen, S.**, Grant, A., Reynnells, R.I., Handy, E., Roberts, C., Millner, P.D., and Sharma, M. 2017. The *Salmonella* bacteriophages: Their host range and lytic effectiveness on Salmonella populations on cucumber fruits. UMES Research Symposium, April 19, 2019. UMES.
- Elbashir, S., **Parveen, S.**, Bowers, J., Rippen, T., Schwarz, J., Jahncke, J., and DE Paola, A. 2015. Microbiological quality of imported and domestic seafood. IAFP Annual meeting. July 24-28, 2015. Portland. OR.
- Hawkins, J. Vimini, B., Schwarz, J., Nichols, P., **Parveen, S.** 2015. Application of antimicrobial agents via commercial spray cabinet to inactivate *Salmonella* on skinless chicken meat. IAFP Annual meeting. July 24-28, 2015. Portland. OR.
- Miotto, M., Barretta, C., da Silva, H., Pellizzaro, S., Fonseca, T., Júnior, A.A.F., **Parveen, S.**, Vieira, C.W. 2015. Development of quantitative real-time Polymerase Chain Reaction (qPCR) for quantification of *Escherichia coli* in oyster. Joint Ecology/Marine lab symposium, Duke University, NC. Oct. 11, 2015.
- Grant, A., **Parveen, S.**, Schwarz, J., Vimini, B., and Hashem, F. 2015. Bacteriophage therapy to control *Salmonella* in ground chicken processing. Food safety symposium, Beltsville, MD. April 01-03, 2015 (**Second place oral presentation**).
- Hawkins, J., Vimini, B., Schwarz, J., Nichols, P., and **Parveen, S.** 2015. Application of antimicrobial solution via commercial spray cabinet to reduce Salmonella load on skinless chicken. 6th Annual Regional Research Symposium 2015, April 21, 2015.
- Elbashir, S., **Parveen, S.**, Bowers, J., Rippen, T., Schwarz, J., Jahncke, M., and DePaola, A. 2015. Detection and identification of *Salmonella* and *Campylobacter jejuni* in seafood. 6th Annual Regional Research Symposium 2015, April 21, 2015.
- Brown, J., Elbashir, S., and **Parveen, S.** 2015. Prevalence of *Vibrio parahaemolyticus* and *Vibrio Vulnificus* in Shrimp. 26th Annual Regional Research Symposium 2015, April 21, 2015.
- Grant, A., **Parveen, S.**, Schwarz, J., Vimini, B., and Hashem, F. 2015. Control of *Salmonella* through bacteriophage application in ground chicken processing. 6th Annual Regional Research Symposium 2015, April 21, 2015. & the Minorities in Agriculture Natural Resources and Related Sciences (MANRRS). Houston, TX. Mar. 27-28, 2015 (**First place oral presentation**).
- Elmahdi, S., Ossai, S., DaSilva, L.V., Jahncke, M., Jacobs, J., and **Parveen, S.** 2015. Antimicrobial susceptibility of *Vibrio vulnificus* and *Vibrio parahaemolyticus* recovered from post-harvest processed oysters. 4th ASM Conference on Antimicrobial Resistance in Zoonotic Bacteria and Foodborne Pathogens. May 8011, 2015. Washington, D.C.
- Grant, A., Bell, R., Zheng, J., Brown, E., and **Parveen S.** 2015. Phenotypic microarray of *Salmonella* Typhimurium isolated from chicken during processing 4th ASM Conference on Antimicrobial Resistance in Zoonotic Bacteria and Foodborne Pathogens. May 8011, 2015. Washington, D.C.

- Elbashir, S., **Parveen, S.**, Bowers, J., Rippen, T., Schwarz, J., Jahncke, J., and DePaola, A. 2015. Microbiological quality of imported and domestic seafood. IAFP Annual Meeting. July 24-28, 2015. Portland. OR.
- Hawkins, J. Vimini, B., Schwarz, J., Nichols, P., **Parveen, S.** 2015. Application of antimicrobial agents via commercial spray cabinet to inactivate *Salmonella* on skinless chicken meat. IAFP Annual meeting. July 24-28, 2015. Portland. OR.
- Grant, A., **Parveen, S.**, Schwarz, J., Vimini, B., and Hashem, F. 2015. Bacteriophage therapy to control *Salmonella* in Ground Chicken Processing. Food safety symposium, Beltsville, MD. April 01-03, 2015(**Second place oral presentation**).
- Elbashir, S., **Parveen, S.**, Bowers, J., Rippen, T., Schwarz, J., Jahncke, M., and DePaola, A. 2015. Detection and identification of *Salmonella* and *Campylobacter jejuni* in seafood. 6th Annual Regional Research Symposium 2015, April 21, 2015.
- Hawkins, J. Vimini, B., Schwarz, J., Nichols, P., and **Parveen, S.** 2015. Application of Antimicrobial solution via commercial spray cabinet to reduce *Salmonella* load on skinless chicken. 6th Annual Regional Research Symposium 2015, April 21, 2015 (**First place graduate oral presentation**).
- Elbashir, S., **Parveen, S.**, Bowers, J., Rippen, T., Schwarz, J., Jahncke, M., and DePaola, A. 2015. Detection and identification of *Salmonella* and *Campylobacter jejuni* in seafood. 6th Annual Regional Research Symposium 2015, April 21, 2015.
- Brown, J., Elbashir, S., and **Parveen, S.** 2015. Prevalence of *Vibrio parahaemolyticus* and *Vibrio Vulnificus* in shrimp. 6th Annual Regional Research Symposium 2015, April 21, 2015.
- Tasmin, R., Hasan, N.A., Choi, S.Y., Saeed, K.M., **Parveen, S.** 2014. Comparative genomics of two multidrug resistant *Salmonella* Typhimurium and *Salmonella* Kentucky strains recovered from chicken carcasses with previously sequenced *Salmonella* enterica strains. UMES Research Symposium, April 17, 2014.
- Elmahdi, S., **Parveen, S.**, Jahncke, M., White, C., Crocker, H., Gray, S., and Bowers, J. 2014. Evaluation of high salinity relaying as a post-harvest-processing method to reduce the abundance of *Vibrio* bacteria in Chesapeake Bay oysters (*Crassostrea virginica*). UMES Research Symposium, April 17, 2014.
- Jahncke, M., **Parveen, S.**, Elmahdi, S., Crocker, H., Bowers, J., White, C., and Gray, S. 2014. High salinity relaying as PHP for raw molluscan shellfish. April 17, 2014. Interstate Shellfish sanitation conference. Virginia Beach. Virginia.
- **Parveen, S.**, Jahncke, M., Elmahdi, S., Crocker, H., Bowers, J., White, C., and Gray, S. 2014. High salinity relaying to reduce *V. parahaemolyticus* and *V. vulnificus* in Chesapeake Bay oysters. IAFP Annual Meeting. Aug. 1-4, 2014. Indianapolis, IN.

- **Parveen, S.**, Rodgers, C., Chigbu, P., Ishaque, A., Jacobs, J., Rhodes, M., and Harter-Dennis, J. 2014. Prevalence of *Vibrio vulnificus* in blue crabs (*Callinectes sapidus*), seawater, and sediments of the Maryland Coastal Bays. ASM General Meeting. May 17-20, 2014. Boston. MA.
- **Parveen, S.**, Rodgers, C., Chigbu, P., Ishaque, A., Jacobs, J., Rhodes, M. and Harter-Dennis, J. 2014. Incidence of *Vibrio parahaemolyticus* in blue crabs (*Callinectes sapidus*), seawater, and sediments of the Maryland Coastal Bays. April 1-4, 2014. Vibrio 2014. Edinburgh, Scotland.
- **Parveen, S.**, Mudoh, M.F., Schwarz, J., Rippen, T., and Chaudhuri, A. 2013. The Effects of storage temperature on the prevalence of *Vibrio parahaemolyticus* and physical and sensory properties of oysters. 2013. IAFP Annual Meeting. July 28-31. 2013. Charlotte, NC.
- **Parveen, S.**, White, C., and Tamplin, M.L. 2013. Development of predictive models for the growth of *Listeria monocytogenes* in blue crab (*Callinectes sapidus*) meat. ASM General Meeting. May 18-21, 2013. Denver, CO.
- Elmahdi, S., **Parveen, S.**, White, C., Jahncke, M., Crocker, H., Gray, S., and Bowers, J. 2013. Evaluation of the high salinity relaying as a post-harvest-processing method to reduce the abundance of *Vibrio vulnificus* and *Vibrio parahaemolyticus* in Chesapeake Bay oysters (*Crassostrea virginica*). Regional Research Symposium, UMES, April. 2013. Princess Anne, MD.
- **Parveen, S.**, Mohamed, T., Zhao, S., and White, D.G. 2013. The effect of chilling on persistence of *Salmonella* serovars on chicken carcasses. ARD 17th Biennial Research Symposium, Apr. 6 -10, 2013, Jacksonville, FL.
- Schwarz, M. A. and **Parveen, S.** 2013. School Lunch Project: If they cook it, they will eat. ARD 17th Biennial Research Symposium, Apr. 6-10, 2013. Jacksonville, FL. & Regional Research Symposium, UMES, April. 2013 (**Second place oral presentation**).
- Elmahdi, S., **Parveen, S.**, White, C., Jahncke, M., Crocker, H., and Gray, S., and Bowers, J. 2013. Evaluation of practical post-harvest mitigation strategies to reduce the abundance of *Vibrio vulnificus* and *Vibrio parahaemolyticus* in Chesapeake Bay oysters (*Crassostrea virginica*). ARD 17th Biennial Research Symposium, Apr. 6-10, 2013. Jacksonville, FL.
- Jahncke, M., **Parveen, S.**, Crocker, H., Elmahdi, S., White, C., Gray, S., Lane, B., and Morris, A. 2012. Studies to evaluate high salinity relaying and rapid cooling of oysters. The annual Meeting of Seafood Sciences and Technology Society. Oct. 29-Nov. 2, 2012. Clearwater, FL.
- Tasmin, R., Oscar, T.P., and **Parveen, S.** 2012. Chlorine inactivation of non-resistant and antibiotic resistant strains of *Salmonella* Typhimurium isolated from chicken carcasses 2012. 2nd Annual Beltsville Agricultural Research Center (BARC) -Univ. of MD (UMD) Fall Symposium. Trends in Agriculture. Oct. 18. 2012. Laurel, MD. & Regional Research Symposium, UMES, April. 2014.

- **Parveen, S.,** Jahncke, M., Crocker, H., Elmahdi, S., White, C., Gray, S., Lane, B., Morris, A., and Bowers, J. 2012. Evaluation of post-harvest mitigation strategies to reduce the abundance of *Vibrio* bacteria in molluscan shellfish. Project director's meeting USDA Capacity Building Grants (CBG), Huntsville, AL. Sept. 16-19, 2012.
- **Parveen, S.,** Korir, R., Hashem F., and Bowers, J. 2012. Microbial survey of fresh produce obtained from retail stores on the Eastern Shore of Maryland. 101 IAFP annual meeting. Jul. 22-25, 2012. Providence, RI.
- Korir, R, **Parveen, S.,** Hashem F., and Bowers, J. 2012. The evaluation of microbial safety of fresh produce obtained from retail stores on the Eastern Shore of Maryland. 2<sup>nd</sup> Annual BARC-UMD Fall Symposium Trends in Agriculture. Oct. 18. 2012. Laurel, MD.
- **Parveen, S.,** DaSilva, L.V., DePaola, A., Bowers, J., White, C., Hettiarachchi, K.A., Brohawn, K., Mudoh, M., and Tamplin, M.L. 2011. Development and validation of predictive models for the growth and survival of *Vibrio parahaemolyticus* in post-harvest Shellstock American oysters (*Crassostrea virginica*) from two estuaries and comparison in Asian oysters (*C. ariakensis*). Vibrio 2011. Nov.2-5, 2011. Santiago de Compostela, Spain.
- M. F. Mudoh, **Parveen, S.,** Jones, J., Krantz, J., Bowers, J., Tamplin, M.L., and DePaola, A. 2011. Comparison of growth and survival of total and pathogenic *Vibrio parahaemolyticus* in American and Asian oysters. Regional Research Symposium, UMES, Princess Anne. MD. Apr. 21, 2011. (**First place graduate oral presentation**). & Graduate Research symposium, 2010. USDA Agricultural Research Service (ARS), Oct. 18, 2010. Beltsville, MD.
- Brice, M., **Parveen, S.,** and Oscar, T.P. 2011. Predictive model for growth and survival of *Salmonella* Typhimurium DT104 on shrimps. Regional Research Symposium, University of Maryland Eastern Shore, Princess Anne, MD. Apr. 21, 2011 (**Second place poster presentation**) & Graduate Research symposium, 2010. USDA ARS, Oct. 18, 2012. Beltsville, MD.
- **Parveen, S.,** and Mohammad, T. 2011. Molecular analysis of *Salmonella* recovered from pre- and post- chill whole broiler carcasses, ARD 15<sup>th</sup> Biennial Research Symposium. Apr. 09-13, 2011. Atlanta, GA.
- Burgos, J., Mudoh, M., and **Parveen, S.** 2011. The effect of storage temperature on the growth and survival of total and pathogenic *Vibrio parahaemolyticus* in the Chesapeake Bay oysters. The American Society for Limnology and Oceanography Aquatic Sciences Meeting. Feb. 13-18. 2011. Sun Juan, Puerto Rico.
- Mudoh, M.F., DePaola, A., Jones, J., Krantz, J., Bowers, J., Tamplin, M.L., and **Parveen, S.** 2010. Comparison of growth and survival of total and pathogenic *Vibrio parahaemolyticus* in American and Asian oysters. Vibrios in the environment conference. Nov. 07-12, 2010. Biloxi, MS.

- Tkachenko A., DaSilva, L.V., Hearne, J., **Parveen, S.**, and Waguespack, Y. 2010. An assay to compare adhesion of *Vibrio vulnificus* to various fractions of mucous secretions in fish. Research Symposium, Apr. 29, 2010. UMES, Princess Anne, MD. & MEES Graduate Research Colloquium, Sept. 24 -25, 2010, UMES.
- Mudoh, M., **Parveen, S.**, Krantz, J. A., Bowers, J., Tamplin, M.L., and DePaola, A. 2010. The effect of storage temperature on the growth and survival of total and pathogenic *Vibrio parahaemolyticus* in Gulf Coast shell stock oysters. Research Symposium, Apr. 29, 2010. UMES, Princess Anne, MD.
- DaSilva, L.V., **Parveen, S.**, DePaola, A., Bowers, J., and Tamplin, M.L. 2009. Development and validation of predictive model for the growth and survival of *Vibrio vulnificus* in post-harvest shellstock. 6<sup>TH</sup> International conference in predictive microbiology in foods. Sept. 8-12, 2009. Washington. D.C.
- **Parveen, S.**, White, C.L., DaSilva, L., DePaola, A., Bowers, J., and Tamplin, M.L. 2009. Validation of a predictive model for the growth and survival of total *Vibrio parahaemolyticus* in post-harvest shellstock Asian oysters. 6<sup>TH</sup> International conference in predictive microbiology in foods. Sept. 8-12, 2009. Washington. D.C.
- Meshack, M.F., **Parveen, S.**, Jones, J., Krantz, J., Bowers, J., Tamplin, M.L., White, C., and DePaola, A. 2010. Effect of storage temperature on the growth and survival of total and pathogenic *Vibrio parahaemolyticus* in Chesapeake Bay oysters. 96th Annual Meeting IAFP. Aug. 1-4, 2010. Anaheim, CA.
- **Parveen, S.**, and Mohamed, T. 2010. Virulence factors of *Salmonella* recovered from pre- and post- chill whole broiler carcasses. IAFP96th Annual Meeting. Aug. 1-4, 2010. Anaheim, CA.
- Oscar, T., Rutto, G., Ludwig, J., and **Parveen, S.** 2010. Mapping the distribution of *Salmonella* on chicken carcasses. IAFP 96th Annual Meeting. Aug. 1-4, 2010. Anaheim, CA.
- Pagadala, S., **Parveen, S.**, Luchansky, J.B., Porto-Fett, A.C.S., Rippen, T., and Wiedmann, M. 2009. Characterization of *Listeria monocytogenes* isolated from blue crab meat and blue crab processing plants. ASM 109 th General Meeting. May 17-21, 2009. Philadelphia, PA.
- **Parveen, S.**, Pagadala, S., Wiedmann, M., Rippen, T., Luchansky, J., and Tamplin, M.L. 2009. Occurrence and antimicrobial resistance of *Listeria monocytogenes* recovered from blue crab meat and blue crab processing plants. 109th ASM General Meeting. May17-21, 2009. Philadelphia, PA. Cephas, K.D., **Parveen, S.**, and DaSilva, L.A.V. 2009. Growth and survival of *Vibrio vulnificus* in postharvest American oysters. ARD 15<sup>th</sup> Biennial Research Symposium, Mar. 28-Apr. 1, 2009. Atlanta, GA (**Second place undergraduate oral presentation**). & First Aquatic and Fisheries Science Symposium. Mar. 28, 2009. UMES Coastal Ecology Research and Teaching Center, Assateague Island, MD (**First place graduate and undergraduate oral presentation**).



- Mohamed, T., **Parveen, S.**, White, D., Zhao, S., and Freidman., S. 2009. Molecular Analysis of Antibiotic Resistant *Salmonella* Typhimurium and *Salmonella* Kentucky Recovered from Whole Broiler Carcasses. ARD 15<sup>th</sup> Biennial Research Symposium. Mar.28-Apr. 1, Atlanta, GA.
- Mudoh, M. F., **Parveen, S.**, Krantz, J.A., Bowers, J., Tamplin, M.L., DaSilva, L.V., and DePaola, A. 2009. Growth and survival of total and pathogenic *Vibrio parahaemolyticus* in Gulf Coast shellstock oysters. ARD 15<sup>th</sup> Biennial Research Symposium. Mar. 28-Apr. 1, 2009. Atlanta, GA.
- **Parveen, S.**, DaSilva, L.V., DePaola, A., Bowers, J., Mudoh, M., Pagadala, S., and Tamplin, M.L. 2009. A model of the effect of temperature on the growth and survival of *Vibrio vulnificus* in Gulf Coast shellstock oysters. ARD 14<sup>th</sup> Biennial Research Symposium. Mar.28-Apr. 1, 2009. Atlanta, GA.
- Pagadala, S., **Parveen, S.**, Rippen, T., Wiedmann, M., Schwarz, J., and Harter-Dennis, J. 2008. Comparative evaluation of BAX polymerase chain reaction and standard culture method for the detection of *Listeria monocytogenes* in blue crab meat and crab processing plants. First Aquatic and Fisheries Science Symposium. Mar. 28, 2008. UMES Coastal Ecology Research and Teaching Center, Assateague Island, MD.
- DaSilva, L., Tamplin, M.L., DePaola, A., White, C., Bowers, J., Pagadala, S., and **Parveen, S.** 2008. Growth and survival of *Vibrio parahaemolyticus* in Gulf coast shellstock oysters. First Aquatic and Fisheries Science Symposium. March 28, 2008. UMES Coastal Ecology Research and Teaching Center, Assateague Island, MD.
- Katsriku, L., Rippen, T., Schwarz, J., and **Parveen, S.** 2008. Development of a restructured crabmeat product: examining the physical, chemical and microbiological attributes. First Aquatic and Fisheries Science Symposium. March 28, 2008. UMES Coastal Ecology Research and Teaching Center, Assateague Island, MD.
- Harris, N., **Parveen, S.**, and Pagadala, S. 2008. Prevalence of *Listeria monocytogenes* in blue Crab (*Callinectes sapidus*) meat and crab processing plants. Apr. 08, 2008. 16 th Annual Mid-Atlantic HBCU Science Conference, UMES.
- Pagadala, S., **Parveen, S.**, Rippen, T., and Wiedmann, M. 2008. Prevalence and antibiotic susceptibility of *Listeria monocytogenes* in blue crab meat (*Callinectes sapidus*) and crab processing plants. Apr. 08, 2008. 16 th Annual Mid-Atlantic HBCU Science Conference, UMES.
- Rutto, G.K., **Parveen, S.**, and DaSilva, L. 2008. The growth and survival of *Vibrio parahaemolyticus* in Gulf coast shellstock oysters. Apr. 08, 2008. 16 th Annual Mid-Atlantic HBCU Science Conference, UMES.

- DaSilva, L., **Parveen, S.**, DePaola, A., Bowers, J., Mudoh, M., Pagadala, S., and Tamplin, M.L. 2008. Predictive model for the growth and survival of *Vibrio vulnificus* in Gulf coast shellstock oysters. IAFP 95th Annual Meeting. Aug. 3- 5, 2008. Columbus, OH.
- Meshack, M., **Parveen, S.**, Krantz, J., Bowers, J., Tamplin, M.L., DaSilva, L.V.A., Depaola, A. 2008. The effect of storage temperature on the growth and survival of total and pathogenic *Vibrio parahaemolyticus* in Gulf coast shell stock oysters. IAFP 95th Annual Meeting. Aug. 3- 5, 2008. Columbus, OH.
- Pagadala, S., **Parveen, S.**, Rippen, T., Tamplin, M.L., Luchansky, J.B., Porto-Fett, A.C.S., and Wiedmann, M. 2008. Isolation and characterization of *Listeria monocytogenes* from blue crab meat (*Callinectes sapidus*) and blue crab processing plants. IAFP 95th Annual Meeting. Aug. 3-5, 2008. Columbus, OH.
- **Parveen, S.**, Dasilva, L., DePaola, A., Bowers, J., C.White, Hettiarachchi, K.A., Rutto, G., Brohawn, K., and Tamplin, M.L. 2008. Development and validation of predictive models for the growth and survival of total *Vibrio parahaemolyticus* in post-harvest shellstock American oysters. 108th ASM General Meeting. Jun. 1-5. 2008. Boston, MA.
- Mohamed, T., **Parveen, S.**, White, D., Zhao, S., Freidman, S., and Blickenstaff, K. 2008. Molecular characterization of antibiotic resistant *Salmonella* Typhimurium and *Salmonella* Kentucky recovered from pre- and post-chill whole broilers carcasses. IAFP 95th Annual Meeting. Aug. 3- 5, 2008. Columbus, OH.
- Allen, A., Hashem, F.M., Donohoe, J., **Parveen, S.**, and Earl, T. 2007. Contaminants in private well water in selected counties in Eastern Maryland. National Water Conference, Feb. 3-7, 2007. Reno, NE.
- DePaola, A., Nordstrom, J., Blackstone, G., Longan, S., **Parveen, S.**, Zimmerman, A., Grimes, J., and Krantz, J. 2007. Application of molecular methods to determine *Vibrio parahaemolyticus* levels in oysters and potential role in establishing control measures and assessing their effectiveness. VIBRIO2007. Nov. 28-Dec. 1, 2007. Paris, France.
- Nordstrom, J. L., Zimmerman, A.M.B., **Parveen, S.**, Murray, S., Grimes, D.J., and DePaola, A. 2007. Application of a multiplex real-time PCR assay for detection of total and pathogenic *Vibrio parahaemolyticus* in oysters. CFSAN Science Day. Aug. 28. 2007. College Park, MD.
- Pagadala, S., Rippen, T., Weidmann, M., Schwarz, J., Harter-Dennis, J., and **Parveen, S.** Detection of *Listeria monocytogenes* in blue crab meat (*Callinectes sapidus*) and blue crab processing plants using automated BAX polymerase chain reaction and standard culture method. Apr. 10, 2007. 15 th Annual Mid-Atlantic HBCU Science Conference, UMES, Princess Anne, MD (**Third place graduate student poster presentation**).
- Hettiarachchi, K.A, Tamplin, M.L., DePaola, A., and **Parveen, S.** 2007. Modeling the effect of storage temperature on the growth and survival of total *Vibrio parahaemolyticus* in oysters.

April 10, 2007. 15 th Annual Mid-Atlantic HBCU Science Conference, UMES, Princess Anne, MD.

- Allen A. L., **Parveen, S.**, Brooks, H., Donohoe, J., and Hashem, F.M. 2007. Assessing well drinking water quality of underserved rural farms. Jan 28-Feb 1. 2007. Proceeding of the National Water Conference, Savannah, GA.
- Pagadala, P., Rippen, T., Wiedmann, M., Tamplin, M.L., Jahncke, M., Whittiker, M., and **Parveen, S.** 2007. Incidence of *Listeria* spp. and *Listeria monocytogenes* in blue crab meat (*Callinectes sapidus*) and blue crab processing plants. IAFP 94th Annual Meeting IAFP. July 8-11, 2007. Disney's Contemporary Resort, Lake Buena Vista, Orlando, FL.
- Pagadala, S., Rippen, T., Weidmann, M., Schwarz, J., Harter-Dennis, J., and **Parveen, S.** 2007. Detection of *Listeria monocytogenes* in blue crab meat (*Callinectes sapidus*) and blue crab processing plants using automated BAX polymerase chain reaction and standard culture method. 2007. IAFP 94th Annual Meeting. Jul. 8-11, 2007. Disney's Contemporary Resort, Lake Buena Vista, Orlando, FL.
- **Parveen, S.**, Tamplin, M.L., DaSilva, L.V.A., White, C., Bowers, J., Rutto, G., and DePaola, A. 2007. Predictive models for the growth and survival of total *Vibrio parahaemolyticus* in Gulf Coast shellstock oysters. IAFP 94th Annual Meeting. Jul. 8-11, 2007. Disney's Contemporary Resort, Lake Buena Vista, Orlando, FL.
- DaSilva, L.V.A., Tamplin, M.L., DePaola, A., White, C., Bowers, J., Pagadala, S., and **Parveen, S.** 2007. Predictive model for the growth and survival of *Vibrio vulnificus* in Chesapeake Bay shellstock oysters. IAFP A94th Annual Meeting. Jul. 8-11, 2007. Disney's Contemporary Resort, Lake Buena Vista, Orlando, FL.
- **Parveen, S.**, Taabodi, M., Oscar, T.P., and Schwarz, J. 2007. Effect of chilling process on the prevalence and serotypes of *Salmonella* on processed poultry. ASM 107th General Meeting. May 21-25, 2007. Toronto, Canada.
- DePaola, A., Nordstrom, J., Blackstone, G.M., Bowers, J., Phillips, A.M.B., Grimes, D.J., Watt, S., and **Parveen, S.** 2007. Enumeration of total and pathogenic *Vibrio parahaemolyticus* using real time PCR in a most probable number format. The 6th International Conference on Molluscan Shellfish Safety (ICMSS). Mar. 18-25, 2007. Blenheim, New Zealand.
- Mohammed, T., Taabodi, M., Schwarz, J., Hubert, S., White, D., Oscar, T.P., and **Parveen, S.** 2006. Identification of antimicrobial resistance and antibiotic resistance genes in *Salmonella* spp. isolated from processed poultry. Apr. 12, 2006. 14th Annual Mid-Atlantic HBCU Science Conference, UMES, Princess Anne, MD.
- Hettiarachchi, K. A., DePaola, A., Tamplin, M.L., Brohawn, K., and **Parveen, S.** 2006. Incidence of *Vibrio parahaemolyticus* in Chesapeake Bay oysters. Apr. 12, 2006. 14th Annual Mid-Atlantic HBCU Science Conference, UMES, Princess Anne, MD.

- Marsh, L., Cotton, C., Philip, E., **Parveen, S.**, and Hashem, F. 2006. Safety and Productivity of cool season salad greens grown in soils amended with composts. ASHS–2006 Annual Conference, Jul. 27–30, 2006, New Orleans, LA.
- **Parveen, S.**, Taabodi, M., Mohammed, T., Schwarz, J., White, D., and Oscar, T.P. 2006. Characterization of *Salmonella* spp. isolated from pre- and post-chill whole broiler carcasses. IAFP 93<sup>nd</sup> Annual Meeting. Aug. 13-16, 2006. Calgary, Alberta, Canada.
- Hettiarachchi, K.A, Tamplin, M.L., DePaola, A., and **Parveen, S.** 2006. Predictive models for the growth and survival of total *Vibrio parahaemolyticus* in shellstock oysters from the Chesapeake Bay. 106th General Meeting for ASM. May 21-25, 2006. Orlando, FL.
- **Parveen, S.**, Hettiarachchi, K.A., DePaola, A., Bowers, J.C., Tamplin, M.L., and Brohawn, K. 2006. Seasonal distribution of total and pathogenic *Vibrio parahaemolyticus* in Chesapeake Bay oysters and waters. ASM 106th General Meeting. May 21-25, 2006. Orlando, FL.
- Hettiarachchi, K.A., DePaola, A., Tamplin, M.L., Brohawn, K., and **Parveen, S.** 2006. Detection and enumeration of *Vibrio parahaemolyticus* in Chesapeake Bay oysters by a molecular method. ARD 14<sup>th</sup> Biennial Research Symposium, Apr. 1-4, 2006, Atlanta, GA.
- Taabodi, M., Oscar, T., Schwarz, J., and **Parveen, S.** 2005. Incidence of *Salmonella* spp. on processed poultry. IAFP 92<sup>nd</sup> Annual Meeting. Aug.14-17. Baltimore, MD.
- Austin-Watson, C., Boyd, K., Brooks, C., and **Parveen, S.** 2005. Inhibition of *Vibrio anguillarum* by *Pseudomonas* and *Bacillus* spp. isolated from the intestinal micro-flora of farm raised striped bass (*Morone saxatilis*). Apr. 14, 2005. 13 th Annual Mid-Atlantic HBCU Science Conference, UMES (**Third place graduate student poster presentation**).
- Boyd, K., Austin-Watson, C., Brooks, C., and **Parveen, S.** 2005. Incidence of intestinal microflora in farm raised striped bass (*Morone saxatilis*) at different stages of fish development. Student Research Day. Annapolis, MD.
- Austin-Watson, C., Boyd, K., Brooks, C., and **Parveen, S.** 2004. The inhibition of *Vibrio anguillarum* by the intestinal micro-flora of farm raised striped bass (*Morone saxatilis*) during the early stages of development. IFT Annual Meeting. Jul.12-16, 2004. Las Vegas, NV.
- Boyd, K., Austin-Watson, C., Brooks, C., and **Parveen, S.** 2004. The intestinal microflora of farm raised striped bass (*Morone saxatallis*) at different stages of fish development. Apr. 14, 2004. 12 th Annual Mid-Atlantic HBCU Science Conference, UMES (**Third place undergraduate student poster presentation**).
- **Parveen, S.**, Wolf, W.C., and Richards, G.P. 2003. Uptake, persistence and localization of *Vibrio vulnificus* in the eastern oyster, *Crassostrea virginica* . ASM 103rd General Meeting for ASM May 18-22, 2003. Washington, DC.

- **Parveen, S.,** Lukasik, J., Tamplin, M.L., Scott, T., Portier, K.M., and Farrah, S.R. 2003. Multiple antibiotic resistance profiles of *Escherichia coli* isolated from swine, poultry, beef and dairy cattle farms in Florida. ARD 13<sup>th</sup> Biennial Research Symposium, Mar. 29-Apr. 2, 2003, Atlanta, GA.
- **Parveen, S.** 2002. Uptake and persistence of virulent and avirulent *Vibrio vulnificus* in the eastern oyster, *Crassostrea virginica*. Microbial food safety symposium. Delaware State University. May 2-3, 2002. Dover. DE.
- **Parveen, S.,** Tamplin, M.L., Portier, K .M. Lukasik, G., Scott, T., Sheperd, S., Tobia, S., Braun, K.R., Koo, P., and Farrah, S.R. 2001. Geographical variation in antibiotic resistance patterns of *Escherichia coli* isolated from swine, poultry, beef and dairy cattle farms in Florida. ASM 101th General Meeting. May 20-24, 2001. Orlando, FL.
- **Parveen, S.,** Hodge, N.C., Stall, R.E., Farrah, S.R., and Tamplin, M.L. 2000. Genotypic and phenotypic characterization of human and nonhuman *Escherichia coli*. ASM 100th General Meeting. May 21-25, 2000. Los Angeles, CA.
- **Parveen, S.,** and Tamplin, M.L. 1999. Validation of multiple antibiotic resistance and ribotype profiles of *Escherichia coli* for differentiating sources of fecal pollution. ASM 99th General Meeting.. May 29-Jun. 3, 1999. Chicago, IL.
- Gallman, A.M., Doyle, T.J., Tamplin, M.L., **Parveen, S.,** Skinner, S.C., Bomeisl, P.E., and Gulig, P.A. 1999. Pathogenesis of infection by virulent and naturally attenuated strains of *Vibrio vulnificus* in subcutaneously inoculated, iron dextran-treated mice. ASM 99th General Meeting. May 29-Jun. 3, 1999. Chicago, IL.
- **Parveen, S.,** and Tamplin, M.L.1998. Discriminant analysis of multiple antibiotic resistance and ribotype profiles of *Escherichia coli* for differentiating sources of fecal pollution in water. Natural Resources Forum'98, Jun. 9-10, 1998. Gainesville, FL.
- **Parveen, S.,** and Tamplin, M.L. 1998. Methods for measuring the level of fecal pollution in water. ASM 98th General Meeting. May 17-21, 1998. Atlanta, GA.
- **Parveen, S.,** and Tamplin, M.L. 1997. Differentiating human and nonhuman sources of *Escherichia coli* pollution. Southeastern Branch of the ASM-Annual Meeting. Oct. 30-Nov. 1. 1997. Helen, GA.
- **Parveen, S.,** and Tamplin, M.L. 1997. Discrimination of point and nonpoint sources of *Escherichia coli* by multiple antibiotic resistance and ribotype profiles. 89th Annual Meeting of the National Shellfisheries Association. Apr. 20-24. 1997. Fort Walton Beach, FL.
- **Parveen, S.,** and Tamplin, M.L. 1996. Comparison of fatty acid methyl ester (FAME) profiles of *Escherichia coli* isolated from point and non-point sources. Southeastern Branch of the ASM-Annual Meeting. Nov.7-9. 1996, Gainesville, FL.

- **Parveen, S.,** Murphree, R.L., and Tamplin, M.L. 1996. Differentiating point and non-point-sources of *Escherichia coli* by multiple antibiotic resistance and ribotype profile. ASM 96th General meeting. May 19-23. 1996. New Orleans, LA.
- Morshed, M.G., Sayeed, S., **Parveen, S.,** and Ahmed, A.U. 1889. Distribution of coliform bacteria during peak flood period in Dhaka city. International seminar on water pollution sponsored by the Bangladesh Research Bureau and SCOPE, Mar.4-6. 1989. Dhaka, Bangladesh.
- **Parveen, S.,** and Huq, A. 1988. Enterotoxicity and hemolysis pattern of *Aeromonas* spp. isolated from aquatic environment of Dhaka. 7th Annual Conference of Bangladesh Society of Microbiologists. Apr. 13-14. 1988. Dhaka, Bangladesh.
- **Parveen, S.,** and Huq, A., Chowdhury, M.A.R., and Aziz, K.M.S. 1987. Antibiotic resistance patterns of *Aeromonas* spp. isolated from environmental and clinical sources of Bangladesh. 6th Annual Conference of Bangladesh Society of Microbiologists. Mar. 20-21, 1987. BCSIR, Dhaka, Bangladesh.
- **Parveen, S.,** Huq, A., Rahim, Z., and Aziz, K.M.S. 1987. Incidence of *Aeromonas* spp. in water, sediment samples of Dhanmondi lake and Buriganga river, Dhaka, Annual Bangladesh Science Conference, section II, Jahangirnagar University, Jan. 10-14. 1987. Savar, Dhaka, Bangladesh.
- **Parveen, S.,** Huq, A., Rahim, Z., and Aziz, K.M.S. 1986. Isolation of *Aeromonas* spp. from aquatic plants from Dhanmondi Lake and Buriganga River, Dhaka, 5th National Botanical Conference. Dec. 4-5.1986. Dhaka, Bangladesh.

#### **Invited Presentations:**

- **Parveen, S.,** Jacobs, J., Ozbay, G., Chintapenta, L. K., Almuhaideb, E., Meredith, J., Ossai, S., Grant, A., Abbott, A., Chigbu, P., Brohawn, K., and Richards, G. 2020. Application of multiple methods for the detection and enumeration of pathogenic vibrios in mid-Atlantic seawater and oysters. The 112<sup>th</sup> National Shellfish Association (NSA) meeting, Mar. 29-Apr. 02, 2020. Baltimore, MD (**Abstract accepted; the meeting is cancelled due to COVID-19**).
- **Parveen, S.** 2019. Application of multiple methods for the detection and enumeration of pathogenic vibrios in the mid-Atlantic region of the United States. International Conference on Microbial Research and Applications. Nov. 13-14, 2019. Baltimore, MD.
- **Parveen, S.** and C. Liu. 2019. Investigation of the seasonal variation of total and pathogenic *Vibrio* spp. & the efficacy of post-harvest practice for *Vibrio* reduction using multiple methods. Interstate Seafood Seminar. Sept. 16-19, 2019. Virginia Beach. VA.
- **Parveen, S.** 2019. How to build a career in academia? Bangladeshi Microbiologists' Convention. July 5-7, 2019, Potomac, MD.

- **Parveen, S.** 2019. Foodborne pathogens in food chain: focus on seafood and poultry. The XXI national meeting of food analysts and VII Latin American congress of food analysts. May 26-30. Florianopolis, SC. Brazil.
- Hashem, F., **Parveen, S.** Haymaker, J. 2019. Current Perspective on water quality and food safety of fresh produce and seafood at UMES. 19th Biennial research symposium. Association of 1890 research symposium. Mar. 30-Apr. 03, 2019. Jacksonville, FL.
- **Parveen, S.** 2018. Current Perspectives on *Vibrios* in the Chesapeake Bay and the Maryland Coastal Bays. Global Challenges: Building Healthy Food Systems. October 4. 2018. University of Maryland, College Park. MD.
- **Parveen, S.** 2018. *Salmonella*: An enemy for the poultry industry. 7th Annual Summit on Microbiology: Education, R&D and Market. Sept. 28-29, 2018. San Antonio, TX.
- **Parveen, S.** 2018. Current perspectives on *Vibrios* in the Chesapeake Bay and the Maryland Coastal Bays. Global Challenges: Building Healthy Food Systems. October 4. 2018. University of Maryland, College Park. MD.
- Hashem. F., **Parveen, S.**, May E. 2018. Water quality, fresh Produce and seafood safety research at UMES. Nov. 2018. University of Florida, Gainesville. FL.
- **Parveen, S.** 2018. *Salmonella*: An Enemy for the Poultry Industry. 7<sup>th</sup> Annual Summit on Microbiology: Education, R&D and Market. Sept. 28-29, 2018. San Antonio, TX.
- **Parveen, S.** 2018. Prevalence, antibiotic resistance and genetic diversity of major pathogens in imported and domestic seafood Atlantic and Gulf coast Seafood Technology (AGST) Conference Annual Meeting, March 10, 2018, Boston, MA.
- **Parveen, S.** 2018. How safe is our seafood? Workshop at the NOAA Living Marine Resources Cooperative Science Center: Literacy in NOAA Mission related Disciplines - A cohort experience. March 5 – 9, 2018, UMES.
- **Parveen, S.**, Elmahdi, S., Jahncke, M., Jacobs, J., and Bowers, J. 2018. The effect of high salinity on the abundance, antibiotic resistance and genetic diversity of *Vibrio parahaemolyticus* in an oyster relay study. National Shellfisheries Association 110<sup>th</sup> Annual Meeting, Mar. 18 - 22, 2018, Seattle, Washington.
- **Parveen, S.** 2017. Ecology and antimicrobial resistance of *Vibrios* recovered from blue crabs, seawater and sediments. Third International Conference on Global Food Security, Dec. 02-07, 2017. Cape Town, South Africa.

- **Parveen, S.** 2017. Current perspectives on microbial poultry & seafood safety. Workshop for Cochran Fellows from Ghana. Summer 2017. University of Maryland Eastern Shore, Princess Anne, MD.
- **Parveen, S.** 2017. Prevalence and antimicrobial resistance of *Salmonella* and pathogenic *E. coli* in poultry and meat. Cochran Fellowship Program. U.S. Food Safety System for Meat and Poultry. Philippine Delegation. UMES. Aug. 01, 2017.
- **Parveen, S.** 2017. Microbial dynamic in the Maryland Coastal Bays. NSF CREST Teacher Workshop. UMES. July, 17, 2017.
- **Parveen, S.** 2017. Is it safe to eat seafood? Sea food Safety Workshop. Jan. 06, 2017. Delaware State University, Dover, DE.
- **Parveen, S.** 2017. Current perspectives on *Vibrios* in the Maryland Coastal Bays. Maryland Coastal Bays Annual Meeting, Jan. 18, 2017.
- **Parveen, S.** 2017. Current perspectives on microbial seafood safety. Global issues related to food safety and Health. ARD 18<sup>th</sup> Biennial Research Symposium. Apr. 1-4, 2017. Atlanta, GA.
- **Parveen, S.** 2017. Past, present and future perspectives on *Vibrios* in the Maryland Coastal. Interstate Seafood Seminar (ISS). Harrisburg, PA. Apr. 4-6, 2017.
- **Parveen, S.** 2017. Prevalence and antimicrobial resistance of *Vibrios* recovered from blue crabs, seawater and sediments of the Maryland Coastal Bays”. Symposium on mid-Atlantic Coastal Lagoons and Coastal Ocean. May. 30. 2017. MD.
- **Parveen, S.** 2017. Nonshellfish *Vibrios*. Round table panelist in “Seafood-associated Vibriosis: Turning the Trend Around”. IAFP Annual meeting. July 8-12, Tampa, FL.
- **Parveen, S.** 2016. Environmental microbiology, food microbiology and food safety research at UMES (How to write a successful grant workshop). Jan. 05, 2016. North South University, Dhaka, Bangladesh.
- **Parveen, S.** 2016. Prevalence and characterization of *Listeria monocytogenes* in crab meat and crab processing plants. April 11-15, 2016. JIFSAN. College Park, MD.
- **Parveen, S.** 2016. Prevalence and characterization of *Escherichia coli* O157:H7 Recovered from retail ground veal in Mid-Atlantic region of the United States. June 14-16, 2016. Lincoln, NE.
- **Parveen, S.** 2015. *Salmonella* and Poultry: A food safety perspective. International conference of Bangladesh Society of Microbiologists. Dec. 26-28, 2015. Dhaka, Bangladesh.



- **Parveen, S.** 2015. Antimicrobial resistance, persistence and control of *Salmonella* in poultry. SANS Seminar Series. University of Maryland Eastern Shore. Princess Anne. UMES. April. 30, 2015.
- **Parveen, S.** 2015. Growth, survival and control of *Vibrio parahaemolyticus* in oysters. Food Safety Symposium, Beltsville, MD. April 01-03, 2015.
- Salah Elbashir and **Parveen, S.** 2015. Evaluation of foodborne pathogens and antibiotic residues in seafood. ISSC Annual Meeting. Ocean City. MD. April 14-16, 2015.
- **Parveen, S.** 2015. *Salmonella*: A poultry safety concern. Jan. 7, 2015. University of Dhaka, Bangladesh.
- **Parveen, S.** 2015. Prevalence, antimicrobial resistance and control of *Salmonella* in poultry. Executive Director Seminar. Jan. 07, 2015. International Center for Diarrheal Disease Research. Bangladesh.
- **Parveen, S.** and A, Huq. 2015. Emerging techniques for detecting and characterizing food- and water-borne pathogens for food safety and security. The third International conference on global warming: Food Security, Ras Al Khairam, UAE. May 5-7, Ras Al Khairam, UAE.
- **Parveen, S.** 2014. Innovative techniques for detecting and characterizing foodborne pathogens. First International Workshop: Innovation in Food Science. Oct. 16-17, 2014. Florianopolis, SC. Brazil.
- **Parveen, S.** 2014. Prevalence and characterization of *Escherichia coli* 0157:H7 recovered from retail ground veal within Mid-Atlantic region of the United States. Aug. 04, 2014, STEC group meeting, Indianapolis, IN.
- **Parveen, S.** 2014. Food safety research at UMES. Sept. 20, 2014. University of Maryland Eastern Shore. Princess Anne, MD.
- **Parveen, S.** 2014. Incidence, persistence and control of *Salmonella* in poultry. Biology and Chemistry Seminars. May 08, 2014. Salisbury Univ. Salisbury, MD.
- **Parveen, S.** 2013. Seafood safety research at UMES. USDA NIFA director's meeting. Jan. 30. 2013. UMES. Princess Anne, MD.
- **Parveen, S.** 2012. *Listeria monocytogenes*: a zoonotic food borne pathogen. International Conference on Biothreats & Biodefense. Oct. 15-17, 2012. Chicago, IL.
- **Parveen, S.** and Jahncke, M. 2012. High salinity relaying for reducing the *Vibrio* spp. in post-harvest oysters. The Interstate Seafood Seminar. Apr. 17-19, 2012. Cape May, NJ.

- **Parveen, S.** 2012. BAX PCR for the detection of food and water-borne pathogens. Journal Club. Mar. 27, 2012. Dept. of Agriculture, Food and Resource Sciences, UMES.
- **Parveen, S.** 2012. Is seafood safe? The Maryland Association for Environmental and Outdoor Education (MAEOE) Conference. Feb. 9, 2012. UMES.
- **Parveen, S.** 2011. *Vibrio parahaemolyticus*: Incidence, growth and survival. BIT's First world congress of Environmental Biotechnology. Oct. 17-22. Dalian, China.
- **Parveen, S.** DaSilva, L.V., DePaola, A., Bowers, J., Brohawn, K., and Tamplin, M.L. 2011. Development and validation of predictive model for the growth and survival of *Vibrio parahaemolyticus* in post-harvest shellstock oysters from two estuaries and two oyster species. National Shellfisheries Association 103 rd annual meeting. Mar. 27-31, 2011. Baltimore, MD.
- **Parveen, S.** 2010. *Vibrio*, *Listeria*, methods and studies at UMES. Advanced good aquaculture practices training for Bangladesh (International workshop). Sept. 20-22, 2010. UMES. Princess Anne, MD.
- **Parveen, S.** 2010. *Salmonella* and its control. Advanced good aquaculture practices training for Bangladesh (International workshop). Sept. 20-22, 2010. UMES. Princess Anne, MD.
- **Parveen, S.** 2010. Incidence, growth and survival of *Vibrio parahaemolyticus* in oysters. Interstate Seafood Seminar, Sept.14-16, 2010. Ocean City, MD.
- **Parveen, S.** 2009. *Salmonella*: Prevalence, antimicrobial resistance and virulence. Aug. 20, 2009. Anne Arundel County Department of Health, Annapolis, MD.
- **Parveen, S.** DaSilva, L.V., DePaola, A., Bowers, J., White, C., Hettiarachchi, K.A., Rutto, G., and Tamplin, M.L. 2007. Predictive models for the growth and survival of *Vibrio parahaemolyticus* in post-harvest shellstock American oysters. USDA-CSREES National Research Initiative Food Safety PI meeting. Nov. 14, 2007. Washington, DC.
- **Parveen, S.** 2007. Capacity Building Grants at UMES. Agricultural Liaison Officer Workshop. Sept. 20, 2007. UMES, Princess Anne. MD.
- **Parveen, S.** 2006. Research overview of food microbiology and safety laboratory. Partnership meeting (USDA and UMES), UMES, Princess Anne, MD.
- **Parveen, S.** 2005. *Vibrio parahaemolyticus* in oysters and waters from the Chesapeake Bay. 57th Interstate seafood seminar, Oct. 11-14, 2005. Ocean City, MD.
- **Parveen, S.** 2003. Genotypic methods for differentiating sources of fecal pollution. Water Environment Federation Workshop. Oct. 11-15, 2003. Los Angeles, CA.

- **Parveen, S.** 2002. MST Methodologies: use of antibiotic resistance analysis and phenotypic methods. National TMDL Science and policy 2002 specialty conference. Water Environment Federation. Nov. 13-16, 2002. Phoenix, AZ.
- **Parveen, S.** 2002. Phenotypic and Genotypic methods for differentiating sources of *Escherichia coli*. ASM General Meeting, May 19 -23, 2002. Salt Lake City, UT.
- **Parveen, S.** 2000. Methods for differentiating sources of fecal pollution. U.S. Geological Survey Conference, Mar. 14-16. 2000. Columbus, OH.
- **Parveen, S.** 2000. Advantages, disadvantages and costs of source tracking methods. U. S. Geological Survey Conference, Mar. 14-16, 2000. Columbus, OH.
- **Parveen, S.** 1999. Tracking sources of fecal contamination. Agricultural Crop Management Conference. Nov. 30-Dec. 01, 1999. Columbia, MO.
- **Parveen, S.** 1999. Ribotyping for differentiating sources of fecal contamination. Southeastern and South Carolina Branches of the American Society for Microbiology Conference, Oct. 28-30, 1999. Jekyll Island, GA

#### **Gene Bank Submission**

- Richards, G. P., **Parveen, S.**, and Watson, M.A. 2003. *Vibrio vulnificus* phosphoglucose.

#### **Dissertation**

- Differentiating human and nonhuman sources of *Escherichia coli* by phenotypic and genotypic methods (Major Supervisor: Dr. Mark L. Tamplin).

#### **Master's Thesis**

- Seasonal distribution and characterization of *Aeromonas* spp. isolated from aquatic environments of Bangladesh (Major Supervisor: Dr. Anwar Huq).

#### **Popular Press**

- Parveen and Schwarz contributes to nationwide award winning research. Ingenuity, spring 2019.
- *Vibrio Vulnificus*: What to know about the deadly bacteria that is the focus of bad news, Food Quality and Safety. December 11, 2018.
- UMES scientists contribute to universal concerns global warming and food security. Ingenuity. Fall 2016.
- Featured on the SANS Digest 2014. Parveen and Schwarz delve deeper into *E. coli* mystery. Jan. 2014.
- Featured on WBOC News highlighting research on safety of school lunch box. May 08, 2012.

- Featured on CBS Baltimore in Sept. 2011. Highlighting research on *Vibrio* in oysters
- The *Salmonella* warning. The Daily Times. Sep. 9, 2012.
- Seafood safety research. The Agriculture Experiment Station Magazine, UMES. Winter 2012.
- UMES researcher receives grants. The Star Democrat Business. April. 22, 2011 (Local Newspaper).
- Poultry food safety research at UMES. 2011. [www.umes.edu](http://www.umes.edu)
- UMES researcher targets seafood safety. 2011. [www.umes.edu](http://www.umes.edu)
- Food Science and Technology researcher in the news. Apr. 29, 2011. The Key- a newsletter for University of Maryland Eastern Shore student, faculty and staff.
- Food Safety: poultry and oysters project highlight. Apr. 2006. The Key- a newsletter for University of Maryland Eastern Shore student, faculty and staff.

#### Technical Reports

- **Parveen, S. (PI).** *Shewanella* species as potential emerging pathogens in oysters and seawater from Apalachicola, Chesapeake and Maryland Coastal Bays. USDA NIFA CBG. 2019-present.
- **Parveen, S. (PI).** Prevalence and Antimicrobial Resistance of *Salmonella* in Organic and Non-Organic Chickens. USDA Evans Allen. 5/22/2018-4/21/2021. 2019-present.
- **Parveen, S. (PI).** A rapid, user friendly method for detection of total Vibrionaceae as an indicator of pathogenic *Vibrio* species in oysters and seawater. USDA NIFA CBG. 2015-2019.
- **Parveen, S. (PI).** Prevalence and Characterization of *Escherichia coli* O157:H7 recovered from retail ground veal in Mid-Atlantic region of the United States. USDA NIFA STEC AP and USDA ARS. 2014-2017.
- **Parveen, S. (PI).** Evaluation of foodborne pathogens and antibiotic residues in imported and domestic seafood. MDX-FS20130100 0232396. 2014-2017.
- **Parveen, S. (PI).** Evaluation of practical post-harvest mitigation strategies to reduce the abundance of *Vibrio* bacteria in molluscan shellfish. # MDX-2010-02370. 0223120. 2011-2015.
- **Parveen, S. (PI).** Molecular characterization and predictive modeling of *Salmonella* spp. recovered from processed poultry. USDA NIFA Evans-Allen. Grant # MDX-FS6 0211085. 2009-2013.

- **Parveen, S. (PI).** Microbial models of the effect of storage temperature on the growth and survival of *Vibrio* species in oysters. USDA CSREES National Research Initiative (NRI) Grant # MDXPARVEEN3. 2007-2011.
- **Parveen, S. (PI).** Prevalence, growth, survival and control of *Listeria monocytogenes* in blue crab meat. USDA CSREES 1890 Capacity Building grants (research). Grant # MDXPARVEEN2. 2006-2011.
- **Parveen, S. (PI).** Characterization of antibiotic-resistant *Salmonella* spp. isolated from processed poultry. USDA CSREES Evans-Allen, Grant # MDX-FS-500. 2004-2007.
- **Parveen, S. (Co-PI).** Education program for improving food safety on the Delmarva Peninsula. 2003. USDA CSREES 1890 Capacity Building grants (Teaching). Grant # MDE-2003-03728. 2004-2007.
- **Parveen, S. (Co-PI).** Food safety biotechnology to combat antibiotic resistance. USDA CSREES Evans Allen. Grant # MDX-FS-600. 2004-2007.
- **GRANTS (FUNDED)**
- Preparing for the future: building capacity for food safety compliance at farmers' markets. USDA NIFA CBG, 01/06/2020-31/05/2023. \$499,642 (**CO-PI**).
- Evaluating the food safety impacts of cover-crop grazing in fresh produce systems to improve cover crop adoption, crop-livestock integration, and soil health. USDA-AMS; Specialty Crop Multi-State Program. 09/01/2020 – 08/30/2023. \$1,000,000 (UMES \$310,000) (**UMES Co-PI**).
- Development and validation of a high-volume and fully integrated shellfish harvesting vessel: The oyster master. Maryland Industry Partnership (MIPS) Grant for funding consideration. 01/01/20-12/31/2019. \$16,000 (**Collaborator**).
- Adapting high pressure processing (HPP) technology to enhance the competitiveness of the domestic blue crab industry. Sea Grant. 09/01/2020 - 08/30/2024. \$300,000 (**Collaborator**).
- Identifying major sources of fecal pathogens in Bangladeshi aquaculture value chains and the most cost-effective risk reduction strategies. USAID. 03/01/2020-02/28/2022. \$15,000 (**UMES PI**).
- Development and validation of a high-volume and fully integrated shellfish harvesting vessel: The Oyster Master. Maryland Industry Partnership Grant for funding consideration. 01/01/20-12/31/2019. \$16,000 (**Collaborator**).
- Development of effective and harmless silver-based materials as antimicrobial coatings. Delmarva Seed Grants. 10/01/2019-09/30/2021. \$30,000 (**Co-PI**).

- Ecology, transmission and control of *Salmonella* and shiga-toxin producing *E. coli* in integrated live stocks (USDA NIFA Organic Transitions). 01/01/2019-12/31/2021. \$500,000 **(Co-PI)**.
- SmartPath: Grower-directed convergence of nanotechnology and smart decision analytics for irrigation water quality management related to pathogens. USDA NIFA. \$566,200 to UMES (\$5, 067,725). 08/01/2018-7/31/2023 **(Co-PI)**.
- *Shewanella* species as potential emerging pathogens in oysters and seawater from Apalachicola, Chesapeake and Maryland Coastal Bays. USDA CBG. 3/1/2018-2/28/2021. \$499,999 **(PI)**.
- Re-immersion time required to return Oyster *Vibrio parahaemolyticus* and *Vibrio vulnificus* levels to background following 24-hour dry storage/desiccation in Maryland waters. Interstate Shellfish Sanitation Conference (ISSC). 03/01/2018-09/30/2019. \$49,735 **(Co-PI)**.
- Prevalence and Antimicrobial Resistance of *Salmonella* in Organic and Non-Organic Chickens. USDA Evans Allen. 5/22/2018-4/21/2021 **(PI)**.
- CONSERVE (Coordinating Nontraditional Sustainable water Use in Variable climates):A Center of Excellence at the Nexus of Sustainable Water Reuse, Food, and Health. USDA-NIFA. \$388,000 to UMES (\$9,998,337). 09/01/2016-08/31/2020 **(UMES-Co-PI)**.
- Food Marketing Institute Foundation Scholarship (travel award). \$3,000. 2016 **(advisor of the student)**.
- American Society of Microbiologists (ASM) Microbe 2017 travel grants. \$1,700. 2017 **(advisor of students)**.
- Climate variability and microbial dynamics in the Maryland Coastal Bays (MCBs). \$5M. 01/01/2017-12/31/2021. NSF **(Co-PI)**.
- Soil and crop management practice impacts on fresh produce safety and quality. 2017. \$600,000. 09/01/2017-08/31/2020. USDA-NIFA Capacity Building Grants-Research **(Co-PI)**.
- Determine and develop improved on farm food safety practices and outreach/educational programs for small and mid-size conventional and organic growers in the Mid-Atlantic, South and South Central regions consistent with USDA-GAPs and FDA guidelines. USDA NIFA CBG. 09/01/2014 to 08/31/2019. \$600,000 **(Co-PI)**.
- A rapid, user friendly method for detection of total Vibrionaceae as an indicator of pathogenic *Vibrio* species in oysters and seawater. USDA NIFA CBG 09/01/2014 to 08/31/2019. \$479,000 **(PI)**.

- Prevalence and Characterization of *Escherichia coli* O157:H7 recovered from retail ground veal and beef in Mid-Atlantic region of the United States. USDA NIFA STEC CAP and USDA ARS. 11/01/2014 to 12/31/2018. \$169,000 **(PI)**.
- University of Maryland Eastern Shore REU in Marine Sciences. NSF. 09/01/2015- 08/31/2018. \$282,000 **(Senior Personnel)**.
- Development of integrated control strategies for *Vibrio parahaemolyticus* in Eastern oyster (*Crassostrea virginica*) for Raw Consumption. Maryland Agricultural Experiment Station. (MAES). 01/01/2015-06/30/2016. \$30,000 **(Co-PI)**.
- Control of *Salmonella* in ground chicken using bacteriophage. Perdue Poultry Industry. 3/15/2014 to 11/14/2015. \$13,500 **(PI)**.
- Control of *Salmonella* in chicken using antimicrobial agents. Perdue Poultry Industry. 3/15/2014 to 11/14/2015. \$7,000 **(PI)**.
- Prevalence and Characterization of *Escherichia coli* O157:H7 recovered from retail ground veal in Mid-Atlantic region of the United States. USDA NIFA STEC CAP and Univ. Nebraska, NE. 04/01/2014 to 03/31/2016. \$100,000 **(PI)**.
- Evaluation of foodborne pathogens and antibiotic residues in imported and domestic seafood. USDA Evans Allen. 01/31/2013-12/31/2017. \$195,000 **(PI)**.
- Interdisciplinary program of education on food safety for fresh fruits and vegetables. USDA NIFA Capacity Building Grants (CBG). 09/01/2012-08/31/2015, \$300,000 **(Co- PI)**.
- University of Maryland Eastern Shore REU in Marine Sciences. NSF. 09/01/2012- 08/31/2015. \$262,000 **(Senior Personnel)**.
- Enhancement of chicken immunity against colonization of *Salmonella* Typhimurium by stimulation of the lysogenic cycle of non-pathogenic *Salmonella* strain in chicken cells. MAES. 07/02/2012-06/30/2013. \$30,000 **(Co-PI)**.
- *Vibrios* in the Environment. 2010. Student travel grants, \$1,055 **(Advisor of the students)** (Through the University of North Carolina, Charlotte, NC).
- Evaluation of practical post-harvest mitigation strategies to reduce the abundance of *Vibrio* bacteria in Molluscan Shellfish. 2010. USDA-NIFA CBG. 07/01/2010-06/31/2014. \$499,895 **(PI)**.
- The University of Maryland Eastern Shore REU in Marine and Estuarine Science. 2010. National Science Foundation (NSF). 05/01/10-04/30/13. \$231,000 **(Senior Personnel)**.
- American Society for Microbiology Minority Travel Grant. 2009. \$1,500 **(PI)**.

- Incidence, growth and survival of pathogenic *Vibrio parahaemolyticus* in Asian oysters (*Crassostrea ariakensis*). 2008. NSF ACTION. \$10,000 (**Faculty Advisor; [PI]**).
- Incidence, growth and survival of *Vibrio vulnificus* and *Vibrio parahaemolyticus* in Asian oysters (*Crassostrea ariakensis*). 2007. NSF ACTION. \$10,000 (**Faculty Advisor; [PI]**).
- Pathogen testing metrics for GAPs in Delmarva leafy greens/fresh produce and poultry litter compost. USDA CSREES 1890 Capacity Building Grant (Research). 10/01/07-9/30/10. \$299,000 (**Collaborator**).
- American Society for Microbiology Minority Travel Grant. 2007. \$1,500 (**PI**).
- Molecular characterization and predictive modeling of *Salmonella* spp. recovered from processed poultry. 2007. USDA CSREES Evans Allen. 01/01/08-12/31/11. \$100,000 (**PI**).
- Microbial models of the effect of storage temperature on the growth and survival of *Vibrio* species in oysters. 2005. USDA CSREES National Research Initiative (NRI) Food Safety, 02/15/05-12/14/08. \$410,000 (**PI**).
- Prevalence, growth, survival and control of *Listeria monocytogenes* in blue crab meat. 2005. USDA CSREES 1890 Capacity Building grants (research). 10/01/05-09/30/10. \$299,605 (**PI**).
- Analysis of poultry samples for *Salmonella*. 2005. Solution BioSciences, Inc. \$2,600 (**PI**).
- Integrating season extenders in alternative crop development on Delmarva. 2004. USDA CSREES Evans-Allen. 10/01/04-09/30/10. (**Collaborator**).
- Characterization of antibiotic-resistant *Salmonella* spp. isolated from processed poultry. 2003. USDA CSREES Evans-Allen. 2/01/04-1/31/08. \$140,000 (**PI**).
- Education program for improving food safety on the Delmarva Peninsula. 2003. USDA CSREES 1890 Capacity Building grants (Teaching). 09/01/03-08/31/07. \$198,891 (**Co-PI**).
- Food safety biotechnology to combat antibiotic resistance, 2003. USDA CSREES Evans Allen. 01/01/04-01/31/07. \$140,000. (**Co-PI**).
- Application of phenotypic and genotypic methods for detecting fecal pollution in water caused by livestock. 1999. USDA CSREES NRI. 07/01/99 to 06/30/01. \$193,338. (**Co-PI**).
- Defining specific genomic sequences of virulent *Vibrio vulnificus* strains to assess risk. 1998. USDA CSREES NRI. 10/01/98- 09/30/2000. \$90,000. (**Co-PI**).
- Conserving and enhancing essential fish habitats by differentiating the specific sources of fecal pollution in estuarine waters. 1999. U.S. Dept. of Commerce. 04/01/99-3/31/2000. \$103,114. (**Co-PI**).



**SUPERVISED STUDENTS/POST GRADUATE FELLOW AT THE UNIVERSITY OF MARYLAND EASTERN SHORE**

Joey Haymaker <b>(Research Assistant)</b>	Primary Advisor	Spring 2020
Detbra Rosales <b>(Research Assistant)</b>	Primary Advisor	Summer 2019
<b>Post graduate fellows</b> Dr. Ligia DaSilva <b>(Postdoctoral Associate)</b>	Primary Advisor	Spring 2006-Spring 2010
Ms. Chanelle White <b>(Research Specialist)</b>	Primary Advisor	Spring 2006-Fall 2012
Ms. Joan Meredith <b>(Research Laboratory Technician)</b>	Primary Advisor	Winter 2014-present
Ms. Sylvia Ossai <b>(Assistant Research Laboratory Technician)</b>	Primary Advisor	Summer 2014-Summer 2015
Dr. Ligia DaSilva <b>(Research Associate)</b>	Primary Advisor	Spring 2014-Summer 2016
Dr. Marilia Miotto <b>(Visiting Scholar, Brazil)</b>	Primary Advisor	Fall 2015-Winter 2016
Dr. Arquette Grant <b>(Postdoctoral Associate)</b>	Primary Advisor	Winter 2017-Spring 2017

**Graduate students as advisor**

Edwina Barnett, M.S.	Primary Advisor	Spring 2020-
Tahirah Johnson, M.S.	Primary Advisor	Fall 2019-present
Anuradha Jeewantha, Ph.D.	Primary Advisor	Fall 2018-present
Esam Almuhaideb, Ph.D.	Primary Advisor	Spring 2018-present
Ava Ellett, M.S.	Primary Advisor	Spring 2018-present
Jasmine Smalls, Ph.D.	Primary Advisor	Fall 2017-present
Chanelle White, Ph.D.	Co-Advisor	Fall 2016-present
Salah Elbashir, Ph.D.	Primary Advisor	Graduated fall 2019
Marilia Miotto, Ph.D.	Co-Advisor	Graduated summer 2017
Sylvia Ossai, M.S.	Primary Advisor	Graduated fall 2017
Jabari Hawkins, Ph.D.	Primary Advisor	Graduated fall 2017
Arquette Grant, Ph.D.	Primary Advisor	Graduated fall 2016

Sara Elmahdi, Ph.D.	Primary Advisor	Graduated fall 2015
Rizwana Tasnim, Ph.D.	Primary Advisor	Graduated spring 2014
Jabari Hawkins, M.S.	Primary Advisor	Fall 2012-summer 2013
Michline Brice, Ph.D.	Primary Advisor	Graduated spring 2017
Melinda Schwarz, Ph.D.	Primary Advisor	Graduated fall 2013
Candace Rodgers, M.S.	Primary Advisor	Graduated spring 2013
Robert Korir, M.S.	Primary Advisor	Graduated fall 2011
Elbagir Eissa, Ph.D.	Primary Advisor	Fall 2008
Geoff Rutto, M.S.	Primary Advisor	Graduated fall 2010
Meshak Mudoh, Ph.D.	Primary Advisor	Graduated spring 2012
Tagelsir M. Mohamed, Ph.D.	Primary Advisor	Graduated spring 2010
Sivaranjani Pagadela, Ph.D.	Primary Advisor	Graduated fall 2008
Chanelle White, Ph.D.	Primary Advisor	Spring 2005-summer 2005
Apsara Hettiarachchi, M.S.	Primary advisor	Graduated, spring 2006
Christina Walton, Ph.D.	Primary Advisor	Fall 2003
Maryam Taabodi, M.S.	Primary Advisor	Graduated, fall 2005
Clytrice Watson, Ph.D.	Co-Advisor	Graduated, fall 2005

#### Graduate students as committee member

Petrina McKenzie-Reynolds, Ph.D.	Research Committee	Spring 2019-present
Nuzul Alam, Ph.D.	Research Committee <b>(External, Bangladesh)</b>	Spring 2019-present
Anette Kenny, M.S.	Research Committee	Graduated fall 2019
Joseph Haymaker M.S.	Committee member	Graduated fall 2018
Vengadesh Letchumanan, Ph.D.	Committee member <b>(External, Malaysia)</b>	Graduated spring 2018
Wendy Attuquayefio, Ph.D.	Research Committee	Spring 2017-present
Rico Duncan, M.S.	Research Committee	Fall 2017-spring 2018
Ebenezer Kassa, M.S.	Research Committee	Spring 2017-present
Debra Rosales, Ph.D.	Research Committee	Summer 2017-present
Veronica Pereira, M.S.	Research Committee	Graduated fall 2019
Gary Fagan, M.S.	Research Committee	Graduated fall 2017
Gwen Dashiell, M.S.	Research Committee	Graduated fall 2018
Esam Almuhaideb, M.S.	Research Committee <b>(External, USA)</b>	Graduated summer 2017
Adebola Daramola, Ph.D.	Research Committee	Graduated spring 2017
Samual Mwangi, Ph.D.	Research Committee	Graduated spring 2015
Celia White, M.S.	Research Committee	Graduated fall 2015
Tomador Khairi, M.S.	Research Committee	Graduated spring 2015
Wallela Hispala, Ph.D.	Research Committee	Fall 2010-2014
Tedra Booker, Ph.D.	Research Committee	Fall 2008-spring 2010
Leonard Kibet, M.S.	Research Committee	Graduated, fall 2009
Shaun McKenzie, Ph.D.	Research Committee	Graduated, fall 2009
Sarah Wood, Ph.D.	Research Committee	Graduated, fall 2008
Lauretta-Lyn Katsriku, M.S.	Research Committee	Graduated, fall 2007
Lucian Mitran, Ph.D.	Research Committee	Graduated, fall 2007

Damien Cezac, Ph.D.	Research Committee	Graduated, fall 2008
Quintece McCrary, Ph.D.	Research Committee	Spring 2005, fall 2008
Imroz Khan, Ph.D.	Research Committee	Spring 2005
Khaled Abou-Zeid, Ph.D.	Research Committee	Graduated, spring 2006
Jennifer Timmons, Ph.D.	Research Committee	Graduated, spring 2006
Dahlia Jackson, Ph.D.	Research Committee	Graduated, fall 2005
Candace Burnette, M.S.	Research Committee	Graduated, fall 2003

### **Undergraduate students as research advisor**

Nylah McClain	Research Advisor	Spring 2020
Abu Bakar, M.S.	Research Advisor	Fall 2019
Loretta Nimoh, B.S.	Research Advisor	Spring 2019-present
Ablavi Amekpo, B.S.	Research Advisor	Summer 2019-present
Rebecca Hernandez, B.S.	Research Advisor	Summer 2019 (REU student)
Olufunmilayo Adeoye, B.S.	Research Advisor	Summer 2017-present
Nakia Coit, B.S.	Research Advisor	Spring 2019- present
Eden Ndjami, B.S.	Research Advisor	Summer 2019
Iman Abdelwahab, B.S.	Research Advisor	Summer 2017-2019
Akosua Wiredu, B.S.	Research Advisor	Summer 2017-2019
Adebola Daramola, B.S.	Research Advisor	Summer 2017-2019
Marci-Ann Smith, B.S.	Research Advisor	Summer 2017-fall 2018
Hannah Merges, B.S.	Research Advisor	Summer 2017 (REU student)
Adib Adnan, High School	Research Co-Advisor	Summer2016-summer 2018
Isaiah Milton, B.S.	Research Advisor	Summer 2017 (REU student)
Akosua Wiredu, B.S.	Research Advisor	Summer 2017-present
Barakat Owolabi, B.S.	Research Advisor	Summer 2016-present
Marci-Ann Smith, B.S.	Research Advisor	Spring 2017-present
Esther Akinsoyinu, B.S.	Research Advisor	Spring 2017-summer 2017
Rasheed Sule, B.S.	Research Advisor	Summer 2016-fall 2016
Ciara Synder, B.S.	Research Advisor	Spring 2017-summer2017
Anna Ramgren, B.S.	Research Advisor	Summer 2016
Linda Wu, B.S.	Research Advisor	Summer 2016
Cloe Grainger, B.S.	Research Advisor	Summer 2016
Lavell Allen, B.S.	Research Advisor	Summer 2015
Veronica DePascuale, B.S.	Research Advisor	Summer 2015
Jessica Bishop, B.S.	Research Advisor	Summer 2015
Chanal Carlisle, B.S.	Research Advisor	Spring 2014
Cloe Grainger, B.S.	Research Advisor	Summer 2015-2016
Joy Mudoh B.S.	Research Advisor	Spring 2014-Fall 2015
Breann Hrechka, B.S.	Research Advisor	Summer 2015-2016
Jasmin Brown, B.S.	Research Advisor	Fall 2013-summer214
Remy Jones, B.S.	Research Advisor	Summer 2013
Mohamed Haneef, B.S.	Research Advisor	Fall 2012-present
Ariana Thompson, B.S.	Research Advisor	Fall 2012
Harrison Miller, B.S.	Research Advisor	Summer 2012
Clarissea Youngblood, B.S.	Research Advisor	Summer 2012

Sylvia Ossai, B.S.	Research Advisor	Fall 2011-present
Mercy Mudoh, B.S.	Research Advisor	Fall 2009-summer 2012
Robert Korir, B.S.	Research Advisor	Fall 2005-summer 2008
Saisha Woodward, B.S.	Research Advisor	Fall 2010
Jhoset Burgos, B.S.	Research Advisor	Summer 2010
Peter Sang, B.S.	Research Advisor	Spring 2010
Clarice Toole, B.S.	Research Advisor	Fall 2009
Wunda Kwembe, B.S.	Research Advisor	Summer 2009
Stephanie Veprek, B.S.	Research Advisor	Spring 2008
Eckroade Jennifer, B.S.	Research Advisor	Spring 2008
Kimberly Cephas, B.S.	Research Advisor	Spring 2008-Spring 2009
Naomi Harris, B.S.	Research Advisor	Fall 2007
Geoff Rutto, B.S.	Research Advisor	Fall 2006
Janet Chelangath, B.S.	Research Advisor	Fall 2005-Spring 2006
Sakib Adnan, High School	Research Advisor	Spring 2006
Adrienne Comer, LSAMP	Research Advisor	Summer 2005
Khalia Boyd, B.S.	Research Advisor	Fall 2003-Spring 2004
Tierra Norman, LSAMP	Research Advisor	Summer 2004
Julien Cherrington, LSAMP	Research Advisor	Summer 2004
Rachel Andrews, LSAMP	Research Advisor	Summer 2003

**Co-supervised and trained (students/technicians/ postdoctoral associates/educators/scientists)**

**Co-advised:** Samuel Mwangi (post doctoral associate), Kaven Green (Ph.D.), Morgan Fu (visiting scholar)

**Trained:** More than 130 students/technicians/ postdoctoral associates/educators/scientists

**CURRENT PRIMARY RESEARCH PROJECTS**

- **Project # 1:** Application of nanno technology for the detection of pathogens in irrigation water.
- **Project # 2:** A rapid user friendly method for detection of total Vibrionaceae as an indicator of pathogenic *Vibrio* species.
- **Project # 3:** Climate variability and microbial dynamics in the Maryland Coastal Bays.
- **Project # 4:** Evaluation of pathogens and indicator organisms in non-traditional irrigation water.
- **Project # 5:** Ecology, transmission and control of foodborne pathogens in crops-livestock farms.
- **Project # 6:** *Shewanella* species as potential emerging pathogens in oysters and seawater from Apalachicola, Chesapeake and Maryland Coastal Bays.
- **Project # 7:** Evaluation of foodborne pathogens and antibiotic residues in imported and domestic seafood.
- **Project # 8:** Prevalence and characterization of *Escherichia coli* O157:H7 and STEC recovered from retail ground veal and beef in mid-atlantic region of the United States.
- **Project # 9:** Control of *Vibrio* in post-harvest oysters.
- **Project # 10:** Whole genome sequencing of *Salmonella* to understand the effect of processing conditions at molecular level.
- **Project #11:** Changes in *Salmonella* Typhimurium throughout the lifecycle under

environmental and antimicrobial conditions.

- **Project # 12:** Control of *Salmonella* in chicken using antimicrobial agents.
- **Project # 13:** Prevalence and antimicrobial resistance of *Salmonella* in organic and non-organic chickens.
- **Project # 14:** Effects of metagenomics on the prevalence of *Salmonella* in organic and non-organic chicken.
- **Project # 15:** Seasonal distribution of vibrios in aquaculture oysters.
- **Project # 16:** Effects of aquaculture practices and metagenomics on the prevalence of vibrios in oysters.
- **Project # 17:** Antibiotic resistance and genome sequencing of pathogenic vibrios recovered from oysters and water.

## **SERVICE**

### **International, National, State, and Regional Committee Assignment:**

- Member, Advisory committee, International Society of Bangladesh-Affiliated Microbiologists (ISBM). 2020-
- Invited Review Panelist, USDA AFRI Food safety-Antimicrobial Resistance. 2019-2020.
- Member, USM Board of Regents faculty Award. 2019-2020.
- Member, Management Committee, Food Protection Trends (peer reviewed journal, IAFP), 2019-present.
- Member, Editorial Advisory board, Heliyon, 2019-present.
- Member, Editorial Board, Heliyon (peer-reviewed journal; Elsevier). 2018-2019.
- Associate Editor, Frontiers in Environmental Health. 2013-present.
- Member, Editorial board, Journal of Food Protection. 2015-2017.
- Member, Editorial board, Food Microbiology, 2014-present.
- Member, First Atlantic & Gulf Seafood Technology Conference (AGSTC) Advisory committee, 2017-present.
- Judge, 7<sup>th</sup> Annual Summit on Microbiology: Education, R&D and Market. 2018. San Antonio, TX.
- Judge-Poster competition. ARD 18<sup>th</sup> Biennial research symposium. Atlanta. 2017.
- Chair, Division of Aquatic Food Products poster competition. IFT. Las Vegas. 2017.
- Moderator, The third international conference on global warming and food security. Ras Al Khairam, UAE. 2015.
- Moderator, International conference on Bangladesh Society of Microbiologists. Dhaka, Bangladesh. 2015.
- Member, Judging and award committee: NOAA: Seventh education and science forum. Oct. 26-29, 2014.

- Member, National Advisory Committee on Microbiological Criteria for Foods. 2013-2017.
- Volunteer, Minority Mentoring, ASM General meeting, 2013.
- Invited review panelist, USDA AFRI Food Safety. Mar. 28-Feb. 01. 2012.
- Moderator, International Conference on Biodefense and Bio threats. Oct. 14-17, 2012. Chicago, IL.
- Member, Editorial board, Food and Nutrition Sciences. 2012 -present.
- Member, International Food Protection Issues professional development groups, International Association for Food Protection (IAFP). 2012-present.
- Judge, Association for Research Directors 16th Biennial Research Symposium, Apr. 09-12, 2013.
- Faculty representative, graduate student symposium, USDA ARS, Beltsville, MD. 2011.
- Member, Selection committee, American Society for Microbiology (ASM) Minority Travel Grants. 2010.
- Invited review panelist, NOAA/UNH, Water quality and Health Bureau, Health Canada, and USDA AFRI. 2003-2012.
- Judge, *Vibrios* in the Environment Conference. Nov. 07-12, 2010. Biloxi, MS.
- Selected qualified expert on *Vibrio* spp. In seafood, FAO/WHO, August, 2010.
- Participated in the US Government accountability office (GMO) *Vibrio* discussion, Dec. 12, 2010.
- Volunteer, American Society for Microbiology (ASM) Minority Booth, ASM General Meeting. 2009.
- Moderator, 6<sup>th</sup> International Conference on Predictive Modeling in Foods. Sept. 8-12, 2009. Washington D.C.
- Member, Editorial Board, Infection and Drug Resistance (peer-reviewed journal), 2008-present.
- Member, Microbial Risk analysis professional development groups, International Association for Food Protection (IAFP), 2008-present.
- Member, Seafood safety and quality professional development groups, International Association for Food Protection (IAFP), 2006-present.
- Member, MEES faculty, University system of Maryland, MD. 2002-present.
- Member, International Association for Food Protection, 2003-present
- Member, Institute of Food Technology, 1997-present.
- Member, American Society for Microbiology, 1996-present.
- Invited review panelist, CICEET, NOAA/UNH, 2003
- Invited panel member, Water quality and Health Bureau, Health Canada. 2003.

- Reviewer for numerous national and international journals and funding agencies, 2003-present.
- Judge, student competitive papers, ARD 13<sup>th</sup> Biennial research symposium, Mar. 29-Apr. 02, 2003. Atlanta, GA.
- Coordinator, Scientific session, Dhaka University Microbiology Alumni Association get-together, Baltimore, MD. Sept. 9-10. 2006.

**Community Service:**

- Member, Academic committee, ICRA, Delmarva, spring 2020-
- Participant, Showcase of food safety and water quality research, UMES Advocacy day, Annapolis, Feb. 12, 2020.
- Member, James Bennett High School. Organizing committee prom (class of 2018), 2017-2018.
- Member, James Bennett High School. Junior/Senior Banquette. Spring 2017.
- Volunteer, Boy Scouts of America, Spaghetti dinner. April 30, 2017.
- Treasurer, Boy Scouts of America, 2017-2018.
- Volunteer, Boy scouts of America, Popcorn Sale, Oct., 2014; Oct. 2016.
- Volunteer, Boy Scouts of America, Popcorn Sale, and Oct., 2015.
- Volunteer, Boy Scouts of America, Spaghetti dinner. April 30, 2016.
- Volunteer, Boy scouts of America, Chili Dinner, Jan. 11. 2014.
- Volunteer, Boy scouts of America, Chili Dinner, Jan. 12. 2013.
- Volunteer, Kisses and Cuddles Day care, Fruitland, MD. Jan. 11. 2013.
- Volunteer, Boy scouts of America, Popcorn Sale, Oct. 13, 2012.
- Volunteer, James Bennett Middle School. Education week. Oct. 16, 2012.
- Volunteer Boy scouts of America, Popcorn Sale, Oct. 2012, 2013, 2014.
- Volunteer, North Salisbury elementary school. Talent Show, Apr. 15. 2011.
- Volunteer, Boy scouts of America, Spaghetti dinner, Troop. 176. May 7, 2011, May 2012, May. 2014.
- Volunteer Fall Festival, North Salisbury Elementary School, Salisbury, MD. Oct. 24. 2008.
- Volunteer, Students and parents picnic. Second grade. Fruitland Primary School, MD. Jun. 05, 2008.
- Volunteer, spring fair, Fruitland Primary School, MD. May. 2006, 2007 and 2008.
- Volunteer, Kisses and Cuddles Day care, Fruitland, MD. Jan. 2008.
- Volunteer, spring fair, Somerset County, Princess Anne, MD. July 26-27, 2006.
- **University Committee Assignment:**

- Member, Research planning Advisory committee. UMES. 2020-
- Member, Committee on student life, Graduate School, UMES. 2018-present.
- Member, Research committee, Graduate School, UMES. 2009-2017
- Member, Faculty award committee, Graduate School, UMES. 2014-2018.
- Chair, SANS Seminar Series, Fall 2014- summer 2015.
- Member, SANS Seminar Series, Fall 2013- summer 2018.
- Member, Graduate faculty committee, Graduate School, UMES. Fall 2014-2017; 2019-2020.
- Member, Graduate education week committee, UMES, 2014-2016.
- Moderator, UMES Research Symposium, April 17, 2014.
- Member, Search Committee. Dept. of Natural Sciences. Summer 2013[summer and fall 2014.
- Chair, Curriculum committee, Graduate Studies. 2013-2014.
- Member, NSF plagiarism investigation committee, summer 2011-2012.
- Member, Graduate council, UMES. 2006-2010, 2012-present.
- Member, Biosafety committee, UMES. 2011-2018.
- Member, Curriculum committee, Graduate School, UMES. Fall 2011-summer 2013.
- Assistant Leader, International flag parade, spring commencement, UMES. 2004, 2005, 2007, 2008, 2009, 2011 and 2012.
- Assistant leader, International flag parade, Founders' day convocation, UMES. 2005, 2006, 2007, and 2008.
- Assistant Leader, International flag parade, fall commencement, UMES. 2005, 2006, 2007, 2008, 2009, 2010, and 2011.
- Leader, International flag parade, spring commencement, UMES. 2010.
- Regular member. Graduate faculty, UMES. 2006-present.
- Volunteer, Ethnic festival, UMES. 2006, 2008, 2009 and 2011.
- Councilor, (Human Ecology and FDST), Faculty Assembly, UMES. 2003-2005.
- Senator, Senate, UMES. 2003-2005.
- Assistant Leader, International flag parade, President Inauguration, UMES. 2003.
- Chair, Library committee, Senate, UMES. 2003-2004.
- Member, Biosafety committee, UMES. 2004-2007.
- Associate member, graduate faculty, UMES. 2002-2006.
- **Department and School Committee Assignment:**



- Member, Curriculum committee, Animal and Plant Science; Plant and Soil Food Science; Food Science and Technology. Dept. of Agriculture, Food and Resource Sciences. 2019-2020.
- Member, Search Committee, Dept. of Agriculture, Food and Resource Sciences, Spring 2018-present.
- Member, P and T Committee, Dept. of Agriculture, Food and Resource Sciences. 2019-2020.
- Guest Speaker, Environmental Microbiology (BIOL 601), Fall 2018.
- Member, Curriculum Committee, Plant Science and Poultry Science, Dept. of Agriculture, Food and Resource Sciences. Fall 2019-present.
- Member, P and T Committee, Dept. of Human Ecology. 2017-2018.
- Member, SANS PTR Committee. 2017-2018.
- Member, SANS USDA CBG internal review committee. 2014-2018.
- Member, SANS Seminar Series, School of Agricultural and Natural Sciences. 2015-2018.
- Chair, SANS Seminar Series, School of Agricultural and Natural Sciences. 2014-2015.
- Member, Food Safety cluster, SANS. 2014-present.
- Member, Postdoctoral associate Search Committee. Dept. Agriculture, Food and Resource committee. Fall 2016.
- Member, Post Tenure Review committee, Dept. of Agriculture, Food and Resource Sciences. Fall 2016.
- Member, Post Tenure Policy Review committee, Dept. of Agriculture, Food and Resource Sciences. Fall 2016.
- Member, Promotion and tenure committee. Department of Agriculture, Food and Resource Sciences. Spring 2017.
- Member, Recruitment and retention committee. Dept. of Agriculture, Food and Resource Sciences. UMES. Fall 2014-present.
- Member, Scholarship Committee, Dept. of Agriculture, Food and Resource Sciences, UMES. 2006-present
- Member, Admission committee, FDST Ph. D. program, Dept. of Agriculture, Food and Resource Sciences, UMES. 2003-present.
- Member, Admission committee, M.S. program. Food and Agricultural Sciences, Dept. of Agriculture, Food and Resource Sciences, UMES. 2003-present.
- Member, Perdue Scholarship for graduate student. FDST Ph.D. program. 2007-present.
- Guest Lecturer, Rapid method course. Dept. of Ag. Food and Resource Sciences. Fall 2016.
- Member, Departmental P and T committee, Natural Sciences. 2015.
- Member, Recruitment and retention committee. Dept. of Agriculture, Food and Resource Sciences. UMES. Fall 2014-summer 2015.

- Member, Search committee, Director, Food Science and Technology Ph.D. program. UMES. Spring 2014-present.
- Member, Search committee, Dept. of Natural Sciences. UMES, Summer 2014-fall 2014.
- Member, Search committee, Dept. of Natural Sciences. UMES. Summer 2013.
- Chair, search committee, Laboratory Technician, Food Sci. & Tech. Ph.D. Program, Dept. of Agriculture, Food and Resource Sciences, UMES. 2013.
- Member, search committee, Laboratory Technician, Food Sci. & Tech. Ph.D. Program, Dept. of Agriculture, Food and Resource Sciences, UMES. 2013.
- Member, search committee, Assistant Laboratory Technician, Food Sci. & Tech. Ph.D. Program, Dept. of Agriculture, Food and Resource Sciences, UMES. 2014.
- Departmental representative, 11th Annual UMES-Tri-county Fair. Fall 2013.
- Departmental representative, 11th Annual UMES-Tri-county Fair. Nov. 29, 2012.
- Guest speaker, Environmental Microbiology (BIOL 601). Fall 2012.
- Guest speaker, Rapid Method (MIC600), Fall 2014-2016.
- Member, search committee, chair, Dept. of Agriculture, Food and Resource Sciences, UMES. Spring 2012-2013.
- Member, Perdue Scholarship for graduate student. FDST Ph.D. program. 2007-present.
- Judge, UMES Research symposium, 2008, 2010- 2016.
- Judge, edible algae symposium, Dept. of Natural Sciences, UMES. Dec. 04, 2012.
- Guest lecturer seminar class (AGSC 600), fall 2010.
- Guest speaker, Agricultural Microbiology, AMIC 324, spring 2011.
- Member, search committee, Dept. of Human Ecology, May, 2011.
- Scholarship Committee, Dept. of Agriculture, Food and Resource Sciences, UMES. 2006-present
- Member, Departmental P and T committee, Human Ecology. 2010.
- Volunteer (assisted in recruitment), Spring fest, UMES, March 26, 2010.
- Performed administrative responsibilities of program director in his absence. Fall 2010-2015.
- Organized several seminars on Food safety by scientists from Academia, federal agencies and industry at UMES. 2003-present.
- Member, Admission committee, FDST Ph. D. program, Dept. of Agriculture, UMES. 2003-present.
- Member, Admission committee, Food and Agricultural Sciences, Dept. of Agriculture, UMES. 2003-present.
- Chair, Search Committee, FDST Faculty position, Dept. of Agriculture, Food and Resource

Sciences, UMES. 2008-2009.

- Member, Search committee, faculty position, Dept. of Agriculture, Food and Resource Sciences, UMES. 2008.
- Member, SANS Advisory Council, 2008-2010.
- Member, Award and recognition committee, SANS, UMES. 2007-2008.
- Chair, search committee, Graduate Program Manager, FDST, Dept. of Agriculture, Food and Resource Sciences, UMES. 2007.
- Volunteer Recruitment Open House, Dept. of Agriculture, UMES. Dec.14. 2007 and Dec. 2008.
- Dean Representative, Doctoral Dissertation. Fall 2006 and 2007. Spring 2008.
- Volunteer (assisted in recruitment), Tri-County College Fair, UMES. Nov. 13, 2006.
- Coordinator, Sunshine club, Human Ecology, UMES. 2004-2005.
- Chair, Search committee, Postdoctoral position in Food Microbiology, FDST, UMES. 2005.
- Member, Search committee, Food Scientist Faculty position, FDST, Dept. of Agriculture, UMES. 2003-2004.
- Member, Search committee, Food Science Graduate Program Manager Position, FDST, Dept. of Agriculture, UMES. 2003.
- Judge, HBCU Research Day, UMES, Apr.08, 2008.
- Member, Award and recognition committee, SANS, UMES. 2003-2004.

#### **OTHER PROFESSIONAL ACTIVITIES**

- Attended sexual harassment workshop, spring 2019.
- Google Gmail training, Spring 2019.
- Attended several webinars/workshops on grant writing organized by USDA NIFA and NSF. 2013-2020.
- HACCP training, Train-the-Trainer, April. 14 to 16, 2015.
- HACCP training, Segment 1 and 2, April. Oct. 29, 2014.
- KUALI training, UMES. Feb. 05, 2014.
- Effective teaching workshop. UMES. Jan. 16. 2014.
- Advisory workshop. UMES. Jan. 13. 2014.
- Attended Webinar on Microbial Modeling and Risk Analysis. International Food Protection Issues professional development groups. Jan. 31. 2013.
- Blackboard training workshop, UMES. Jan. 11, 2013.
- Organized workshop on seafood safety. The 2012 Maryland Association for Environmental and Outdoor Education (MAEOE) conference, UMES. Feb. 9. 2012.

- Critical Thinking Workshop, Jan. 24, 2012.
- Blackboard Collaborate Training Workshop at UMES, Jan.13, 2012.
- Pedagogy Training Workshop at UMES, Jan.19, 2012.
- Attended anger management workshop, Human Resource, UMES. Spring 2011.
- Organized international workshop on good aquaculture practices. Sept. 20-22, UMES.
- Participated Best practices for motivating scientist's webinar conference provided by principal investigators, Sept. 23, 2010.
- Attended workshop on crisis prevention training, Jan. 6, 2009.
- Attended workshops on Microsoft office training, power point 2007 training, outlook 2007 training, fall 2008.
- Completed Level I competencies for the blackboard learning system, Center for instructional Technology, UMES. Mar. 6, 2008.
- Online course "Food Safety Risk Management", Joint Institute of Food Safety and Applied Nutrition (JIFSAN), Mar. 10- Apr.18, 2008.
- Participated in the online course "overview of risk analysis", JIFSAN, Jan.08-26, 2008.
- Completed the human participant's protection education for research team's online course offered by the National Institutes of Health. Aug.16, 2007.
- Participated in the student learning outcomes assessment workshop at the University of Maryland Eastern Shore (Division of Academic Affairs). Jan.17-18, 2006.
- Participated in the Association for Research Directors' Conference in New Orleans, June 2005. Attended the workshop on "Writing Impact Statements for USDA grants".
- Participated in the workshop on how to deal with unacceptable employee behavior, May 20, 2005, Baltimore, offered by Rockhurst University continuing Education Center.
- Participated in the Dangerous Goods Seminar organized by FedEx Express, Feb.1-3, 2005. Philadelphia, PA.
- Participated in the Food Toxicology course at JIFSAN, Jul.28-30, 2004.
- Participated in the Workshop on AFLP at the University of Florida. Jan. 2000.
- Completed 12 hrs. Short courses in University of Florida Basic Radiation Safety, Jan.14, 1998.
- Participated in the workshop for Rabbit Handling and Injection at the University of Florida, Gainesville. Oct. 1995.
- Participated in the Interdisciplinary Center for Biotechnology Research (ICBR) molecular markers workshop at the University of Florida, Gainesville. Oct.30-Nov. 3, 1995.
- Participated in the Workshop on the Characterization of *Aeromonas* jointly sponsored by the Department of Microbiology, University of Maryland, College Park, Maryland, U. S. and Laboratory Science Division, ICDDR.B. Sept.5-14, 1989.

