

Maria D. Fuentes, MD, MPH

mfuent42@epcc.edu

(915) 790 6617

EDUCATION

- 2018 – present **PhD in Interdisciplinary Health Sciences**
College of Health Sciences, University of Texas at El Paso
- 2015 – 2018 **Master in Public Health**
Department of Public Health, University of Texas at El Paso.
- 1998 – 2008 **Doctor of Medicine (Surgeon)**
- 1999 **Emergency Medical Technician**
Cruz Roja Mexicana, Juarez, Mexico.

PROFESSIONAL EXPERIENCE

- 2023 **Biology Faculty** (Full time), Department of Biology, El Paso Community College
(Transmountain Campus).
- 2021 – 2023 **Public Health Emergency Manager**, Canutillo Independent School District, El Paso, TX
- 2022 **Biology Faculty** (Part-time), Department of Biology, El Paso Community College
- 2021 – present **Lecturer**, Department of Public Health, and Department of Social Work, The University
of Texas at El Paso
- 2021 **SI/CURE Facilitador Instructor**, El Paso Community College, El Paso, TX
- 2021 **Epidemiology Lead**, Texas Tech University Health Sciences Center, Lubbock, Texas.
- 2019 - 2021 **Contact Tracing Case Investigator**, College of Health Sciences, University of Texas at El
Paso and Texas Department of State Health Services.
- 2018 – 2019 **PhD Research Associate**, College of Health Sciences, University of Texas at El Paso.
- 2016 - 2018 **Graduate Research Assistant**, Department of Public Health, University of Texas at El Paso.
- 2017 **MPH Internship**, at El Paso Health, Inc., El Paso, TX.
- 2016 **Graduate Teaching Assistant**, Department of Social Work, University of Texas at El Paso.
- 2014 - 2016 **Physician**, La Rodadora Espacio Interactivo, Cd. Juarez, Mexico.
- 2011 - 2015 **Physician Observership**, Eduardo Covarrubias, MD, PA, El Paso, TX
- 2009 - 2010 **Pharmacy Technician**, Walgreens Pharmacy, El Paso, TX
- 2008 **Physician**, Juarez, Mexico
- 2007 - 2008 **Medical Social Service**, Department of Epidemiology, Servicios Estatales de Salud, Cd.
Juarez, Mexico.
- 2005 **Medical Internship** at Instituto Mexicano del Seguro Social HGZ#35, Cd. Juarez, Mexico
- 1999 - 2000 **Emergency Medical Technician Instructor**, Cruz Roja Mexicana, Cd. Juarez, Mexico
- 1997 - 2000 **Emergency Medical Technician**, Cruz Roja Mexicana, Cd. Juarez, Mexico

RESEARCH EXPERIENCE

- 2023 – present **Expression of Acute Heat Shock Proteins Among Hispanic Mexican American
Construction Workers Exposed to Ambient Heat in El Paso County.**
The University of Texas at El Paso

- 2022 – present **COVID-19 Vaccine Hesitancy Among Hispanics in the US Mexico Border**
The University of Texas at El Paso
- 2018 **Antibiotic Resistant Bacteria in the Environment and Hospital Settings.**
The University of Texas at El Paso
- 2018 **Uncovering Fall Injury Risks and Consequences in Hispanic Older Adult Men Who Accessed Emergency Medical Services (EMS)**
The University of Texas at El Paso
- 2016 - 2018 **A Study of Environmental and Genetic Factors Affecting Antibiotic Resistance of Extended Spectrum β -Lactamase Bacteria from the Rio Grande River in El Paso, TX and Cd. Juarez, Mexico.**
The University of Texas at El Paso
- 2016 - 2018 **The Effect of Cultural Barriers in the Perception of Occupational Risk in Mexican Migrant Workers.**
University of Texas at El Paso
- 2005 - 2006 **Comparative Study of Antiretroviral Treatment on the Patient with HIV/AIDS at IMSS HGZ No. 35 Juarez, Mexico**
Instituto Mexicano del Seguro Social Hospital #35, Juarez, Mexico
- 2003 - 2005 **Surgical Treatment of Patent Ductus Arteriosus**
Universidad Autónoma de Ciudad Juarez, Juarez, Mexico
- 2004 **Treatment Results on Acute Lymphoblastic Leukemia using Total Protocol 11/SJCHR on Children of Juarez, Mexico**
Juarez, Mexico

PEER-REVIEWED PUBLICATIONS

Fuentes M; Sepulveda G; Flores M; Mendoza J; Alvarez M; Dominguez, D. (2022) Environmental Dissemination of Carbapenem Resistant Enterobacteria in the Rio Grande River: A Public Health Concern?. *Texas Public Health Journal*.

Fuentes M; Gutierrez S; Sahagun D; Gomez J; Mendoza J; Ellis C; Bauer S; Blattner J; Lee W; Alvarez M; Dominguez D. (2019) Assessment of Antibiotic Levels, Multi-Drug Resistant Bacteria and Genetic Biomarkers in the Waters of the Rio Grande River Between the United States-Mexico Border. *Journal of Health & Pollution*, 9(23).

Staines H, **Fuentes M**, Staines R. (2005) Tratamiento quirúrgico del conducto arterioso persistente. Experiencia de 21 años en un Hospital General. *Revista Mexicana de Cirugía Pediátrica*, 12(1): 39-45.

PROFESSIONAL CONFERENCE PRESENTATIONS

Fuentes, M, Dominguez, D., Lee, W., Alvarez, M. (2019). Antimicrobial Biomarkers for ESBLs, Integrons and Pharmaceutical Residues in the Environment. ASM Microbe International Meeting. San Francisco, CA, June 22, 2019

Fuentes, M, Alvarez, M and D. C. Dominguez (2019). Antimicrobial Resistant Genes of Extended Spectrum β Lactamase and Carbapenem Resistant Enterobacteria in the Environment." Texas Public Health Education Conference, San Antonio TX, March 18-20, 2019.

Fuentes, M, Gutierrez, S., Sahagun, D., Mendoza J, Gomez, J., Bauer, S., Blattner, J., Lee, W-Y., Alvarez, M., and D. C. Domínguez. 2019. Assessment of Antibiotic Levels, Multi-Drug Resistant Bacteria and Genetic Biomarkers in Waters of the Rio Grande River between U.S.-Mexico Border. Southwest Binational Conference, UTEP, El Paso, TX.

Fuentes, M. (2020). Clinical Challenges of Antibiotic Resistant Infections. Oral presentation to be held at Cinvestat del Instituto Politecnico Nacional, Monterrey, Mexico, 2020.

Marquez, M; Portillo, D; **Fuentes, M**; Dominguez, D. (2019). Assessment of Antibiotic Resistance Genes in Effluent from Water Treatment Plants through Different Molecular Diagnostics. Poster presented at the 2019 Art and Science Summer Research Symposium at EPCC, El Paso, TX.

Marquez, M; Portillo, D; **Fuentes, M**; Mendoza, J; Dominguez, D. (2019). Assessment of Antibiotic Resistance Genes in Effluent from Water Treatment Plants and the Community of El Paso, TX. Poster presented at the 2019 COURI Symposium, UTEP, El Paso, TX.

Nunez-Finley, A; Borrego, H; **Fuentes, M.** (2019). Antibiotic Resistance Genes in Water from Waste Water Treatment Plants. Poster presented at the 2019 Art and Science Summer Research Symposium at EPCC, El Paso, TX.

Fuentes, M; Alvarez, M; Wen, Y; Dominguez, D. (2019). Antimicrobial Biomarkers for ESBLs, Integrons and Pharmaceutical Residues in the Environment. Abstract accepted to be presented as a poster session at the Conference on June, 2019 at San Francisco, California.

Fuentes, M; Alvarez, M; Dominguez, D. (2019). Antimicrobial Resistant Genes of Extended Spectrum β -Lactamase and Carbapenem Resistant Enterobacteria in the Environment. Abstract accepted to be presented as a poster session at the Texas Public Health Education Conference on March, 2019 at San Antonio, Texas.

Fuentes, M. Breaking barriers of autism through music. Oral presentation at the 5th Annual Autism Conference at Juarez, Mexico. (March, 2019).

Fuentes, M; Rivera, J; Dominguez, D. (2018). Antibiotic Resistance of Extended Spectrum β -Lactamases (ESBLs) in Hospitalized Patients in the El Paso, TX and Juarez, Mexico Border Area. Poster session presented at the Graduate Student Research EXPO 2018, University of Texas at El Paso, El Paso, TX.

Fuentes, M; Lee, W.; Gutierrez, S; Sahagun, D; Gomez, J; Mendoza, J; Alvarez, M; Dominguez, D. (2018). A Study of Antibiotic Resistance of Extended Spectrum β -Lactamase Bacteria from the Rio Grande River in El Paso, TX and Cd. Juarez, Mexico. Poster session presented at EPCC's Summer 2018 Art and Science Research Symposium, El Paso, TX.

Fuentes, M. (2018). Music and Autism, a language with no boundaries. Oral presentation at Light it Up Blue for Autism Awareness. University of Texas at El Paso.

Fuentes, M; Dominguez, D; Mendoza, J; Alvarez, M. (2017) A Study of the Environmental and Genetic Factors Affecting Antibiotic Resistance of Bacteria from the Rio Grande River in El Paso, TX – Cd. Juarez, Mexico. Poster session presented at SETAC North American 38th Annual Meeting, Minneapolis, Minnesota.

Fuentes, M; Lee, W; Alvarez, M; Dominguez, D. (2017) Environmental and Genetic Analysis of Antibiotic Resistance in the Rio Grande River in El Paso, TX – Cd. Juarez, Mexico. Poster session presented at the Graduate Student Research EXPO 2017, University of Texas at El Paso, El Paso, TX.

Fuentes, M; Dominguez, D; Mendoza, J; Alvarez, M. (2017) A Study of the Environmental and Genetic Factors Affecting Antibiotic Resistance of Bacteria from the Rio Grande River in El Paso, TX – Cd. Juarez, Mexico. Poster session presented at the Interdisciplinary Research and Education (IDRE) Week "Water Research Symposium" at UTEP, El Paso, TX.

Martinez A. Barrera G, **Fuentes M.** (2006) Comparative Study of Antiretroviral Treatment on the patient with HIV/AIDS at IMSS HGZ No. 35 Juarez, Mexico. Poster session presented at XXXIV Jornada Medica

Nacional y XVIII Simposio Internacional del Colegio de Médicos Posgraduados del IMSS, AC Hospital Medico Siglo XXI; Mexico City, Mexico.

Ornelas JR; Staines H; Barrera G; **Fuentes, M**; Gomez, M. (2004) Treatment Results on Acute Lymphoblastic Leukemia using Total Protocol 11/SJCHR on Children of Juarez, Mexico. Poster session presented at 24th International Congress of Pediatrics, Cancun, Mexico.

Barrera, G; **Fuentes M**. (Oct. 2004) Research Protocol: Adult Stem Cell Transplant on animal induced Hepatic Cirrhosis. Oral session presented at National Medical Student Congress of the Universidad Miguel Hernandez de Elche; Alicante, Spain

Staines, H; **Fuentes, M**. (2004) Surgical Treatment of Patent Ductus Arteriosus. Oral session presented at Iberoamerican Association Congress of Pediatric Surgery, Toledo, Spain.

Staines, H; **Fuentes, M**. (2004) Surgical Treatment of Patent Ductus Arteriosus. Oral session presented at V UACJ Medical Student Congress, Juarez, Mexico

PROFESSIONAL CERTIFICATIONS

2012 – present Educational Commission for Foreign Medical Graduates (ECFMG), United States
#0 743 671 0

2010 – present Physician Certification Professional License, Mexico #6334227

2010 – present Physician Certification State License, Mexico #10 165 114 S III

2007 – 2009 Texas State Board of Pharmacy #147140 0

1999 – 2001 National School of Emergency Medical Technicians, Cruz Roja Mexicana, Mexico

1999 School of Emergency Medical Technicians, Mexico

HONORS, MEMBERSHIP AND COLLEGE AFFILIATIONS

2019 Member of the Texas Public Health Association

2019 Member of the American Society for Microbiology

2019 Member of the Alpha Chi National College Honor Society.

2019 Highlighted Research at ASM Microbe 2019, San Francisco, CA

2018 Member of UTEP Alumni Association

2018 Graduate Student Assembly Representative for the Interdisciplinary Health Sciences PhD Program, UTEP

2018 Vice-President for Students for Public Health, UTEP

2018 Graduate Student Assembly Representative for the MPH Program, UTEP

2016 Member for the Collegiate Physicians and Researchers Association, UTEP

2016 Communications Officer for Students for Public Health

2016 Committee member for the 41st National Institute Conference on Social Work and Human Services in Rural Areas.

2004 Committee member of The U.S. Mexico Border Health Association

2002 Committee member and editor for *Expresiones Medicas*, UACJ, Juarez, Mexico