

Maria Fuentes, MD, MPH

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EDUCATION

2022 – present	Applied Statistic Graduate Certificate Department of Mathematical Sciences, College of Sciences, University of Texas at El Paso.
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. Thesis Title: 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.
1998 – 2008	Doctor of Medicine (Surgeon) Universidad Autonoma de Ciudad Juárez, Instituto de Ciencias Biomédicas, Cd. Juarez, Chihuahua, Mexico. Thesis Title: Comparative Study of Antiretroviral Treatment on the Patient with HIV/AIDS at IMSS HGZ No. 35 Juarez, Mexico. United States Certificate by the Educational Commission of Foreign Medical Graduates #0-743-671-0
1999	Emergency Medical Technician Cruz Roja Mexicana, Juarez, Mexico.

PROFESSIONAL EXPERIENCE

2021 – present	Public Health Emergency Manager at Canutillo Independent School District, The University of Texas at El Paso
2022	Faculty (Part-time), Department of Biology, El Paso Community College
2021 - present	Lecturer and Teaching Assistant, Department of Social Work, The University of Texas at El Paso
2021 - present	SI/CURE Facilitator Instructor, El Paso Community College, El Paso, TX
2021	Epidemiology Lead, Department of Public Health, Texas Tech University Health Sciences Center, Lubbock, Texas.
2021	Graduate Teaching Assistant, Department of Social Work, The University of Texas at El Paso
2018 - 2021	Contact Tracing Case Investigator, College of Health Sciences, University of Texas at El Paso and Texas Department of State Health Services. PhD Research Associate, College of Health Sciences, University of Texas at El Paso.
2016 - 2018	Master's Graduate Research Assistant, University of Texas at El Paso.
2017	MPH Internship at El Paso Health, Inc., El Paso, TX.
2016	Graduate Teaching Assistant, University of Texas at El Paso.
2015 - 2016	Physician, La Rodadora Espacio Interactivo, Cd. Juarez, Mexico.
2011 - 2015	Physician, Eduardo Covarrubias, MD, PA, El Paso, TX
2009 - 2010	Pharmacy Technician, Walgreens Pharmacy.
2007 - 2008	Social Service at Department of Epidemiology, Servicios Estatales de Salud; Secretaria de Salud, Cd. Juarez, Mexico.
2005	Medicine 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

2021	Vaccine Hesitancy Among Vulnerable Hispanic Populations in Rural Areas of El Paso, TX
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- Mentor: Bruce Friedman, PhD.
University of Texas at El Paso
- 2020** **Antibiotic Resistance during the COVID-19 pandemia**
Mentor: Delfina C. Domínguez, PhD.
University of Texas at El Paso
- 2019** **A Point-of-Care Diagnostic Device for the Diagnosis of Antibiotic Resistance in Urinary Tract Infections**
Mentor: Delfina C. Domínguez, PhD.
University of Texas at El Paso
- 2018** **Antibiotic Resistant Bacteria in the Environment and Hospital Settings.**
Mentor: Delfina C. Domínguez, PhD.
University of Texas at El Paso
- 2018** **Uncovering Fall Injury Risks and Consequences in Hispanic Older Adult Men Who Accessed Emergency Medical Services (EMS).**
P.I. Guillermina Solis, PhD, APRN, F/GNP
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.**
P.I. Delfina C. Dominguez, PhD.
Multidrug Resistant *E coli* in Hospitalized Patients in El Paso, TX and Cd. Juarez, Mexico.
P.I. Delfina C. Dominguez, PhD.
University of Texas at El Paso
- 2016 - 2018** **The Effect of Cultural Barriers in the Perception of Occupational Risk in Mexican Migrant Workers.**
P.I. Gabriel Ibarra-Mejía, MD, PhD
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**
P.I. Alberto Martinez, MD
Instituto Mexicano del Seguro Social Hospital #35, Cd. Juarez, Mexico
- 2003 - 2005** **Surgical Treatment of Patent Ductus Arteriosus**
P.I. Hugo Staines Orozco, MD
Universidad Autonoma de Ciudad Juarez, Cd. Juarez, Mexico
- 2004** **Treatment Results on Acute Lymphoblastic Leukemia using Total Protocol 11/SJCHR on Children of Juarez, Mexico**
P.I. Juan R. Ornelas, MD
Cd. Juarez, Mexico

TEACHING EXPERIENCE

- 2022** Part-time Faculty, Department of Biology, El Paso Community College
- 2021** Lecturer, Department of Social Work, UTEP
- 2021** SI//CURE Facilitator Instructor, El Paso Community College
- 2021** Teaching Assistant for Department of Social Work
- 2019** Mentored students from the UTEP COURI Program on a research project titled Assessment of Antibiotic Resistance in Effluent from Water Treatment Plants and the Community of El Paso, TX. Teaching included laboratory training for essential molecular diagnostics and a poster presentation by students.
- 2019** Mentored students from the Building Scholars Program from the El Paso Community College on a research project titled Antibiotic Resistance Genes in Water from Waste Water Treatment Plants. Teaching included laboratory training for essential molecular diagnostics and a poster presentation by students.
- 2016 - 2017** Graduate Teaching Assistant, University of Texas at El Paso

2015 - 2016
1999-2000

First Aid Instructor, La Rodadora Espacio Interactivo, Cd. Juarez, Mexico
Emergency Medical Technician Instructor, Cruz Roja Mexicana, Cd.
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.

PRESENTATIONS

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

Barrera, G; **Fuentes M.** (Oct. 2004) Suprarenal Cell Carcinoma on a Pediatric Patient; Case and Review of Literature. 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 & COLLEGE AFFILIATIONS

2019 - present	Member of the American Society for Microbiology
2019 - present	Member of the Texas Public Health Association
2019 - present	Member of the Alpha Chi National College Honor Society.
2018 – present	Member of UTEP Alumni Association
2018 - present	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 - present	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 – 2003 Committee member and editor for *Expresiones Medicas*, UACJ, Juarez, Mexico

CERTIFICATIONS & OTHER ONLINE TRAININGS

2020 COVID-19 Contact Tracer Certification, Association of State and Territorial Health Officials
2020 Privacy Training including HIPAA, Texas Health and Human Services
2020 HHS Information Security and Cybersecurity Training, Texas Health and Human Services
2020 The Health Effects of Climate Change, HarvardX Online Course Training Certificate
2017 – 2019 American Heart Association BLS #047858
2016 – present General Lab Safety, Institutional Biosafety Committee, UTEP
2016 – present Biosafety & Blood borne Pathogens, Institutional Biosafety Committee, UTEP
2016 – 2019 Collaborative Institutional Training Initiative (CITI)
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

COLLABORATIONS/ VOLUNTEER ACTIVITIES

2022 Weekly Community Education Sessions at Canutillo Independent School District
2022 Leader of First Autism Conference at Canutillo Independent School District
2019 Member of the Innovative, Multidisciplinary Water Research to Address the Needs of the US-Mexico Border Corridor. Las Cruces, NM.
2019 Leader of the 2nd Autism Conference held at the Tomas Rivera Conference Center, UTEP, on April 2019.
2018 Leader of the 1st Autism Conference held at the College of Health Sciences at UTEP on April 2018.
2017 Leader of the #EPunidosporHouston event held at Plaza San Jacinto for the relief of people affected by hurricane Harvey

AWARDS

2019 Highlighted Research at ASM Microbe 2019, San Francisco, CA
2018 Outstanding Community Engagement Award, University of Texas at El Paso
2016 Outstanding Participation as a Committee Member of the 41st National Institute Conference on Social Work and Human Services in Rural Areas "From surviving to thriving: new paradigms in rural social work".
2016 Outstanding Participation and Support to the HOPE Health Opportunity Prevention and Education Fair
2004 1st place award on research and 3rd place award on oral presentation for research titled "*Research Protocol: Stem Cell Transplant on animal induced*"

cirrhosis", XXII International Student Medical Congress, University of Elche, Alicante, Spain.

2004 Recognition of support in the realization of the 62nd Annual Meeting of The U.S.-Mexico Border Health Association

2003 Outstanding Participation as an Editorial Committee Member of *Expresiones Medicas*
