

Fidel Martinez-Gutierrez

Personal Information	Mexican, Birth date: September 24 th, 1974
Adscription	Professor and Research of Faculty of Chemical Sciences Autonomous University of San Luis Potosi, Mexico Center for Research in Health Sciences and Biomedicine (CICSAB) Av. Dr. Nava #6 Zona Universitaria, San Luis Potosi, SLP, México, 78200. Phone:(52) 444 826 23 00 Ext: 6319, 8566 Email: fidel@uaslp.mx
Postdoctoral research experience	Institute of Bioprocess Engineering and Pharmaceutical Technology Technische Hochschule Mittelhessen- University of Applied Sciences. Faculty of Biology and Chemistry, Justus-Liebig University Giessen, Germany, 2015.
PhD	Autonomous University of Chihuahua / Vancouver General Hospital, British Columbia, Canada. October 2011. Dissertation: Evaluation of toxicity of silver nanoparticles on prokaryotes and eukaryotes cells.
Master Degree	National Autonomous University of Mexico, UNAM, Mexico, DF. 2000. Dissertation: Bactec for diagnosis of bacteremia Related a Central Venous Catheter (BRCVC).
Bachelor	Autonomous University of San Luis Potosi, 1995. Dissertation: Prevalence of pathogens and their susceptibility patterns in isolated of lower respiratory tract infections in a private institution in the city of San Luis Potosi.

ARTICLES IN THE LAST 5 YEARS

1. Effect of prebiotics of *Agave salmiana* fed to healthy Wistar rats Jasso-Padilla, I., Juarez-Flores, B., Martinez-Gutierrez, F. Journal of the Science of Food and Agriculture, **2017**, 97(2), 556-563.
2. Potential use of *Agave salmiana* as a prebiotic that stimulates the growth of probiotic bacteria. Fidel Martinez-Gutierrez, Stefan Ratering, Bertha Juárez-Flores, Cesar Godinez- Hernandez, Rita Geissler-Plaum, Florian Prell, Holger Zorn, Peter Czerma, Sylvia Schnell., LWT - Food Science and Technology, **2017** (84).
3. Antinociceptive activity of ent-dihydrocucumanoic acid isolated from *Gymnosperma glutinosum* Spreng Less. Angel Josabad Alonso-Castro, Marco Martin González-Chávez, Juan Ramón Zapata-Morales, Alexia Karina Verdinez-Portales, Amanda Sánchez-Recillas, Rolffy Ortiz-Andrade, Mario Isiordia-Espinoza, Fidel Martínez-Gutiérrez, Marco Antonio Ramírez-Morales, Fabiola Domínguez, María Elizabeth Juache-Flores, Roberto Martínez. Drug Development Research, **2017**, 78.

4. Adhesion forces of biofilms developed in vitro from clinical strains of skin wounds. Elizabeth Alvarado-Gomez; Mario Perez-Diaz; Donato Valdez-Perez; Jaime Ruiz-Garcia; Martin Magaña-Aquino; Gabriel Martinez-Castañon; Fidel Martinez-Gutierrez. *Materials Science & Engineering C, Materials for Biological Applications*, **2018**, 82.
5. Silver-pig skin nanocomposites and mesenchymal stem cells: suitable antibiofilm cellular dressings for wound healing. Mario Alberto Pérez-Díaz, Phaedra Silva-Bermudez, Binisa Jiménez-López, Valentín Martínez-López, Yaaziel Melgarejo-Ramírez, Ana Brena-Molina, Clemente Ibarra, Isabel Baeza, M. Esther Martínez-Pardo, M. Lourdes Reyes-Frías, Erik Márquez-Gutiérrez, Cristina Velasquillo, Gabriel Martínez-Castañon, Fidel Martinez-Gutierrez and Roberto Sánchez-Sánchez. *Journal of Nanobiotechnology*, **2018**, 16.
6. In vitro Synergism of silver nanoparticles with antibiotics as an alternative treatment in multiresistant uropathogens. Montserrat Lopez-Carrizales, Karla Itzel Velasco, Claudia Castillo, Andrés Flores, Martin Magaña, Gabriel Alejandro Martinez-Castañon, Fidel Martinez-Gutierrez. *Antibiotics (Basel)*, **2018**, 7.
7. Pharmacological and toxicological study of a chemical-standardized ethanol extract of the aerial parts from *Eysenhardtia polystachya* (Ortega) Sarg. (Fabaceae). Juan Ramon Zapata-Morales, Victor Arana Argaez, Julio Torres, Marco Antonio Ramírez-Morales, Mario Alberto Juárez-Méndez, Eyra Ramírez-Villanueva, Yessica Paola Infante Barrios, Fidel Martinez-Gutierrez, Candy Carranza Alvarez, Andres Flores, Angel Alonso. *Journal of Ethnopharmacology*, **2018**, 224.
8. Evaluation of anti-biofilm and cytotoxic effect of a gel formulation with Pluronic F-127 and silver nanoparticles as a potential treatment for skin wounds. Elizabeth Alvarado-Gómez; Gabriel Martínez-Castañón; Roberto Sánchez-Sánchez; Adriana Ganem-Rondero; Miguel José Yacaman; Fidel Martínez-Gutiérrez. *Materials Science & Engineering C*, **2018**, 92.
9. Assessment of extraction methods and biological value of seed oil from eight variants of prickly pear fruit (*Opuntia* spp.). Evelyn Regalado-Rentería; Juan Rogelio Aguirre-Rivera; Marco Martín González-Chavez; Roberto Sánchez-Sánchez; Fidel Martínez-Gutiérrez; Bertha Juárez-Flores. *Waste Biomass Valor*, 2018.
10. Effective control of biofilms by photothermal therapy using a gold nanorod hydrogel. Bermúdez-Jiménez C, Niño-Martínez N, Patiño-Marín N, Martínez-

Gutiérrez F, Ruiz F, Bach H, Martínez-Castañón G. J Biomed Mater Res B Appl Biomater, **2020**, 108(2).

11. Antimicrobial peptides-based nanostructured delivery systems: an approach for leishmaniasis treatment. Adrian Rodríguez-Carlos, Fidel Martinez-Gutierrez, Bruno Rivas-Santiago. Current Pharmaceutical Design, **2019**, 25.
12. Synthesis of CuO and ZnO nanoparticles by a novel green route: Antimicrobial activity, cytotoxic effects and their synergism with ampicillin. Marco Antonio Reyes-Torres, Esmeralda Mendoza-Mendoza, Ángela Merari Miranda-Hernández, Mario Alberto Pérez-Díaz, Montserrat López-Carrizales, René Darío Peralta-Rodríguez, Roberto Sánchez-Sánchez, Fidel Martinez-Gutierrez. Ceramics International, 2019, 45.
13. Effects of Agave Fructans, Inulin, and Starch on Metabolic Syndrome Aspects in Healthy Wistar Rats. Evelyn Regalado-Rentería, Juan Rogelio Aguirre-Rivera, César Iván Godínez-Hernández, Juan Carlos García-López, A. Cuauhtémoc Oros-Ovalle, Fidel Martínez-Gutiérrez, Marco Martinez-Martinez, Stefan Ratering, Sylvia Schnell, Miguel Ángel Ruíz-Cabrera, and Bertha Irene Juárez-Flores. ACS Omega 2020, 5.
14. Preparation of Spray-Dried Functional Food: Effect of Adding *Bacillus clausii* Bacteria as a Co-Microencapsulating Agent on the Conservation of Resveratrol. Daniel Vázquez-Maldonado, Vicente Espinosa-Solis, César Leyva-Porras, Patricia Aguirre-Bañuelos, Fidel Martinez-Gutierrez, Manuel Román-Aguirre and María Z. Saavedra-Leos. Processes, **2020**, 8.
15. Characterization, antibiofilm and biocompatibility properties of chitosan hydrogels loaded with silver nanoparticles and ampicillin: an alternative protection to central venous catheters. Montserrat Lopez-Carrizales, Esmeralda Mendoza-Mendoza, René D. Peralta-Rodriguez, Mario A. Pérez-Díaz, Diana Portales-Pérez, Martín Magaña-Aquino, Antonio Aragón-Piña, Ramiro Infante-Martínez, Enrique D. Barriga-Castro, Roberto Sánchez-Sánchez, Gabriel A. Martinez-Castañón, Fidel Martinez-Gutierrez. Colloids and Surfaces B: Biointerfaces, **2020**, 196.
16. Atmospheric Corrosion, Antibacterial Properties, and Toxicity of Silver Nanoparticles Synthesized by Two Different Routes. I. DeAlba-Montero, Claudio A. Ruiz-Torres, Diana P. Portales-Perez, Fidel Martinez-Gutierrez, Felix Echeverria, Martha E. Compean-Jasso, Yolanda G. Cataño-Cañizales, and Facundo Ruiz. Bioinorganic Chemistry and Applications, 2020.

17. Effects of Ingesting a Traditional Mexican Beverage Fermented with Lactic Acid Bacteria on Stress in Medical Students. Authors: Laura Márquez-Morales, Elie Girgis El-Kassis, Judith Cavazos-Arroyo, Valeria Magali Rocha-Rocha, Fidel Martinez-Gutierrez, Beatriz Pérez-Armendáriz. *Nutrients*, **2021**, 13(5).
18. An analysis COVID-19 in Mexico: a prediction of severity. Martínez-Martínez Marco Ulises, Alpízar-Rodríguez Deshiré, Flores-Ramírez Rogelio, Portales-Pérez Diana Patricia, Soria-Guerra Ruth Elena, Pérez-Vázquez Francisco, Martínez-Gutiérrez Fidel. *Journal of General Internal Medicine*, 2021.
19. Association between subjects with newly diagnosed rheumatoid arthritis and dental caries. Ana Gabriela Sánchez-Medrano, Fidel Martínez-Gutiérrez; Marco Ulises MartínezMartínez; Marco Felipe Salas-Orozco; Lorena Dafnee Villa-García; Nuria Patiño-Marín. *Odovtos-International Journal of Dental Sciences*, **2021**.
20. Synthesis and Antimicrobial Evaluation of Amino Acid Naphthoquinone Derivatives as Potential Antibacterial Agents. Lluvia Itzel López-López, Ernesto Rivera-Ávalos, Cecilia Villarreal-Reyes, Fidel Martínez-Gutiérrez, Denisse de Loera. *Chemotherapy*, **2021**.
21. Fructans from *Agave* enhance probiotic yoghurt by modulating gut microbiota on children with overweight or obesity. Marco U. Martinez-Martinez, Daniel Vázquez-Maldonado, Stefan Ratering, Cesar Godínez-Hernández, Rosa Isela Ortiz-Basurto, Ruth E. Soria-Guerra, Bellinda Schneider, Bertha I. Juárez-Flores, Diana P. Portales-Pérez, Sylvia Schnell, Fidel Martinez-Gutierrez. *Food Bioscience*, **2021**.
22. Prebiotic effect of fructans from *Agave salmiana* in probiotic lactic acid bacteria and in children as supplement for malnutrition. Martinez-Gamiño Daniel, Garcia-Soto Mariano J., Gonzalez-Acevedo Olivia, Godinez-Hernandez Cesar, Juarez-Flores Bertha, Ortiz-Basurto Rosa Isela, Rodriguez-Aguilar Maribel, Flores-Ramirez Rogelio, Martinez-Martinez Marco, Ratering Stefan, Schnell Sylvia, Bach Horacio, Martinez-Gutierrez Fidel. **Food & Function**, **2022**, 13, 4184 - 4193 DOI: 10.1039/D1F003852D.

TO SEND:

Physiological effects on Wistar rats with azoxymethane-induced colonic carcinogenesis supplemented to 10% with commercial fructans of chicory inulin and fructans from *Agave*

Synbiotic to modulate the disturbed intestinal microbiota of infant patients by use of antibiotic.

ACADEMIC STAYS:

- Virgen Macarena University Hospital, Seville, Spain, Dr. Evelio Perea Pérez, 2003.
- National Institute of Public Health, Cuernavaca, Morelos. Mexico, Dra. Gabriela Echaniz Aviles, 2004.
- Vancouver General Hospital, British Columbia, Canada, Dr. Yossef Av-Gay, 2008-2010.
- Center for Biofilm Engineering (CBE), Montana University, Bozeman, U.S.A, Dr. Garth James, 2011.
- French National Institute for Agricultural Research, Paris, Francia, Dr. Romain Briandet, 2012.
- Institute of Bioprocess Engineering and Pharmaceutical Technology de Technische Hochschule Mittelhessen- University of Applied Sciences. Faculty of Biology and Chemistry, Justus-Liebig University Giessen, Germany. Professor Sylvia Schnell, 2014 to 2015.

WORK EXPERIENCE:

August 2000 - to the date Professor and Research, Autonomous University of San Luis Potosi.

February 2000 to 16 December 2003. Medical laboratory scientist. Mexican Institute of Social Security, IMSS. San Luis Potosi.

May 1999 to January 2000. Medical laboratory scientist. National Cancer Institute (INCAN), Mexico DF.

April 1996 to January of 1998. Medical laboratory scientist. Hospital Centro Medico del Potosí. San Luis Potosi.

RESEARCH, INTERNATIONAL PUBLICATIONS

38 articles in International Journals

<https://pubmed.ncbi.nlm.nih.gov/?term=Martinez-Gutierrez+F&filter=dates.2008-2021>

TRAINING OF HUMAN RESOURCES

Director:

4 doctoral theses, 12 master theses and 12 bachelor theses.

Member of tutelary committees:

Doctoral thesis 4 and master thesis 9.