

CURRICULUM VITAE

Chris A. Mares, Ph. D.
Assistant Professor of Biology
Texas A&M University-San Antonio
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EDUCATION:

2011-2013	Postdoctoral Training	University of Texas Health Science, San Antonio, Texas-Department of Microbiology and Immunology, Laboratory of Dr. Molly Bergman
2010-2011	Postdoctoral Training	St. Jude Children's Research Hospital, Memphis, Tennessee-Department of Immunology, Laboratory of Dr. Thirumala-Devi Kanneganti
2003-2010	Ph.D.	University of Texas Health Science Center, San Antonio, Texas - Microbiology and Immunology, Laboratory of Dr. Judy M. Teale, University of Texas at San Antonio-UTHSCSA
1997-2001	B.S.	University of the Incarnate Word, San Antonio, Texas – Biology

EMPLOYMENT:

2023-present	Lecturer	University of Texas at San Antonio, Department of Molecular Microbiology and Immunology, San Antonio, Texas
2021-present	Mentor/ Adj. faculty	University of Texas Health Science Center at San Antonio, Microbiology, Immunology, and Molecular Genetics, San Antonio, Texas
2020-2021	Advisor	iGenomeDx, San Antonio, Texas
2016-present	Assistant Professor	Texas A&M University-San Antonio, Department of Science and Mathematics, Biology program
2016	Adj. faculty	Texas A&M University-San Antonio, Immunology

2015-2016	Adj. faculty	Northwest Vista College, Dual credit program, AP/DC Biology (Bio 1406 and 1407)
2014-2016	Teacher	Warren High School, Chemistry, Northside ISD, San Antonio, Texas (Texas Education Agency certified 4-8 Science, 7-12 Life Science, and 7-12 Composite Science)
2013-2014	Asst. Prof. of Research	University of Texas at San Antonio, San Antonio, Texas Department of Biological Sciences
2002-2003	Teacher	Anson Jones Middle School, Northside ISD, San Antonio, Texas (Texas Education Agency certified 4-8 Science)

HONORS AND AWARDS:

2023	Undergraduate Faculty Travel Grant, 106 th meeting of the American Association of Immunologist
2022	Military Affairs Student Challenge Coin, Presented by Elizabeth Cruz, Texas A&M University-San Antonio
2019	Military Affairs Student Challenge Coin, Presented by Marlon Phillips, Texas A&M University-San Antonio
2013	Mentored Teaching Award, Office of Postdoctoral Affairs, UTHSCSA
2011-2012	Ford Foundation Postdoctoral Fellowship, National Research Council/National Academy of Sciences
2010	Keystone Symposia Travel Scholarship (The Macrophage)
2008-2010	National Institutes of Health/National Institute of Aging Dissertation Award (R36AG033400-01)
2005-2006	Microbial Pathogenesis Training Grant (T32AI7271), Department of Microbiology and Immunology, UTHSCSA Sponsor: Judy M. Teale, Ph.D.
1997-2001	Southwestern Bell Academic Scholarship (UIW)
1997-2001	University of the Incarnate Word Presidential Academic Scholarship
1998	Alpha Lambda Delta (UIW)

- 1998 Heart of Texas Conference Academic Excellence (UIW)
- 1997 University of Texas at Austin Presidential Academic Scholarship (declined)
- 1997 National Hispanic Scholar
- 1997 National Macy Scholar

FORMAL TEACHING:

- 2016-present Assistant professor, Immunology (BIOL 4408), Cell Physiology (BIOL 3409), Cell Biology (BIOL 2431), General Biology I (BIOL1306/1106), Integrative Biology Seminar (BIOL 4101), Cell and Molecular Biology Seminar (BIOL 4102), Texas A&M University-San Antonio, San Antonio, Texas; Parasitology (MMI 4763), University of Texas at San Antonio
- 2016 Adjunct faculty, Immunology (BIOL 4408), Texas A&M University-San Antonio, San Antonio, Texas
- 2014-2016 Chemistry and AP Biology teacher, (TEA certified in 4-8 science, 7-12 life and composite science and BIOL 1406-1407), Warren High School/Northwest Vista College, Northside ISD, San Antonio, Texas
- 2013 Co-instructor, Immunology (BIOL 4743), University of Texas at San Antonio, Department of Biology, San Antonio, Texas (Fall, 11 lectures, Average rating 4.61 out of 5)**
- 2013 Lecturer, Toxicology (BL3440), St. Mary's University, Department of Biological Sciences, San Antonio, Texas (Spring, 4 lectures, Average rating 4.631 out of 5)**
- 2012 Lecturer, Fundamentals of Biosciences (INTD 5000), University of Texas Health Science at San Antonio, Graduate School of Biomedical Sciences, San Antonio, Texas (Fall, 2 lectures, Average rating 4.51 out of 5)**
- 2012 Lecturer, Immunology (BIOL 4073), University of Texas at San Antonio, Department of Biology, San Antonio, Texas (Fall, 2 lectures)
- 2010 Adjunct Instructor, Intro. to Microbiology (BIOL 2474 L1 and L2), Department of Biology, University of the Incarnate Word, San Antonio, Texas (Spring, Entire course, Average rating 4.37 out of 5)**
- 2010 Adjunct Instructor, Ecology (BIOL 3442 L1 and L2), University of the Incarnate Word, Department of Biology, San Antonio, Texas (Spring)

- 2010 Lecturer, Intro. to Immunology (BIOL 4073), University of Texas at San Antonio, Department of Biology (Spring, 2 lectures)
- 2009 Lecturer, Intro. to Immunology (BIOL 4073), University of Texas at San Antonio, Department of Biology (Fall, 2 lectures)
- 2008 Guest lecturer, General Microbiology (BIOL 3471), University of the Incarnate Word, San Antonio, Texas (1 lecture)
- 2008 Guest lecturer, Medical Microbiology (BIOL 4375), University of the Incarnate Word, San Antonio, Texas (1 lecture)
- 2003-2005 Instructor, Medical Microbiology, Medical School, University of Texas Health Science Center at San Antonio, San Antonio, Texas (Entire course)
- 2003 Assistant Instructor, Dental Microbiology, Dental School, University of Texas Health Science Center at San Antonio, San Antonio, Texas (2 lectures)
- 2002-2003 8th grade science teacher (certified teacher by Texas Education Agency 4-8 science), Jones Middle School, Northside ISD, San Antonio, Texas (Entire academic school year)
- 2002-2010 Catechist, 1st, 4th, and 5th grade Holy Rosary Parish, San Antonio, Texas
 ** student evaluations available upon request

SUPERVISORY TEACHING:

- 2022-present Rebecca McGehee, Undergraduate researcher, Texas A&M University-San Antonio
- 2022 Motaz Zayed, Undergraduate researcher, Texas A&M University-San Antonio
- 2022 Max Sahi, Undergraduate researcher, University of Texas Health San Antonio, Co-Mentor
- 2021 Alishma Stewart, Undergraduate researcher, University of Texas Health San Antonio, Co-Mentor
- 2020-2021 Angela Martinez, Undergraduate researcher, Texas A&M University-San Antonio

2020-2021	Melinda Rosas, Undergraduate researcher, Texas A&M University-San Antonio
2020	Michelle Martin-Zamora, Undergraduate researcher, Texas A&M University-San Antonio
2019-2020	Russell Hammond, Undergraduate researcher, Texas A&M University-San Antonio (Molecular Biology Technician AccessDx)
2019	John Verschelde, Undergraduate researcher, University of Texas Health San Antonio, Co-Mentor
2019	Desirae Morales, Undergraduate researcher, University of Texas Health San Antonio, Co-Mentor (PhD student at UT-Health San Antonio)
2018	Rosie Sosa, Undergraduate researcher, University of Texas Health San Antonio, Co-Mentor
2018-2019	Ashley Hughes, Undergraduate researcher, Texas A&M University-San Antonio
2018-2019	Joseph Ramos, Undergraduate researcher, Texas A&M University-San Antonio
2017	Nancy Osti, Undergraduate researcher, University of Texas Health San Antonio, Co-Mentor
2017	Zachary Barcenas, Undergraduate researcher, University of Texas Health San Antonio, Co-Mentor
2017	Michelle Lopez, Undergraduate researcher, University of Texas Health San Antonio, Co-Mentor
2017	Bryan Prieto, Undergraduate researcher, Texas A&M University-San Antonio
2017	Katie Gentel, Undergraduate researcher, Texas A&M University-San Antonio
2017	Jonathan Hernandez, Undergraduate researcher, University of Texas Health San Antonio, Co-Mentor
2017	Tiffany Reichert, Undergraduate researcher, University of Texas Health San Antonio, Co-Mentor

2016	Erick Reynero, Undergraduate researcher, University of Texas Health San Antonio, Co-Mentor
2016	Rick Venegas, Undergraduate researcher, University of Texas Health San Antonio, Co-Mentor
2016-2018	Amanda Martinez (Advisor: Dr. Floyd Wormley); guided Honors Thesis project at UTSA
2013-2014	Margarita Akopian (Advisor: Dr. Judy M. Teale); guided Honors Thesis project at UTSA
2013-2014	Karina Lemus (Advisor: Dr. Judy M. Teale), guided independent study project at UTSA
2014	Daisy Kwende (Advisor: Dr. Judy M. Teale), guided independent study project at UTSA
2012-2013	Norberto Gonzalez Juarbe (Advisor: Dr. Molly Bergman), rotation student in Graduate Biomedical School Program at UTHSCSA (Assistant Professor at J. Craig Venter Institute)
2012	William Hambright (Advisor: Dr. Molly Bergman), rotation student in Graduate Biomedical School Program at UTHSCSA
2011	Fernando Lugo (Advisor: Dr. Molly Bergman), rotation student in Graduate Biomedical School Program at UTHSCSA
2008-2011	Pramod Mishra (Advisor: Dr. Judy M. Teale); junior advisor and mentor for dissertation project and post-graduate career paths (Biomedical entrepreneur and Co-Founder/Chief Scientific Officer of iGenomeDx)
2009-2010	Edward Rangel (Advisor: Dr. Judy M. Teale); guided summer research and independent study at UTSA
2009	Melissa Esquivel (Advisor: Dr. Judy M. Teale); guided independent study at UTSA
2008	Jocelyn Campos (Advisor: Dr. Judy M. Teale); guided Honors Thesis project at UTSA (M.D., Internal Medicine)
2007	Todd Siluk (Advisor: Dr. Judy M. Teale); guided summer research project at UTSA (Pharmacist at argenx)

PUBLICATIONS:

Submitted and under review: * denotes undergraduate student contributors

1. Shurko J., **Mares C.A.**, Page R.B., Nguyen V., Lopez K., Vanee N., Mishra P. Prevalence and Characterization of Bacteria Present in the Nasopharynx of Outpatients with and without SARS-CoV-2. medRxiv/2022/278915. Under review at BMC Infectious Diseases.

In preparation:

1. **Mares C.A.**, Page R.B., Nguyen V., Lopez K., Vanee N., Shurko J., Mishra P. Prevalence and frequency of opportunistic and pathogenic bacteria in wounds. In preparation.
2. Vanegas D., Church K., Mishra P., **Mares C.A.**, Cardona S., Cardona A.E. Pathogenic inflammation and neuronal damage during murine neurocysticercosis associates with increased expression of IL-1 β . In preparation.

Publications :

1. Platt M., Lin Y.H, Penix T., Wiscovitch-Russo R., Vashee I., **Mares C.A.**, Rosch J. Yu Y., Gonzalez-Juarbe N. A multiomics analysis of direct interkingdom dynamics between influenza A virus and Streptococcus pneumoniae uncovers host-independent changes to bacterial virulence fitness. PLoS Pathogens, 18(12): e1011020. [https://doi.org/ 10.1371/journal.ppat.1011020](https://doi.org/10.1371/journal.ppat.1011020).
2. **Mares C.A.#**, Lugo F., Albataineh M., Goins B, Newton I.L.G., Isberg R.R.#, Bergman M.A. Heightened virulence of Yersinia is associated with decreased function of the YopJ protein. Infection and Immunity, 89 (12) November 16, 2021. (#-Co-corresponding authors).
3. Page R., Espinosa J., **Mares C.A.**, del Pilar J., and Shelton G.R. The curvy road to success. Journal of College Science Teaching, 47 (5), May 5, 2018.
4. Vanegas D, Church K, Mishra P, **Mares C.A.**, Cardona S, Cardona AE. Pathogenic inflammation and neuronal damage during murine neurocysticercosis associates with increased expression of IL-1 β . J Immunol May 1, 2018, 200 (1 Supplement) 52.32.
5. Mishra P.K, Li Q., Munoz L., **Mares C.A.**, Morris E.G., Teale J.M., Cardona A.E. Reduced Leukocyte Infiltration in Absence of Eosinophils Correlates with Decreased Tissue Damage and Disease Susceptibility in Δ dblGATA Mice during Murine Neurocysticercosis. PLoS Negl Trop Dis 10(6): e0004787. doi:10.1371/journal.pntd.0004787, June 22, 2016.

6. Gonzalez Juarbe N., **Mares C.A.**, Hinojosa C., Medina J., Cantwell A., Dube P., Orihuela C., Bergman M.A. Requirement for *Serratia marcescens* cytolysin in a murine model of hemorrhagic pneumonia. *Infection and Immunity*, doi: 10.1128/IAI.01822-14, Nov 24, 2014.
7. Ojeda S.S., **Mares C.A.**, Alvarez J.I., Li Q. Orihuela C.J., Teale J.M. Virulence factors involved in passage of *Francisella novicida* through an air-blood barrier model. *Journal of Bioterrorism & Biodefense*, S3:003, 2011.
8. Sharma J., **Mares C.A.**, Li Q., Morris E.G., Teale J.M. Features of sepsis caused by pulmonary infection with *Francisella tularensis* Type A strain. *Microbial Pathogenesis*, 51(1-2):39-47, 2011.
9. Fu J., **Mares C.**, Lizcano, A., Liu Y., Wickes B.L. Insertional mutagenesis combined with an inducible filamentation phenotype reveals a conserved STE50 homolog in *Cryptococcus neoformans* that is required for monokaryotic fruiting and mating. *Molecular Microbiology*, 79(4):990-1007, 2011.
10. **Mares C.A.**, Sharma J., Ojeda S.S., Campos J.A.*, Li Q., Morris E.G., Coalson J.J., Teale J.M. Aged mice display an attenuated pulmonary host response to *Francisella novicida*. *PLoS ONE*, 5(11):e14088, 2010.
11. **Mares C.A.**, Sharma J., Li Q., Rangel E.*, Esquivel M.*, Morris E.G., Teale J.M. Defect in efferocytosis leads to alternative activation of macrophages in *Francisella* infections. *Immunology and Cell Biology*, 89(2):167-172, 2010.
**highlighted as an Outstanding Observation
12. **Mares C.A.**, Ojeda S.S., Li Q., Morris E.G., Coalson J.J., Teale J.M. Aged mice display an altered pulmonary host response to *Francisella tularensis* live vaccine strain (LVS) infections. *Experimental Gerontology*, 45(2): 91-96, 2010.
13. Ojeda S.S., Wang Z.J., **Mares C.A.**, Chang T.A., Li Q., Morris E.G., Jerabek P.A., Teale J.M. Rapid dissemination of *Francisella tularensis* and the effect of route of infection. *BMC Microbiology*, 8(1): 215, 2008.
14. **Mares C.A.**, Ojeda S.S., Morris E.G., Li Q., Teale J.M. Initial delay in the immune response to *Francisella tularensis* is followed by hypercytokinemia characteristic of severe sepsis and correlating with upregulation and release of damage-associated molecular patterns. *Infection and Immunity*, 76(7):3001-3010, 2008.

ABSTRACTS:

1. McGehee R., Smyth D., **Mares C.A.** Establishing an invertebrate infection model for *Staphylococcus hemolyticus*. Texas Branch American Society for Microbiology, Rice University, Houston, Texas, 2022.
2. **Mares C.A.**, Albataineh M., Lugo F., Isberg R.R., Bergman M.A. YopJ suppresses virulence of *Yersinia* by inducing macrophage cytotoxicity. UTHSCSA Department of Microbiology and Immunology Retreat, San Antonio, TX 2012. **Presented as a poster and oral presentation
3. **Mares C.A.**, Albataineh M., Lugo F., Isberg R.R., Bergman M.A. YopJ suppresses virulence of *Yersinia* by inducing macrophage apoptosis. 4th Annual Mikiten Graduate Student Research Forum, San Antonio, TX, 2012.
4. **Mares C.A.**, Sharma J., Li Q., Rangel E., Escobar M., Morris E.G., Teale J.M. Defect in efferocytosis leads to alternative activation of macrophages in *Francisella* infections. Keystone Symposia on The Macrophage in Banff, Alberta. Poster abstract, 2010.
5. **Mares C.A.**, Sharma J., Ojeda S.S., Li Q., Campos J. A., Morris E.G., Coalson J.J., Teale J.M. Aged mice display an attenuated pulmonary host response to *Francisella tularensis* sp. *novicida*. Student Research Day 2009 at UTHSCSA/Barshop Institute. Poster Abstract, 2009.
6. **Mares C.A.**, Ojeda S.S., Li Q., Morris E.G., Barrera C.A., Teale J.M. Virulence of *Francisella tularensis* sp. *novicida* correlates with a delay in the innate immune response. 5th International Congress on Tularemia in Woods Hole, MA. Poster Abstract. 2006
7. Ojeda S.S., Barrera C.A., Li Q., Morris E.G., **Mares C.A.**, Teale J.M. Characterization of chemokine expression in lungs of mice infected with *Francisella tularensis* sp. *novicida*. 5th International Congress on Tularemia in Woods Hole, MA. Poster Abstract. 2006.
8. **Mares C.A.**, Ojeda S.S., Barrera C.A., Li Q., Morris E.G., Teale J.M. Effects of aging on the innate immune response to *Francisella tularensis* LVS. 5th International Congress on Tularemia in Woods Hole, MA. Poster Abstract. 2006.
9. Mishra, B.B., **Mares C.A.**, Mishra P.K., Grewal H.S. and Teale J.M. Toll-like receptors in murine neurocystercosis. Keystone Symposia on Innate Immunity in Banff, Alberta. Poster abstract, 2005.

FUNDING:**Funded:**

2023	Undergraduate Faculty Travel Grant, American Association of Immunologist, (\$2,250), Chris Mares
2021-2022	Research Council Award, Texas A&M University-San Antonio (\$10,000); Davida Smyth and Chris Mares (Co-PI's)
2021-2022	Faculty Research Fellowship, College of Arts & Sciences, Texas A&M University-San Antonio (\$10,000); Chris Mares and Davida Smyth Co-PI's
2018	Summer Faculty Research Fellowship, College of Arts & Science, Texas A&M University-San Antonio (\$2,000); Mares-PI
2013-2014	Minority Supplement Award, National Institute of Neurological Diseases and Stroke (R01 NS078501 02S1), Department of Biology, UTSA, (\$139,650); Dr. Judy Teale-PI
2013	Mentored Teaching Award, Office of Postdoctoral Affairs, UTHSCSA (\$8,000); Mares-PI
2011-2012	Ford Foundation Postdoctoral Fellowship, National Research Council of The National Academies; (\$40,000); Chris Mares-PI, Sponsors: Dr. Thirumala-Devi Kanneganti and Dr. Molly Bergman
2008-2010	National Institutes of Health/National Institute on Aging Dissertation Award (R36 AG033400); (\$106,367); Chris Mares-PI
2005-2006	Microbial Pathogenesis Training Grant (T32 AI7271), Department of Microbiology and Immunology, (\$22,500), UTHSCSA Sponsor: Dr. Judy M. Teale

Completed/Not Funded:

2021-2022	Characterization of dissemination and inflammation caused by systemic fungal infections (Re-submission-A1). Support for Research Excellence (R16), National Institutes of Health/National Institute of Allergy and Infectious Diseases (Direct cost: \$450,000); Chris Mares-PI *received a score and was discussed but was not funded
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- 2021 Enhancing Research Capabilities to Study Systemic Infections. Research and Education Program for Historically Black Colleges and Universities and Minority-Serving Institutions Equipment/Instrumentation, Department of Defense (\$169,067); Chris Mares-PI
- 2017-2018 Acquisition of a Confocal Laser Scanning Microscope for Cross-Disciplinary Multi-User Research. Research and Education Program for Historically Black Colleges and Universities and Minority-Serving Institutions Equipment/Instrumentation, Department of Defense and NSF; Matt Crook-PI; Corinna Ross, Co-I; Chris Mares Co-I, Alan Daniel Co-I, Jerod Bucher, Co-I

Pending:

- 2022-2023 Characterization of dissemination and inflammation caused by systemic fungal infections (Re-submission-A1). Support for Research Excellence (R16), National Institutes of Health/National Institute of Allergy and Infectious Diseases (Direct cost: \$500,000); Chris Mares-PI

SERVICE:

Service to the College/University:

- 2023-present College of Education and Human Development Advisory Council, Texas A&M University-San Antonio
- 2022-present Chair, Institutional Biosafety Committee
- 2022-present Honors Advisory Committee
- 2021-present Cross-Discipline Education Committee
- 2019-2022 Chair, Institutional Animal Care and Use Committee
- 2019-2020 Interim Vice Chair, Institutional Biosafety Committee
- 2018-2020 Texas Higher Education Coordinating Board-Biology Field of Study Advisory Committee
- 2019 Biology/Composite Science Teacher Certification Panel
- 2017-2019 College level Curriculum Committee
- 2017-2018 JagTracks 3 and 4 development committee

Service to the Department of Science and Mathematics:

- 2023 Community Health Faculty Search Committee (Asst. Prof. and Asst. Prof. Program Coordinator)

2021-present	Biology Program Graduate Admissions Committee
2020-2021	Molecular Microbiologist/Virologist Faculty Search Committee
2020-2021	Animal Physiologist Faculty Search Committee
2020-2021	Anatomy & Physiology Faculty Search Committee-1
2020-2021	Anatomy & Physiology Faculty Search Committee-2
2020-2021	Supplemental Instructor Faculty Advisory Group
2019-2020	Wildlife Biology Faculty Search Committee
2018	Systematist/Water-related Biology Faculty Search Committee
2018-present	Texas A&M College of Medicine Summer Undergraduate Research Selection Committee Chair
2017, 2019	New Student Orientation Faculty representative
2017-present	Liaison/On-site mentor for UT-Health MIMG undergraduate research program
2017-present	Health Professions Advisory Committee
2017	Developmental Biology Faculty Search Committee
2017	Adjunct Lecturer Search Committee
2017	Chair Anatomy & Physiology Lecturer Search Committee
2016-2017	STEM building – Biology program
2016-present	General Biology/Life Sciences planning committee
2016-present	Sponsor-Pre-Health Society

Service to the Community:

2023	Discussion Leader on the Alumni Panel for Ph.D. student interview sessions
2020-2021	Advisor at iGenomeDx for COVID-19 testing and molecular diagnostics
2017	UTSA College of Science Poster Judge
2016-2019	Core4STEM Hispanic Chamber of Commerce presenter
2016-2019	Science Olympiad Subject Facilitator
2016	Sul Ross gifted and talented presenter, Northside ISD, San Antonio, TX
2008	Science Fair Judge, Forbes Elem., San Antonio ISD, San Antonio, Texas
2012-2017	Career Day presenter, Linton Elem., Northside ISD, San Antonio, Texas
2006	Volunteer practice judge, Academic Decathlon, O.W. Holmes High School, Northside ISD, San Antonio, Texas

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:

2017-present	American Association for the Advancement of Science
2017-present	American Association for Immunologists
2017-present	National Association for Biology Teachers
2017-present	American Society for Microbiology
2022-present	Texas Association of Advisors for Health Professions