

## CURRICULUM VITAE

### Chris A. Mares, Ph. D.

Assistant Professor of Biology  
Texas A&M University-San Antonio  
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### EDUCATION/EMPLOYMENT:

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 (TEA 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
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
2002-2003	Teacher	Jones Middle School, Northside ISD, San Antonio, Texas
1997-2001	B.S.	University of the Incarnate Word, San Antonio, Texas – Biology

## **HONORS AND AWARDS:**

- 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), Texas A&M University-San Antonio, San Antonio, Texas
- 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 8<sup>th</sup> 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, 1<sup>st</sup>, 4<sup>th</sup>, and 5<sup>th</sup> grade Holy Rosary Parish, San Antonio, Texas

\*\* student evaluations available upon request

**SUPERVISORY TEACHING:**

- 2018-present Ashley Hughes, Undergraduate researcher, Texas A&M University-San Antonio
- 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
- 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
- 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
- 2007 Todd Siluk (Advisor: Dr. Judy M. Teale); guided summer research project at UTSA

## **PUBLICATIONS:**

### **In preparation:**

1. **Mares C.A.**, Albataineh M., Lugo F., Goins B, Isberg R.R., Newton I, Bergman M.A. Evolution of decreased YopJ function and increased virulence of pathogenic yersiniae. Under revision.
2. 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 $\beta$ . In preparation.

### **Peer-reviewed publications:**

1. 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.
2. 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  $\Delta$ dblGATA Mice during Murine Neurocysticercosis. *PLoS Negl Trop Dis* 10(6): e0004787. doi:10.1371/journal.pntd.0004787, June 22, 2016.
3. 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.
4. 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.
5. 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.
6. 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.

7. **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.
8. **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
9. **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.
10. 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.
11. **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.

\* denotes undergraduate student contributors

### **ABSTRACTS:**

1. **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
2. **Mares C.A.**, Albataineh M., Lugo F., Isberg R.R., Bergman M.A. YopJ suppresses virulence of Yersinia by inducing macrophage apoptosis. 4<sup>th</sup> Annual Mikiten Graduate Student Research Forum, San Antonio, TX, 2012.
3. **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.
4. **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.
5. **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. 5<sup>th</sup> International Congress on Tularemia in Woods Hole, MA. Poster Abstract. 2006
  6. 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*. 5<sup>th</sup> International Congress on Tularemia in Woods Hole, MA. Poster Abstract. 2006.
  7. **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. 5<sup>th</sup> International Congress on Tularemia in Woods Hole, MA. Poster Abstract. 2006.
  8. Mishra, B.B., **Mares C.A.**, Mishra P.K., Grewal H.S. and Teale J.M. Toll-like receptors in murine neurocystercercosis. Keystone Symposia on Innate Immunity in Banff, Alberta. Poster abstract, 2005.

**FUNDING:**

- |           |                                                                                                                                                                       |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2018      | Summer Faculty Research Fellowship, College of Arts & Science, Texas A&M University-San Antonio                                                                       |
| 2013-2014 | Minority Supplement Award, National Institute of Neurological Diseases and Stroke (R01 NS078501 02S1), Department of Biology, UTSA, Dr. Judy Teale-PI                 |
| 2013      | Mentored Teaching Award, Office of Postdoctoral Affairs, UTHSCSA                                                                                                      |
| 2011-2012 | Ford Foundation Postdoctoral Fellowship, National Research Council of The National Academies; 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); Mares-PI                                                                 |
| 2005-2006 | Microbial Pathogenesis Training Grant (T32 AI7271), Department of Microbiology and Immunology, UTHSCSA Sponsor: Dr. Judy M. Teale                                     |

## **SERVICE:**

### **Service to the Department of Science and Mathematics:**

- 2016-present General Biology/Life Sciences planning committee
- 2016-present Sponsor-Pre-Health Society
- 2016-2017 STEM building – Biology 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
- 2017-present Liason/On-site mentor for UT-Health MIMG undergraduate research program
- 2017, 2019 New Student Orientation Faculty representative
- 2018-present Texas A&M College of Medicine Summer Undergraduate Research Selection Committee Chair
- 2018 Systematist/Water-related Biology Faculty Search Committee

### **Service to the College/University**

- 2017-2019 College level Curriculum Committee
- 2017-2018 JagTracks 3 and 4 development committee
- 2018-present Texas Higher Education Coordinating Board-Biology Field of Study Advisory Committee
- 2019-present Biology/Composite Science Teacher Certification Panel
- 2019-present Institutional Animal Care and Use Committee
- 2019-present Institutional Biosafety Committee

### **Service to the Community:**

- 2006 Volunteer practice judge, Academic Decathlon, O.W. Holmes High School, Northside ISD, San Antonio, Texas
- 2008 Science Fair Judge, Forbes Elem., San Antonio ISD, San Antonio, Texas
- 2012-2017 Career Day presenter, Linton Elem., Northside ISD, San Antonio, Texas
- 2016 Sul Ross gifted and talented presenter, Northside ISD, San Antonio, TX
- 2016-present Core4STEM Hispanic Chamber of Commerce presenter
- 2016-present Science Olympiad Subject Facilitator
- 2017 UTSA College of Science Poster Judge



**MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:**

2017-present American Association for the Advancement of Science

2017-present American Association for Immunologists

2017-present American Association for Microbiology

2017-present National Association for Biology Teachers