

**CURRICULUM VITAE  
MEREDITH M. CURTIS, PH.D.**

**CONTACT INFORMATION**

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**ACADEMIC BACKGROUND**

**Education**

- B.A.—Baylor University, Biology (2001)
- Ph.D.—University of Washington, Immunology (2009)

**Professional Experience**

- Texas Christian University, Department of Biology, Instructor I (2015-present)
- Brookhaven College, Department of Biology, Adjunct Faculty (2012-2015)
- UT Southwestern Medical Center, Department of Microbiology, Postdoctoral Researcher (2009-2015)
- UT Southwestern Medical Center, Department of Immunology, Research Technician (2001-2003)

**Honors and Awards**

- Award for Excellence in Postdoctoral Research (1 of 5 Finalists), UT Southwestern Medical Center (2015)
- National Institutes of Health (NIH) Institutional Research T32 Training Grant, UT Southwestern Medical Center (2011-2014)
- Bill and Melinda Gates' Foundation Scholarship, Immunologic Memory Keystone Symposia (2007)
- NIH-funded Institutional Research T32 Training Grant, University of Washington (2005-2007)
- National Cancer Institute Training Grant, University of Washington (2004)
- Magna Cum Laude, Baylor University (2001)
- Phi Beta Kappa, Baylor University (2001)

**TEACHING**

**Courses Taught**

BIOL 40203 (Histology) (TCU – 2016 to present)  
BIOL 20234 (Basic Microbiology) (TCU – 2015 to present)  
BIOL 2420 (Microbiology for Non-Science Majors) (Brookhaven – 2012 to 2015)  
BIOL 1406 (Intro to Biology I for Majors) (Brookhaven – 2012)  
Lecturer in Principles of Microbiology (UT Southwestern – 2012 to 2014)  
Laboratory Assistant in Medical Microbiology (UT Southwestern – 2010 to 2012)  
Teacher's Assistant in Immunology 441 (University of Washington – 2004)

**RESEARCH AND CREATIVE ACTIVITY**

**Refereed publications (\*Prior to 2009, all publications were under the name Mathis MA)**

- Moreira CG, Russell R, Mishra AA, Narayanan S, Ritchie JM, Waldor MK, **Curtis MM**, Winter SE, Weinschenker D, Sperandio V. Bacterial adrenergic sensors regulate virulence of enteric pathogens in the gut. *Mbio*. 2016; 7(3): pii. e00826-16.
- **Curtis MM**, Hu Z, Klimko C, Narayanan S, Deberardinis R, Sperandio V. The gut commensal *Bacteroides thetaiotaomicron* exacerbates enteric infection through modification of the metabolic landscape. *Cell Host Microbe*. 2014;16(6):759-69.
- **Curtis MM**, Russell R, Moreira C, Wang C, Williams N, Taussig R, Stewart D, Zimmern P, Falck JR, Sperandio V. QseC inhibitors as an anti-virulence approach for Gram-negative pathogens. *MBio*. 2014;5(6):e02165-14.
- Chen C, Blumentritt CA, **Curtis MM**, Sperandio V, Torres AG, Dudley EG. Restrictive streptomycin-resistant mutations decrease the formation of attaching and effacing lesions in *Escherichia coli* O157:H7 strains. *Antimicrob Agents Chemother*. 2013; epub ahead of print.
- Pacheco AR, **Curtis MM**, Ritchie JM, Munera D, Waldor MK, Moreira CG, Sperandio V. Fucose sensing regulates bacterial intestinal colonization. *Nature*. 2012;492(7427):113-117.
- Njoroge JW, Nguyen Y, **Curtis MM**, Moreira CG, Sperandio V. Virulence meets metabolism: Cra and KdpE gene regulation in enterohemorrhagic *Escherichia coli*. *MBio*. 2012; 3(5):e00280-12.
- **Curtis MM**, Sperandio V. A complex relationship: the interaction among symbiotic microbes, invading pathogens, and their mammalian host. *Mucosal Immunol*. 2011;4(2):133-138. Review.
- **Curtis MM**, Rowell E, Shafiani S, et al. Fidelity of pathogen-specific CD4+ T cells to the Th1 lineage is controlled by exogenous cytokines, interferon-gamma expression, and pathogen lifestyle. *Cell Host Microbe*. 2010;8(2):163-173.
- **Curtis MM**, Way SS, Wilson CB. IL-23 promotes the production of IL-17 by antigen-specific CD8 T cells in the absence of IL-12 and type-I interferons. *J Immunol*. 2009;183(1):381-387.
- **Curtis MM**, Way SS. Interleukin-17 in host defence against bacterial, mycobacterial and fungal pathogens. *Immunology*. 2009;126(2):177-185. Review.
- Orgun NN, **Mathis MA**, Wilson CB, Way SS. Deviation from a strong Th1-dominated to a modest Th17-dominated CD4 T cell response in the absence of IL-12p40 and type I IFNs sustains protective CD8 T cells. *J Immunol*. 2008;180(6):4109-4115.
- Orr MT, **Mathis MA**, Lagunoff M, Sacks JA, Wilson CB. CD8 T cell control of HSV reactivation from latency is abrogated by viral inhibition of MHC class I. *Cell Host Microbe*. 2007;2(3):172-180.
- Pitcher LA, **Mathis MA**, Young JA, et al. The CD3 gammaepsilon/deltaepsilon signaling module provides normal T cell functions in the absence of the TCR zeta immunoreceptor tyrosine-based activation motifs. *Eur J Immunol*. 2005;35(12):3643-3654.
- Pitcher LA, **Mathis MA**, Subramanian S, et al. Selective expression of the 21-kilodalton tyrosine-phosphorylated form of TCR zeta promotes the emergence of T cells with autoreactive potential. *J Immunol*. 2005;174(10):6071-6079.
- \*Sozio MS, \***Mathis MA**, Young JA, et al. PTPH1 is a predominant protein-tyrosine phosphatase capable of interacting with and dephosphorylating the T cell receptor zeta subunit. *J Biol Chem*. 2004;279(9):7760-7769. (\*co-first authors)
- Pitcher LA, Young JA, **Mathis MA**, Wrage PC, Bartok B, van Oers NS. The formation and functions of the 21- and 23-kDa tyrosine-phosphorylated TCR zeta subunits. *Immunol Rev*. 2003;191:47-61. Review.

#### Oral Presentations at Scholarly Meetings

- **Curtis MM**, Hu Z, Klimko C, Narayanan S, Deberardinis R, Sperandio V. “*B. thetaiotaomicron*, a member of the gut microbiota, exacerbates enteric infection.” The American Society For Microbiology 2014 Annual Meeting, Boston, MA
- **Curtis MM**, Way SS, Rowell EA, Urdahl K, Wilson CB. “Th1 fidelity vs. Th1/Th17 plasticity are dictated in vivo by pathogen lifestyle, exogenous cytokines and prior expression of IFN-gamma.” American Association Of Immunologists 2009 Annual Meeting, Seattle, WA

- **Mathis MA**, Sozio MS, Young JA, et al. "PTPH1 is a predominant protein-tyrosine phosphatase capable of interacting with and dephosphorylating the T cell receptor zeta subunit." American Association Of Immunologists 2003 Annual Meeting, Denver, CO

#### **Posters Presented at Scholarly Meetings**

- **Curtis MM**, Hu Z, Klimko C, Narayanan S, Deberardinis R, Sperandio V. "*Bacteroides thetaiotaomicron*, a member of the gut microbiota, exacerbates enteric infection." Microbial Toxins & Pathogenicity Gordon Research Conference 2014, Waterville Valley, NH
- **Curtis MM**, Sperandio V. "*Bacteroides thetaiotaomicron* Regulation of the Virulence of the Human Pathogen Enterohemorrhagic *E. coli* O157:H7." Cell Symposia Microbiome And Host Health 2013; Lisbon, Portugal
- **Curtis MM**, Sperandio V. "The role of quinones in enterohemorrhagic *E. coli* (EHEC) virulence." 8<sup>th</sup> International Symposium On Shiga Toxin (Verocytotoxin) Producing *Escherichia Coli* Infections 2012; Amsterdam, The Netherlands
- **Curtis MM**, Sperandio V. "The role of quinones in enterohemorrhagic *E. coli* (EHEC) virulence." American Society For Microbiologists 2011 Annual Meeting; New Orleans, LA
- **Curtis MM**, Way SS, Rowell EA, Urdahl K, Wilson CB. "Th1 fidelity vs. Th1/Th17 plasticity are dictated in vivo by pathogen lifestyle, exogenous cytokines and prior expression of IFN-gamma." American Association Of Immunologists 2009 Annual Meeting; Seattle, WA
- **Mathis MA**, Schoenborn J, Wilson CB. "Stability of commitment of memory CD4 T cells to an effector lineage." 13<sup>th</sup> International Congress Of Immunology 2007, Rio de Janeiro, Brazil
- **Mathis MA**, Schoenborn J, Wilson CB. "Stability of memory CD4 and CD8 T cell effector lineage commitment in the presence or absence of innate signals." Keystone Symposia, Immunologic Memory 2007; Santa Fe, NM
- **Mathis MA**, Way SS, Schoenborn J, Wilson CB. "Stability of Th1/Tc1 commitment to an effector lineage" 2006 Midwinter Conference Of Immunologists At Asilomar; Monterey, CA

#### **Memberships Held in Professional Organizations**

- American Society for Microbiology
- American Association of Immunologists