

TEXAS STATE VITA**I. Academic/Professional Background**

A.	Name: Michael A. Wilson	Title: Lecturer
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B. Educational Background

<i>Degree</i>	<i>Year</i>	<i>University</i>	<i>Major</i>
Ph.D.	1999	Stanford University	Microbiology and Immunology
B.S.	1987	University of Nevada- Reno	Biochemistry

Ph.D Thesis Dissertation: Drug-induced gene expression and comparative genomic analyses of *Mycobacterium tuberculosis*
(Sydney Raffel Award for the Outstanding Graduate Student in Microbiology and Immunology)

C. University Experience

<i>Position</i>	<i>University</i>	<i>Dates</i>
Lecturer and Laboratory Coordinator	Texas State University	2018 - present
Adjunct Faculty, Biology	Austin Community College	2018
Director, Genomic Sequencing and Analysis Facility	University of Texas at Austin	2016 -2017
Director, Institutional Research Core Facilities	University of Texas Health Science Center at San Antonio	2010 - 2016

D. Relevant Professional Experience

<i>Position</i>	<i>Entity</i>	<i>Dates</i>
Consultant / Director of Assay R&D	Infinagen / Consultant	2009
Senior Scientist III	Asuragen, Inc., Austin TX	2006 - 2009
Senior Laboratory and Production Manager	Ambion, Inc, Austin, TX	2004 - 2006
Facility Head, Microarray Research Facility	National Institutes of Health, National Institute of Allergy and Infectious Diseases (NIAID), Bethesda, MD	2000 - 2004
Post-doctoral fellowship Action TB Fellow	Affymax Research Institute (owned by GlaxoSmithKline), Santa Clara, CA	1999 - 2000

E. Other Professional Credentials (licensure, certification, etc.)

II. TEACHING

A. Teaching Honors and Awards:

B. Courses Taught:

BIO 1320 Modern Biology I at Texas State University
BIO 1330 Functional Biology at Texas State University
BIO 2400 Microbiology at Texas State University, Spring 2018, Fall 2018
BIO 3450K Genomics at Texas State University
BIO 7102 Seminar Aq. Res., Spring 2018
BIOL 2420 Microbiology and Laboratory, Austin Community College, Summer 2018
BIOL 1408 Biology for Non-Science Majors, Austin Community College Sum. 2018

III. SCHOLARLY/CREATIVE

A. Works in Print (including works accepted, forthcoming, in press):

1. Books:

a. Scholarly Monographs:

b. Textbooks:

c. Edited Books:

d. Chapters in Books:

Wilson, Michael A., Voskuil, M., Schnappinger, D., Schoolnik, G.K. "Functional Genomics of *Mycobacterium tuberculosis* Using DNA Microarrays." *Mycobacterium Tuberculosis Protocols (Methods in Molecular Medicine Vol 54)*. Ed. Tanya Parish, Tanya, Neil G. Stoker, Neil G. Totowa NJ: Humana Press, Inc., 2001. 335-354. Print.

Schoolnik, Gary K., Voskuil, M.I., Schnappinger, D., Yildiz, D.F., Meibom, N.A., Dolganov, N.A., Wilson, M.A., Chong, K.H., "Whole Genome DNA Microarray Expression Analysis of Biofilm Development by *Vibrio cholera* 01 El Tor." *Microbial Growth in Biofilms (Methods in Enzymology Vol. 336)*. Ed. Ron J. Doyle. Academic Press, 2001 3-18. Print.

e. Creative Books:

2. Articles:

a. Refereed Journal Articles:

Hinton A, Afrikanova I, **Wilson M**, King C, Maurer B, Yeo G, Hayek A, Pasquinelli A. A Distinct MicroRNA Signature for Definitive Endoderm Derived From Human Embryonic Stem Cells. *Stem Cells Dev.* 2010 Jun;19(6):797-807.

Sah S, McCall MN, Eveleigh D, **Wilson M**, Irizarry RA. 2010. Performance evaluation of commercial miRNA expression array platforms. *BMC Res Notes* 3: 80.

Wilson, M.A. *curriculum vitae*

Johnson CD, Esquela-Kerscher A, Stefani G, Byrom M, Kelnar K, Ovcharenko D, **Wilson M**, Wang X, Shelton J, Shingara J, Chin L, Brown D, Slack FJ. The let-7 microRNA represses cell proliferation pathways in human cells. *Cancer Res* 67:7713-22, 2007.

MAQC Consortium including **Wilson M**. The MicroArray Quality Control (MAQC) project shows inter- and intraplatform reproducibility of gene expression measurements. *Nat Biotechnol* 24:1151-61, 2006.

Shippy R, Fulmer-Smentek S, Jensen RV, Jones WD, Wolber PK, Johnson CD, Pine PS, Boysen C, Guo X, Chudin E, Sun YA, Willey JC, Thierry-Mieg J, Thierry-Mieg D, Setterquist RA, **Wilson M**, Lucas AB, Novoradovskaya N, Papallo A, Turpaz Y, Baker SC, Warrington JA, Shi L, Herman D. Using RNA sample titrations to assess microarray platform performance and normalization techniques. *Nat Biotech* 24:1123-31, 2006.

Venter M, Myers TG, **Wilson MA**, Kindt TJ, Paweska JT, Burt FJ, Leman PA, Swanepoel R. Gene expression in mice infected with West Nile virus strains of different neurovirulence. *Virology*. 342:119-40.

Irizarry RA, et. al. 2005. Multiple-laboratory comparison of microarray platforms. *Nat Methods*. 5:345-50, 2005.

Schaupp CJ, Jiang G, Myers TG, **Wilson MA**. Active mixing during hybridization improves the accuracy and reproducibility of microarray results. *Biotechniques*. 38:117-9, 2005.

Boshoff, HIM, Myers TG, Copp BR, McNeil MR, **Wilson MA**, Barry, CDIII. The Transcriptional Responses of *M. tuberculosis* to inhibitors of metabolism; novel insights into drug mechanisms of action. *J Biol Chem*. 279:40174-84, 2004.

Helmann JD, Wu MF, Kobel PA, Gamo FJ, **Wilson M**, Morshedi MM, Navre M, Paddon C. Global transcriptional response of *Bacillus subtilis* to heat shock. *J Bacteriol* 183:7318-28, 2001.

Wiker, HG, **Wilson MA**, Schoolnik GK. Extracytoplasmic proteins of *Mycobacterium tuberculosis* - mature secreted proteins often start with aspartic acid and proline. *Microbiology* 146:1525-33, 2000.

Behr, MA‡, **Wilson MA**‡, Gill WP, Salamon H, Schoolnik GK, Rane S, Small PM. Comparative genomics of BCG vaccines by whole-genome DNA microarray. *Science* 284:1520-3, 1999. (‡ authors contributed equally)

Wilson MA, DeRisi J, Kristensen HH, Imboden P, Rane S, Brown PO, Schoolnik GK. Exploring drug-induced alterations in gene expression in *Mycobacterium tuberculosis* by microarray hybridization. *Proc Natl Acad Sci USA*. 95:12833-8, 1999.

Verma NK, Ziegler HK, **Wilson M**, Khan M, Safley S, Stocker BA, Schoolnik GK. Delivery of class I and class II MHC-restricted T-cell epitopes of listeriolysin of *Listeria monocytogenes* by attenuated *Salmonella*. *Vaccine* 13:142-50, 1995.

Pfrommer GS, Dickens SM, **Wilson MA**, Young BJ, Kozel TR. Accelerated decay of C3b to iC3b when C3b is bound to the *Cryptococcus neoformans* capsule. *Infect Immun* 61:4360-6, 1993.

Wilson, M.A. *curriculum vitae*

Wilson MA, Kozel TR. Contribution of antibody in normal human serum to early deposition of C3 onto encapsulated and nonencapsulated *Cryptococcus neoformans*. *Infect Immun* 60:754-61, 1992.

Kozel TR, **Wilson MA**, Welch WH. Kinetic analysis of the amplification phase for activation and binding of C3 to encapsulated and nonencapsulated *Cryptococcus neoformans*. *Infect Immun* 60:3122-7, 1992.

Kozel TR, **Wilson MA**, Murphy JW. Early initiation events of alternative complement pathway activation by the capsule of *Cryptococcus neoformans*. *Infect Immun* 59:3101-10, 1991.

Kozel TR, **Wilson MA**, Farrell TP, Levitz SM. Activation of C3 and binding to *Aspergillus fumigatus* conidia and hyphae. *Infect Immun* 57:3412-7, 1989.

Kozel TR, **Wilson MA**, Pfrommer GS, Schlageter AM. Activation and binding of opsonic fragments of C3 on encapsulated *Cryptococcus neoformans* by using an alternative complement pathway reconstituted from six isolated proteins. *Infect Immun* 57:1922-7, 1989.

IV. SERVICE

University Pre-Health Committee

V PATENT

U.S. Patent No. 7,700,118 Molecular Differences Between Species of the *M. tuberculosis* complex.