

## CURRICULUM VITAE

AUGUST 2018

### ***PATRICK M. TARWATER***

The University of Texas Health Sciences Center at Houston

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### **EDUCATION AND TRAINING**

- Ph.D. 1999 **Biometry** (Concentration: Epidemiology)  
The University of Texas Health Science Center at Houston
- M.S. 1992 **Mathematics** (Concentration: Statistics)  
Texas Tech University, Lubbock, Texas
- B.A. 1990 **Mathematics** (Minor: Philosophy)  
Texas Tech University, Lubbock, Texas

### **PROFESSIONAL EXPERIENCE**

- 2016-present **Associate Professor**  
*Department of Biostatistics*  
School of Public Health  
The University of Texas Health Science Center at Houston  
El Paso Regional Campus, El Paso, TX
- 2013-present **Adjunct Professor**  
*Department of Infectious Disease and Microbiology*  
Graduate School of Public Health  
The University of Pittsburgh, Pittsburgh, PA
- 2003-present **Adjunct Professor**  
*Department of Biostatistics*  
Bloomberg School of Public Health  
The Johns Hopkins University, Baltimore, MD
- 2009-2016 **Professor**  
*Division of Biostatistics and Epidemiology*  
Department of Biomedical Sciences  
Paul L. Foster School of Medicine  
The Texas Tech University Health Sciences Center, El Paso, TX
- 2008-2009 **Associate Professor of Biostatistics**  
*Department of Biomedical Sciences*  
Paul L. Foster School of Medicine  
The Texas Tech University Health Sciences Center, El Paso, TX
- 2005-2007 **Invited Member**  
*Biostatistics Expert Network (Epidemiology and Biostatistics Core)*

- 2005-2008 The Ponce School of Medicine, Ponce, Puerto Rico  
**Associate Professor**  
*Division of Biostatistics*  
*(Division of Epidemiology, secondary appointment)*
- 2002-2005 The University of Texas School of Public Health, Houston, TX  
**Assistant Professor**  
*Division of Biostatistics (Division of Epidemiology, secondary appointment)*
- 2000-2002 The University of Texas School of Public Health, Houston, TX  
**Assistant Research Professor**  
*Department of Epidemiology*  
 Bloomberg School of Public Health  
 The Johns Hopkins University, Baltimore, MD
- 1999-2000 **Assistant Scientist**  
*Department of Epidemiology*  
 Bloomberg School of Public Health  
 The Johns Hopkins University, Baltimore, MD
- 1997-99 **Senior Statistical Software Engineer**  
*Computational Technologies Group*  
 Visual Numerics, Inc., Houston, TX
- 1993-97 **Instructor**  
*Department of Mathematics*  
 The University of St. Thomas, Houston, TX

## HONORS AND AWARDS

- 2003 Best Contributed Paper**, Joint Statistical Meetings, San Francisco, Teaching Statistics in the Health Sciences Section of the American Statistical Association
- 2004 Honors Convocation**, University of Texas Health Science Center (UTHSC), Houston, TX
- 2004 Delta Omega Honorary Society**, Alpha Iota Chapter, School of Public Health (SPH), UTHSC, Houston, TX
- 2005 Outstanding Young Investigator**, UTHSC, Houston, TX
- 2005 Honors Convocation**, UTHSC, Houston, TX
- 2005 Research Excellence Award**, SPH-UTHSC, Houston, TX
- 2005 Dean's Teaching Excellence Award**, SPH-UTHSC, Houston, TX
- 2006 Research Excellence Award**, SPH-UTHSC, Houston, TX
- 2006 Academic & Administrative Leadership Development Program**, UTHSC, Houston, TX
- 2006 Honors Convocation**, UTHSC, Houston, TX
- 2006 Visiting Professor**, Southwestern School of Medicine, Dallas, TX
- 2007 Research Excellence Award**, SPH-UTHSC, Houston, TX
- 2008 Dean's Teaching Excellence Award**, SPH-UTHSC, Houston, TX
- 2008 Research Excellence Award**, SPH-UTHSC, Houston, TX
- 2009 Professor-in-Residence (Uganda)**, Accordia Global Health Foundation
- 2009 Fellow**, American College of Epidemiology, Raleigh, NC
- 2010 Professor-in-Residence (Uganda)**, Accordia Global Health Foundation
- 2016 Fogarty Invited Lecturer (Hyderabad, India)**, LEPRAS Society

**PROFESSIONAL ACTIVITIES***Society Membership:*

1993-	American Statistical Association (ASA)
1995-	Statistics in Epidemiology Section of ASA
1995-	Teaching Statistics in the Health Sciences Section of ASA
1995-	Biometrics Section of ASA
1995-9	Houston Area Chapter American Statistical Association, Houston, TX.
1997-9	Texas Area Statisticians Conference (TASC)
1998	Member: Committee for Allocation of Funds for Student Rewards, TASC
1986-95	Mathematical Association of America
1990-8	Texas Section Mathematical Association of America

*Society Leadership and Service:*

2005 – 07	Program Chair (2007), Teaching Statistics in the Health Sciences Section, American Statistical Association (ASA)
2004 – 06	Liaison to Congress of Epidemiology 2006 Planning Committee
2003 – 07	Co-Editor and Website Manager, Statistics in Epidemiology Section, ASA
2003 – 06	Publications Officer, Statistics in Epidemiology Section, ASA
2003	Session Chair, Joint Statistical Meetings, Biometrics Section, ASA
1997	Session Chair, Joint Statistical Meetings, Biometrics Section, ASA

*Professional Leadership and Service:*

2005 -	Biostatistics expert network, Ponce School of Medicine, Puerto Rico.
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**EDITORIAL and EXTERNAL SERVICE ACTIVITIES***Reviewer:*

Journal	<i>AIDS</i> , 2000, 2001 <i>AIDS Research and Therapy</i> , 2006 <i>Advances and Applications in Statistics</i> , 2003 <i>American Journal of Epidemiology</i> , 2001, 2002, 2003, 2005 <i>Electronic Journal of Statistics</i> , 2010 <i>Epidemiology</i> , 2001 <i>International Journal of Epidemiology</i> , 2002 <i>Journal of Acquired Immune Deficiency</i> , 2003, 2004, 2005 <i>Journal of Infectious Diseases</i> , 2004 <i>Journal of Statistical Computation and Simulation</i> , 2004 <i>PLoS One</i> , 2012, 2013 <i>Public Health</i> , 2012
Conference	<i>International AIDS Conference</i> , 2002, 2004, 2006 <i>International AIDS Society Conference 2007</i>
Grant	<i>NIH, NIAID</i> , AIDS Research Review Committee, 2006 <i>AIDS Fonds, Netherlands</i> , 2002, 2004, 2005, 2009, 2013

*NIH, NIAID, R24 Special Emphasis Panel, 2004, 2005*  
*NIH, NIAID, U01 Special Emphasis Panel, 2005*  
*National Medical Research Council, Singapore, 2005, 2008*

Academic *Florida International University, Tenure/Promotion External Reviewer, 2006*  
*University of Maryland, Tenure/Promotion External Reviewer, 2006*

## PUBLICATIONS

### *Journal Articles (Peer-Reviewed):*

1. Detels R, **Tarwater PM**, Phair JP, Margolick J, Riddler SA, and Munoz A. Effectiveness of potent antiretroviral therapies on the incidence of opportunistic infections before and after AIDS diagnosis. *AIDS* 2001; 15:347-355.
2. **Tarwater PM**, Margolick J, Jin J, Phair J, Detels R, Rinaldo C, Giorgi J, and Muñoz A. Increase and plateau of CD4 T cell counts in the 3 ½ years following initiation of potent antiretroviral therapy. *J Acquir Immune Defic Syndr* 2001;27:168-75
3. Sacktor N, **Tarwater PM**, Skolasky MA, McArthur JC, Selnes A, Becker J, Cohen B, Miller EN. CSF antiretroviral drug penetrance and the treatment of HIV-associated psychomotor slowing. *Neurology* 2001; 57:542-5.
4. **Tarwater PM**, Mellors J, Gore ME, Margolick J, Phair J, Detels R, and Muñoz A. Methods to assess population effectiveness of therapies in HIV incident and prevalent cohorts. *Am J Epidemiol* 2001; 154:675-81.
5. Babas T, Vieler E, Hauer DA, Adams RJ, **Tarwater PM**, Fox KJ, Clements JE, and Zink MC. Pathogenesis of SIV pneumonia: selective replication of viral genotypes in the lung. *Virology* 2001; 2:371-81.
6. Zink MC, Coleman GD, Mankowski JL, Adams RJ, **Tarwater PM**, Fox KJ, Clements JE. Increased macrophage chemoattractant protein-1 in cerebrospinal fluid precedes and predicts the development of simian immunodeficiency virus encephalitis. *J Inf Dis* 2001; 184:1015-21.
7. Augenbraun M, **Tarwater PM**, Greenblatt R, Cohen M, Gore ME, Watts H, Preston-Martin S, and Anastos K. Opportunistic infection (OI) prophylaxis in the Women's Interagency HIV Study (WIHS). *J Acquir Immune Defic Syndr* 2001;28:195-6.
8. **Tarwater PM**, and Martin CF. Effects of population density on the spread of disease. *Complexity* 2001; 6(6):29-36.
9. Mankowski JL, Queen SE, **Tarwater PM**, Fox KJ, Perry VH, Clements JE. Axonal  $\beta$ -Amyloid Precursor Protein Accumulation in SIV-infected Macaques. *J Neuropathol Exp Neurol* 2002; 61(1):85-90.
10. Clements JE, Babas T, Mankowski J, Suryanarayana K, Piatak MJ, **Tarwater PM**, Lifson JD, and Zink MC. CNS as a reservoir for SIV: stable levels of SIV DNA in the brain from acute through asymptomatic infection. *J Infect Dis* 2002; 186(7):905-13.

11. Babas T, Muñoz D, Mankowski J, **Tarwater PM**, Clements JE, and Zink MC. Role of microglial cells in selective replication of Simian immunodeficiency virus genotypes in the brain. *J Virol* 2003; 77(1):208-216.
12. Mankowski JL, Queen SE, **Tarwater PM**, Adams RJ, and Guilarte TR. Elevated peripheral benzodiazepine receptor expression in SIV encephalitis. *J Neurovirology* 2003; 9(1):94-100.
13. Philpott S, Weiser B, **Tarwater PM**, Kleeberger C, Vermund S, Gange S, Anastos K, Cohen M, Greenblatt R, Kovacs A, Minkoff H, Young M, Miotti P, Dupuis M, Chen CH, Burger H. The association of CCR5 genotype with HIV-1 infection, disease progression and response to potent therapy in Women. *J Infect Dis* 2003; 187(4):569-575.
14. Li X, Buechner JM, **Tarwater PM**, Muñoz A. A diamond-shaped, equiponderant graphical display of the effects of two categorical predictors on continuous outcomes. *Am Statistician* 2003; 57(3):193-199.
15. Marx MA, Murugavel KG, **Tarwater PM**, SriKrishman AK, Thomas DL, Solomon S, and Celentano DD. Examination of the association between HCV and genital ulcers in a multi-level random sample of slum residents in southern India. *Clin Infect Dis* 2003; 37:514-520.
16. Sacktor N, Skolasky RL, **Tarwater, PM**, McArthur JC, Selnes OA, Becker J, Cohen B, and Miller EN. Response to systemic HIV viral load suppression correlates with psychomotor speed performance. *Neurology* 2003; 61(4):567-9.
17. **Tarwater PM**, Parrish MA, and Gallant JE. Prolonged treatment interruption after immunologic response to HAART. *Clin Infect Dis* 2003; 37(11):1541-1548
18. Barber SA, Bennet JM, DeWitt JB, **Tarwater PM**, Zink MC. Dysregulation of mitogen-activated protein kinase (MAPK) signaling pathways in SIV Encephalitis. *Am J Pathol* 2004; 164(2):355-62.
19. Chatterjee R, **Tarwater P**, Neogi D, Ghosh A, Roy P, and Gupta P. Estimation of HIV seroprevalence in blood bank camps in Kolkata, India. *Transfus Med* 2004; 14(1):77-8.
20. Gibbs SG, Green CF, **Tarwater PM**, Scarpino PV. Airborne Antibiotic Resistant and Non-Resistant Bacteria and Fungi Recovered from Two Swine Herd Confined Animal Feeding Operations. *J Occupational and Environmental Hygiene* 2004; 1(11): 699-706.
21. Philpott S, Burger H, **Tarwater PM**, Lu M, Gange SJ, Anastos K, Cohen M, Greenblatt RM, Kovacs A, Minkoff H, Young M, Miotti P, Dupuis M, Chen CH, Weiser B. CCR2 genotype and disease progression in HIV-1 infected women. *Clin Infect Dis* 2004; 39(6):861-5.
22. **Tarwater PM**, Gallant JE, Mellors JW, Gore ME, Phair JP, Detels R, Margolick JB, and Munoz A. Prognostic value of plasma HIV RNA among highly active antiretroviral therapy users. *AIDS* 2004; 18:2419-2423.
23. Rue SM, Roos JW, **Tarwater PM**, Clements JE, and Barber SA. Phosphorylation

- and proteolytic cleavage of Gag proteins in budded simian immunodeficiency virus. *J Virol* 2005; 79(4):2484-2492.
24. Grant LA\*, **Tarwater PM\***, Schneider M, Anastos K, Cohen M., Khalsa A, Minkoff H, Young M, Greenblatt RM. Temporal Trends and Determinants of HAART Discontinuation in the Women's Interagency HIV Study. *J Acquir Immune Defic Syndr* 2005; 38(4):500-503. \*Authors contributed equally.
  25. Helke KL, Queen SE, **Tarwater PM**, Nath A, Zink MC, Irani DN, Mankowski JL. 14-3-3 protein in CSF: an early predictor of SIV CNS disease. *J Neuropathol Exp Neurol* 2005; 64(3):202-8.
  26. Zink MC, Uhrlaub JL, DeWitt JB, Voelker T, Bohlayer E, Mankowski JL, **Tarwater PM**, Clements JE, Barber SA. Minocycline suppresses replication of SIV and reduces the severity of encephalitis in SIV-infected macaques. *JAMA* 2005; 293(16):2003-2011.
  27. Carruth LM, Christine Zink M, **Tarwater PM**, Miller MD, Li M, Queen LA, Mankowski JL, Shen A, Siliciano RF, Clements JE. SIV-specific T lymphocyte responses in PBMC and lymphoid tissues of SIV-infected pigtailed macaques during suppressive combination antiretroviral therapy. *J Med Primatol.* 2005;34(3):109-121.
  28. Rusch M, Farzadegan H, **Tarwater PM**, Safaeian M, and Strathdee SA. Sexual risk behaviour among injection drug users before availability of highly active antiretroviral therapy. *AIDS and Behavior* 2005; 9(3):289-299.
  29. Orr S, Newton E, **Tarwater PM**, Weismiller D. Factors associated with prenatal smoking among black women in Eastern North Carolina. *Matern Child Health J* 2005;9(3):245-252.
  30. Green, C.F., Gibbs, S.G., **Tarwater PM**, Mota, L.C., Scarpino, P.V. Bacterial Plume Emanating from the Air Surrounding Swine Confinement Operations. *J Occup Environ Hyg* 2006; 3(1):9-15.
  31. Leyva M., Byrd T. and **Tarwater P**. Attitudes towards cervical cancer screening: A study of beliefs among women in Mexico. *California Journal of Health Promotion* 2006; 4(2):13-24.
  32. Babas T, Dewitt JB, Mankowski JL, **Tarwater PM**, Clements JE, Zink MC. Progressive selection for neurovirulent genotypes in the brain of SIV-infected macaques. *AIDS* 2006; 20(2):197-205.
  33. Wachtman LM, **Tarwater PM**, Queen SE, Adams RJ. and Mankowski JL. Platelet decline: An early predictive hematologic marker of Simian Immunodeficiency Virus central nervous system disease. *J Neurovirology* 2006;12(1):25-33.
  34. Barber SA, Gama L, Dudaronek JM, Voelker T, **Tarwater PM** and Clements JE. Mechanism for the establishment of transcriptional latency of HIV in the brain in a simian immunodeficiency virus-macaque model. *J Infect Dis* 2006;193(7):963-70.
  35. Lai D, **Tarwater PM**, Hardy RJ. Measuring impact of HIV/AIDS, diseases of the heart and malignant neoplasms on life expectancy in the United States from 1987 to 2000. *Public Health* 2006;120(6):486-92.

36. Gibbs SG, Green CF, **Tarwater PM**, Mota LC, and Scarpino PV. Isolation of antibiotic resistant bacteria from the air plume downwind of a swine confined or concentrated animal feeding operation. *Environ Health Perspect* 2006; 114(7):1032-37.
37. Barber SA, Gama L, Li M, Voelker T, **Tarwater PM**, Carruth LM and Clements JE. Longitudinal Analysis of SIV Replication in the Lung: Compartmentalized Regulation of SIV. *J Infect Dis* 2006;194(7):931-38.
38. Gibbs SG, Sobieraj J, Harris H, Steel H, **Tarwater PM**, and Ortiz M. Comparison of Non-Deployable Hearing Profiles by Army Component (Active Duty, National Guard and Reserve) and by Gender. *Military Medicine* 2006;171(10):967-69.
39. Laast VA, Pardo CA, **Tarwater PM**, Queen SE, Reinhart TA, Ghosh M, Adams RJ, Zink MC, and Mankowski JL. Pathogenesis of SIV-induced alterations in macaque trigeminal ganglia. *J Neuropathol Exp Neurol* 2007;66(1):26-34.
40. Wachtman LM, **Tarwater PM**, Skolasky RL, Esposito D, Schifitto G, Marder K, McDermott MP, Cohen BA, Nath A, Sacktor N, Epstein LG, Mankowski JL, and McArthur JC. Platelet decline: An avenue for investigation into the pathogenesis of Human Immunodeficiency Virus (HIV)-Associated Dementia. *Archives of Neurology* 2007; 64(9):1264-72.
41. Fallert BA, Poveda S, Schaefer TM, Pfeifer ME, Sangavi SK, **Tarwater PM**, Watkins SC, Murphy-Corb ME, Kirschner DE, and Reinhart TA. Virologic and immunologic events in hilar lymph nodes during the course of simian immunodeficiency virus infection. *J Acquir Immune Defic Syndr* 2008; 47(1):16-26.
42. Sivaraman K., **Tarwater P.M.**, and Cole A.M. Codon choice in genes depends on flanking sequence information – implications for theoretical reverse translation. *Nucleic Acids Res* 2008; 36(3):ePub .
43. Qin S., Sui Y., Soloff A.C., Junecko B.A., Kirschner D.E., Murphy-Corb M.A., Watkins B.A., **Tarwater P.M.**, Pease J.E., Barratt-Boyes S.M., and Reinhart T.A. Chemokine and cytokine mediated loss of regulatory T cells in lymphoid tissues during pathogenic simian immunodeficiency virus infection. *J Immunol* 2008; 180(8):5530-36.
44. Mota LC, Gibbs SG, Green CF, Payan F, **Tarwater PM**, and Ortiz M. Characterization of seasonal indoor and outdoor bioaerosols in the arid environment of El Paso, Texas. *J Environ Health* 2008; 70(10):48-53.
45. Mota, L.C., Gibbs, S.G., Green C.F., Flores, C.M., **Tarwater, P.M.**, and Ortiz, M. Seasonal fine and coarse culturable fungal constituents and concentrations from indoor and outdoor air samples taken from an arid environment. *J Occupational and Environmental Hygiene* 2008; 5(8): 511-518.
46. Makley M.J., English J., D.A. Drubach D.A., Kreuz A.J., and **Tarwater P.** Prevalence of Sleep Disturbance in Closed Head Injury Patients on a Rehabilitation Unit. *Neurorehabil Neural Repair* 2008;22(4):341-7.
47. Mankowski J.L, Queen S.E., Fernandez C.S., **Tarwater P.M.**, Karper J.M., Adams R.J., and Kent S.J. Natural host genetic resistance to lentiviral CNS disease: A

- neuroprotective MHC class I allele in SIV-infected macaques. *PLoS ONE* 2008; 3(11):e3603.
48. Makley MJ, Johnson-Green L., **Tarwater PM**, Kreuz AJ Spiro J, Rao V, and Celnik P. Return of Memory and Sleep Efficiency Following Moderate to Severe Closed Head Injury. *Neurorehabil Neural Repair* 2009; 23:320-326.
  49. Sobieraj, J., Gibbs, S.G., Steele, H., Harris, M., **Tarwater, P.M.**, and Ortiz, M. Hearing Threshold Comparisons between 2001-02 NHANES and 2003-05 Fort Bliss U.S. Army Service Components. *Journal of Occupational and Environmental Hygiene. Military Medicine* 2009;174:42-46.
  50. Ding M, **Tarwater PM**, Rodriguez M, Chatterjee R, Ratner D, Roy P, Mellors J, Neogi D, Gupta P. Estimation of the predictive role of plasma viral load on CD4 decline in HIV-1-infected subjects in India using real time RTPCR assay. *J Acquir Immune Defic Syndr* 2009; 50(2):119-125.
  51. Rodriguez MA, Ding M, Ratner D, Chen Y, Tripathy SP, Kulkarni SS, Chatterjee R, **Tarwater PM**, Gupta P. High Replication fitness and transmission efficiency of HIV-1 subtype C from India: Implications for subtype C predominance. *Virology* 2009; 385(2):416-24.
  52. Ebenezer GJ, Laast VA, Dearman B, Hauer P, **Tarwater PM**, Adams RJ, Zink MC, McArthur JC, and Mankowski JL. Altered cutaneous nerve recognition in a simian immunodeficiency virus/macaque intracutaneous axotomy model. *J Comp Neurol* 2009; 514(3):272-283.
  53. Mota A, Mena KD, Soto-Beltran M, **Tarwater PM**, Chaidez C. Risk assessment of cryptosporidium and giardia in water irrigating fresh produce in Mexico. *Journal of Food Protection* 2009;72(10):2184-88.
  54. Quinn GA, **Tarwater PM**, and Cole AM. Subversion of IL-1-mediated host defense by a nasal carrier strain of Staphylococcus aureus. *Immunology* 2009;128(1):e222-e229..
  55. Witwer KW, Gama L, Li M, Bartizal CM, Queen SE, Varrone JJ, Brice AK, Graham DR, **Tarwater PM**, Mankowski JL, Zink MC, Clements JE. Coordinated Regulation of SIV Replication and Immune Responses in the CNS. *PLoS ONE* 2009; 4(12):e8129.
  56. Gupta RG, Kelly KM, Helke KL, Queen SE, Karper JM, Dorsey JL, Brice AM, Adams RJ, **Tarwater PM**, Kolson DL, and Mankowski JL. HIV and SIV Induce Alterations in CNS CaMKII Expression and Activation: A Potential Mechanism for Cognitive Impairment. *Am J Pathology* 2010; 176(6):2776-84.
  57. Shen C, Ding M, ; Craigo JK, **Tarwater PM**, Chatterjee R, Roy P, Guha SK, Saha B, Modake D, Neogi D, Chen Y, Gupta P. Genetic characterization of HIV-1 from semen and blood from clade C-infected subjects from India and effect of therapy in these body compartments. *Virology* 2010; 401(2):190-96.
  58. Zink MC, Brice AK, Kelly KM, Quenn SE, Gama L, Li M, Adams RJ, Bartizal C, Varrone J, Rabi SA, Graham DR, **Tarwater PM**, Mankowski JL, Clements JE. SIV-infected macaques treated with highly active antiretroviral therapy (HAART) have



- reduced CNS virus replication and inflammation but persistence of viral DNA. *J Infect Dis* 2010; 202(1):161-70.
59. Awad, AHA, El Morsy, T.H., **Tarwater, P.M.**, Green, C.F., and Gibbs, S.G. Air biocontamination in a variety of agricultural industry environments in Egypt: a pilot study. *Aerobiologia*. 2010; 26(3):223-232.
  60. Qin SL, Junecko BAF, Trichel AM, **Tarwater PM**, Murphey-Corb MA, Kirschner DE, Reinhart TA. Simian immunodeficiency virus infection alters chemokine networks in lung tissues of cynomolgus macaques association with pneumocystis carinii infection. *Am J Pathol* 2010; 177(3):1274-85..
  61. Cole AM, Patton DL, Rohan LC, Cole AL, Cosgrove-Sweeny Y, Rogers NA, Ratner D, Sassi AB, Lackman-Smith C, **Tarwater PM**, Ramratnam B, Ruchala P, Lehrer RI, Waring AJ, and Gupta P. The formulated microbicide RC-101 was safe and antivirally active following intravaginal application in pigtailed macaques. *PLoS ONE* 2010; 5(11):e15111.
  62. Qin S, Alcorn JF, Craigo JK, Tjoeng C, **Tarwater PM**, Kolls JK and Reinhart TA. Epigallocatechin-3-Gallate Reduces Airway Inflammation in Mice through Binding to Proinflammatory Chemokines and Inhibiting Inflammatory Cell Recruitment. *J Immuno* 2011; 186(6):3693-3700
  63. Gao J., Zhang Y., Tang X., Tucker L.D., **Tarwater P.M.**, Quesenberry P.J., Rigoutsos I., and Ramratnam B. The Evi1, microRNA-143, K-Ras Axis in Colon Cancer. *FEBS Letters* 2011; 585(4):693-699.
  64. Stanley BA, Graham DR, James J, Mitsak M, **Tarwater PM**, Robbins J, and Van Eyk JE. Altered myofilament stoichiometry in response to heart failure in a cardioprotective alpha-myosin heavy chain transgenic rabbit model. *Proteomics Clinical Applications* 2011; 5(3-4):147-158.
  65. Li M, Patton D, Cosgrove-Sweeny Y, Ratner D, Rohan L, Cole A, **Tarwater P**, Gupta P, and Ramratnam B. Incorporation of the HIV-1 microbicide cyanoviran-N in a food product. *JAIDS* 2011; 58(4):379-384.
  66. Laast VA, Shim B, Johaneck LM, Dorsey JL, Hauer PE, **Tarwater PM**, Adams RJ, Pardo CA, McArthur JC, Ringkamp M, and Mankowski JL. Macrophage-mediated dorsal root ganglion damage precedes altered nerve conduction in SIV-infected macaques. *Am J Path* 2011; 179(5):
  67. Meulendyke KA, Pletnikov MV, Engle EL, **Tarwater PM**, Graham DR, Zink MC. Early Minocycline Treatment Prevents a Decrease in Striatal Dopamine in an SIV Model of HIV-Associated Neurological Disease. *J Neuroimmune Pharmacol*. 2011; 7(2):454-464.
  68. Pegu P, Helmus R, Gupta P, **Tarwater P**, Caruso L, Shen C, Ross T, and Chen Y. Induction of strong anti-HIV cellular immunity by a combination of clostridium perfringens expressing HIV gag and virus-like particles. *Current HIV Research* 2011; 9(8): 613-622.
  69. Kelly KM, **Tarwater PM**, Karper JM, Bedja D, Queen SE, Tunin RS, Adams RJ, Kass DA, Mankowski JL. Diastolic dysfunction is associated with myocardial viral

- load in simian immunodeficiency virus-infected macaques. *AIDS* 2012; 26(7):815-823.
70. Velasco A, Ono C, Nugent K, **Tarwater P**, and Kumar A. Ultrasonic evaluation of the radial diameter in a local population from Texas. *Journal of Invasive Cardiology* 2012; 24(7):339-341.
71. Awad AHA, Gibbs SG, **Tarwater PM**, Casillas ME, Green CF. Seasonal evaluation of fine and coarse culturable bacterial aerosols from residences within a rural and an urban city in Egypt. *Intl J Environ Health Res* 2013; 23(4):269-280.
72. Qin S, Fallert Junecko BA, Lucero CM, Klamar CR, Trichel A, Murphy-Corb M, **Tarwater PM**, Kirschner DE, Reinhart TA. Simian immunodeficiency Virus Infection Potently Modulates Chemokine Networks and Immune Environments in Hilar Lymph Nodes of Cynomolgus Macaques. *J Acquir Immune Defic Syndr* 2013; 63(4):428-37.
73. Soto-Beltran, M, Mena KD, Gerba CP, **Tarwater PM**, Reynolds K and Chaidez C. Risk assessment of *Listeria monocytogenes* in queso fresco in Culiacan, Mexico. *Journal of Food Safety* 2013; 3(3):111-116.
74. Awad AHA, Gibbs SG, **Tarwater PM**, Green CF. Coarse and Fine Culturable Fungal Air Concentrations in Urban and Rural Homes in Egypt. *Int J Environ Res Public Health* 2013; 10(3):936-949.
75. Eade, CR, Cole AL; Diaz, C; Rohan LC; Parniak MA, Marx P; **Tarwater PM**; Cole AM. The anti-HIV microbicide candidate RC-101 inhibits pathogenic vaginal bacteria without harming endogenous flora or mucosa. *American Journal of Reproductive Immunology* 2013; 69(2):150-158.
76. Wood MP, Cole AL, Ruchala P, Waring AJ, Rohan LC, Marx P, **Tarwater PM**, Gupta P, and Cole AM. A compensatory mutation provides resistance to disparate HIV fusion inhibitor peptides and enhances membrane fusion. *PLOS One* 2013; 8(2):e55478.
77. Sisk JM, Witwer KW, **Tarwater PM**, Clements JE. SIV replication is directly downregulated by four antiviral miRNAs. *Retrovirology* 2013; 10(95):1-15.
78. Svoboda SJ, Harvey TM, Owens BD, Brechue WF, **Tarwater PM**, Cameron KL. Changes in serum biomarkers of cartilage turnover after anterior cruciate ligament injury. *Am J Sports Med* 2013; 41(9): 2108-2116.
79. Kelly KM, Beck SE, Metcalf-Pate KA, Queen SE, Dorsey JL, Adams RJ, Avery L, Hubbard W, **Tarwater PM**, Mankowski JL. Neuroprotective maraviroc monotherapy in SIV-infected macaques: Reduced replicating and latent SIV in the brain. *AIDS* 2013; 27(18):21-28.
80. Beale EG, **Tarwater PM**, Lee VH. A retrospective look at replacing face-to-face embryology instruction with online lectures in a human anatomy course. *Anatomical Sciences* 2014; 7(3):234-41.

81. Dwivedi AK, Mallawaarachchi I, Lee S, **Tarwater PM**. Methods for estimating relative risk in studies of common binary outcomes. *J Applied Statistics* 2014; 41(3):484-500.
82. Lalude OO, Gutarra MF, Pollono EN, Lee S, **Tarwater PM**. Inappropriate utilization of SPECT myocardial perfusion imaging on the USA-Mexico border. *J Nuclear Cardiology* 2014; 21(3):544-552.
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86. Watts SH, Bryan ED, **Tarwater PM**. Changes in insurance status and emergency department visits after 2008 economic downturn. *Academic Emergency Medicine* 2015; 22(1): 73-80.
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92. Beck SE, Queen SE, Viscidi R, Johnson D, Kent SJ, Adams RJ, **Tarwater PM**, Mankowski JL. Central nervous system-specific consequences of simian immunodeficiency Gag escape from major histocompatibility complex class I-mediated control. *Journal of NeuroVirology* 2016; 22(4):498-507.
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94. Walker-Sperling VEK, Pohlmeier CW, **Tarwater PM**, Blankson JN. The effect of latency reversal agents on primary CD8+ cells: Implications for shock and kill strategies for human immunodeficiency virus eradication. *EBioMedicine* 2016; 8:217-229.
95. Walker-Sperling VEK, Merlo C, Buckheit R, Lambert A, **Tarwater PM**, Kirk G, Drummond B, Blankson JN. HIV controller T cells effectively inhibit viral replication in alveolar macrophages. *AIDS Res Hum Retroviruses* 2016; 32(10-11):1097-1099.
96. Knight AC, Brill SA, Queen SE, **Tarwater PM**, Mankowski JL. Increased Microglial CSF1R Expression in the SIV/Macaque Model of HIV CNS Disease. *Journal of Neuropathology and Experimental Neurology* 2018; 77(3):199-206.
97. Cole AL, Schmidt-Owens M, Beavis AC, Chong CF, **Tarwater PM**, Schaus J, Deichen MG, Cole AM. Cessation from smoking improves innate host defense and clearance of experimentally inoculated nasal *S. aureus*. *Infection and Immunity* 2018; 86(4).
98. Farhoody P, Mallawaarachchi I, **Tarwater PM**, Serpell JA, Duffy DL, Zink MC. Aggression Toward Familiar People, Strangers, and Conspecifics in Gonadectomized and Intact Dogs. *Frontiers in Veterinary Science* 2018; 5:18.
99. Girardi V, Mena KD, Albino SM, Demoliner M, Gularte JS, de Souza FG, Rigotto C, Schneider VE, Paesi SO, **Tarwater PM**, Spiliki FR. Microbial risk assessment in recreational freshwaters from southern Brazil. *Science of the Total Environment* 2018. (Accepted)
100. Misra S, Oakley J, McGhee C, Wang E, Patel D, **Tarwater P**, Mankowski J. Automated Analysis of In Vivo Confocal Microscopy Images to Measure Corneal Nerve Fiber Loss in Type 1 Diabetes. *Investigative Ophthalmology & Visual Science (IOVS)* 2018. (Under review)
101. Nielsen J, Mena K, Begley C, **Tarwater P**. Perceived Benefits and Barriers of Physician Volunteerism in Free Clinics. *American Journal of Public Health* 2018. (Submitted)
- 102.

**RESEARCH GRANT PARTICIPATION***Active Support:*

<b>Beach Exposure And Child HEalth Study (BEACHES)</b>	<b>1/1/2018-12/31/2019</b>
Gulf of Mexico Research Initiative (Solo-Gabriele, PI)	\$1,000,000
UT Health SPH Subcontract (Mena, PI)	\$
<b>Role: Co-Investigator</b>	<b>12%</b>

*Modifications/Overlap:* None

*Pending:*

<b>Estrogen Modulation of HHV-8 Transcription and Replication 4/01/2019-3/31/2024</b>	
NIH via University of Pittsburgh (Jenkins, PI)	
UT Health SPH Subcontract (Tarwater, PI)	
<b>Role: Co-Investigator and Principal Biostatistician</b>	<b>10%</b>

<b>Designer exosomes to target latent HIV-1 reservoirs</b>	<b>4/01/2019-3/31/2024</b>
NIH via Lifespan Hospital, Rhode Island (Ramratnam, PI)	
UT Health SPH Subcontract (Tarwater, PI)	
<b>Role: Co-Investigator and Principal Biostatistician</b>	<b>15%</b>

*Recent Unfunded Proposals*

<b>Latent replication competent HIV-1 Quantification in blood and tissues</b>	<b>7/1/17-6/30/2021</b>
NIH via Univ. Pittsburgh GSPH (Gupta, PI)	
UT Health SPH Subcontract (Tarwater, PI)	
<b>Role: Co-Investigator and Principal Biostatistician</b>	<b>10%</b>

<b>Evaluations to Improve Prevention Interventions Under the President's emergency Plan for AIDS Relief (PEPFAR)</b>	<b>5/1/17-4/30/2019</b>
NIH via UTEP CHS (Mangadu, PI)	
UT Health SPH Subcontract (Tarwater, PI)	
<b>Role: Co-Investigator and Principal Biostatistician</b>	<b>20%</b>

<b>Partnering in Research to Enhance Practical Assessment of Risks and Engage Communities (PREPARE Communities)</b>	<b>1/1/2018-12/31/2019</b>
Gulf of Mexico Research Initiative (Mena, PI)	\$997,145
<b>Role: Co-Investigator</b>	<b>10%</b>

<b>HHV-8: A model for chronic infection and inflammation in the prostate</b>	<b>9/1/2017-8/31/2021</b>
NIH via Univ. Pittsburgh GSPH (F. Jenkins, PI)	
UT Health SPH Subcontract (Tarwater, PI)	
<b>Role: Co-Investigator and Principal Biostatistician</b>	<b>10%</b>

*Completed Support*

<b>U01-AI-35043 Muñoz, A (PI)</b>	<b>4/1/99-3/31/03</b>
Center for the Analysis and Management of the MACS Data (CAMACS)	
NIH (NIAID)	\$ 8,389,465
<b>Role: Co-Investigator</b>	<b>50% effort</b>

<b>U01-AI-42590 Muñoz, A (PI)</b>	<b>4/1/99-3/31/03</b>
Women's Interagency HIV Study Data Management and Analysis Center (WDMAC)	
NIH (NIAID)	\$ 7,527,354
<b>Role: Co-Investigator</b>	<b>50% effort</b>
<b>DAD A09-03-P-0191 (P Tarwater, PI)</b>	<b>10/1/02-9/30/03</b>
WBAMC	\$ 6,573
<b>Role: Clinical Investigation Committee</b>	<b>6%</b>
<b>P01 MH 070056 Nath, A (PI)</b>	<b>7/1/03-6/30/07</b>
Johns Hopkins School of Medicine	\$ 5,616,401
Univ of Texas Subcontract (P Tarwater, PI)	\$
<b>Role: Co-Investigator &amp; Principal Biostatistician</b>	<b>5%</b>
<b>R01 NS 050028 Clements, J (PI)</b>	<b>3/1/04-2/28/09</b>
Johns Hopkins School of Medicine	\$ 1,783,020
Texas Tech Subcontract (P Tarwater, PI)	\$
<b>Role: Co-Investigator &amp; Principal Biostatistician</b>	<b>5%</b>
<b>R01 MH 069116 Zink, C (PI)</b>	<b>4/1/04-3/31/09</b>
Johns Hopkins School of Medicine	\$ 2,914,420
Texas Tech Subcontract (P Tarwater, PI)	\$
<b>Role: Co-Investigator &amp; Principal Biostatistician</b>	<b>5%</b>
<b>R01 HL 078479 Mankowski, J (PI)</b>	<b>8/1/04-7/31/09</b>
Johns Hopkins School of Medicine	\$ 2,659,377
Texas Tech Subcontract (P Tarwater, PI)	\$
<b>Role: Co-Investigator &amp; Principal Biostatistician</b>	<b>5%</b>
<b>R01 AI 060422 Reinhart, T (PI)</b>	<b>3/1/05-2/28/10</b>
University of Pittsburgh School of Public Health	\$ 2,586,691
Texas Tech Subcontract (P Tarwater, PI)	\$
<b>Role: Co-Investigator &amp; Principal Biostatistician</b>	<b>5%</b>
<b>U19 AI 065430 (P Gupta, PI)</b>	<b>7/1/05-6/30/10</b>
University of Pittsburgh School of Public Health	\$ 4,940,094
Texas Tech Subcontract (P Tarwater, PI)	\$
<b>Role: Principal Biostatistician &amp; Director for the Data Center</b>	<b>5%</b>
<b>R01 HD 052436 (P Gupta, PI)</b>	<b>7/1/06-6/30/11</b>
University of Pittsburgh School of Public Health	\$ 2,445,474
Texas Tech Subcontract (P Tarwater, PI)	\$
<b>Role: Principal Biostatistician &amp; Director for the Data Center</b>	<b>5%</b>
<b>R01 NS 055651 (J Mankowski, PI)</b>	<b>7/13/06-5/31/10</b>
Mechanisms of HIV-Induced PNS Disease: The SIV/Macaque Model	
NIH(NINDS) via Johns Hopkins School of Medicine	\$ 2,486,634
Texas Tech Subcontract (P Tarwater, PI)	\$
<b>Role: Co-Investigator &amp; Principal Biostatistician</b>	<b>5%</b>
<b>P40 RR 019995 (RJ Adams, PI)</b>	<b>7/1/06-6/30/11</b>
Johns Hopkins School of Medicine	\$ 4,864,244
Texas Tech Subcontract (P Tarwater, PI)	\$
<b>Role: Co-Investigator &amp; Principal Biostatistician</b>	<b>5%</b>
<b>MoU, University of Texas HSC, Houston</b>	<b>8/01/11 – 12/31/11</b>

UT-H School of Public Health <b>Instructor, PH1690 (Fundamentals of Biostatistics)</b>	<b>25%</b>
<b>R01 CA 140605-01A2 (Damodoran, PI)</b> Dietary prevention of prostate cancer (CDP) NIH via Texas Tech University HSC <b>Role: Co-Investigator</b>	<b>6/1/12-5/31/13</b> \$ 298,893 \$ <b>5%</b>
<b>U19 AI 082623 (P Gupta, PI)</b> CSIC and Entry Inhibitor Retrocyclin as Combination Microbicides University of Pittsburgh School of Public Health Texas Tech Subcontract (Tarwater, PI) <b>Role: Co-Investigator and Principal Biostatistician</b>	<b>9/1/09-8/31/13</b> \$ 7,292,049 \$ <b>10%</b>
<b>R01 MH 85554 (MC Zink, PI)</b> IDO Regulation in the SIV model of HIV CNS Disease NIH via Johns Hopkins School of Medicine Texas Tech Subcontract (Tarwater, PI) <b>Role: Co-Investigator &amp; Principal Biostatistician</b>	<b>5/1/09-2/28/14</b> \$ 2,852,819 \$ <b>10%</b>
<b>R56AI 104713-01A1 (T Reinhart, PI)</b> NIH via University of Pittsburgh School of Public Health Texas Tech Subcontract (P Tarwater, PI) <b>Role: Co-Investigator &amp; Principal Biostatistician</b>	<b>9/1/13-8/31/14</b> \$ 704,473 \$ <b>10%</b>
<b>P01 MH 70306 (JE Clements, PI)</b> CNS & Peripheral Viral Reservoirs in a SIV model of HIV HAART NIH via Johns Hopkins School of Medicine Texas Tech Subcontract (Tarwater, PI) <b>Role: Co-Investigator &amp; Principal Biostatistician</b>	<b>12/1/04-11/30/14</b> \$15,595,301 \$ <b>5%</b>
<b>R01 MH087233 (MC Zink, PI)</b> Minocycline Immune Effects on SIV CNS Disease NIH via Johns Hopkins School of Medicine Texas Tech Subcontract (Tarwater, PI) <b>Role: Co-Investigator &amp; Principal Biostatistician</b>	<b>9/1/09-3/31/15</b> \$ 2,934,699 \$ <b>4%</b>
<b>R21 AI 102659-01A1 (KW Witwer, PI)</b> Circulating Cellular and Extracellular Noncoding RNAs in HIV-1 Elite Suppression NIH via Johns Hopkins School of Medicine Texas Tech Subcontract (Tarwater, PI) <b>Role: Co-investigator &amp; Principal Biostatistician</b>	<b>8/1/13-7/31/15</b> \$ 443,533 \$ <b>10%</b>
<b>R01 NS076357 (JE Clements, PI)</b> Plasma mRNA biomarkers of HIV/SIV CNS disease NIH via Johns Hopkins School of Medicine UT Health SPH Subcontract (Tarwater, PI) <b>Role: Co-Investigator &amp; Principal Biostatistician</b>	<b>7/1/12-6/30/17</b> \$ 2,636,442 \$ <b>10% effort</b>
<b>R01 HD072693 (B Ramratnam, PI)</b> Reproductive hormones and their impact on HIV acquisition NIH via Rhode Island Hospital UT Health SPH Subcontract (Tarwater, PI) <b>Role: Co-Investigator &amp; Principal Biostatistician</b>	<b>4/1/12-2/28/17</b> \$ 2,414,249 \$ <b>5%</b>

**CURRICULUM VITAE – PART II***Patrick M. Tarwater***ADVISING****University of Texas Health Sciences Center at Houston School of Public Health  
(2002 – 2007) (2016 – present)***Academic Advisor*Primary:

- |                                      |   |
|--------------------------------------|---|
| 1. Sarah Duzinski ( <i>MPH '03</i> ) | 2. Veronica Pedregon ( <i>MPH '05</i> ) |
| 3. Kendra Witt ( <i>MPH '05</i> )    | 4. Carolyn Cooper ( <i>MPH '06</i> )    |
| 5. Jessica Mora ( <i>DrPH '16</i> )  | 6. Jennifer Neilsen ( <i>MPH '18</i> )  |
| 7. Brianna Webb ( <i>MPH '18</i> )   | 8. Ricardo Pulido ( <i>MPH '18</i> )    |

Secondary:

- |                                       |  |
|---------------------------------------|--|
| 1. Shelby Blackmon ( <i>MPH '04</i> ) | 2. Lynne McNicol ( <i>MPH '04</i> )    |
| 3. David Lopez ( <i>MPH '04</i> )     | 4. Kylene Kilgore ( <i>MPH '04</i> )   |
| 5. Brandy Peterson ( <i>MPH '07</i> ) | 6. Ariana Arciero ( <i>MPH '05</i> )   |
| 7. Myriam Leyva ( <i>MPH '05</i> )    | 8. Cheri Railey ( <i>MPH '06</i> )     |
| 9. Arthur Islas ( <i>MPH '07</i> )    | 10. Irma Carrillo                      |
| 11. Kristenmae Claros                 | 12. Ulysses Urquidi ( <i>MPH '07</i> ) |
| 13. Norma Fernandez                   | 14. Amy Witten                         |

*Thesis Advisor:*

Sarah Duzinski: *Evaluation of Clinical Markers of Disease Progression as Prognostic Indicators of Response after Supervised Interruption of Initial HAART among HIV-Positive Patients*, MPH 2004

Veronica Pedregon: *Economic Consequences of Minority Status as a Determinant of Racial/Ethnic Inequalities in Health*, MPH 2005

Carolyn J. V. Cooper: *Lost Opportunities: Umbilical Cord Blood Banking and Donation Habits in El Paso, Texas*, MPH 2006

**Texas Tech University Health Science Center Paul L. Foster School of Medicine  
(2008 – 2016)***Scholarly Activity Research Project Advisor(SARP)*

Lindsey Smith: *Evaluation of differential effect modification in clinical studies using recursive partitioning*, MD 2013.

Scott Grant: *Poisson regression model for infant mortality in the state of Texas*, MD 2013.

**Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health  
(1999 – 2002)***Advisor:* Laura Novelli (*MS*), Kate Gilroy (*MS*), Melissa Marx (*PhD*),*Committee:* Megan McSorley, Leena Choi, Laowattana, Nilsa Logo-Berrios, Erika Avila-Tang, Mauro Sanchez, Tsuo-Hung Lan, Alain Labrique, Jonathan Golub**Department of Mathematics, University of St. Thomas  
(1993 – 1997)**



*Advisor:* A Adai, K Fink, L Dickey, W Braun, B Escalero

**CLASSROOM INSTRUCTION**

## CURRENT/RECENT COURSES

**University of Texas Health Science Center School of Public Health**2018 Instructor, *Introduction to Biostatistics*2016-18 Instructor, *Foundations of Biostatistics***Short Courses**2016 Instructor, *Study Design and Analysis*, Fogarty Grant, University of Pittsburgh and LEPRA Society Hyderabad, India2013- Instructor, *Data Analysis for Biomedical Researchers*, Department of Microbiology and Infectious Diseases, University of Pittsburgh Graduate School of Public Health2005- Instructor, *Advanced Data Analysis*, Graduate Summer Institute of Epidemiology and Biostatistics, Johns Hopkins Bloomberg School of Public Health

## PAST COURSES

**Short Courses**2005-06 Instructor, Biostatistics and Epidemiology in Clinical Research, Texas Tech School of Medicine2002- 04 Instructor, Data Analysis I and II, *Graduate Summer Institute of Epidemiology and Biostatistics*, Johns Hopkins Bloomberg School of Public Health2001-05 Instructor, *The Graduate Training Program in Clinical Investigation* Johns Hopkins School of Medicine**Texas Tech University Graduate School of Biomedical Sciences**2012-16 Course Creator, Director and Instructor, *Fundamentals of Biostatistics***Texas Tech University Paul L. Foster School of Medicine**2008-16 Course Creator, Director and Instructor, *Basic and Clinical Biostatistics***Division of Biostatistics, University of Texas Health Science Center School of Public Health**2011 Instructor, *Introduction to Biostatistics*2007-08 Instructor, *Statistical Methods in Epidemiology*2002-08 Instructor, *Intermediate Biometric Methods I and II*Co-Instructor, *Introduction to Biometry*Co-Instructor, *Advanced Epidemiologic Methods*Co-Instructor, *Epidemiologic Proposal Development*2002-04 Instructor, *HIV Epidemiology*Instructor, *Data Analysis I and II***Department of Epidemiology, Johns Hopkins School of Hygiene and Public Health**2000-02 Instructor, *Design and Applications of Case-Control Studies, Methods in*

*Epidemiology.*

Department of Mathematics, University of St. Thomas

1993-97 Instructor, *Calculus (I, II, and III), Elementary Statistics, Intermediate Statistics, Probability, Applied Data Analysis, College Algebra, Business Calculus,*

**SERVICE***Academic***School of Public Health, University of Texas Health Sciences Center at Houston**

Faculty Council – El Paso Representative (2018- )  
 Curriculum Development – Biostatistics (2017- )  
 Teaching Quality and Efficiency – Biostatistics (2017- )  
 Collaborating and Consulting Committee - Biostatistics (2017- )  
 Infectious Diseases/Immunology Committee – Biostatistics (2017- )  
 Online MPH Committee (2017-2018)  
 Admissions Committee – El Paso Representative (2016- )

**Paul L. Foster School of Medicine, Texas Tech University Health Sciences Center, El Paso, TX****School of Medicine**

Diversity and Inclusion Committee (2014 – 2016): Chair (2015)  
 Professionalism Committee (2013 – 2016)  
 Director, MD/MPH Dual Degree Program (2009 – 10)  
 Faculty Search Committee – CoE Infectious Disease (2009-11): 5 positions  
 Faculty Search Committee – CoE Cancer (2009-11): 4 positions  
 Faculty Search Committee - Director, CoE Diabetes and Obesity (2009-10)  
 Faculty Search Committee - Biostatistics, Committee Chair (2008-09): 2 positions  
 Faculty Search Committee - Chair, Neurology (2009)  
 School of Medicine Faculty Grievance Panel (2008 – 09)  
 Interviewer – Student Application Committee (2008, 09, 10)

**Office of Research**

GSBS Committee (2011)  
 Research Committee (2010 – present)  
 Research Ad-Hoc Committee (2008 – 09)  
 Seed Grant Review Committee (2008, 09)

**Office of Faculty Services**

Mentor: Dr. Kanchan Pema – Mentee (2011)  
 Instructor - Faculty Development Course (2008 – present)

**Biomedical Sciences**

Faculty Research Incentive Plan, Ad-hoc (2012)  
 Research Seminar Coordinator (2008)  
 Webpage development Coordinator (2008)

**Medical Education**

Evaluation Committee (2009 – 15)  
 Society, Community, Individual (SCI) Curriculum Committee (2008 – 15)  
 SCI - Biostatistics Thread Director (2008 – 15)  
 Scholarly Project Organizational Committee (2008)  
 Scholarly Project, Biomedical Sciences Group Coordinator (2008 – 14)

**Texas Tech University Health Sciences Center, Lubbock, TX**

Founding Board Member, Clinical Research Institute (2010 - 13)

**School of Medicine**

Instructor and Co-creator, Faculty Development Course (2012)

**School of Public Health, University of Texas Health Sciences Center at Houston**

Appointed Member, Biostatistics Division Head Search Committee (2006- 07)

Co-Chair, Research, (2006-07)

Elected Member, Research Council, At-Large (2006- 07)

Elected Member, Faculty Council, Biostatistics (2003-06)

Appointed Member, Biostatistics Division Head Nomination Committee (2003)

Coordinator, Research Seminar, El Paso Regional Campus (2002-04)

**Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health**

Epidemiology Curriculum Committee

Student Application Review Committee

Comprehensive Exam Grading Committee

**Department of Mathematics, University of St. Thomas**

Faculty Senate, Sciences Representative

President's Invited Speaker Committee

Director, Undergraduate Research Program

Director and Inaugural Speaker, Undergraduate Mathematics Seminar

Faculty Search Committee: Department of Computer Sciences

Faculty Sponsor, Student Chapter of Mathematical Association of America

**Department of Mathematics, Texas Tech University**

President, SIAM Graduate Student Organization

Director, Annual Faculty Colloquia, SIAM Graduate Organization

### *Community*

- 2016 -** Member, MPH Community Advisory Board, UTEP
- 2012 - 13** Member, Board of Directors, El Paso Zoological Society
- 2009 - 11** Member, Paso del Norte Group
- 2008 - 09** Member, Board of Directors, The First Tee of Greater El Paso
- 2008 - 10** President, Board of Directors, First Presbyterian Christian Preschool
- 2007 - 10** Member, Board of Directors, First Presbyterian Christian Preschool
- 2005 - 07** Member, Board of Directors, El Paso Counts Organization
- 2004 – 05** Community Advisory Board, Texas Tech Health Sciences Center - El Paso
- 2004 – 05** External Development Planning Committee, YMCA, El Paso, TX
- 2002 – 04** Clinical Investigation Committee, William Beaumont Army Medical Center, El Paso, TX

### **PRESENTATIONS**

#### *Invited Presentations*

- 2018 Tarwater, PM. Biostatistics and Epidemiology in Clinical Research. *Department of Population Health, University of Texas Rio Grande Valley School of Medicine, Harlingen, TX*
- 2018 Tarwater, PM. Extension of Covariable Interaction Considerations in Clinical Research and Application in HIV Cohort Studies. *School of Public Health, Texas Tech Health Science Center, Abilene, TX*
- 2018 Tarwater, PM. Epidemiology and Biostatistics in Clinical and Basic Research. *Medical Practice Evaluation Center, Harvard School of Medicine, Boston, MA*
- 2016 Tarwater, PM. Analysis of Cohort Studies. *BUILDing SCHOLARS. UT Health SPH, El Paso, TX*
- 2013 Tarwater, PM. Basic Science Research: Non-Classical Approaches. *Veterinary Research Fellows Training, Johns Hopkins School of Medicine, Baltimore, MD.*
- 2013 Tarwater, PM. The power of patience: cohort studies. *Department of Medical Education Scholarship and Research Seminar, Texas Tech University Health Science Center, El Paso, TX*
- 2012 Tarwater, PM. (Keynote) Statistical issues in clinical research. *Research Symposium, Texas Tech University Health Science Center, Odessa, TX*
- 2011 Tarwater, PM. Basic Science Research and Statistics: Methods and Explanations. *Veterinary Research Fellows Training, Johns Hopkins School of Medicine, Baltimore, MD.*
- 2010 Tarwater, PM. Analysis of longitudinal, cohort data for infectious diseases. *Infectious Disease Institute, Accordia Global Health Foundation, Kampala, Uganda.*
- 2010 Tarwater, PM. Methods for Quality in Clinical Research. *Trauma Medicine: Grand Rounds, Paul L. Foster School of Medicine, El Paso, TX.*

- 2009 Tarwater, PM. Analysis of longitudinal, cohort data for infectious diseases. *Infectious Disease Institute, Accordia Global Health Foundation, Kampala, Uganda.*
- 2007 Tarwater, PM. Biostatistical Applications in Cohort Studies. Department of Surgery, *Harvard Medical School/Children's Hospital Boston, Boston, MA*
- 2006 Tarwater, PM. Analytic Methods for Cohort Studies: Applications to Natural History of HIV. School of Public Health Research Seminar, *Drexel University, Philadelphia, PA*
- 2006 Tarwater, PM. Analytic Methods for Estimation of Incubation Period for HIV in India. Department of Clinical Research, *University of Texas Southwestern School of Medicine, Dallas, TX*
- 2005 Tarwater, PM. Epidemiology and Natural History of HIV/AIDS: Statistical Applications. Division of Cardiology, *University of Texas Southwestern School of Medicine, Dallas, TX*
- 2003 Tarwater PM and Z Mulla. Categorizing Continuous Variables: Introduction to Recursive Partitioning. Research Seminar, *UT School of Public Health. El Paso Regional Campus (November)*
- 2003 Tarwater PM. HIV Epidemiology: Advanced Methods for Analyzing Cohort Studies. Research Seminar, *UT School of Public Health. El Paso Regional Campus (September)*
- 2001 Tarwater PM. Applied Statistical Methods in Health Science and Business – Beyond Multiple Regression. *Villa Julie College, School of Business.*
- 2000 Tarwater, PM. Nonlinear Models for Markers of Disease Progression in Longitudinal Studies. Invited Speaker Session: *Joint Statistical Meetings, Indianapolis.*
- 2000 Tarwater PM. Scientific Collaboration and Science. FOGARTY Summer Institute. *Johns Hopkins Bloomberg School of Public Health.*
- 1999 Tarwater PM. The Effects of Population Density on the Spread of Disease. Presented at *Johns Hopkins School of Hygiene and Public Health, Department of Epidemiology Seminar.*
- 1998 Tarwater PM. SEIR Type Epidemic Models with Heterogeneous Mixing. Presented at *University of Texas School of Public Health, Biometry Seminar.*
- 1996 Tarwater PM. Multilevel Modeling: An Analysis of Instructor Performance Data. Presented at the *University of Texas School of Public Health, Longitudinal Analysis Class.*
- 1995 Tarwater PM. Attacking and Supporting Inferences on Statistical Evidence. Presented at the *Legal Assistants Division of the State Bar of Texas, Division 1's Panel Discussion Daubert, et al. V. Merrell Dow Pharmaceuticals, Inc. and the Reference Manual on Scientific Evidence Persuasively, (Panel discussant)*

*Scientific Presentations (Peer-reviewed)*

- 2003 Censored observations: Teaching self-consistency equations. PM Tarwater  
Innovative Uses of Statistical Designs and Methods in the Health Sciences, Oral  
presentation, *Joint Statistical Meetings*. San Francisco (August) **\*\*Awarded  
Best Contributed Paper**
- 2002 Prolonged Treatment Interruption (TI) after Immunologic Response to HAART.  
Parish MA, Tarwater PM, Raines C, Gallant JE. Oral presentation  
(ThOrB1439), *14th International AIDS Conference*, Barcelona, Spain, (July).
- 2000 Comparison of Methods to Determine the Effectiveness of Antiretroviral  
Therapies (ART) at the Population Level in HIV-1 Incident and Prevalent  
Cohorts. Tarwater PM, Muñoz A, Mellors J, Gore ME, Margolick J, Phair J, and  
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