# Abdus S. Wahed, PhD

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# Employment

March 2015 – Present	Professor of Biostatistics (Tenured), Graduate School of Public Health (GSPH) University of Pittsburgh, Pittsburgh, PA
September 2013 – Present	Director of PhD Graduate Program, Department of Biostatistics, GSPH
September 2003 – Present	Senior Statistician Co-Investigator, Department of Epidemiology, GSPH
September 2009 – February 2015	Associate Professor (Tenured), Department of Biostatistics, GSPH
September 2003 – August 2009	Assistant Professor, Department of Biostatistics, GSPH
August 2001 - August 2003	Graduate Research and Teaching Assistant, Department of Statistics, North Carolina State University (NCSU), Raleigh, NC
July 2002 - August 2002	Graduate Student Instructor, Department of Statistics, NCSU
August 2000 - July 2001	Graduate Teaching Assistant, Department of Statistics, NCSU
August 1998 - July 2000	Graduate Teaching Assistant, Dept. of Mathematical Sciences, Ball State University, Muncie, IN
April 1998 - August 1998	Senior Poll Analyst (part-time) DEMOCRACYWATCH, Dhaka, Bangladesh
December 1997 - August 1998	Assistant House Tutor Shahidullah Hall, Dhaka University, Dhaka, Bangladesh
October 1995 - August 1998	Lecturer Department of Statistics, Dhaka University, Dhaka, Bangladesh
January 1995 - October 1995	Computer Programmer, Beximco Invest. Co. Ltd., Dhaka, Bangladesh

# Education

December 2003	Ph.D., Statistics, North Carolina State University, Raleigh, NC
	Advisor: Anastasios A. Tsiatis
	Title of Dissertation: Semiparametric Efficient Estimation of Treatment Policies
	in Two-Stage Randomization Designs in Clinical Trials
July 2000	M.A., Mathematical Statistics, Ball State University, Muncie, IN
September 1994	M.Sc., Statistics, University of Dhaka, Bangladesh
May 1992	B.Sc., Statistics (Minor: Economics and Mathematics), University of Dhaka, Bangladesh

# Honors and Awards

- 2019 Selected to represent International Biometric Society Eastern North American Region (ENAR) on the COPSS Award Committee
- 2016 Provost's Excellence in Mentoring Award, University of Pittsburgh
- 2015 Fellow, American Statistical Association

### Honors and Awards (cont. from previous page)

- 2014 Statistician of the Year Award, American Statistical Association (ASA) Pittsburgh Chapter
- 2011 GSPH Nominee for the ASPH/Pfizer Early Career in Public Health Teaching Award
- 2010 James L. Craig Award for Teaching Excellence, GSPH
- 2010 Bayesisn Pharmacokinetics and Pharmacodynamics Modeling Workshop Travel Award Statistical and Applied Mathematical Sciences Institute (SAMSI), RTP, NC
- 2007 Dynamic Treatment Regimes Workshop Travel Award, SAMSI
- 2005 Digestive Disease Week Poster of Distinction Award American Gastroenterological Association
- 2003 Best Student Paper Award, Biopharmaceutical Section, ASA
- 2003 Best Student Paper Award, Biometrics Section, ASA
- 2003 Outstanding Graduate Teaching Assistant Award, Dept. of Statistics, NCSU
- 2003 ENAR Student Travel Award, International Biometric Society
- 2002 Gertrude M. Cox Outstanding Academic Achievement Award, Dept. of Statistics, NCSU
- 2002 Phi Kappa Phi Honor Society, NCSU
- 2001 Outstanding Graduate Teaching Assistant Award, Dept. of Statistics, NCSU
- 2001 Mu Sigma Rho Statistics Honor Society, NCSU
- 2000 Dean's Excellence Award for a perfect GPA (4.0), Graduate School, Ball State University
- 1994 One of the two distinguished speakers in the Annual Student Paper Competition Department of Statistics, University of Dhaka
- 1992 Dr. Qazi Motahar Husain Outstanding Student Award, Department of Statistics, University of Dhaka
- 1991 Dr. Qazi Motahar Husain Outstanding Student Award, Department of Statistics, University of Dhaka
- 1990 Dr. Qazi Motahar Husain Outstanding Student Award, Department of Statistics, University of Dhaka

#### Publications

Methodological Work [asterisk(\*) indicates student advisee]

- Chen, L, Yavuz, I, Cheng, Y, and Wahed, AS (2020). Cumulative Incidence Regression for Dynamic Treatment Regimens. Biostatistics, 2020 Apr 1; 21(2):e113-e130. doi: 10.1093/biostatistics/kxy062.
- \*Gao, X, Dong, X, Kang, C, and Wahed, AS (2019). Inference on mean quality-adjusted lifetime using joint models for continuous quality of life process and time to event. Journal of Statistical Research Vol. 53, No. 2, pp. 165-189.
- \*Topp, AS, \*Johnson, GS, and Wahed, AS(2018). Variants of double robust estimators for twostage dynamic treatment regimes. Journal of Statistical Research. Vol. 52, No. 1, pp. 91-113.
- \*Jiang, Z, Liu, Y, Wahed, AS, and Molenberghs, G (2018). Joint modeling of multiple ordinal adherence outcomes via generalized estimating equations with flexible correlation structure. Statistics in medicine 37 (6), 983-995.
- \*Adeniji, AK, Hsu, JY, Wahed, AS (2018). Estimation of discrete survival function for errorprone diagnostic tests. Pharmaceutical statistics 17 (1), 74-89.
- 6. Yavuz, I, Cheng, Y, and Wahed, AS (2018). Estimating the Cumulative Incidence Function of Dynamic Treatment Regimes. Journal of Royal Statistical Society, Series A. 181 (1), 85-106.
- \*Buhule, OD, Wahed, AS, and Youk, AO (2017). Bayesian hierarchical joint modeling of repeatedly measured continuous and ordinal markers of disease severity: Application to Ugandan diabetes data. Statistics in medicine 36 (29), 4677-4691.
- 8. \*Hsu JY, Wahed AS (2017). Weighted generalized estimating equations for response-adaptive treatment regimes in two-stage longitudinal studies. Journal of Statistical Research 51(1): 79-100

- Xu, Y, Mueller, P, Wahed, AS, and Thall, PF. (2016). Bayesian Nonparametric Estimation for Dynamic Treatment Regimes with Sequential Transition Times; J. of the Am. Stat. Assoc. 111 (515), 921-950.
- \*Sampene, E. and Wahed, AS (2016). A Relatively Simple Efficient Estimator for Relative Risk in Case-Cohort Studies. Journal of Statistical Research 2016, Vol. 48-50, No. 2, pp. 37-54
- \*Marron, MM, and Wahed, AS (2016). Teaching Missing Data Methodology to Undergraduates Using a Group-Based Project Within a Six-Week Summer Program. Journal of Statistics Education 24 (1), 8-15.
- Jaman, A, Latif, AHMM, Bari, W, and Wahed, AS (2016). A determinant-based criterion for working correlation structure selection in generalized estimating equations. Statistics in Medicine, Volume 35, Issue 11, 20 May 2016, 1819-1833.
- \*Ogbagaber, SB, Karp, J, and Wahed, AS (2016). Design of sequentially randomized trials for testing adaptive treatment strategies. Statistics in Medicine. Volume 35, Issue 6, pp 840-858.
- \*Dong, X, Kong, L, and Wahed, AS (2015). Accelerated failure time model for case-cohort design with longitudinal covariates subject to measurement error and detection limits. Statistics in Medicine, Volume 35, Issue 8 pp 1327-1339.
- 15. \*Tang, X, and Wahed, AS (2015). Pattern-mixture-type Estimation and Testing of Neuroblastoma Treatment Regimes. Journal of Statistical Theory and Practice Vol 9, Issue 2, pp 266-287.
- Huang, X, Ning, J, Wahed, AS (2014). Optimization of individualized dynamic treatment regimes for recurrent diseases. Statistics in medicine 33.14 (2014): 2363-2378.
- 17. \*Kidwell, K, Ko, JH, and Wahed, AS (2014). Inference for the median residual life function in sequential multiple assignment randomized trials. Statistics in medicine 33.9 (2014): 1503-1513.
- \*Adeniji, A, Belle, SH, and Wahed, AS (2014). Incorporating diagnostic accuracy into the estimation of discrete survival function. Journal of Applied Statistics 41.1 (2014): 60-72. Volume 41, Issue 1, 2014, PP 60-72
- \*Tang, X, and Wahed, AS (2014). Cumulative Hazard Ratio Estimation for Treatment Regimes in Sequentially Randomized Clinical Trials. Statistics in Biosciences, 10.1007/s12561-013-9089-6
- \*Kidwell, KM and Wahed, AS (2013). Weighted Log-rank Statistic to Compare Shared-Path Adaptive Treatment Strategies. Biostatistics 2013 Apr;14(2):299-312.
- Wahed, AS, Thall, PF(2013). Evaluating Joint Effects of Induction-Salvage Treatment Regimes on Overall Survival in Acute Leukemia. Journal of Royal Statistical Society, Series C. Appl. Statist. (2013) 62, Part 1, pp. 67-83
- \*Miyahara, S, and Wahed, AS (2012). Assessing the Effect of Treatment Regimes on Longitudinal Outcome Data: Application to REVAMP Study of Depression. Journal of Statistical Research. Vol. 46 (2), 233-254
- \*Ko, JH, and Wahed, AS (2012). Up-front vs. Sequential Randomizations for Inference on Adaptive Treatment Strategies. Statistics in Medicine, Volume 31, Issue 9, pages 812-830
- \*Tang, X, and Wahed, AS (2011). Comparison of Treatment Regimes with Adjustment for Auxiliary Variables. Journal of Applied Statistics, 2011; 38: 2925-2938.
- 25. Wahed, AS (2011). On the Equivalence of Inverse-Probability-of-Censoring-Weighted and Kaplan-Meier Estimators. Invited Article, Journal of Applied Statistical Sciences, Volume 18, Issue 4.
- \*Miyahara, S, and Wahed, AS (2010). Weighted Kaplan-Meier Estimators for Two-Stage Treatment Regimes. Statistics in Medicine, 2010; 29: 2581-2591.
- 27. Wahed, AS(2010). Inference for Two-Stage Adaptive Treatment Strategies Using Mixture Distributions. Journal of Royal Statistical Society Series C (Applied Statistics) Appl. Statist. (2010) 59.
- \*Feng, W and Wahed, AS (2009). Sample Size for Two-Stage Studies with Maintenance Therapy. Statistics in Medicine, 2009; 28: 2028-2041
- 29. Wahed, AS ,Luong, T, and Jeong, J-H (2009). A new generalization of Weibull distribution with application to a breast cancer data set. Statistics in Medicine, 2009; 28: 2077-2094

- Wahed, AS (2009). Estimation of survival quantiles in two-stage randomization designs, Journal of Statistical Planning and Inference 139 (2009) 2064-2075.
- \*Feng, W and Wahed, AS (2008). A supremum log rank test for comparing adaptive treatment strategies and corresponding sample size formula, Biometrika. 95, 3, pp. 695-707.
- Ali, MM, Woo, J, Pal, M and Wahed, AS (2008). Some Skew-Symmetric Double Inverted Distributions. International Journal of Statistical Sciences. Vol. 7, pp. 1-12.
- Wahed, AS (2007). The family of curvi-triangular distributions. International Journal of Statistical Sciences, Vol 6, pp 7-18.
- Wahed, AS and Tsiatis, AA (2006). Semi-parametric Efficient Estimation of The Survival Distribution for Treatment Policies in Two-Stage Randomization Designs in Clinical Trials with Censored Data. Biometrika Vol 93: pp. 147-161.
- Wahed, AS (2006). Bayesian Inference Using Burr Model Under Asymmetric Loss Function: An Application to Carcinoma Survival Data. Journal of Statistical Research, 2006, Vol. 40, No. 1, pp. 45-57.
- Wahed, AS. (2006). A General Method of Constructing Extended Families of Distributions from an Existing Continuous Class. Journal of Probability and Statistical Science 4(2), 165-177.
- \*Feng, W and Wahed, AS (2006). A Review of Inferential Procedures for Survival Analysis in Two-Stage Randomization Designs. Far East Journal of Theoretical Statistics Vol. 19 (1), pp 117-139.
- Wahed, AS and Tsiatis, A. A.(2004). Optimal estimator for the survival distribution and related quantities for treatment policies in two-stage randomization designs in clinical trials, Biometrics, Vol. 60, No. 1. pp 124-133.
- Wahed, AS and Ali, MM (2001). The Skew-Logistic Distribution. Journal of Statistical Research, Vol. 35, No,2, pp. 71-80.
- 40. Wahed, AS and Uddin, B (1998). Bayes Estimation Under Asymmetric Loss. Dhaka University Journal of Science, Vol. 46.

Interdisciplinary Work

- Hinerman, A. S., Barinas-Mitchell, E. J., El Khoudary, S. R., Courcoulas, A. P., Wahed, A. S., & King, W. C. (2020). Change in predicted 10-year and lifetime cardiovascular disease risk after Roux-en-Y gastric bypass. To appear, Surgery for Obesity and Related Diseases.
- 42. Brahmania, M., Liu, S., Wahed, AS., Yim, C., Hansen, B. E., Khalili, M., ... & Wong, D. (2020). Alcohol, tobacco and coffee consumption and liver disease severity among individuals with Chronic Hepatitis B infection in North America. To appear, Annals of Hepatology.
- 43. Evon, DM, Lin, H-HS, Khalili, M, Fontana, RJ, Yim, C, Wahed, AS, Fried, MW, Hoofnagle, JH, for the Hepatitis B Research Network (HBRN) (2020). Patient-reported outcomes in a large North American cohort living with chronic hepatitis B virus: a cross-sectional analysis. Aliment Pharmacol Ther. 2020; 51: 457–468. https://doi.org/10.1111/apt.15618
- 44. Sterling, Richard K; King, Wendy C; Wahed, AS; Kleiner, David E; Khalili, Mandana; Sulkowski, Mark; Chung, Raymond T; Jain, Mamta K; Lisker-Melman, Mauricio; Wong, David K (2020). Evaluating non-invasive markers to identify advanced fibrosis by liver biopsy in HBV/HIV coinfected adults. Hepatology 71 (2), 411-421.
- 45. Navarro, Victor J; Belle, Steven H; D'Amato, Massimo; Adfhal, Nezam; Brunt, Elizabeth M; Fried, Michael W; Reddy, K Rajender; Wahed, AS; Harrison, Stephen; Silymarin in NASH and C Hepatitis (SyNCH) Study Group (2019). Silymarin in non-cirrhotics with non-alcoholic steatohepatitis: A randomized, double-blind, placebo controlled trial. PloS one 14 (9) e0221683.
- 46. Zhou, Kali, Wahed, AS, Cooper, Stewart, Di Bisceglie, Adrian M, Fontana, Robert J, Ghany, Marc G, Khalili, Mandana, Lok, Anna S, Perrillo, Robert, Lee, William M, Lau, DT, Sterling, R, Janssen, HL, and Terrault, N (2019). Phase Transition Is Infrequent Among North American Adults With e-Antigen-Negative Chronic Hepatitis B and Low-Level Viremia. American Journal of Gastroenterology. 114 (11), 1753-1763.

- 47. Friedman, Allon N; Wang, Junyao; Wahed, AS; Docherty, Neil G; Fennern, Erin; Pomp, Alfons; Purnell, Jonathan Q; le Roux, Carel W; Wolfe, Bruce (2019). The Association Between Kidney Disease and Diabetes Remission in Bariatric Surgery Patients With Type 2 Diabetes. American Journal of Kidney Diseases. 74 (6), 761-770.
- Liu, Stephen J; Mair, Christina; Songer, Thomas J; Krans, Elizabeth E; Wahed, A; Talbott, Evelyn (2019). Opioid-related hospitalizations in Pennsylvania: a latent class analysis. Drug and alcohol dependence. 202 pp 185-190.
- 49. Karp, Jordan F; Zhang, Jun; Wahed, Abdus S; Anderson, Stewart; Dew, Mary Amanda; Fitzgerald, G Kelley; Weiner, Debra K; Albert, Steve; Gildengers, Ari; Butters, Meryl (2019). Improving Patient Reported Outcomes and Preventing Depression and Anxiety in Older Adults With Knee Osteoarthritis: Results of a Sequenced Multiple Assignment Randomized Trial (SMART) Study. The American Journal of Geriatric Psychiatry, 27 (10), 1035-1045.
- 50. Chang, Kyong-Mi; Traum, Daniel; Park, Jang-June; Ho, Suzanne; Ojiro, Keisuke; Wong, David K; Wahed, Abdus S; Terrault, Norah A; Khalili, Mandana; Sterling, Richard K (2019). Distinct phenotype and function of circulating V?1+ and V?2+ ??T-cells in acute and chronic hepatitis B. PLoS Pathogens.15 (4) e1007715
- 51. King, Wendy C; Hinerman, Amanda S; Belle, Steven H; Wahed, Abdus S; Courcoulas, Anita P (2018). Comparison of the performance of common measures of weight regain after bariatric surgery for association with clinical outcomes. Journal of the American Medical Association. 320 (15) 1560-1569.
- 52. Field, Alison E; Inge, Thomas H; Belle, Steven H; Johnson, Geoffrey S; Wahed, Abdus S; Pories, Walter J; Spaniolas, Konstantinos; Mitchell, James E; Pomp, Alfons; Dakin, Gregory F (2018). Association of Obesity Subtypes in the Longitudinal Assessment of Bariatric Surgery Study and 3-Year Postoperative Weight Change. Obesity 26 (12) 1931-1937.
- 53. Sterling, Richard K., Wahed, Abdus S., King, Wendy C., Kleiner, David E., Khalili, Mandana, Sulkowski, Mark, Chung, Raymond T., Jain, Mamta K., Lisker-Melman, Mauricio, Wong, David K., Ghany, Marc G., for the HIV-HBV Cohort Study of the Hepatitis B Research Network (2018). Spectrum of liver disease in hepatitis B virus (HBV) patients co-infected with human immunodeficiency virus (HIV): Results of the HBV-HIV cohort study. American Journal of Gastroenterology: May 2019 Volume 114 Issue 5 p 746-757.
- 54. O'Rourke, RW, Johnson, GH, Purnell, JQ, Courcoulas, AP, Dakin, GF, Garcia, L, Hinojosa, M, Mitchell, JM, Pomp, A, Pories, WJ, Spaniolas, K, Flum, DR, Wahed, AS, and Wolfe, BM (2019). Serum biomarkers of inflammation and adiposity in the LABS cohort: associations with metabolic disease and surgical outcomes. International Journal of Obesity 43 (2), 285.
- 55. Karp, JF, Gao, X, Wahed, AS, Morse, JQ, Rollman, BL, Weiner, DK, Reynolds, CF (2018). Effect of Problem Solving Therapy Versus Supportive Management in Older Adults with Low Back Pain and Depression While on Antidepressant Pharmacotherapy. The American Journal of Geriatric Psychiatry, 26 (7), 765-777.
- 56. Purnell, JQ, Johnson, GS, Wahed, AS, Dalla Man, C, Piccinini, F, Cobelli, C, Prigeon, RL, Good-paster, BH, Kelley, DE, Staten, MA, Foster-Schubert, KE, Cummings, DE, Flum, DR, Courcoulas, AP, Havel, PJ, Wolfe, BM (2018). Prospective evaluation of insulin and incretin dynamics in obese adults with and without diabetes for 2 years after Roux-en-Y gastric bypass. Diabetologia. 2018 May;61(5):1142-1154. doi: 10.1007/s00125-018-4553-y. Epub 2018 Feb 10.
- 57. Friedman, AN Wahed, AS, Wang, J, Courcoulas, AP, Dakin, G, Hinojosa, MW, Kimmel, PL, Mitchell, JE, Pomp, A, Pories, WJ, Purnell, JQ, le Roux, C, Spaniolas, K, Steffen, K, Thirlby, R, Wolfe, B (2018). Effect of Bariatric Surgery on CKD Risk. J Am Soc Nephrol. April 2018 29: 1289-1300.
- Jakicic, JM, Davis, KK, Rogers, RJ, King, WC, Marcus, MD, Helsel, D, Rickman, AD, Wahed, AS, and Belle, SH (2016). Effect of Wearable Technology Combined with a Lifestyle Intervention on Long-Term Weight Loss: the IDEA Randomized Clinical Trial. JAMA. 2016;316(11):1161-1171. doi:10.1001/jama.2016.12858

- Hassan, MA, Kim, WR, Li, R, Smith, CL, Fried, MW, Sterling, RK, Ghany, MG, Wahed, AS, Ganova-Raeva, LM, Roberts, LR, Lok, AS for the Hepatitis B Research Network (2016). Characteristics of US-born versus Foreign-born Americans of African Descent with Chronic Hepatitis B. American journal of epidemiology 186 (3), 356-366.
- Purnell, JQ, Selzer, F, Wahed, AS, Pender, J, Pories, W, Pomp, A, Dakin, G, Mitchell, J, Garcia, L, Staten, MA (2016). Type 2 Diabetes Remission Rates After Laparoscopic Gastric Bypass and Gastric Banding: Results of the Longitudinal Assessment of Bariatric Surgery Study. Diabetes care 39 (7), 1101-1107.
- 61. Park JJ, Wong DK, Wahed, AS, Lee WM, Feld JJ, Terrault N, Khalili M, Sterling RK, Kowd-ley KV, Bzowej N, Lau DT, Kim WR, Smith C, Carithers RL, Torrey KW, Keith JW, Levine DL, Traum D, Ho S, Valiga ME, Johnson GS, Doo E, Lok AS, Chang KM; Hepatitis B Research Network. Hepatitis B Virus-Specific and Global T-Cell Dysfunction in Chronic Hepatitis B. Gastroenterology. 2016 Mar;150(3):684-695.e5. doi: 10.1053/j.gastro.2015.11.050. Epub 2015 Dec 10. PMID: 26684441
- 62. Evon DM, Wahed, AS, Johnson G, Khalili M, Lisker-Melman M, Fontana RJ, Sarkar S, Reeve BB, Hoofnagle JH. Fatigue in Patients with Chronic Hepatitis B Living in North America: Results from the Hepatitis B Research Network (HBRN).Dig Dis Sci. 2016 Apr;61(4):1186-96. doi: 10.1007/s10620-015-4006-0. Epub 2016 Jan 30.
- 63. Karp JK, Dew MA, Wahed, AS, Fitzgerald K, Bolon CA, Weiner DK, Morse JQ, Albert SM, Butters MA, Gildengers AG, Reynolds CF III: Challenges and Solutions for Depression Prevention Research: Methodology for a Depression Prevention Trial for Older Adults with Knee Arthritis and Emotional Distress. Am J Geriatr Psychiatry. 2015 Nov 17. pii: S1064-7481(15)00277-8. doi: 10.1016/j.jagp.2015.10.012. [Epub ahead of print]
- 64. Jakicic JM, King WC, Marcus MD, Davis KK, Helsel D, Rickman AD, Gibbs BB, Rogers RJ, Wahed, A, Belle SH. Short-Term Weight Loss with Diet and Physical Activity in Young Adults: the IDEA Study. Obesity (Silver Spring). 2015 Dec;23(12):2385-97. doi: 10.1002/oby.21241. Epub 2015 Nov 5. PMID: 26538477.
- Gibbs BB, King WC, Davis KK, Rickman AD, Rogers RJ, Wahed A, Belle SH, Jakicic, JM. Objective vs. Self-report Sedentary Behavior in Overweight and Obese Young Adults (2015). Journal of Physical Activity and Health, 2015, 12, 1551-1557. http://dx.doi.org/10.1123/jpah.2014-0278.
- 66. Jakicic JM, King WC, Gibbs BB, Rogers RJ, Rickman AD, Davis KK, Wahed, A, Belle SH. Objective versus Self-Reported Physical Activity in Overweight and Obese Young Adults. J Phys Act Health. 2015 Oct;12(10):1394-400. doi: 10.1123/jpah.2014-0277. Epub 2015 Jan 19. PMID: 25599334.
- Al-Khafaji, A, Elder, M, Lebovitz, DJ, Murugan, R, Souter, M, Stuart, S, Wahed, AS, Keebler, B, Dils, Mitchell, S, Shutterly, K, Wilkerson, D, Pearse, D, Kellum, JA(2015). Protocolized fluid therapy in brain-dead donors: The multi-center randomized MOnIToR trial. Intensive Care Med. 2015 Mar;41(3):418-26. doi: 10.1007/s00134-014-3621-0. Epub 2015 Jan 13. PMID: 25583616.
- Smith, MD, Patterson, E, and Wahed, AS, et al.(2014). Technical Factors Associated with Anastomotic Leak after RYGB. Surg Obes Relat Dis. 2015 Mar-Apr;11(2):313-20. doi: 10.1016/j.soard.2014.05.036. Epub 2014 Nov 8.PMID: 25595919.
- Koenig, AM, Butters, MA, Begley, A, Ogbagaber, S, Wahed, AS, and Reynolds, CF (2014). Response to Antidepressant Medications in Late-Life Depression Across the Spectrum of Cognitive Functioning. Journal of Clinical Psychiatry. 2014 Feb;75(2):e100-7. doi: 10.4088/JCP.13m08442
- 70. Al-Khafaji A, Murugan R, Wahed AS, et al (2013). Monitoring Organ Donors to Improve Transplantation Results (MOnIToR) trial methodology. Crit Care Resusc. 2013 Sep;15(3):234-40
- 71. Mason, NS, Lopresti, BJ, Ruszkiewicz, J, Dong, X, Joyce, S, Leef, G, Sen, M, Wahed, AS, Mathis, CA, Grandis, JR, Thomas, SM(2012). Utility of 3'-[18F]fluoro-3'-deoxythymidine as a PET tracer to monitor response to gene therapy in a xenograft model of head and neck carcinoma. Am J Nucl Med Mol Imaging. 2013; 3(1): 16-31

- 72. Smith, MD, Patterson, E, Wahed, AS, et al. (2012). Can Technical Factors Explain the Volume-Outcome Relationship in Gastric Bypass Surgery? Surg Obes Relat Dis. 2012 Oct 30. pii: S1550-7289(12)00391-7. doi: 10.1016/j.soard.2012.09.013.
- 73. Fried, MW, Navaro, VJ, Afdhal, N, Belle, SH, Wahed, AS, et. al., Effect of Silymarin (Milk Thistle) on Liver Disease in Patients With Chronic Hepatitis C Unsuccessfully Treated With Interferon Therapy A Randomized Controlled Trial. JAMA. 2012;308(3):274-282
- 74. Sarkar, S, Jiang, Z, Evon, DM, Wahed, AS, and Hoofnagle, JH. (2012) Fatigue Before, During and After Antiviral Therapy of Chronic Hepatitis C: Results from the Virahep-C Study, J Hepatol. 2012 Nov;57(5):946-52. doi: 10.1016/j.jhep.2012.06.030
- Greenstein, AJ, Wahed, AS, Adeniji, A, et al. (2012). Prevalence of Adverse Intra-operative Events during Obesity Surgery and their Sequelae. J Am Coll Surg. 2012 Aug; 215(2):271-7.e3. doi: 10.1016/j.jamcollsurg.2012.03.008
- 76. Reddy KR, Belle, SH, Fried, MW, Afdhal, N, Navarro, VJ, Hawke, RL, Wahed, AS, Doo, E, Meyers, CM. for the SyNCH Study Group (2011). Rationale, Challenges and Participants in a Phase II Trial of a Botanical Product for Chronic Hepatitis C. Clinical Trials, Vol 9 (1), 102-112
- 77. Schrieber, SJ, Hawke, RL, Wen, Z, Smith, PC, Reddy, KR, Wahed AS, Belle, SH, Afdhal, NH, Navarro, VJ, Meyers, CM, Doo, E, Fried, MW for The SyNCH Trial Group (2011). Differences in the Disposition of Silymarin Between Patients with Non-Alcoholic Fatty Liver Disease and Chronic Hepatitis C. Drug Metab. Disp. 39 (12) pp 2182-2190.
- Murugan, R, Sileanu, F, Wahed, AS, et al. (2011). Sex Difference in Deceased Donor Organ Transplantation. Transplantation, 2011 Dec 15;92(11):1278-84
- Smith, MD, Patterson, E, and Wahed, AS et al. (2011). 30-day Mortality after Bariatric Surgery: Independently Adjudicated Causes of Death in the Longitudinal Assessment of Bariatric Surgery. Obesity Surgery; 21 (11), pp 1687-1692
- 80. Ramcharran D, Wahed, AS, Conjeevaram HS, Evans RW, Wang T, Belle SH, Yee LJ (2011). Serum lipids and their associations with viral levels and liver disease severity in a treatment-naive chronic hepatitis C type 1-infected cohort. J Viral Hepat. 2011 Apr;18(4):e144-e152
- 81. Ramcharran, D, Wahed, AS, Conjeevaram, HS et al. (2010). Associations between serum lipids and hepatitis C antiviral treatment efficacy. Hepatology. 2010 Sep;52(3):854-63.
- Conjeevaram, HS, Wahed, AS, Afdhal, N, et al. (2010). Changes in insulin sensitivity and body weight during and after peginterferon and ribavirin therapy of chronic hepatitis C. Gastroenterology. 2011 Feb;140(2):469-77.
- 83. Donlin MJ, Cannon NA, Aurora R, Li J, Wahed, AS, et al. (2010) Contribution of Genome-Wide HCV Genetic Differences to Outcome of Interferon-Based Therapy in Caucasian American and African American Patients. PLoS ONE 5(2): e9032.
- 84. Smith, M.D., Patterson, E., Wahed, AS, Belle, S.H., Bessler, M., Courcoulas, A.P., Flum, D., Mitchell, J.E., Pomp, A., Pories, W.J., Wolfe, B (2010). Response to Livingston, EH Letter to the Editor regarding: There is an Inverse Relationship between Surgeon Volume and Adverse Outcomes after RYGB in the Longitudinal Assessment of Bariatric Surgery (LABS) Study, Surg Obes Relat Dis. 2010 Jul-Aug;6(4):463.
- 85. Inabnet WB, Belle, SH, Bessler, M, Courcoulas, A, Dellinger, P, Garcia, L, Mitchell, J, Oelschlager, B, O'Rourke, R, Pender, J, Pomp, A, Pories, W, Ramanathan, R, Wahed, AS, Wolfe, B (2010). A comparison of 30 day outcomes after non-lap Band primary and revisional bariatric surgical procedures from the Longitudinal Assessment of Bariatric Surgery (LABS) study. Surg Obes Relat Dis. 2010 Jan-Feb;6(1):22-30.
- 86. Longitudinal Assessment of Bariatric Surgery (LABS) Consortium (2009). Reply to the letters from Vetter, ML, et al. (2009) and Bhattacharyya, S, et al. (2009) [In response to Peri-operative Safety in the Longitudinal Assessment of Bariatric Surgery. New England Journal of Medicine. Volume 361:445-454 July 30, 2009 Number 5]. N Engl J Med. 2009 Nov 5;361(19): 1911. (Corporate authorship)

- Longitudinal Assessment of Bariatric Surgery (LABS) Consortium. (2009). Peri-operative Safety in the Longitudinal Assessment of Bariatric Surgery. New England Journal of Medicine. Volume 361:445-454 July 30, 2009 Number 5. (Corporate authorship)
- Hoofnagle, JH, Wahed, AS, and Belle, SH (2009). Reply to Antonucci et al. (in response to Hoofnagle, JH, Wahed, AS, et al. (2009) below). Journal of Infectious Diseases 2009; 200:1485.
- Smith, MD, Patterson, E, Belle, SH, Bessler, M, Courcoulas, AP, Flum, D, Halpin, V, Mitchell, JE, Pomp, A, Pories, W, Wahed, AS Wolfe, B(2009). The Relationship between Surgeon Volume and Adverse Outcomes after RYGB in the Longitudinal Assessment of Bariatric Surgery (LABS) Study. Surg Obes Relat Dis. 2010 Mar 4;6(2):118-25.
- Hawke, R, ..., Wahed, AS, et al. (2009). Silymarin Ascending Multiple Oral Dosing Phase I Study in Non-Cirrhotic Patients with Chronic Hepatitis C. The Journal of Clinical Pharmacology 50 (4), 434-449
- 91. Dove, LM, Rosen, RC, Ramacharran, D, Wahed, AS et al. (2009). Decline in Male Sexual Desire, Function, and Satisfaction During and After Antiviral Therapy for Chronic Hepatitis C. Gastroenterology, 137 (3); 873-884.
- Iuliano, D, Feingold, E, Wahed, AS et al. (2009). Host Genetics, Steatosis and Insulin Resistance among African Americans and Caucasian Americans with Hepatitis C Virus Genotype-1 Infection. Intervirology 2009;52:49-56
- 93. Lopez, OL, Becker, JT, Wahed, AS, Saxton, J, Sweet, RA, Wolk, D, Klunk, W, and DeKosky, ST (2009). Concomitant use of memantine and cholinesterase inhibition in the treatment of Alzheimer's disease. J Neurol Neurosurg Psychiatry. 2009 Mar 29.
- 94. Murugan, R, Venkataraman, R, Wahed, AS et al. (2009). Preload Responsiveness is associated with Increased IL- 6 and Lower Organ Yield from Cadaveric Donors. Critical care medicine 37(8):2387-93, 2009
- 95. Yee, LJ, Im, K, Wahed, AS et al. for the Virahep-C Study Group (2009). Polymorphism in the human MHC and the early viral decline during treatment of chronic hepatitis C, Antimicrob. Agents Chemother. Feb 2009, p 615-621.
- 96. Ling, B, Schoen, RE, Trauth, JM, Wahed, AS, et al. (2009). Physicians Encouraging Colorectal Screening (PECS): A randomized controlled trial of enhanced office and patient management on compliance with colorectal cancer screening, Arch Intern Med. 2009;169(1):47-55
- 97. Hoofnagle, JH, Wahed, AS, Brown, RS, Howell, CD, Belle, SH for the Virahep-C Study Group (2009). Early Changes in Hepatitis C Viral Levels in Response to Peginterferon and Ribavirin in Patients with Chronic Hepatitis C, Genotype 1 Infection, The Journal of Infectious Diseases 2009; 199:1112-20.
- 98. Murugan, R, Venkataraman, R, Wahed, AS, Elder, M, Hergenroeder, G, Carter, M, Madden, NJ, Powner, D, Kellum, JA On behalf of the HIDonOR Study Investigators (2008). Increased plasma IL-6 in donors is associated with lower recipient hospital-free survival after cadaveric organ transplantation. Crit Care Med 2008; 36:1810-1816.
- 99. Golden-Mason, L, Klarquist, J, Wahed, AS, and Rosen, HR for the Virahep-C Study Group (2008). PD-1 Expression is Increased on Immunocytes in Chronic HCV and Predicts Failure of Response to Antiviral Therapy: Race-Dependent Differences. J. Immunol. 180: 3637-3641.
- 100. Dowling, TC, Wahed, AS, Paul, M, Terrault, NA, Taylor, M, Jeffers, L, Hoofnagle, JH, and Howell, CD for the Virahep-C Study Group (2008). Peginterferon Pharmacokinetics in African American and Caucacian American Patients with Hepatitis C Virus Genotype 1 Infection, Clinical Gastroenterology and Hepatology 2008;6:575-583.
- 101. Donlin, MJ, Cannon, NA, Yao, E, Li, J, Wahed, AS, Taylor, MW, Belle, S, Di Bisceglie, AM, Aurora, R, and Tavis, JE for the Virahep-C Study Group (2007). Pretreatment Sequence Diversity Differences in the Full-Length Hepatitis C Virus Open Reading Frame Correlate with Early Response to Therapy. J. Virol. 2007 81: 8211-8224.
- 102. Brodsky LI, Wahed AS, Li J, Tavis JE, Tsukahara T, et al (2007) A Novel Unsupervised Method to Identify Genes Important in the Anti-viral Response: Application to Interferon/Ribavirin in

Hepatitis C Patients. PLoS ONE 1(1): e584. doi:10.1371/journal.pone.0000584

- 103. Smith, SR, Wahed, AS, Kelley, SS, Conjeevaram, HS, Robuck, PR, Fried, MR for the Virahep-C Study Group (2007). Assessing the Validity of Self-Reported Medication Adherence in HCV Treatment. Ann Pharmacother.2007; 41: 1116-1123.
- 104. Yee, LJ, Tang, Y, Kleiner, DE, Wang, D, Im, K, Wahed, AS, Tong, X, Rhodes, S, Su, X, Whelan, MR, Ghany, MG, Borg, B, Fontana, RJ, Liang, J and Yang, H for the Virahep-C Study Group (2007). Mxyovirus-1 (Mx1) and protein kinase (PKR) haplotypes and fibrosis in chronic HCV, Hepatology, 2007, 46 (1): 74-83.
- 105. Conjeevaram HS, Kleiner DE, Everhart JE, Hoofnagle JH, Zacks S, Afdhal NH, Wahed AS for the Virahep-C Study Group (2007). Race, Insulin Resistance and Hepatic Steatosis in chronic hepatitis C. Hepatology. 2007 Jan;45(1):80-7

Other Publications

- 106. Wahed, AS (2010). Unbiased Estimator. Encyclopedia of Research Design. Edited by Neil J. Salkind, Sage Publications, Newbury Park, CA.
- 107. Wahed, AS (2010). Adaptive Designs in Clinical Trials. Encyclopedia of Research Design. Edited by Neil J. Salkind, Sage Publications, Newbury Park, CA.
- 108. Wahed, AS and Miyahara, S. (2010). Group Sequential Designs in Clinical Trials. Encyclopedia of Research Design. Edited by Neil J. Salkind, Sage Publications, Newbury Park, CA.
- Wahed, AS and Tang, X. (2010). Analysis of Variance. Encyclopedia of Research Design. Edited by Neil J. Salkind, Sage Publications, Newbury Park, CA.
- Wahed, AS and Hsu, J. (2010). Cause-and-Effect. Encyclopedia of Research Design. Edited by Neil J. Salkind, Sage Publications, Newbury Park, CA.
- 111. Wahed, AS. (2006) "Censored Data". Entry in Encyclopedia of Measurement and Statistics. Sage Publications, , Newbury Park, CA.
- 112. Wahed, AS and Uddin B (1997). Empirical Bayes Estimator of Burr Parameters Based on the EM Algorithm. Statistics Preprint Series, School of Mathematics, University of New South Wales, Report S97-3, May 1997.

#### Presentations

Invited Presentations

- 1. December 2019. Modified Parametric Regression-Based Q-Learning for Optimal Treatment Regimes for Leukemia. Department of Biostatistics, Virginia Commonwealth University, Richmond, VA.
- May 2019. Optimizing Dynamic Treatment Regimes Based on Quality-Adjusted Survival Lifetime Data Science Conference, Pittsburgh, PA.
- 3. May 2019. SMART trials for Optimal Dynamic Treatment Regimes for Leukemia Adaptive Design Scientific Working Group Webinar (attended by more than 100 unique members).
- 4. April 2019. Parametric Regression Models for Optimal Treatment Regimes for Leukemia. Division of Public Health Sciences, Fred Hutchinson Cancer Center, Seattle, WA.
- April 2019. Accelerated Failure Time Models for Individualizing Treatment Regimes for Leukemia. Department of Biostatistics, Epidemiology, and Informatics, University of Pennsylvania, Philadelphia, PA.
- 6. November 2018. Statistical Analysis of SMART Studies via Artificial Randomization. Statistical and Computational Challenges in Precision Medicine Workshop, Institute of Mathematics and Its Applications, University of Minnesota, Minneapolis, MN.
- 7. September 2018. Inference about dynamic treatment regimes optimizing response to treatments Department of Biostatistics and Department of Biomedical Informatics Mini-Retreat, GSPH, Pittsburgh, PA.

- 8. August 2018. Discovering the Future: Individualized Treatment, Data Science, and Beyond Department of Biostatistics, University of Minnesota, Minneapolis, MN.
- 9. December 2017. Estimating Cumulative Incidence Function of Dynamic Treatment Regimes. International Indian Statistical Association Annual Conference 2017, Hyderabad, India.
- 10. December 2017. Professional Development for Graduate Students. Invited Seminar, Department of Applied Statistics, Institute of Statistical Research and Training, University of Dhaka, Dhaka, Bangladesh.
- 11. December 2017. Missing Data and Causal Inference Using Inverse Weighting. Invited Seminar, Department of Statistics, University of Dhaka, Dhaka, Bangladesh.
- 12. May, 2017. Statistical Methods for Dynamic Treatment Regimens and Sequential Multiple Assignment Randomized Trial American Statistical Association Biopharmaceutical Section Webinar
- 13. April, 2017. Statistical Analysis of SMART Studies via Artificial Randomization Department of Biostatistics and Computational Biology, University of Rochester, Rochester, NY
- April, 2017. Inference for Dynamic Treatment Regimes from SMART Studies via Artificial Randomization Department of Biostatistics and Biomedical Informatics, University of Wisconsin-Madison, Madison, WI
- 15. January, 2017. Inference for Dynamic Treatment Regimes in the Presence of Drop-Out Department of Biostatistics, Graduate School of Public Health, University of Pittsburgh
- 16. November 2016. Estimating the Cumulative Incidence Function of Dynamic Treatment Regimes. Department of Applied Statistics, University of Dhaka, Dhaka, Bangladesh.
- 17. November 2016. Inference for Dynamic Treatment Regimes in the Presence of Drop-Out. Invited Seminar, Department of Statistics, University of Dhaka, Dhaka, Bangladesh.
- 18. November 2016. Professionalism and Career Development. Invited Seminar, Department of Statistics, University of Dhaka, Dhaka, Bangladesh.
- November 2016. Missing Data in Longitudinal Studies. Three-hour Workshop at the International Conference on Repeated Measures organized by the Department of Applied Statistics, East West University, Dhaka, Bangladesh.
- 20. November 2016. Bayesian Hierarchical Joint Modeling of Repeatedly Measured Mixed Biomarkers of Disease Severity and Time-to-Event. Plenary talk at the International Conference on Repeated Measures organized by the Department of Applied Statistics, East West University, Dhaka, Bangladesh.
- 21. October 2016. Invited talk at the 75th Anniversary of North Carolina State University (NCSU) Statistics Department. Department of Statistics, NCSU, Raleigh, NC.
- 22. September 2016. Inference for Dynamic Treatment Regimes in the Presence of Drop-Out. Department of Statistics, Virginia Tech, Blacksburg, VA.
- 23. August 2016. Global Challenges and Collaboration in Biopharmaceutical Statistics Panelist, Joint Session by ASA Biopharmaceutical Section and Committee on International Relations in Statistics.
- 24. February 2016. Statistical Methods for Comparing Dynamic Treatment Regimes with Time-to-Event Endpoints. Division of Biostatistics, University of Miami, Florida
- 25. December 2015. On Some Distributions in Connection with Pareto's Law by Professor ANM Muniruzzaman. ANM Muniruzzaman Memorial Session, Second International Conference on Probability and Statistics, Department of Statistics, University of Dhaka, Bangladesh
- 26. December 2015. ANM Muniruzzaman: A pioneer in statistical research and training in Bangladesh. ANM Muniruzzaman Memorial Session, Second International Conference on Probability and Statistics, Department of Statistics, University of Dhaka, Bangladesh
- 27. December 2015. SMART Inference for SMART studies. Ninth Triennial Calcutta Symposium, Department of Statistics, University of Calcutta, Calcutta, India.
- December 2015. Professionalism and Career Development. Department of Public Health Sciences, Daffodil International University, Dhaka, Bangladesh.

- 29. January 2015. Nonparametric and Parametric Inferences for Dynamic Treatment regimes. STAT Quest 2015, Department of Statistics, University of Calcutta, Calcutta, India.
- January 2015. Early Viral Kinetics and Its Relationship to Sustained Virological Response: Results from a Multi-Center Study of Hepatitis C. James P Grant School of Public Health, BRAC University, Dhaka, Bangladesh.
- 31. December 2014. Statistical Analysis of SMART Studies via Artificial Randomization. International Conference on Applied Statistics, Dhaka, Bangladesh.
- 32. November 2014. Baseline Covariate Adjustment in SMART Studies via Artificial Randomization. IMPACT Conference, Cary, North Carolina.
- 33. October 2014. Hypothesis Testing in Sequentially Randomized Designs via Artificial Randomization. Department of Biostatistics, Columbia University, Newyork, NY.
- October 2014. Evaluation of Dynamic Treatment Regimes from SMART via Artificial Randomization. Department of Epidemiology and Biostatistics, Case Western Reserve University, Cleveland, Ohio.
- October 2014. SMART estimators for SMART Studies. International Conference on Advances in Interdisciplinary Statistics and Combinatorics (AISC) - 2014, Greensboro, NC.
- 36. September 2014. Likelihood-Based and Nonparametric Inference for Dynamic Treatment Regimes in Leukemia. Department of Biostatistics, University of Pittsburgh.
- August 2014. Design of Sequentially Randomized Trials for Comparing Adaptive Treatment Strategies. Joint Statistical Meeting, 2014, Boston, Massachussets.
- July 2013. Dynamic Treatment Regime, Sequentially Randomized Designs, and Semi-parametric Theory. Tsiatis Symposium, North Carolina State University.
- June 2013. Joint Modeling of Multivariate Ordinal Medication Adherence Data. ICSA-ISCB joint conference in Bethesda, Maryland.
- 40. June 2013. Statistical methods for comparing adaptive treatment strategies in SMART designs with time-to-event endpoints.Guelph Biomathematics and Biostatistics Symposium: Adaptive Strategies in Epidemiology, Ecology, and Engineering, University of Guelph, Ontario, Canada.
- 41. April 2013. Evaluating joint effects of induction-salvage treatment regimes on overall survival in acute leukaemia. Joint Statisticians in the Pharmaceutical Industry and Royal Statistical Society's Journal Club Meeting on Survival Analysis.
- March 2013. Covariate-Adjusted Comparison of Dynamic Treatment Regimes in Sequentially Randomized Designs. ENAR Spring Meetings, Orlando, Florida.
- 43. January 2013. Cumulative Adjusted Hazard Ratio Estimation for Dynamic Treatment Regimes. Department of Statistics, University of Dhaka.
- 44. January 2013. A Joint Modeling Approach for Multiple Ordinal Processes via Generalized Estimating Equations. Institute of Statistical Research and Training, University of Dhaka.
- 45. December 2012. Modeling Adherence to Multiple Medications: A Joint Modeling Approach via Generalized Estimating Equations. IMBIC conference, Calcutta.
- 46. December 2012. Statistical methods for comparing dynamic treatment regimes through sequentially randomized trials. 8th Triennial Statistics and Probability Symposium, Calcutta.
- 47. November 2012. Covariate-Adjusted Comparison of Dynamic Treatment Regimes in Sequentially Randomized Clinical Trials. Department of Biostatistics, University of Minnesota.
- 48. June 2012. Early Viral Kinetics in Hepatitis C. Summer Institute in Biostatistics, University of Pittsburgh.
- 49. June 2012. Study Designs. 29th Annual Meeting of the American Siciety of Metabolic and Bariatric Surgery, San Diego, California.
- 50. April 2012. Testing multiple adaptive treatment strategies in sequentially randomized clinical trials. Department of Biostatistics, University of Texas MD Anderson Cancer Center.

- 51. April 2012. Up-front vs. Sequential Randomization Designs for Comparing Adaptive Treatment Strategies. International Biometric Society (ENAR) spring meetings, 2012, Washington, DC.
- June, 2011. Results from Virahep-C study, SIBS Seminar, Department of Biostatistics, University of Pittsburgh.
- 53. June, 2011. Personalized Medicine and Dynamic Treatment Regimes, Central Indiana Chapter of the American Statistical Association.
- 54. June, 2011. Risk Adjustment in Bariatric Surgery, 28th Annual Meeting of the American Society of Metabolic and Bariatric Surgery, Orlando, Florida.
- 55. March 2011. Evaluating the Joint Effect of Induction-Salvage Treatment Regimes in the Treatment of Leukemia. International Biometric Society (ENAR) spring meetings, 2011, Miami, Florida.
- 56. December, 2010. (Jointly with Dylan Small of U. of Pennsylvania) Invited Workshop Speaker on "Causal inference in observational studies and sequentially randomized designs", The First International Conference on Theory and Application of Statistics, Dhaka University Statistics Department Alumni Association, Dhaka, Bangladesh.
- 57. December, 2010. Accelerated failure time and proportional hazards models for sequentially randomized designs, The First International Conference on Theory and Application of Statistics, Dhaka University Statistics Department Alumni Association, Dhaka, Bangladesh.
- November, 2010. Introduction to Survival Analysis (for non-statisticians) UPMC Mercy Graduate Medical Education Program, UPMC Mercy, Pittsburgh
- 59. May, 2010. Statistical inference for treatment strategies from two-stage randomization designs when second randomization is delayed 2010 ICSA Applied Statistics Symposium, Indianapolis, IN
- 60. February, 2010. Adaptive Designs in Clinical Trials. School of Medicine, University of Pittsburgh
- December, 2009. Assessing the effect of treatment regimes on longitudinal outcome data. Department of Applied Statistics, University of Dhaka, Bangladesh
- 62. December, 2009. A new generalization to the Weibull distribution with an application to a breast cancer dataset. 7th triennial statistics and probability conference, Kolkata, India
- 63. November, 2009. Statistical methods for comparing dynamic treatment regimes with time-to-event endpoints. Department of Statistics, University of Pittsburgh
- 64. November, 2009. Statistical methods for comparing dynamic treatment regimes with time-to-event endpoints. Center for Statistical Sciences, Brown University, RI
- August, 2009. Dynamic Treatment regimes in Leukemia Treatment. Joint Statistical Meetings 2009, American Statistical Association.
- 66. February, 2009. Adaptive Designs in Clinical Trials. School of Medicine, University of Pittsburgh.
- 67. September, 2008. Comparing adaptive treatment strategies following sequential multiple assignment randomization trials, Clinical and Translational Sciences Research Institute, CHRC, RAND-Pittsburgh Institute, VA-CHERP.
- 68. July, 2008. Inference on dynamic treatment regimes following sequential multiple assignment randomization trials, Center for Statistics at Queen Mary, University of London.
- 69. February, 2008. Adaptive treatment strategies- one step forward towards individualized treatment rules. Dean's Junior Faculty Seminar Series, Graduate School of Public Health, Pittsburgh.
- 70. February, 2008. Adaptive Designs in Clinical Trials. School of Medicine, University of Pittsburgh.
- January 2008. Supremum weighted log-rank test and sample size for comparing two-stage adaptive treatment strategies. Department of Epidemiology, Biostatistics and Occupational Health, McGill University.
- June 2007. Semi-parametric methods for estimating causal effect of treatment strategies in twostage randomization clinical trials. ICSA 2007 Applied statistics Symposium, Raleigh, North Carolina.
- 73. May 2007. Weibull-based approaches to survival analysis with applications to breast cancer data. Department of Mathematical Sciences, Ball State University, Muncie, Indiana.

- 74. February 2007. Comparing Adaptive Treatment Strategies: Challenges and Solutions. Center for Health Equity, Research and Promotions (CHERP), VA Health Care System, Pittsburgh.
- 75. December 2006. Survival Analysis for Comparing Adaptive Treatment Strategies. Department of Applied Statistics, University of Dhaka, Dhaka, Bangladesh.
- 76. April 2006. Survival Analysis in Two-stage Randomization Designs in Leukemia Trials. Department of Mathematics and Statistics, University of Windsor, Windsor, Ontario.
- 77. February 2006. Survival Analysis in Two-stage Randomization Designs in Oncolgy Trials. Invited presentation, Department of Biostatistics, College of Public Health, University of Kentucky.
- March 2005. Survival Analysis in Two-stage Randomization Designs. Invited lecture in the session Censored Data in the Environmental, Agricultural, and Medical Sciences. International Biometric Society (ENAR) spring meetings, 2006, Tampa, Florida.
- March 2003. Optimal Estimator of the Survival Distribution and Related Quantities of Treatment Policies in Two-Stage Randomization Designs in Clinical Trials. University of Texas M.D. Anderson cancer Center.
- 80. March 2003. Optimal Estimator of the Survival Distribution and Related Quantities of Treatment Policies in Two-Stage Randomization Designs in Clinical Trials. Department of Biostatistics, and Department of Statistics and Actuarial Science, University of Iowa.
- March 2003. Optimal Estimator of the Survival Distribution and Related Quantities of Treatment Policies in Two-Stage Randomization Designs in Clinical Trials. University of Pittsburgh Graduate School of Public Health.
- 82. February 2003. Optimal Estimator of the Survival Distribution and Related Quantities of Treatment Policies in Two-Stage Randomization Designs in Clinical Trials. Boston University School of Public Health.
- 83. February 2003. Optimal Estimator of the Survival Distribution and Related Quantities of Treatment Policies in Two-Stage Randomization Designs in Clinical Trials. Department of Biostatistics, University of Minnesota.
- February 2003. Optimal Estimator of the Survival Distribution and Related Quantities of Treatment Policies in Two-Stage Randomization Designs in Clinical Trials. Department of Health Studies, University of Chicago.
- February 2003. Optimal Estimator of the Survival Distribution and Related Quantities of Treatment Policies in Two-Stage Randomization Designs in Clinical Trials. Medical University of South Carolina.
- 86. January 2003. Survival Analysis in Two-Stage Randomization Designs in Clinical Trials. Department of Mathematics and Statistics, Georgia State University.
- January 2003. Optimal Estimator of the Survival Distribution and Related Quantities of Treatment Policies in Two-Stage Randomization Designs in Clinical Trials. Department of Biostatistics and Epidemiology, University of Pennsylvania.

#### Contributed Presentations

- 1. (Poster with Liwen Wu and Junyao Wang) Interim Monitoring of Sequential Multiple Assignment Randomized Trials. Joint Statistical Meeting 2020. Virtual (due to COVID 19).
- 2. (Poster with Liwen Wu and Junyao Wang) Group Sequential Analysis for Sequential Multiple Assignment Randomized Trials. ENAR Spring Meeting 2020. Virtual (due to COVID 19).
- 3. (with Geoffrey Johnson) Optimizing Acute Myelogenous Leukemia Treatment Regimes via Sequential Conditional Structural Mean Models. Joint Statistical Meeting, 2018, Baltimore, Maryland.
- 4. (Poster with Xiaotian Gao, Xinxin Dong, Chaeryon Kang) Inference on Mean Quality Adjusted Lifetime Using Joint Models for Continuous Quality of Life Process and Time to Event. ENAR Spring Meeting 2018, Atlanta, Georgia.
- 5. (with Ling-Wan Chen, Idil Yavuz, and Yu Cheng) Cumulative Incidence Regression for Dynamic Treatment Regimes. ENAR Spring Meeting 2017, Washington DC.

- (Poster with Shannon M. Woolley and Jonathan G. Yabes). Test for Stratified Random Signs Censoring in Competing Risks. ENAR Spring Meeting 2017, Washington DC.
- (with Yanxun Xu, Peter Mueller, presented by Peter Thall). Bayesian Nonparametric Estimation for Dynamic Treatment Regimes with Sequential Transition Times. JASA-ACS Invited Session -Invited Papers. Joint Statistical Meeting 2016, American Statistical Association, Chicago, IL.
- (with Geoff Johnson and Andrew Topp). Optimizing Dynamic Treatment Regimes via Quality-Adjusted Q-Learning and Threshold Utility Analysis for Subgroup Analysis in Clinical Trials (chosen as Honorable Mention for ASA Biopharmaceutical section student award). Joint Statistical Meeting 2016, American Statistical Association, Chicago, IL.
- (with Song Zhang, Yu Cheng) Novel Diagnostic Accuracy Analysis for Competing Risks Outcomes with ROC Surfaces. ICSA Applied Statistics Symposium 2016, Atlanta, Georgia. (poster with Yimeng Liu) A Class of Two-Sample Tests for Quantile Residual Life Time. ENAR Spring Meeting 2016, Austin, Texas.
- 10. (poster with Yimeng Liu) A Class of Two-Sample Tests for Quantile Residual Life Time. 2016 Pittsburgh Chapter Annual Banquet of the American Statistical Association, Pittsburgh, PA.
- 11. (poster with Andrew S. Topp and Geoff S. Johnson) Efficient Double Robust Estimation for Two-Stage Dynamic Treatment Regimes. ENAR Spring Meeting 2016, Austin, Texas.
- (poster with Andrew S. Topp and Geoff S. Johnson) Efficient Double Robust Estimation for Two-Stage Dynamic Treatment Regimes. 2016 Pittsburgh Chapter Annual Banquet of the American Statistical Association, Pittsburgh, PA.
- (with Idil Yavuz, Dokuz Eylul University, Turkey, Ling-Wan Chen, and Yu Cheng) Regression Analysis for Cumulative Incidence Function under Two-stage Randomization. ENAR Spring Meeting 2016, Austin, Texas.
- (with Xiaoxue Li ; Stewart Anderson, and Saul Shiffman) Time-Varying Coefficient Models for Missing-by-Design Intensive Longitudinal Data. Joint Statistical Meetings, August 2015, Seattle, WA.
- 15. (with Yanxun Xu<sup>\*</sup> and Peter Mueller, University of Texas, Austin, and Peter F. Thall, University of Texas MD Anderson Cancer Center) Bayesian Nonparametric Estimation for Dynamic Treatment Regimes with Sequential Transition Times, ENAR Spring Meeting 2015, Miami, Florida.
- 16. (with Semhar Ogbagaber) Regression Analysis of Sequentially Randomized Trials Through Artificial Randomization. Joint Statistical Meetings, August 2014, Boston, MA.
- 17. (with Abidemi Adeniji) Incorporating Diagnostic Accuracy into the Estimation of Discrete Survival Function with Lost-to-Follow-Up.Joint Statistical Meetings, August 2014, Boston, MA.
- 18. (with Yu-Ting Weng) Estimating a Dengue Ordinary Differential Equation Model with the Mesh Adaptive Direct Search Method, ENAR Spring Meeting, March 2014. Baltimore, Washington, DC
- 19. (with Emmanuel Sampene) A Simple Locally Efficient Estimator for Relative Risk in Case-cohort Studies, ENAR Spring Meeting, March 2014. Baltimore, Washington, DC.
- (with Olive Buhule and Ada Youk) Bayesian Hierarchical Joint Modeling of Repeatedly Measured Continuous and Ordinal Markers of Disease Severity, ENAR Spring Meeting, March 2014. Baltimore, Washington, DC.
- (with Semhar Ogbagaber) Regression Analysis of Sequentially Randomized Trials through Artificial Randomization, ENAR Spring Meeting, March 2014. Baltimore, Washington, DC.
- 22. A Flexible Correlation Structure for Joint Modeling of Multivariate Ordinal Medication Adherence Data. Joint Statistical Meetings, August 2013, Montreal, QC, Canada.
- (with Emmanuel Sampene) Efficient Estimation of Relative Risk in Case-Cohort Studies. Joint Statistical Meetings, August 2013, Montreal, QC, Canada.
- (with Semhar Ogbagaber) Design of Sequentially Randomized Trials for Comparing Adaptive Treatment Strategies, Society of Clinical Trials, May 2013, Boston, MA
- (poster with Emmanuel Sampene) Efficient Estimation of Relative Risk in Case-Cohort Studies, 35th Midwest Biopharmaceutical Statistics Workshop, May 2013, Muncie, Indiana.

- 26. (poster with Emmanuel Sampene) Efficient Estimation of Relative Risk in Case-Cohort Studies, ASA Pittsburgh Chapter Banquet, April 2013, Pittsburgh, PA.
- (with Kelley M. Kidwell) Weighted Log-rank Statistic to Compare Shared-path Adaptive Treatment Strategies. Joint Statistical Meetings, 2012, San Diego, CA.
- 28. (with Xinxin Dong and Lan Kong) Accelerated Failure Time Model for Case-Cohort Design with Longitudinal Covariates Measured with Error. Joint Statistical Meetings, 2012, San Diego, CA.
- 29. (with Kelley M. Kidwell) Weighted Log-rank Statistic to Compare Shared-path Adaptive Treatment Strategies. International Biometric Society (ENAR) spring meetings, 2012, Washington, DC.
- (with Abidemi K. Adeniji) Discrete Survival Analysis with Misclassified Events. International Biometric Society (ENAR) spring meetings, 2012, Washington, DC.
- (with Xinxin Dong and Lan Kong) Accelerated Failure Time Model for Case-Cohort Design with Longitudinal Covariates Measured with ErrorInternational Biometric Society (ENAR) spring meetings, 2012, Washington, DC.
- 32. (poster with Chetachi A. Emeremni) Analysis of Variance for Right Censored Survival Data. International Biometric Society (ENAR) spring meetings, 2012, Washington, DC.
- (poster with Yenchih Hsu) Inference for Two-stage Treatment Depression Regimes from Longitudinal Studies. 34th Midwest Biopharmaceutical Statistical Workshop, May 2011, Muncie, Indiana.
- 34. (poster with Zhen Jiang) Joint Modeling of Multivariate Ordinal Longitudinal Outcome Using GEE: Application to Medication Adherence. 34th Midwest Biopharmaceutical Statistical Workshop, May 2011, Muncie, Indiana.
- (poster with Kelley M. Kidwell) Weighted Log-rank Statistic to Compare Shared-path Adaptive Treatment Strategies. 34th Midwest Biopharmaceutical Statistical Workshop, May 2011, Muncie, Indiana.
- (poster with Abidemi K. Adeniji) Discrete Survival Analysis with Mis-classified Events. 34th Midwest Biopharmaceutical Statistical Workshop, May 2011, Muncie, Indiana.
- 37. (poster with Chetachi A. Emeremni) Variable Selection Techniques in Weighted Least Squares. 34th Midwest Biopharmaceutical Statistical Workshop, May 2011, Muncie, Indiana.
- 38. (with Xinyu Tang) Weighted Cumulative Treatment Estimation for Sequentially Randomized Clinical Trials in the Presence of Non-proportional Hazards, ENAR Spring Meetings, 2011.
- (with Yen-chih Hsu) Weighted GEE for Response-Adaptive Treatment Regimes in Two-Stage Longitudinal Studies, ENAR Spring Meetings, 2011.
- 40. (with Zhen Jiang) Joint Modeling of Ordinal and Binary Longitudinal Outcomes Using GEE: Application to Medication Adherence, ENAR Spring Meetings, 2011.
- (Poster with Jesse Hsu) Causal Inference for Treatment Strategies from Two-Stage Randomization Designs. 34th Midwest Biopharmaceutical Statistical Workshop, May 2010, Muncie, Indiana.
- (With Jinhui Ko) Nonparametric Estimation of Median Residual Life Function for Two-Stage randomization Designs. ENAR Spring meeting 2010.
- (With Xinyu Tang) Cox Proportional Hazard Model for Dynamic Treatment Regimes. ENAR Spring meeting 2010.
- 44. (Poster with Jinhui Ko) Nonparametric Estimation of Median Residual Life Function for Two-Stage randomization Designs. 33rd Midwest Biopharmaceutical Statistical Workshop, May 2009, Muncie, Indiana.
- (Poster with Xinyu Tang) Statistical Methods for Sequentially Randomized Trials: An Application to High-Risk Neuroblastoma Study. 33rd Midwest Biopharmaceutical Statistical Workshop, May 2009, Muncie, Indiana.
- 46. Supremum Weighted Log-rank Test and Sample Size for Comparing Two-stage Adaptive Treatment Strategies, July 2008, International Biometric Conference, Dublin.
- 47. Inverse-probability-weighting-based sample size formula for comparing two-stage adaptive treatment strategies. ENAR Spring Meetings 2008, Crystal City, Virginia.

- 48. Discussion on Two-Stage Treatment Strategies Based on Sequential Failure Times by Peter Thall (with Patricia Houck, and Jinhui Ko), ATSRG reading group meeting, November 2007, Department of Biostatistics, University of Pittsburgh Graduate School of Public Health.
- (Poster with Sachiko Miyahara) Weighted Kaplan-Meier Estimator for Adaptive Treatment Strategies. SAMSI workshop on dynamic treatment regimes, June 2007, Statistical and Applied Mathematical Sciences Institute, RTP, North Carolina.
- 50. (Poster with The Minh Luong and Jong-Heyon Jeong) Weibull-based approaches to survival analysis: an application to a breast cancer data set. 30th Midwest Biopharmaceutical Statistical Workshop, May 2007, Muncie, Indiana.
- 51. A supremum log-rank test for two-stage adaptive treatment strategies and corresponding sample size formula, ENAR Spring Meetings 2007, Atlanta, GA (presented by Wentao Feng).
- 52. Introduction to Adaptive Treatment Strategies with Examples (with Sachiko Miyahara). ATSRG reading group meeting, March 2007, Department of Biostatistics, University of Pittsburgh Grad-uate School of Public Health.
- Likelihood Inference for Survival Analysis in Two-stage Randomization Designs, Joint Statistical Meetings, August 2006, Seattle, Washington
- 54. (Poster with Wentao Feng) Inferences for Treatment Regimes in Two Stage Clinical Trials, Midwest Biopharmaceutical statistics workshop, May 2006, Muncie, Indiana.
- 55. (Poster with Conjeevaram et al.) Insulin Resistance Is Independent Of Hepatic Steatosis and Is Augmented By Environmental Factors Such As Obesity in Patients With HCV Genotype 1 Infection, DDW, Chicago, Illinois, May 2005.
- 56. (with Leland Ye) Genetic variation in an interferon-stimulated gene, mxyovirus-1 (MxA), has a significant protective effect from fibrosis in genotype-1 chronic hepatitis C virus infection, DDW, Chicago, Illinois, May 2005.
- 57. A non-linear mixed effect model for hepatitis C viral dynamics, International Biometric Society (ENAR) spring meetings, 2005, Austin, TX, March, 2005.
- 58. A non-linear mixed effect model for hepatitis C viral dynamics, Joint Statistical Meetings 2004, Toronto, Canada, August 2004 (Presented on behalf of Dr. Wahed by K Im).
- Presented in the Faculty Seminar Series, Department of Biostatistics, University of Pittsburgh, October 2004.
- (poster with Conjeevaram et al.)Race, Insulin Resistance, Visceral Adiposity and Hepatic Steatosis in Genotype 1 Patients with Chronic Hepatitis C, AASLD, November 2004.
- Efficient Estimation of the Survival Distribution for Treatment Policies in Two-Stage Randomization Designs in Clinical Trials with Censored Data. International Biometric Society (ENAR) meeting 2004, Pittsburgh, PA, April 2004.
- 62. Optimal Estimator of the Survival Distribution and Related Quantities of Treatment Policies in Two-Stage Randomization Designs in Clinical Trials. Joint Statistical Meetings 2003, American Statistical Association, San Francisco, California, August 2003.
- 63. Optimal Estimator of the Survival Distribution and Related Quantities of Treatment Policies in Two-Stage Randomization Designs in Clinical Trials. International Biometric Society (ENAR) meeting 2003, Tampa, Florida, April 2003.

#### Advising

PhD Students

- 1. Lingyun Lyu. PhD in Biostatistics, Expected graduation: August 2022.
- 2. Liwen Wu. PhD in Biostatistics, Expected graduation: August 2021.
- 3. Junyao Wang. PhD in Biostatistics, Expected graduation: December 2020.

- 4. Xiaotan (Steven) Gao. PhD in Biostatistics, August 2020 [Co-Advisor: Chae Ryon Kang, PhD] Dissertation Title: Joint Model of Longitudinal and Survival Data, and Robust Nonparametric Regression Entry position: Assistant Professor, Department of Kinesiology,
  - Entry position: Assistant Professor, Department of Kinesiology, University of Illinois Urbana-Champaign.
- Song Zhang. PhD in Biostatistics, December 2017 [Co-Advisor: Yu Cheng, PhD] Dissertation Title: Diagnostic accuracy analysis for ordinal competing risk outcomes using ROC surface
  - Entry position: Statistician, VA Health Care System, Pittsburgh
- 6. Shannon Wooley. PhD in Biostatistics, August 2017 [Co-Advisor: Jonathan Yabes, PhD] Dissertation Title: Tests for random signs censoring in competing risks. Entry position: Statistician, Duke Clinical Research Institute, Durhum, North Carolina.
- Yimeng Liu. PhD in Biostatistics, August 2017 Dissertation Title: A series of two-sample non-parametric tests of quantile residual lifetime. Current position: Statistician, Amgen
- 8. Andrew Topp. PhD in Biostatistics, September 2016 Dissertation Title: Double Robust Estimator for Two-Stage Dynamic Treatment Regimes Current position: Statistician, Abbvie
- Geoff Johnson. PhD in Biostatistics, June 2016 Dissertation Title: Quality Adjusted Q-learning and Conditional Structural Mean Models for Optimizing Dynamic Treatment Regimes Current position: Statistician, GlaxoSmithCline
- Yu-Ting Weng. PhD in Biostatistics, December 2014 Dissertation Title: Differential Equation Modeling of Dengue Incidence Current position: Research Fellow, Food and Drug Administration.
- Olive Buhule. PhD in Biostatistics, Summer 2014 [Co-Advisor: Ada Youk, PhD] Dissertation Title: Bayesian Hierarchical Joint Modeling of Continuous and Ordinal Markers of Disease Severity and Time-to-Event Data Current position: Research Scientist, University of Wisconsin, Madison.
- Semhar Ogbagabar. PhD in Biostatistics, Summer 2014
   Dissertation Title: Topics in Two-Stage Randomization Designs for Clinical Trials Current position: Research Fellow, Food and Drug Administration
- Emmanuel Sampene. PhD in Biostatistics, Summer 2013 Dissertation Title: Efficient Estimation of Relative Risk in Case-Cohort Studies Current position: Research Scientist, University of Wisconsin-Madison
- Xinxin Dong. PhD in Biostatistics, Summer 2013 Dissertation Title: Inference for Accelerated Failure Time Model with Longitudinal Covariates Measured with Error Current position: Sr. Biostatistician, Takeda Pharmaceuticals Corporation
- 15. Chetachi Ememerni. PhD in Biostatistics, Summer 2012 Dissertation Title: Inference for Right Censored, and Right Censored Length Biased Data Through Inverse Weighting Current position: Manager, Biostatistics, Regeneron Pharmaceuticals, Inc.
- 16. Abidemi Adeniji. PhD in Biostatistics, Summer 2012 Dissertation Title: Incorporating Diagnostic Accuracy into the Estimation of Discrete Survival Function Current position: Associate Director, Biostatistics, EMD Serono Inc.
- Kelley Kidwell. PhD in Biostatistics, Summer 2012
   Dissertation Title: Survival Analysis of Shared-Path Adaptive Treatment Strategies Current position: Associate Professor of Biostatistics, University of Michigan

- Zhen Jiang. PhD in Biostatistics, Summer 2011
   Dissertation Title: Joint Analysis of Longitudinal Ordinal and Binary Data: Application to Multiple Medication Adherence.
   Current position: Division of Biostatistics, Office of Biostatistics and Epidemiology, CBER, U.S.
   Food and Drug Administration
- Jesse Hsu. PhD in Biostatistics, Summer 2011
   Dissertation Title: Longitudinal Data Analysis from Depression Studies: Assessment of Intermediate-Outcome-Dependent Dynamic Interventions
   Current position: Assistant Professor of Biostatistics, University of Pennsylvania
- Xinyu Tang. PhD in Biostatistics, Summer 2010 Dissertation Title: Analyzing Survival Data For Sequentially Randomized Designs Current Employment: Division of Biostatistics, Office of Biostatistics and Epidemiology, CBER, U.S. Food and Drug Administration
- Jin Hui Ko. PhD in Biostatistics, Summer 2010 Dissertation Title: Inference on Median Residual Life Function from Sequentially Randomized Designs Entry position: Sr. Biostatistician, Novartis Oncology
- 22. Sachiko Miyahara. PhD in Biostatistics, Summer 2009 Dissertation Title: Statistical Inference for Treatment Regimes for Longitudinal and Time-to-Event Data Current position: Sr. Research Scientist, Center for Biostatistics in AIDS Research, Department of Biostatistics, Harvard University
- 23. Wentao Feng. PhD in Biostatistics, Spring 2008 Dissertation Title: Sample Size and Power for Comparing Two-Stage Adaptive Treatment Strategies Current position: Associate Director at Seattle Genetics

# **MS Students**

Yunfei Xie. MS in Biostatistics, December 2019

Thesis Title: Assessing risk factors and predicting sepsis mortality using logistic and survival methods. Advisor

Shekhar Mehta. MS in Biostatistics, Summer 2006

Thesis Title: Longitudinal Analysis of Renal Function using ZIP GEE on OLT Transplant Patients Undergoing NAC Prophylaxis Advisor

#### Honors and Awards by Advisees (based on jointly written papers)

- 2020. Liwen Wu, Biopharmaceutical Section Student Scholarship Award from the American Statistical Association.
- 2019 Junyao Wang, Dean's Day Award (First Place) Department of Biostatistics, GSPH.
- 2016 Yimeng Liu, Mahela Serbin Award from the American Statistical Association Pittsburgh Chapter
- 2016 Geoffrey H Johnson, honorable mention, ASA Biopharmaceutical Section Student Award
- 2015 Ajmery Jaman, 1st prize of the prestigious 2015 ISI JAN TINBERGEN AWARDS
- 2013 Idil Yavuz, Dept. of Statistics, University of Pittsburgh, ENAR Student Award
- 2012 Kelley Kidwell, Best Student Paper by the Society for Clinical Trials
- 2012 Xinxin Dong, Best Student Paper Award Statistics in Epidemiology Section of American Statistical Association(ASA)

2012 Kelley Kidwell, Best Student Paper Award Biopharmaceutical Section, ASA

2011 Zhen Jiang, ENAR Student Award

2010 Xinyu Tang, ENAR Student Award

2008 Sachiko Myahara, Honorable Mention, Charlie Sampson Poster Award, Midwest Biopharmaceutical Statistical Workshop

2007 Wentao Feng, ENAR Student Award

2007 Wentao Feng, Best Student Paper Award Biopharmaceutical Section, ASA

### Teaching

# University of Pittsburgh

#### Spring 2020.

Biostat 2044: Statistical Theory II; T-F 11:00am-12:30pm, 3cr, 5 students; Primary Instructor.

Fall 2019.

Biostat 2050: Longitudinal and Clustered Data Analysis; W-F 10:00am-11:50am, 2cr, 39 students; Co-Primary Instructor.

Spring 2019.

Biostat 2044: Statistical Theory II; T-F 11:00am-12:30pm, 3cr, 25 students; Primary Instructor. Fall 2018.

Biostat 2050: Longitudinal and Clustered Data Analysis; W-F 10:00am-11:50am, 2cr, 44 students; Co-Primary Instructor.

Spring 2018.

Biostat 2044: Statistical Theory II; T-F 11:00am-12:30pm, 3cr, 20 students; Primary Instructor.

# Spring 2017.

Biostat 2061: Likelihood Theory and Applications; M-F 1:00pm-2:55pm, 2cr, 10 students; Primary Instructor.

# Spring 2016.

Biostat 2061: Likelihood Theory and Applications; M-F 1:00pm-2:55pm, 2cr, 8 students; Primary Instructor.

# Spring 2015.

Biostat 2061: Likelihood Theory and Applications; M-F 1:00pm-2:55pm, 2cr,  $\sim 8$  students; Primary Instructor.

Fall 2014.

Biostat 2051: Estimation Theory; M-W 1:00pm-2:25pm, 3cr, ~8 students; Primary Instructor. Summer 2014.

Biostat 1200/1201: Introduction to Biostatistical Reasoning; M-F 10:00am-12:00 noon, 4cr, 19 students; Co-Instructor in SIBS Program.

Fall 2013.

Biostat 2051: Estimation Theory; M-W 1:00pm-2:25pm, 3cr, ~13 students; Primary Instructor.

Summer 2013.

Biostat 1200/1201: Introduction to Biostatistical Reasoning; M-F 10:00am-12:00 noon, 4cr, 20 students; Co-Instructor in SIBS Program.

Spring 2013.

Biostat 2094: Statistical Computing in R; Tu 10:00am-12:00 noon, 2cr, ~11 students; Primary Instructor.

Fall 2012.

Biostat 2051: Estimation Theory; M-W 1:00pm-2:25pm, 3cr, 13 students; Primary Instructor.

Summer 2012.

Biostat 1200/1201: Introduction to Biostatistical Reasoning; M-F 10:00am-12:00 noon, 4cr, 20 students; Co-Instructor in SIBS Program.

Spring 2012.

Biostat 2094: Statistical Computing in R; Tu 10:00am-12:00 noon, 2cr, 11 students; Primary Instructor. Fall 2011.

Biostat 2083: Linear Models; T-Th 9:00am-10:25am, 3cr, 11 students; Primary Instructor.

# Summer 2011.

Biostat 1200/1201: Introduction to Biostatistical Reasoning; M-F 10:00am-12:00 noon, 4cr, 21 students; Co-Instructor in SIBS Program.

Spring 2011.

Biostat 2094: Statistical Computing in R; Tu 10:00am-12:00 noon, 2cr, 17 students; Primary Instructor. 2010-2011.

Biostat 3010: Research And Dissertation Phd / FTDR; 5 students, variable credits; Primary Advisor. Fall 2010.

Biostat 2083: Linear Models; T-Th 9:00am-10:25am, 3cr, 15 students; Primary Instructor.

#### Summer 2010.

Biostat 1200/1201: Introduction to Biostatistical Reasoning; M-F 10:00am-12:00 noon, 4cr, 20 students; Co-Instructor in SIBS Program.

2009-2010.

Biostat 3010: Research And Dissertation Phd / FTDR; 5 students, variable credits; Primary Advisor. Fall 2009.

Biostat 2083: Linear Models; T-Th 9:00am-10:25am, 3cr, 16 students; Primary Instructor.

Summer 2009.

Biostat 2041: Introduction to Statistical Methods 1; T, Th 9:00am-10:25am, 3cr, 52 students; Primary Instructor.

Fall 2008.

Biostat 2021: Independent Study ;(Statistical Analysis Using R); 1 student, 1 cr; Primary Instructor. Fall 2008.

- Biostat 2083: Linear Models; Tuesdays, Thursdays 9:30-10:30a, 3 cr; Primary Instructor.
- 2008-2009.

Biostat 3010: Research And Dissertation Phd and FTDR; 4 students, variable credits; Primary Advisor. 2007-2008.

Biostat 3010: Research And Dissertation Phd; Wednesdays 11:30-12:30p, 3 cr; Primary Advisor. 2007-2008.

Biostat 3010: Research And Dissertation Phd; Wednesdays 12:30-1:30p, 3 cr; Primary Advisor. Fall 2007.

Biostat 2083: Linear Models; T, Th 9:00am-10:25am, 3cr, 11 students; Primary Instructor.

### Fall 2007.

Biostat 2021: Independent study ; (Adaptive Treatment Strategies); Primary Instructor.

Summer 2007.

Biostat 2041: Introduction to statistical methods 1; T, Th 9:00am-10:25am, 3cr, 65 students; Primary Instructor.

2006-2007.

Biostat 3010: Research And Dissertation Phd; Wednesdays 12:30-1:30p, 1 student, C113 cr; Primary Advisor.

2006-2007.

Biostat 2025: Biostatistics Seminar; Thursdays 3:30p - 5:00p, 1 cr; Primary Organizer.

Fall 2006.

Biostat 2083: Linear Models; T, Th, 1:30p-3:00p, 3 CR, 8 students; Primary Instructor.

#### 2005-2006.

Biostat 3010: Research And Dissertation Phd; Wednesdays 11:30-1:30p, 1 student, 3 cr; Primary Advisor .

Fall 2005.

Biostat 2083: Linear Models; T, Th, 1:30p-3:00p, 3 CR, 16 students; Primary Instructor.

2004-2005.

Biostat 3010: Research And Dissertation Phd; Wednesdays 2:00-3:30p, 3 cr; Primary Advisor.

2004-2005.

Biostat 2025: Biostatistics Seminar; Thursdays 3:30p - 5:00p, 1 cr; Primary Organizer.

Fall 2004.

Biostat 2083: Linear Models; F 2:30-5:30, M 12:00-1:00, 3 CR, 16 students; Primary Instructor.

# North Carolina State University

Summer 2002.

ST 372: Introduction to statistical inference and regression; 3 CR, about 35 students; Primary Instructor.

Summer 2003.

ST 372: Introduction to statistical inference and regression; 3 CR, about 35 students; Primary Instructor.

Fall 2000.

ST 311: Introduction to probability and ; statistics (Two sections); 3 CR, about 80 students; Primary Instructor.

Spring 2001.

ST 311: Introduction to probability and ; statistics (Two sections); 3 CR, about 80 students; Primary Instructor.

# Ball State University

Fall 1999.

MATHS 221: Probability and Statistics; 3 CR, about 30 students; Primary Instructor.

Spring 2000.

MATHS 221: Probability and Statistics; 3 CR, about 30 students; Primary Instructor.

Spring 1999.

MATHS 181: Elementary probability and statistics; 3 CR, 18 students; Primary Instructor.

### Dhaka University

1996-1998.

Real analysis and Advanced Calculus (Year-long courses); 2CR, about 65 students; Primary Instructor 1996-1998.

Test of hypothesis(Year-long courses);3 CR, 12 students; Primary Instructor.

1996-1998.

ST M101: Statistical inference (Year-long courses); 4 CR, 65 students; Primary Instructor.

# Other Teaching

### Spring 2020

Guest Lecture (2hrs)in Epidemiological Methods II : Missing Data

Summer 2020

Review office hours for PhD Applied Qualifying Exam (2 hours)

Spring 2019

Recitation for BIOST 2044 (3 hours per week)

### Summer 2019

Review office hours for PhD Qualifying Exam (2 hours) PhD Qualifying Exam

#### Spring 2018

Review office hours for BIOST 2044 (2 hours per week)

#### Summer 2018

Review office hours for PhD Qualifying Exam (2 hours) PhD Qualifying Exam

#### Summer 2017

Review office hours for PhD Qualifying Exam (2 hours) PhD Qualifying Exam

#### Summer 2016

Review office hours for PhD Qualifying Exam (2 hours) PhD Qualifying Exam

#### Summer 2015

Review office hours for PhD Qualifying Exam (2 hours) PhD Qualifying Exam

#### Spring 2015

1-hrs/week class lectures/meetings with students for Advanced Martingale-Based Survival Analysis

### Fall 2014

1-hrs/week class lectures/meetings with students for Advanced Martingale-Based Survival Analysis

# Summer 2014

Review office hours for PhD Qualifying Exam (2 hours) PhD Qualifying Exam

# Summer 2013

Review office hours for PhD Qualifying Exam (2 hours) PhD Qualifying Exam

## Spring 2013

Substituted 1 lecture for BIOST 2042 Introduction to Statistical Methods 2

# Summer 2012

Review office hours for PhD Qualifying Exam (2 hours) PhD Qualifying Exam

# Spring 2012

Substituted 1 lecture for BIOST 2042 Introduction to Statistical Methods 2

# Summer 2011

Review office hours for PhD Qualifying Exam (5 hours) PhD Qualifying Exam

#### Spring 2011

Substituted 2 lectures for BIOST 2042 Introduction to Statistical Methods 2  $\,$ 

#### Summer 2011

2-hrs/week class lectures/meetings with students for proposed Asymptotic Theory course

#### Spring 2011

2-hrs/week class lectures/meetings with students for proposed Asymptotic Theory course

# Spring 2011

Lead the adaptive treatment strategies reading group lectures (http://www.biostat.pitt.edu/ATSRG/meetings.htm) Adaptive Treatment Strategies Reading Group (ATSRG)

#### Fall 2011 Lead

Lead the adaptive treatment strategies reading group lectures (http://www.biostat.pitt.edu/ATSRG/meetings.htm) Adaptive Treatment Strategies Reading Group (ATSRG)

#### Spring 2010

Organized and participated in preparatory office hour sessions for students who would appear in the PhD qualifying examination.

#### Spring 2010

Organized 5 hours of student seminars in biostatistics, where at each hour, a senior student provided a tutorial on one of the topic they have expertise in. This semester's topics included Statistical Analysis and Graphics in R, and Latex.

#### February 2010

One hour invited lecture in the course statistical methods for clinical trials School of Medicine, University of Pittsburgh Adaptive Designs in Clinical Trials.

February 2009

One hour invited lecture in the course statistical methods for clinical trials School of Medicine, University of Pittsburgh Adaptive Designs in Clinical Trials.

### February 2008

One hr invited lecture in the course statistical methods for clinical trials School of Medicine, University of Pittsburgh Adaptive Designs in Clinical Trials

#### Service on Doctoral Committees

- Gabriel Conzuelo Rodriguez, PhD in Epidemiology (Expected). Dissertation: TBD.
- Amanda S. Hinerman, PhD in Epidemiology (Expected). Dissertation: TBD
- Junyao Wang, PhD in Statistics (Expected). Dissertation: Adaptive Randomization in a Two-stage Sequential Multiple Assignment Randomized Trial
- Xiaotian Gao, PhD in Biostatistics 2020. Dissertation: Joint Model of Longitudinal and Survival Data, and Robust Nonparametric Regressio
- Tanbin Rahaman, PhD in Biostatistics 2019. Dissertation: Classification and Clustering for Rna-Seq Data with Variable Selection.
- Stephen Liu, PhD in Epidemiology 2017. Dissertation: Classifications, re-visits, and mortality for opioid-related hospitalizations in Pennsylvania and their associations with HCV and HIV discharges
- Ling-Wan Chen, PhD in Statistics 2017. Dissertation: Cumulative Incidence Regression for Dynamic Treatment Regimens and Quantile Association Model for Bivariate Survival Data
- Zhiguang Huo, PhD in Biostatistics 2017. Dissertation: Statistical Integrative Omics Methods for Disease Subtype Discovery
- Yimeng Liu, PhD in Biostatistics 2017. Dissertation: A Series of Two-Sample Tests for Quantile Residual Life
- Song Zhang, PhD in Biostatistics 2017. Dissertation: Diagnostic accuracy analysis for ordinal competing risk outcomes using ROC surface
- Shannon Wooley, PhD in Biostatistics 2017. Dissertation: Tests for Random Signs Censoring in Competing Risks

- Andrew Topp, PhD in Biostatistics 2016. Dissertation: Double-Robust Estimation for Two-Stage Dynamic Treatment Regimes
- Geoffrey Johnson, PhD in Biostatistics 2016.
  - Dissertation: Quality-Adjusted Q-Learning and Conditional Structural Mean Models for Optimizing Dynamic Treatment Regimes
- Yafei Wei, PhD in Statistics 2016. Dissertation: Estimation, Model Selection, and Resilience of Power-Law Distributions
- Xiaoxu Li, PhD in Biostatistics 2014. Dissertation: Modeling the Variation in Events Intensity
- Tao Xue, PhD in Environmental and Occupational Health 2015. Dissertation: Spatiotemporal Modeling of Air Pollutants and Their Health Effects in the Pittsburgh Region
- Shaowu Tang, PhD in Biostatistics 2014. Dissertation: Investigations on Genomic Meta-Analysis: Imputation for Incomplete Data and Properties of Adaptively Weighted Fisher's Method
- Candace Wu, PhD in Biostatistics 2014. Dissertation: Inference on Conditional Quantile Residual Life for Censored Survival Data
- Min Geng, PhD in Biostatistics 2014. Dissertation : Marginal Structural Cox Proportional Hazards Model for Data with Measurement Errors
- Yi Ren, PhD in Biostatistics 2014. Dissertation : Proportional Subdistribution Hazards Regression with Interval-Censored Competing Risks Data
- Siyu Li, PhD in Statistics 2013. Dissertation : Simultaneous Population and Dose Selection in Clinical Trials and Cluster Validation
- Idil Yavuz, PhD in Statistics 2013. Dissertation : Non-Parametric Inference and Regression Analysis for Cumulative Incidence Function under Two-Stage Randomization
- Ferdouse Begum, PhD in Biostatistics 2013. Dissertation: GWAS Meta-Analysis
- Nicholas J Christian, PhD in Biostatistics 2011. Dissertation: Hierarchical Likelihood for Clustered Competing Risk Data
- Yu Mi Kwon, PhD in Biostatistics 2010. Dissertation: Kernel-Assisted Imputation Method With Incomplete Data Under Pseudo-Likelihood For Variance Estimate
- Yuanyuan Wang, PhD in Biostatistics 2010. Simulation Experiment Platform for Evaluating Clinical Trial Designs, with Applications to Phase 1 Dose-Finding Clinical Trials
- Stephanie Shook, PhD in Biostatistics 2010. Dissertation: Evaluating the Design and Analysis of Clinical Trials
- Folefac Atem, PhD in Biostatistics 2010. Dissertation: Rationale for Choosing Explicit Correlation Structure in a Multilevel Analysis with Bivariate Outcomes

Chen Gu, PhD in Statistics 2010. Dissertation: Improved Sample Size Re-estimation In Adaptive Clinical Trials Without Unblinding

Yoko Tanaka, PhD in Biostatistics 2010. Dissertation: Two-stage Dose Adaptive Designs for a Best Dose-Response Model and a Minimum Efficacious Dose in Drug Development

- Fiona Callaghan, PhD in Biostatistics 2010. Dissertation: Classification Trees for Survival Data with Competing Risks
- Fang Zhu, PhD in Biostatistics 2010.

Dissertation: An Index of Local Sensitivity to Nonignorability and a Penalized Pseudolikelihood Method for Data with Nonignorable Nonresponse

- Danielle Iuliano, PhD in Epidemiology 2009. Dissertation: Host genetic variants, treatment outcomes and metabolic complications in hepatitis C virus genotype 1
- Darmendra Ramacharan, PhD in Epidemiology 2009. Dissertation: Aspects of the lipid profile in a cohort with chronic hepatitis C infection

Sarah Haile, PhD in Biostatistics 2008. Dissertation: Inference on Competing Risks in Breast Cancer Data

Qing Xu, PhD in Biostatistics 2007. Dissertation: Inference on Survival Data Under Non-proportional Hazards

### Service on Masters Committees

Yunfei Xie, MS in Biostatistics 2019 Thesis: Assessing risk factors and predicting sepsis mortality using logistic and survival methods

Avantika Srivastava, MS in Biostatistics 2019 Thesis: Impact of the Treatment Assignment Model on Propensity Score-Based Methods

Qi Gao, MS in Biostatistics 2019

Thesis: Multinomial logistic regression and group-based trajectory modeling for longitudinal data of contraceptive methods and recognition of abusive behaviors among women seeking family planning clinical care

Corey Wicket, MPH in Epidemiology 2005 Thesis: Depression Symptoms in Patients with Untreated Hepatitis C

Murugan Raghavan, MPH in Clinical Research 2008

# Service on Departmental/School/Univ Committees

2016-present, Member, University of Pittsburgh Conflict of Interest Committee (COIC)

2019-2020, Chair, GSPH Faculty Appointment, Promotion, and Tenure Committee

2014-2019, Member, GSPH Faculty Appointment, Promotion, and Tenure Committee

2013-present. Chair, Doctoral Monitoring Committee

2013-present. Member, PhD comprehensive Examination Committee

2017 - 2019. Member, Search Committee for Biostatistics Faculty, Graduate School of Public Health

- 2018-2019. Member, Masters Program Committee
- 2018-2019. Investigative Board to Examine Allegations of Research Misconduct, School of Medicine, University of Pittsburgh, Member
- 2011-2013. Chair, PhD comprehensive Examination Committee
- 2013 2014. Member, Search Committee for Biostatistics Faculty, Graduate School of Public Health
- 2012 2013. Chair, Search Committee for Biostatistics Faculty, Graduate School of Public Health
- 2010 2012. Member, Search Committee for Biostatistics Faculty, Graduate School of Public Health
- 2009 2011. Member, Search Committee for Public Health Dynamic Laboratory (PHDL) Faculty, Graduate School of Public Health
- 2005 2011. Member, Ph.D. Qualifying Examination Committee
- 2009 2011. Co-Chair, Doctoral Curriculum Committee
- 2008 2011. Member, Doctoral Monitoring Committee
- 2006 2011. Member, Masters Program Committee
- 2010 2011. Member, Doctoral Exam Evaluation Committee
- 2006 2008. GSPH Planning and Budget Policies Committee (PBPC)

#### Membership in Professional Societies

American Statistical Association International Biometric Society (ENAR) International Chineese Statistical Association Calcutta Statistical Association Bangladesh Statistical Association International Indian Statistical Association

#### Service to the Profession

2020-Present. Member, COPSS Award Committee.

- 2014-2018. Vice-Chair, Committee on International Relations in Statistics, American Statistical Association(ASA).
- 2017. Member, International Advisory Committee International Conference on Advances in Interdisciplinary Statistics and Combinatorics, UNC Greensboro, October 2017
- 2016. Member, International Advisory Committee International Conference on Advances in Interdisciplinary Statistics and Combinatorics, UNC Greensboro, October 2016
- 2016. Member, Organizing Committee, International Conference on Analysis of Repeated Measures Data, Dhaka, Bangladesh, November 2016.
- 2016. Member, Program Committee, International Indian Statistical Association Conference, August 2016.
- 2015. Member, Scientific Committee, and Organizing Committee, Second International Conference on Probability and Statistics, University of Dhaka, Bangladesh, December 2015.
- 2014-2016. Member, Regional Advisory Board (RAB), International Biometric Society Eastern North American Region (ENAR)
- 2012-2014. Member, Committee on International Relations in Statistics, ASA.
- 2014. Member, Scientific Committee, International Conference on Applied Statistics, Dhaka, Bangladesh.
- 2014. Member, International Advisory Committee International Conference on Advances in Interdisciplinary Statistics and Combinatorics, UNC Greensboro

- 2014. Member, Program Committee, International Indian Statistical Association Conference, July 2014.
- 2013-2014. Past-President, Pittsburgh Chapter of the ASA.
- 2012-2013. President, Pittsburgh Chapter of the ASA.
- 2011-2012. President-Elect, Pittsburgh Chapter of the ASA.
- 2013. Reviewer, Patient-Centered Outcome Research Institute (PCORI)
- 2011-2014. ENAR representative to American Association of Advancement in Science section N (Medical Statistics)
- 2011-2013. Member, ENAR Student Travel Award Committee, International Biometric Society
- 2012. Reviewer, PCORI
- 2011-2012. Member, ENAR Program Committee for the 2012 Spring Meetings in Washington, D.C.
- 2011. Organizer and Chair, International Biometric Society, ENAR meeting, Miami, Florida
- 2010-2011. Member, International Committee, The First International Conference on Theory and Application of Statistics, Dhaka University Statistics Department Alumni Association (DUSDAA), Dhaka, Bangladesh.
- 2010. Organizer and Chair, International Biometric Society, ENAR meeting, New Orleans, Louisiana
- 2009. Reviewer, Patient-Centered Outcome Research Institute (PCORI)
- 2009. Organizer and Chair, International Biometric Society, ENAR meeting, San Antonio, Texas
- 2009. Reviewer, NIH Study sections for challenge grants.
- 2008. Organizer and Chair, International Biometric Society, ENAR meeting, Virginia
- 2006. Session Chair, Joint Statistical Meetings, Seattle, Washington
- 2006. Session Chair, International Biometric Society, ENAR meeting, Tampa, Florida
- 2004. Session Chair, International Biometric Society, ENAR meeting, Pittsburgh, PA

#### **Editorial Service**

- 2019 Present. Associate Editor, Biometrics.
- 2013 Present. Associate Editor, Biostatistics.
- 2013 Present. Associate Editor, Journal of Statistical Theory and Practice.
- 2014 2020. Editor, Journal of Statistical research.
- 2014 2015. Guest Editor, Journal of Statistical Theory and Practice.
- 2011-2012. Guest Editor, Journal of Statistical Research Special Volume on Biostatistics.
- 2009 Present. Member, Editorial Board, Open Access Statistics and Probability Journal.

 Biostatistics, Journal of Statistical Computation and Simulation, Statistics in Medicine, Journal of the American Statistical Association, Lifetime Data Analysis, Journal of Experimental & Clinical Cancer Research, Journal of Statistical research, International Journal of Statistical Sciences, Journal of Hepatology, American Journal of Epidemiology, Clinical Trials, Biometrical Journal, Journal of Probability and Statistical Science, Biometrics, Applied Mathematics Letters, and Cleft Palate-Craniofacial Journal

### **Research Grants**

Have been serving as Co-Investigator, directing statistical activities, on National Institute of Health (NIDDK, NHLBI, NIMH) and Health Research Service Administration-supported multicenter observational studies and clinical trials through collaborations with Epidemiology Data Center, Western Psychiatric Institute, and Department of Critical Care Medicine on projects related to Hepatitis B and C, Bariatric Surgery, Weight Gain Prevention, Depression in Older Adults, Sequencing Therapy for Depression and Pain, and Donor Management. Additionally, I have served as a mentor for 6 years on Summer Institute in Biostatistics.