
Scientific and Leadership - PhD in Biostatistics and MBA in Healthcare Management; List of Professional Accomplishments:

- (1) **Eleven years (2006 – present) as a Faculty member;** Associate Professor of Biostatistics and Data Management, The Icahn School of Medicine at Mount Sinai (ISMMS) and The Mount Sinai Hospital, New York, USA; ISMMS is ranked among top 20 medical schools in USA. Associate Professor, Biostatistics, Atlantic Health System, Morristown, New Jersey, USA. Associate Professor of Biostatistics and Epidemiology, College of Public Health and Health Informatics (CPHHI), King Saud Bin Abdul-Aziz University for Health Sciences (KSAU-HS), Riyadh, K.S.A.
- (2) **Seventeen years (Post-PhD; 2000-present) as a Senior Statistician/Biostatistics and Healthcare Management Consultant;** supervision of biostatisticians and healthcare professionals and administrators; methodological support for health services and management research conducted by science and medical students/professionals, junior & senior faculty at KSAU-HS (KSA), AHS (Morristown, New Jersey, USA) and Arbor Research Collaborative for Health (Ann Arbor, Michigan, USA). Also provided biostatistical consultation for science and medical researchers in Jordan, UAE and Qatar.
- (3) **Eleven years (2006-present) as the Manager of Biostatistics at Atlantic Health System (AHS); a top academic Health System in the US; recipient of several multi-million federal grants from the National Institutes of Health (NIH);** consisting of six world-class academic medical centers in New Jersey - supervision of biostatisticians/healthcare professionals; overseeing the development of methodological/statistical aspects of grant/research proposals; monitoring the progress, accuracy and completion of research projects at AHS.
- (4) **Served as a Senior Biostatistical/Healthcare Management Consultant at the National Institutes of Health (NIH)** Review Panel for Population Health and Health Disparities grant applications in the US. Also, served on numerous Healthcare Management and Quality Improvement Committees, Institutional Review Board (IRB), Data Management and Biostatistics Education Committees.
- (5) **Spearheaded the establishment of important national healthcare policies and modifications to existing policies in the US.** Served as a Senior Consultant on several US Healthcare and National Policy Federal Committees – US Department of Health and Human Services (DHHS), 2001-2006.
- (6) **Published 34 DISTINGUISHED-QUALITY ORIGINAL ARTICLES in high impact peer-reviewed scientific international journals.** Also, authored a book chapter on Lung Allocation in the US. In: Lynch JP III, Ross D, eds. 2006.
- (7) **Published 49 abstracts (presentations – oral and poster) in the proceedings of numerous INTERNATIONAL CONFERENCES.**
- (8) **Seven Award-Winning Publications;** received numerous scientific awards for contributions to international conferences and meetings.

Work Experience:

- Institution:** **King Saud Bin Abdul-Aziz University for Health Sciences (KSAU-HS), Department of Biostatistics and Epidemiology, College of Public Health and Health Informatics, Riyadh, Kingdom of Saudi Arabia.**
- Period:** December 2014 – present
- Position:** **Associate Professor of Biostatistics and Epidemiology, Senior Consultant, Research Office.**
- Duties:** (1) Teaching Biostatistics and Healthcare Services and Management Research to Science, Medicine and Public Health students. Providing statistical support to healthcare services and management research projects conducted by students, medical faculty and healthcare administrators; Overseeing the development, progress, accuracy, and timely completion of research and quality improvement projects, (2) Help research investigators design and develop methodology for their outcomes research and quality improvement initiatives and grant proposals, (3) Provide analytical support to research/quality improvement projects in terms of performing statistical analysis, summarizing and interpreting results and dissemination of research findings through preparation of oral/poster presentations and manuscripts for submission to high quality journals.
- Institution:** **Icahn School of Medicine at Mount Sinai, New York, Atlantic Center for Research, Atlantic Health System, Morristown, NJ, USA (the largest academic and clinical affiliate of the Icahn School of Medicine at Mount Sinai and the Mount Sinai Hospital, New York, NY, USA).**
- Atlantic Health System's Atlantic Center for Research is a resource for all who would like to conduct, participate, or assist in a research study or grant. The department also serves as staff to the Atlantic Center for Research and the Institutional Review Board (IRB), which is entrusted with the protection of human subjects involved in research.
- Period:** January 2006 – January 2015
- Position:** **Manager of Biostatistics & Associate Professor of Biostatistics**
2006-2011: Assistant Professor of Biostatistics
2011-present: Associate Professor of Biostatistics
2006-present: Manager of Biostatistics
- Duties:** (1) Teaching Biostatistics, Epidemiology and Healthcare Management Research methods to undergraduate and graduate students (Science, Medicine and Public Health) and providing statistical training and supervision to health care professionals. Supervision of biostatisticians/epidemiologists; Overseeing the development, progress, accuracy, and timely completion of research and quality improvement projects, (2) Help research investigators design and develop methodology

for their outcomes research and quality improvement initiatives and grant proposals, (3) Provide analytical support to research/quality improvement projects in terms of performing statistical analysis, summarizing and interpreting results and dissemination of studies' findings through preparation of oral/poster presentations and manuscripts for submission to medical journals.

Courses Taught:

- Introduction to Quantitative Research Methods – Healthcare Services & Management
- Healthcare Trends - Risk Management and Analysis
- Design and Conduct of Clinical and Health Services Research Studies
- Introduction to Biostatistics
- Advanced Biostatistics (Biostatistics II)
- Introduction to Epidemiology, Advanced Epidemiology (Epidemiology II)
- Generalized Linear Models - Linear and Logistic Regression
- Survival Analysis
- Diagnostic Accuracy Measures – Sensitivity and Specificity
- Power Analysis and Sample Size Calculations
- Applied Biostatistics in Clinical Trials
- Introduction to Systematic Review and Meta-Analysis
- Software Applications – SPSS, SAS, S-PLUS, Minitab, GAUSS, OpenEpi

Supervision of Students and Researchers

Brian Larkin – Health Services & Management Research, Biostatistics, 2011-2016
Daniel Shulkin - Health Services Research, Biostatistics & Epidemiology, 2013-2016
Juliette Kirk - Health Services & Management Research, Biostatistics, 2013-2015
Zachary Zeller – Health Services Research, Biostatistics, 2015
Mark Dobrosky – Biostatistics and Epidemiology, 2014
Stephanie Hanchuk – Biostatistics & Epidemiology, 2012-2013
Melissa Morawski - Biostatistics & Data Management, 2011-2012
Nicolle Segarra - Biostatistics & Data Management, 2011
Anthony Longo - Health Services & Management Research, Biostatistics, 2010
Brielle Sheridan - Biostatistics & Epidemiology, 2009
Cara Fitzgerald - Biostatistics & Epidemiology, 2008

Advanced Courses Attended (Post Doctorate):

- "Mixed Models, Longitudinal and Incomplete Data" given by Geert Verbeke (Biostatistical Centre, Catholic University of Leuven, Belgium) and Geert Molenberghs (Centre for Statistics, Limburg University Centre, Belgium), Center for Statistical Consultation and Research (CSCAR), University of Michigan, Ann Arbor, Michigan, March 25, 2005.

- "Survival Models" given by Brenda Gillespie (Center for Statistical Consultation and Research (CSCAR), University of Michigan, Ann Arbor, Michigan), Arbor Research Collaborative for Health, Ann Arbor, Michigan, July 2002.
- "Bayes and Empirical Bayes Methods for Data Analysis" given by Thomas A. Louis (Division of Biostatistics, School of Public Health, University of Minnesota, USA), Catholic University of Leuven, Belgium, December 9-11, 1998.
- "Repeated Categorical Data Analysis" given by Walter Stroup (University of Nebraska-Lincoln, USA), Catholic University of Leuven, Belgium, September 28-29, 1998.
- "S-Plus" given by Emmanuel Lesaffre, Bart Spiessens, Coleet Vynckier and Els Goetghebeur (Catholic University of Leuven and University of Gent), Catholic University of Leuven, Belgium, November 18-20, 1996.
- "Finite Mixture Models and their Applications, Including Disease Mapping and Meta Analysis". Leuven, Belgium, December 11-13, 1995.
- "Cross-over Trials". Catholic University of Leuven, Belgium, September 24-26, 1996.
- "Graphical Models, with Applications to the Medical, Social and Economic Sciences". Catholic University of Leuven, Belgium, December 9-11, 1996.
- "Survival Analysis", Catholic University of Leuven, Belgium, March 17-19, 1997.

Key Accomplishments: Played a major role in the implementation of the following:

1. The design, development, analyses and discussions of a large randomized prospective study that led to the use of the *INVOS[®] Cerebral Oximeter* during cardiac surgery at Morristown Memorial and Overlook Hospitals. *INVOS[®]* is a technology using near infrared reflectance spectroscopy (NIRS) to assess bifrontal regional cerebral oxygen saturation (rSO₂) that showed be significantly associated with reduced cognitive decline, delirium and shorter hospital stay after Coronary Artery Bypass Grafting (CABG) (related references are provided in the list of publications below, see also <http://www.somanetics.com/clinical-evidence/adult#cardaic>).
2. The design, development, analyses and discussions of a descriptive, comparative study that led to change in practice among Oncology nurses in Morristown Memorial and Overlook Hospitals by replacing peripheral blood tests for coagulation with *Venous Access Device (VAD) Coagulation Tests* which decrease pain and bruising during the course of

cancer treatment for adult inpatients (references are provided in the list of publications below). This is an Oncology Nursing Society Award-Winning project; details are in <http://www.ons.org/Awards/ONSAwards/NewAuthor/>

3. The design, ongoing development and progress of the *Stroke Patient Satisfaction Program in the Hospital and Post Discharge*. This program, implemented in both Morristown Memorial and Overlook Hospitals, provides an important measure of patient satisfaction which is key to a successful stroke program and is required by the Joint Commission for stroke disease-specific certification (references are provided in the list of publications below).
4. Development of automated Excel files used for the *Calculation of Z Scores for Echocardiographically Measured Cardiac Structures* for pediatric patients with congenital and acquired heart disease in Morristown Memorial and Overlook Hospitals. This information is extremely valuable for clinicians caring for infants and children with known or suspected cardiac disease.

Institution: **Arbor Research Collaborative for Health, Ann Arbor, MI, USA.**

Arbor Research Collaborative for Health is a not-for-profit organization that conducts multidisciplinary quantitative studies in epidemiology and public health with the goal of improving patient outcomes. Findings from those studies have led to better care for patients with chronic diseases and organ failure.

Period: **November 2001 – January 2006**

Position: **Senior Biostatistician**

Duties: (1) Supervision of biostatisticians, epidemiologists and healthcare administrators; Overseeing the development, progress, accuracy, and timely completion of healthcare management research and quality improvement projects. (2) Served as a statistical consultant providing continuous analytic support to the Organ Procurement and Transplantation Network (OPTN)/United Network for Organ Sharing (UNOS) Thoracic Organ Transplantation Committee, which is aimed at improving quality of care for Heart and Lung transplant patients.

Key Accomplishments: Played a major role in the implementation of the following:

1. The design, development and analyses of numerous large outcomes studies using the Scientific Registry of Transplant Recipients (SRTR) database that led to the implementation (in May 2005) of a *new Lung Allocation Policy for Patients Waiting for a Lung Transplant in the United States*. The new policy, which replaced an old one that was based solely on waiting time, is based on calculation of a Lung Allocation Score (LAS) incorporating both risk of death on the waiting list and transplant benefit (related references are

provided in the list of publications below).

2. The design, development and analyses of numerous outcomes studies using the Scientific Registry of Transplant Recipients (SRTR) database leading to change in practice in terms of ***Immunosuppression Use for Kidney Transplant Patients*** (related references are provided in the list of publications below).

Institution: Department of Methodology and Statistics, Utrecht University, Utrecht, the Netherlands.

Period: May 2000 - November 2001.

Position: Postdoctoral Research Associate

Duties: (1) Doing post-doctoral research on Capture-Recapture Methods,
(2) Teaching Statistics to science students and providing statistical consultancy.

Institution: Biostatistical Centre, University of Leuven, Leuven, Belgium.

Period: September 1995 - July 2000.

Position: Doctoral Candidate and Research Assistant

Duties: (1) Conducting research on bivariate generalized linear and additive models,
(2) Conducting research design for clinical trials, statistical analysis, and providing statistical consultancy.

Honors and Awards:

Honors:

- 1) MBA degree (concentration Healthcare Management) with grade **Excellent**
- 2) PhD degree in Biostatistics with **Distinction**
- 3) Master's degree in Mathematics/Statistics with grade **Very good**
- 4) Bachelor's degree in Statistics with grade **Good**

Awards:

- 1) Joint winner of the Dorfman Award at the Academy of Psychosomatic Medicine for best article for original research published in *Psychosomatics* in 2013.
- 2) Oncology Nursing Society (ONS) Publishing Award for an article published in *Clinical Journal of Oncology Nursing*, 2009.
- 3) International Society for Clinical Biostatistics (ISCB) Award Winner for paper presented at the 21st Meeting of the ISCB, Trento/Italy, September 4-8, 2000.
- 4) Best Paper presented during the 14th International Workshop on Statistical Modeling, Graz/Austria, July 19-23, 1999.
- 5) Best Paper presented during the 15th International Workshop on Statistical Modeling, Bilbao/Spain, July 17-21, 2000.

- 6) Best Oral Presentation Award for a research abstract presented at the 13th Annual Atlantic Health System Research Day, Morristown, NJ, June 2009.
- 7) Best Poster Presentation Award for a research abstract presented at the 13th Annual Atlantic Health System Research Day, Morristown, NJ, June 2009.

Achievement in Research (Theses):**Doctoral Thesis (Biostatistics):**

Title: Smoothing Procedures and Diagnostics for the Bivariate Dale Model.

Supervisor: Prof. Dr. Emmanuel Lesaffre, Head of the Biostatistical Centre, School of Public Health, Catholic University of Leuven, Leuven, Belgium.

Co-Supervisor: Prof. Dr. Geert Molenberghs, Head of Center for Statistics, Hasselt University, Diepenbeek, Belgium.

Master's Thesis (Statistics):

Title: Characterization of Some Families of Distributions.

Supervisor: Prof. Dr. Adnan Awad. Department of Mathematics and Statistics, University of Jordan, Amman, Jordan.

Research Interests - Statistical: Generalized linear models, multivariate generalized linear models (longitudinal and non-longitudinal data), bivariate Dale model, additive bivariate Dale model, nonparametric regression, smoothing splines, penalized likelihood and goodness-of-fit tests for generalized linear models and multivariate generalized linear models, Poisson regression models, binary/ordinal logistic regression models, survival models, clinical trials, bioequivalence, simulation studies; Bayesian statistical modeling, bootstrap methods, experimental design. **Clinical:** Healthcare Services and Management, Cancer Epidemiology, Infectious Disease Epidemiology, Diabetes, Neurology/Neurosurgery, Women's Health, Pediatrics, Cardiology/Cardiothoracic Surgery, Nephrology and Transplant Epidemiology.

Experience with Large National and International Databases:

- 2001 – present: Surveillance, Epidemiology and End Results (SEER)
- 2001-2006: The International Heart and Lung Transplant Registry
- 2001-2006: The Scientific Registry of Transplant Recipients (SRTR)
- 2001-2006: The Dialysis Outcomes and Practice Patterns Study (DOPPS),

including study design and analysis of numerous patient outcome and quality measures (e.g. mortality, morbidity, hospitalization, hospital stay, quality of life, access to health care, healthcare disparities) and cost measures.

LIST OF AWARD WINNING PUBLISHED ARTICLES FOLLOWED BY FULL LIST of PUBLICATIONS

1. **Bustami RT**, Lesaffre E, Molenberghs G, Loos R, Danckaerts M, Vlietinck R. Modeling Bivariate Ordinal Responses Smoothly with Examples from Ophthalmology and Genetics. *Statistics in Medicine*, 20, 1825-1842, 2001 (**JOINT AWARD WINNING ARTICLE; International Society for Clinical**

Biostatistics Award).

2. Lin R, Fowler S, Dise C, **Bustami RT**. Venous Access Devices: Obtaining Coagulation Tests in Adult In-patients with Cancer. *Clinical Journal of Oncology Nursing*, Volume 13, Number 3, 2009. (**JOINT AWARD WINNING ARTICLE; Oncology Nursing Society Publishing Award, 2009**).
3. Slater JP, Guarino T, Stack J, Vinod K, **Bustami RT**, Brown JM 3rd, Rodriguez AL, Magovern CJ, Zaubler T, Freundlich K, Parr GV. Cerebral oxygen desaturation predicts cognitive decline and longer hospital stay after cardiac surgery. *Ann Thorac Surg*. 2009 Jan; **87**(1):36-44; discussion 44-5. (**ARTICLE RECEIVED MAJOR MEDIA COVERAGE**).
4. Zaubler TS, Murphy K, Rizzuto L, Santos R, Skotzko C, Giordano J, **Bustami RT**, Inouye SK. Quality Improvement and Cost Savings with Multicomponent Delirium Interventions: Replication of the Hospital Elder Life Program in a Community Hospital. *Psychosomatics*. 2013 May-Jun; **54**(3):219-26. doi: 10.1016/j.psych.2013.01.010. Epub 2013 Mar 12. (**JOINT AWARD WINNING ARTICLE; Dorfman Award at the Academy of Psychosomatic Medicine for best article for original research published in Psychosomatics in 2013**).
5. **Bustami RT**, Lesaffre E, Molenberghs G. The Use of Smoothing for Testing the Goodness-Of-Fit in a Bivariate Generalized Linear Model. *Proceedings of the 14th International Workshop on Statistical Modeling*, Graz/Austria, 1999. (**AWARD WINNING PAPER; BEST STUDENT PAPER at IWSM, 1999**).
6. **Bustami RT**, Lesaffre E, Molenberghs G. Goodness-Of-Fit Tests for Bivariate Ordinal Regression Models. *Proceedings of the 15th International Workshop on Statistical Modeling*, Bilbao/Spain, 2000. (**AWARD WINNING PAPER; BEST STUDENT PAPER at IWSM, 2000**).
7. **Bustami RT**, Lesaffre E, Molenberghs G. A Goodness-Of-Fit Test for the Bivariate Dale Model. *Proceedings of the 21st Meeting of the International Society for Clinical Biostatistics*, Trento/Italy, 2000. (**AWARD WINNING PAPER; Best PAPER AWARD at the International Society for Clinical Biostatistics, 2000**).

Original Full Length Publications [Listed in chronological order] (AWARD WINNING INFORMATION IS ALSO PROVIDED)

1. Nevens F, **Bustami RT**, Scheys I, Lesaffre E, Fevery J. Variceal Pressure Is a Factor Predicting the Risk of a First Variceal Bleeding. A Prospective Cohort Study in Cirrhotic Patients. *Hepatology*, **27**, No 1, 15-19, 1998.
2. **Bustami RT**, Lesaffre E, Molenberghs G, Loos R, Danckaerts M, Vlietinck R. Modeling Bivariate Ordinal Responses Smoothly with Examples from Ophthalmology and Genetics. *Statistics in Medicine*, 20, 1825-1842, 2001

(AWARD WINNING ARTICLE; International Society for Clinical Biostatistics Award).

3. Van der Heijden P, **Bustami RT**, Van Houwelingen H, Engbersen J. Point and Interval Estimation of the Population Size Using the Truncated Poisson Regression Model. *Statistical Modeling*, Volume **3**, no. 4, 305–322, 2003.
4. Saran R, Novak J, Desai A, Abdulhayoglu E, Warren J, **Bustami RT**, Handelman G, Barbato D, Weitzel W, D'Alecy L, Rajagopalan S. Impact of Vitamin E on Plasma Asymmetric Dimethylarginine (ADMA) in Chronic Kidney Disease (CKD): A Pilot Study. *Nephrology Dialysis and Transplantation*, **18**, 2415-2420, 2003.
5. **Bustami RT**, Ojo A, Wolfe R, Merion R, Bennett W, McDiarmid S, Leichtman A, Held P, Port F. Immunosuppression and the Risk of Post-Transplant Malignancy among Cadaveric First Kidney Transplant Recipients, *American Journal of Transplantation*, **4**:87-93, 2004.
6. Kaufman DB, Shapiro R, Lucey MR, Cherikh WS, **Bustami RT**, Dyke DB. SRTR Report on the State of Transplantation: Immunosuppression Practice and Trends. *American Journal of Transplantation*, **4** (Supplement 9): 38-53, 2004.
7. Swartz R, **Bustami RT**, Daley JM, Gillespie BW, Port FK. Continuous Renal Replacement Therapy (CRRT) Improves Outcome Among Patients with Severe Acute Renal Failure (ARF). *Clinical Nephrology*, **63** (5):335-45, 2005.
8. Shapiro R, Young JB, Milford EL, Trotter JF, **Bustami RT**, Leichtman AB. SRTR Report on the State of Transplantation: Immunosuppression. Evolution in Practice and Trends, 1993-2003. *American Journal of Transplantation*, **5** (Issue 4, Part 2): 874-886, 2005.
9. Egan TM, Murray S, **Bustami, RT**, Shearon TH, McCullough, KP, Edwards, LB, Coke, MA, Garrity, ER, Sweet, SC, Heiney, DA, Grover, FL: Development of the New Lung Allocation System in the United States. *American Journal of Transplantation*, **6**:5p2, 1212-1227, 2006.
10. Meier-Kriesche H-U, Li S, Gruessner RWG, Fung JJ, **Bustami RT**, Barr ML, Leichtman AB. Immunosuppression: Evolution in Practice and Trends, 1994-2004. *American Journal of Transplantation*, **6**:1111-31, 2006.
11. **Bustami RT**, O'Donnell N, Whitman ED. Variations in time to receiving first surgical treatment for breast cancer as a function of racial/ethnic background. *Journal of Clinical Oncology* **26**, 26-30: 2008.
12. Slater JP, Guarino T, Stack J, Vinod K, **Bustami RT**, Brown JM 3rd, Rodriguez AL, Magovern CJ, Zaubler T, Freundlich K, Parr GV. Cerebral oxygen desaturation predicts cognitive decline and longer hospital stay after cardiac

- surgery. *Ann Thorac Surg.* 2009 Jan; **87**(1):36-44; discussion 44-5. (**ARTICLE RECEIVED MEDIA COVERAGE**).
13. Lin R, Fowler S, Dise C, **Bustami RT**. Venous Access Devices: Obtaining Coagulation Tests in Adult In-patients with Cancer. *Clinical Journal of Oncology Nursing*, Volume **13**, Number 3, 2009. (**AWARD WINNING ARTICLE; Oncology Nursing Society Publishing Award, 2009**).
 14. Sales CM, Haq F, **Bustami RT**, Sun F. Management of isolated soleal and gastrocnemius vein thrombosis. *J Vasc Surg.* 2010 Nov; **52**(5):1251-4. Epub 2010 Jul 13.
 15. Epstein MD, Segal LN Ibrahim S, Friedman N, **Bustami RT**. Snoring and the risk of obstructive sleep apnea in patients with pulmonary embolism. *Sleep*, **33**(8): 1069–1074, 2010.
 16. Zaubler T, Fann JR, Roemer S, Katon WJ, **Bustami RT**, Syrjala KL. Impact of Delirium on Decision-making Capacity following Hematopoietic Stem Cell Transplantation. *Psychosomatics.* **51**(4):320-9, 2010.
 17. Segal LN, Oei E, Oppenheimer BW, Goldring RM, **Bustami RT**, Ruggiero S, Berger KI, Fiel SB. Evolution of pattern of breathing during a spontaneous breathing trial predicts successful extubation. *Intensive Care Medicine*, **36**(3):487-95, 2010.
 18. Starkman H, Frydman E. **Bustami RT**. Glargine Basal-Bolus Insulin Regimen Vs Insulin Pump Therapy. A Comparison of Glycemic Control. *J Pediatr Endocr Met* 2011; **24**(5-6):369–371, 2011; by Walter de Gruyter • Berlin • Boston. DOI 10.1515/JPEM.2011.018.
 19. Casey DE Jr, Chang K, **Bustami RT**. Evaluation of Hospitalization for Infections That Are Present on Admission. *Am J Med Qual.* 2011 Nov-Dec; **26**(6):468-73. Epub 2011 Jul 1.
 20. Mones RL, Yankah A, Duelfer D, **Bustami RT**, Mercer G. Disaccharidase deficiency in pediatric patients with celiac disease and intact villi. *Scand J Gastroenterol.* 2011 Dec;**46**(12):1429-34. doi: 10.3109/00365521.2011.619276. Epub 2011 Sep 22.
 21. Lujan J, Barratt-Stopper PA, Nemeth Z, **Bustami RT**, Perdrizet GA, Rolandelli RH. Factors Influencing the Outcome of Intestinal Anastomosis. *Am Surg.* 2011 Sep; **77**(9):1169-75.
 22. Xydas S, Magovern CJ, Slater JP, Brown JM, **Bustami RT**, Parr GVS, Thurer RL. Implementation of a Comprehensive Blood Conservation Program can Reduce Blood Utilization in a Community Cardiac Surgery Program. *J Thorac Cardiovasc Surg.* 2012 Apr;**143**(4):926-35. Epub 2012 Jan 27.

23. Koshenkov VP, Shulkin D, **Bustami RT**, Chevinsky AH, Whitman ED. Role of sentinel lymphadenectomy in thin cutaneous melanomas with positive deep margins on initial biopsy. *J Surg Oncol*. 2012 Sep 15; **106** (4):363-8. doi: 10.1002/jso.23093. Epub 2012 Mar 15.
24. Fang SH, Cromwell JW, Wilkins KB, Eisenstat TE, Notaro JR, Alva S, **Bustami RT**, Chinn BT. Is the Abdominal Repair of Rectal Prolapse Safer than Perineal Repair in the Highest Risk Patients? A NSQIP Analysis. *Dis Colon Rectum*. 2012 Nov; **55**(11):1167-72. doi: 10.1097/DCR.0b013e31826ab5e6.
25. Zaubler TS, Murphy K, Rizzuto L, Santos R, Skotzko C, Giordano J, **Bustami RT**, Inouye SK. Quality Improvement and Cost Savings with Multicomponent Delirium Interventions: Replication of the Hospital Elder Life Program in a Community Hospital. *Psychosomatics*. 2013 May-Jun; **54**(3):219-26. doi: 10.1016/j.psym.2013.01.010. Epub 2013 Mar 12. (**AWARD WINNING ARTICLE; Dorfman Award at the Academy of Psychosomatic Medicine for best article for original research published in Psychosomatics in 2013.**)
26. **Bustami RT**, Shulkin D, O'Donnell N, Whitman ED. Variations in Time to Receiving First Surgical Treatment for Breast Cancer as a Function of Racial/Ethnic Background: a Cohort Study. *Journal of the Royal Society of Medicine*. 2014, 5: DOI: 10.1177/2042533313515863.
27. Kurlan R, Evans R, Wrigley S, McPartland S, **Bustami RT**, Cotter A. Tai Chi in Parkinson's Disease: A Preliminary Randomized, Controlled, and Rater-Blinded Study. *Advances in Parkinson's Disease*. 2015, 4, 9-12. doi: 10.4236/apd.2015.41002.
28. Alkatheri A, Bekairy AA, Aburuz S1, Qandil A, Khalidi N, Abdullah K, Sayyari SA, **Bustami RT**, Harbi SA, Raddadi SA, Thiab KA, Saleh KB, Shaya AA. Exploring Quality of Life among Renal and Liver Transplant Recipients. *Ann Saudi Med*. 2015 Sep-Oct; **35**(5):368-76. doi: 10.5144/0256-4947.2015.368.
29. Alkatheri AA, Bekairy AA, Jarab A, **Bustami RT**, Khalidi N, Alshaya A, Bin Saleh K, Alraddadi S, Alharbi S, Vasudevan S, Alsayyari A, Qandil AM. Medication Adherence and Treatment Satisfaction among Renal Transplant Recipients. *Ann Transplant*. 2016 May 5; **21**:270-8.
30. Alkatheri A, **Bustami RT**, Bekairy AA, Almudaimagh H, Algamdi S, Harbi SA, Khalidi N, Murphy JE, Qandil A. Pharmacy Educators' Knowledge of Medication Safety and Their Perception toward its Integration into the Doctor of Pharmacy Curriculum. *Accepted for publication in the American Journal of Pharmaceutical Education (AJPE)* 2016.
31. Alkatheri A, Bekairy AA, Al-Rajhi Y, Harbi SA, Hejaili F, **Bustami RT**,

- Almudaimagh H, Mansour M. Weekly Therapeutic Effectiveness of Different Doses of Eprex; Epoetin alfa® in the Treatment of Anaemia of Chronic Kidney Disease Adult Patients. *International Journal of Research in Pharmacy and Science* 2016, 6(3); 17-24.
32. Alkatheri A, Bekairy AA, Al-Rajhi Y, Harbi SA, Alkhamees KH, Hejaili F, **Bustami RT**, Abdel-Razaq W, Qandil A, Mansour M. Comparison of the effectiveness of equal doses of short and long-acting erythrocyte stimulating agents for managing anemia in chronic kidney disease adult patients. *International Journal of Medical Research & Health Sciences (IJMRHS)*. 2016, 5, 12: 335:342.
33. Harbi SA Al-Qhatani N, **Bustami RT**, Almudaimagh H, Alkatheri A, Al Badali H, Al Awlah Y, Aldekhael S, Al Tuwaijri W, AbuRuz S, Bekairy AA. A comparative study of voluntarily reported medication errors among adult patients in intensive care (IC) and non-IC settings in Riyadh, Saudi Arabia. *Tropical Journal of Pharmaceutical Research*, December 2016; 15 (12): 2713-2718.
34. Modaimagh H, **Bustami RT**, Alharbi S, Albekairy A, Al Nuhait M, Al Harbi K, Al Jarboa A, Masud A. Sickness Presenteeism Among Health Care Providers in an Academic Tertiary Care Center in Riyadh: A Cross-Sectional Survey. *Accepted for Publication in Annals of Saudi Medicine*, 2017.
35. Abdel-Razaq W. **Bustami RT**. Exploring Patients Perceptions of Cancer Chemotherapy Side Effects. *Submitted for Publication in Cancer Management and Research*, 2017.
36. **Bustami RT**, Almotairi M, Jarab A, Aburuz S. Validity and Reliability of the Arabic Version of the The EuroQOL (EQ-5D). A Study from Saudi Arabia. *Submitted for Publication in Annals of Saudi Medicine*, 2017.
37. El Amin NO. Sukkarieh HH, **Bustami RT**, Aljaafari EA, Yousef L, Al-Kadri H. Obstetricians and Midwives' Practices of Umbilical Cord Clamping and their Attitudes toward Delayed Cord Clamping in Saudi Arabia. *Submitted for Publication in Annals of Saudi Medicine*, 2017.

Abstracts Published in Proceedings of International Conferences [in chronological order] (AWARD WINNING INFO IS ALSO PROVIDED)

1. Elgamal A, Van Poppel H, **Bustami RT**, Baert L. The Use of Free Total (F/T) PSA Ratio Enhances Detection of the Impalpable Invisible T1c Prostate Cancer. *European Urology*, **30** (52): 21, 1996.
2. **Bustami RT**, Lesaffre E, Molenberghs G. The Use of Smoothing for Testing the Goodness-Of-Fit in a Bivariate Generalized Linear Model. *Proceedings of the 14th International Workshop on Statistical Modeling*, Graz/Austria, 1999. **AWARD**

WINNING PAPER; Best Paper at IWSM, 1999).

3. **Bustami RT**, Lesaffre E, Molenberghs G. Goodness-Of-Fit Tests for Bivariate Ordinal Regression Models. *Proceedings of the 15th International Workshop on Statistical Modeling*, Bilbao/Spain, 2000. (**AWARD WINNING PAPER; Best Paper at IWSM, 2000).**)
4. **Bustami RT**, Lesaffre E, Molenberghs G. A Goodness-Of-Fit Test for the Bivariate Dale Model. *Proceedings of the 21st Meeting of the International Society for Clinical Biostatistics*, Trento/Italy, 2000. (**AWARD WINNING PAPER; Best Paper at the International Society for Clinical Biostatistics, 2000).**)
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36. Sidor J, BS, Armstrong C, **Bustami RT**, Sales CM. EVAR: Does Device Type Matter? *Proceedings of the 38th Annual Symposium on Vascular Surgery*, Scottsdale, Arizona, 2010.
37. Haq F, Sales CM, Armstrong C, **Bustami RT**. Management of Gastrocnemius and/or Soleal Vein Thrombosis: Is Anticoagulation Effective? *Proceedings of the 38th Annual Symposium on Vascular Surgery*, Scottsdale, Arizona, 2010.
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39. Melfi R, Naturale D, Griffith R, Astiz D, **Bustami RT**. Impact of a Diabetes Care Program on Resident Confidence, Knowledge, and Skills in Diabetes and Chronic Disease Management. *Proceedings of the 70th Annual Meeting of the American Diabetes Association*, Orlando, Florida, 2010.
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- Margins on Initial Biopsy. *Proceedings of the Society of Surgical Oncology's 64th Annual Cancer Symposium*, March 2-5, 2011, in San Antonio, TX.
41. Sofair JB, **Bustami RT**, Rivera R, Cummings S, Dardik R, Ryan CW, Zaubler T. Does New Jersey's Screening Law Increase the Detection of Postpartum Depression? *Proceedings of the 165th Annual Meeting of the American Psychiatric Association*, May 5-9, 2012, Philadelphia, Pennsylvania.
 42. Fearon-Clarke J, Betty M, Vargas B, Montesino R, Sheris S, **Bustami RT**. Emergency department diuretic dosing in acute decompensated heart failure and its effect on length of stay and re-admission rate. *Heart & Lung: The Journal of Acute and Critical Care*, Volume 41, Issue 4, 414-415, July 2012.
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 44. Whitman ED, **Bustami RT**. Survival for melanoma patients with pre-existing chronic lymphocytic leukemia. *J Clin Oncol* 30, 2012 (suppl; abstr e19057).
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 46. Patel H, DeFilippis M, Adamczyk K, **Bustami RT**. Evaluation of hypertonic saline utilization in patients with traumatic brain injury in a community teaching hospital. *Proceedings of the 11th Annual Neurocritical Care Society Meeting*, October 1-4, 2013, Philadelphia, PA.
 47. Levison J, Porcelli B, Deitz A, Karchin M, **Bustami RT**. Choice of Hemodialysis Extremity Access Can Reduce Catheter Days. *Proceedings of the 42nd Annual Clinical Vascular Surgery Society Meeting*, March 18-22, 2014, Carlsbad, CA.
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Technical Reports [Listed in chronological order]

1. **Bustami RT**, Lesaffre E, Molenberghs G. Implementation of the Additive Bivariate Dale Model. *Technical Report*, Biostatistical Centre, Catholic University of Leuven, Leuven, Belgium, 1998.
2. **Bustami RT**, Lesaffre E, Molenberghs G. Implementation of the Additive Bivariate Dale Model using S-PLUS. *Documentation Report*, Biostatistical Centre, Catholic University of Leuven, Leuven, Belgium, 2000.

Book Chapters: Egan TM, Edwards LB, Coke MA, Murray S, **Bustami RT**, Hulbert Shearon TE: Lung Allocation in the United States. In: Lynch JP III, Ross D, eds., Lung and Heart-Lung Transplantation (Lung Biology in Health and Disease series) New York: Marcel Dekker Inc. 2006.

Journal Reviews: American Journal of Transplantation, American Journal of Medical Quality.

Grants Funded: (Consultant & Co-investigator)

1. Keleekai N *et al.* Assessing a peripheral intravenous catheter insertion, simulation-based mastery learning course's impact on nurses' IV insertion skills, knowledge, and confidence. Funded by B. Braun Medical Inc, PA, USA, \$30,000, (2014-2016).
2. Smith J *et al.* Educational Intervention to Improve Lifestyle and Outcomes for Obese Kids. Funded by Johnson & Johnson, USA, \$25,000, (2013-2015).
3. Fiel S *et al.* To assess, identify, and diminish barriers to adherence and thus improve overall Fev1 scores and nutritional status over a 3 year period (2014-2016), in the final approval phase – State of New Jersey funding agency.

Software Developed:

A full S-Plus package that implements:

- **Fitting univariate and bivariate generalized linear models**
- **Fitting univariate and bivariate generalized *additive* models (smoothing)**
- **Model assessment and global influence.**

Memberships in Professional Societies:

- **2008-present: American Heart Association**
- **2009-present: American Society of Clinical Oncology**

Memberships in Professional Committees:

- **2016-present: Institutional Review Board (Alfaisal University)**
- **2006-present: Institutional Review Board (AHS)**
2006-present: Medical Education and Training Committee (AHS)
2006-2015: Recruitment Committee (AHS)
2006-2015: NCAA Accreditation Task Force (KSAU-HS)

Scholarships:

- Doctoral scholarship for PhD research in Biostatistics from Catholic University of Leuven, Belgium: September 1995- September 1999.
- Postdoctoral grant from the Department of Methodology and Statistics, Utrecht University, Utrecht, the Netherlands: May 2000 – May 2002.

Computer Skills:

- Mastery of PCs (DOS, Windows)
- Biostatistical and Epidemiological Software:
 - SAS
 - S-Plus
 - SPSS
 - Epi Info
 - MINITAB
 - StatsDirect
 - OpenEpi
 - MedCalc
- Microsoft Office: Microsoft Word, Microsoft Excel, Microsoft Power Point, Microsoft Outlook.
- PCTeX32

Language Proficiency:

English: Fluent: speaking, reading and writing

Arabic: Fluent: speaking, reading and writing

French: *Very good:* speaking, reading and writing

Dutch: *Very good:* speaking, reading and writing

References: [MANY, AVAILABLE UPON REQUEST]