

Issa F. Zakeri, Ph.D.

Department of Epidemiology and Biostatistics
Drexel University
Nesbit Hall, 5th Floor, Room 556
3215 Market Street
Philadelphia, PA 19104
Phone: (267) 359-6220
E-mail: issa.zakeri@drexel.edu

I. GENERAL BIOGRAPHICAL INFORMATION

A. Education

University of Illinois at Urbana-Champaign	M.S. Mathematics	1984
University of Illinois at Urbana-Champaign (Advisor: Robert A. Wijsman)	Ph.D. Statistics	1987

B. Academic Appointments

2012- Professor, Department of Epidemiology and Biostatistics, Drexel University

2008-2012 Associate Professor (with tenure), Department of Epidemiology and Biostatistics, Drexel University

Previous position(s) at other institutions:

1982-1987 Teaching/Research Assistant, University of Illinois at Urbana-Champaign, Champaign, IL.

1987-1994 Assistant Professor, Department of Mathematics, University of Maryland, College Park, MD.

1992 Visiting Research Assistant Professor, Center for Stochastic Processes, Department of Statistics, University of North Carolina at Chapel Hill, Chapel Hill, NC.

1992-1994 Summer Quarters, Visiting Scholar, Department of Statistics, Stanford University, Stanford, CA.

1994-1996 Visiting Assistant Professor, Department of Statistics, University of North Carolina at Chapel Hill, Chapel Hill, NC.

1996-1997 Visiting Research Assistant Professor, Department of Statistics, University of North Carolina at Chapel Hill, Chapel Hill, NC.

1997-2000 Visiting Faculty, Department of Statistics, University of North Carolina at Chapel Hill, Chapel Hill, NC.

2001-2007 Assistant Professor of Pediatrics, Baylor College of Medicine

2006-2008 Adjunct Faculty, Department of Statistics, Rice University

II. RESEARCH INFORMATION

A. Research Support

Active

R01 DC013626 Zakeri (PI of subcontract)) 12/01/2014-11/30/2018 1.2 calendar
NIDCD
Objective evaluation of the conductive olfactory losses and nasal obstructions symptoms
Role: PI of subcontract

COMPLETED GRANTS

04589 DeRoos (PI) 01/15/2015-12/31/2015 .9 calendar
Water Resource Foundation \$83,067
Evaluation of Scientific Literature on Turbidity Associate with the Risk of Gastrointestinal (GI) Illness
Role: Co-Investigator

FHI 360 Zakeri (PI) 09/01/15-03/01/2016 1.08 calendar
FHI 360- NCCOR \$51,471
Youth Compendium of Energy Cost of Physical Activity
Role: PI of subcontract

1R01 DK085163-01 Zakeri (PI of subcontract) 5/1/10- 4/30/14
NIH \$1,646,133
Novel Approaches to Predict Energy Expenditure & Physical Activity Levels in Preschoolers
Role: PI of subcontract (35% effort for each of the 4 years of funding)

Co-Investigator Lowe (PI) 5/1/2009-4/31/2014
NIH 1 R01 DK080909 \$356,424
A Test of Nutritional Interventions to Enhance Weight Loss Maintenance
Role: Co-Investigator

Co-Investigator Sockolow (PI) 09/30/2011-09/29/2013
NIH-AHRQ R21
Impact of point-of-care Electronic Health Record in Home Care
Role: Co-Investigator (10% effort for each of the 2 years funding)

Co-Investigator Forman (PI) 7/1/2009-6/30/2011
NIH 1R21DK0804430 \$229,500
Acceptance-based behavior treatment: An innovative control innovation
Role: Co-Investigator

Co-Investigator (PI: N. Butte) 12/01/05-11/30/09
NIH 1 R01 DK074387-01 \$1,350,000
Prediction of Energy Expenditure/Physical Activity in Children and Adolescents
Role: Co-Investigator (25% time in all years)

Principal Investigator (PI: I. Zakeri) 10/01/04-11/30/07
USDA ARS 6520-51000-047 \$125,307

Issa F. Zakeri

Statistical Analysis of Food Purchase Data

Role: PI (15% time in all years)

Co-Investigator (PI: T. Baranowski) 07/01-/05-06/30/09
NIH-NCI 1 R01 CA 116766 \$1,819,870

PROP Sensitivity and Obesity among Ethnic Children

Role: Co-Investigator (10% time in all years)

Co-Investigator (PI: T. Nicklas) 04/15/05-03/31/08
NIH NCI 1 R01 CA107545 \$1,473,554

Predictors of Children's Portion Sizes and Mealtime Intake

Role: Co-Investigator (10% in all years)

Co-Investigator on Subcontract (PI: R. Buday /T .Baranowski) 07/01/04-06/30/09
NIH-NIDDK SBIR PHASE II 1 U44 DK066724 \$500,060

Computer-based Intervention for Type 2 Diabetes in Youth

Role: Co-Investigator (%5 time years 1 & 2, and 10% time year 3)

Co-investigator (PI: T. Baranowski) 08/10/2007-07/31/2011
1U01CA130762-01 \$2,247,771

Food Intake Recording Software System: Version 4

The goal of this grant is to develop a computerized method for conducting 24 hour dietary recalls with children that will be approximately the quality of 24 hour dietary recalls conducted by dietitians, but much lower cost per recall.

Role: Co-Investigator (10% time in all years)

Co-Investigator (PI: T. Baranowski) 03/15/03-02/28/08
NIH-NIDDK 1 U01 DK061231 \$620,210

Middle School Prevention of Type 2 Diabetes

Role: Co-Investigator (5% time in all years)

Co-Investigator (PI: J. Fisher) 01/10/05-01/09/10
NIH NIDDK 1 R01 DK071095 \$1,458,000

Intake Promoting Effects of Large Portions in Children

Role: Co-Investigator (5% time in all years)

Co-Investigator (PI: J. Fisher) 04/15/05-03/31/08
NIH-NCI R01 CA107545-01A1 \$1,473,554

Predictors of Children's Portion Sized and Mealtime Intake

Role: Co-Investigator (5% time in yrs 1,2; 10% yr 3)

Co-investigator (PI: J. Fisher) 01/01/06-01/01/10
USDA NRI 2006-55215-16694 \$1,107,387

Determination of Young Children's Self-Served Portion Sizes

Role: Co-Investigator (5% time in all years)

Co-investigator (PI: K. Cullen) 09/01/2006-08/2008
NIH 1R21HD051661-01A1 \$371,250

Exploring Strategies to Increase School Breakfast Consumption in Middle Schools

Role: Co-Investigator (5% time in all years)

Issa F. Zakeri

Co-Investigator (PI: K. Cullen) 02/2004-01/2008
USDA-NRI Integrated Program (grant) 2004-35215-14225 \$747,500
A ground level weight management approach: Creating healthy home eating environments
Role: Co-Investigator (10% time in all years)

Co-Investigator (PI: K. Cullen) 3/15/07-3/14/11
USDA-NRI Integrated Program (grant) \$1,453,333
An Interactive Web-Based Program to Improve Food and Activity Choices of High School Students

Co-investigator (PI: D. Thompson) 05/01/07 – 04/30/2011
NIH NICHD 1 R01 HD050585 \$2,485,497
Squire's Quest! II: Implementation intentions & Children's FJV Consumption
Role: Co-Investigator (5% time in all years)

Co-Project Director (PI: T. Nicklas) 01/01/08-12/31/07
Dairy Management, Inc/National Dairy Council \$46,252
Dietary Calcium Intake and Dairy Product Consumption by Minority Mothers: Nutritional Impact and Health Outcomes.
Role: Co-Project Director (5% time)

Co-Investigator (PI: T. Nicklas) 12/01/04-11/30/06
NIH-NCI 1 R21 CA107010-01A1 \$247,373
Getting a Head Start on Healthier Eating Habits

Co-Investigator (PI: K. Cullen) 10/2005-10/2006
USDA-ERS \$149,085
Evaluation of School Policy Change on Middle School Student Lunch Consumption

Co-Investigator (PI: T. Nicklas) 2003-2005
USDA ERS
Eating Patterns and Dietary Quality in Young Adults

Co-Investigator (PI: D. Thompson) 09/01/03-08/31/05
NIH-NCI R21 CA 102470
Dual Code Theory and Youth Physical Activity Self Efficacy

Co-Investigator on Subcontract (PI: R. Buday) 07/2003-06/2004
NIH-NIDDK SBIR PHASE I 1 U44 DK066724-01
Computer-based Intervention for Type 2 Diabetes in Youth

Co-Investigator (PI: T. Baranowski) 07/01/01-06/30/04
American Cancer Society TURSG 01-225-01-PBP
Multicultural 5 A Day and Activity Boy Scout Badges
Role: Co-Investigator (10% time)

Co-Investigator (PI: T. Baranowski) 07/01/01-06/30/03
NIH-NCI 1 R21 CA092045
Home Fruit, Juice and Vegetable Availability: Theory and Measurement
Role: Co-Investigator (15% time in all years)

Co-Investigator (PI: T. Baranowski) 08/01/99-11/30/02
National Heart, Lung and Blood Institute U01 HL 065160
Obesity Prevention among African-American Girls

Issa F. Zakeri

Role: Co-Investigator (10% time year 3)

Co-Investigator (PI: T. Nicklas) 2003-2005
(Subcontract) UAB NIH NCI
Fruit and Vegetable Intake Issues in Head Start Families
Co-Investigator (5% time in years 2 and 3)

Co-Investigator (PI: T. Nicklas) 01/ 02/02-31/01/05
R21 CA091475
Food Preference of Ethnic Minority Preschoolers
Role: Co-Investigator (5% time in all years)

Co-Investigator (PI: T. Baranowski) 10/01/04-09/30/05
USDA ARS 6250-51000-038
Influences on and methods of changing children's diet and physical activity

Statistician (PI: T. Nicklas) 2004-2005
National Cattleman's Beef Association
Contribution of Meat Products to the overall Quality, Adequacy of Dietary Intakes & Health Outcomes
in Children & Young Adults

Co-Investigator (PI: D. Thompson) 07/01/03-02/28/05
Robert Wood Johnson Foundation
Factors influencing log-on rates in eHealth obesity prevention program promoting healthy eating and
physical activity to 8-10 year old African American girls

Co-Investigator (PI: R. Jago) 11/01/03-10/31/05
Robert Wood Johnson Foundation
Moderating effect of environment on adolescent physical activity change

Co-Investigator (PI: R. Leadbetter) 1999
Office of Naval Research Grant N00014931 D043
Structural Safety of Vessels in High Seas

Co-Investigator (PI: S. Cambanis) 1994-1996
National Science Foundation and Air Force Office of Scientific Research F49620
Stable Random Processes

National Science Foundation Travel Grant 1989

University of Maryland, College Park, Research Award 1988

B. Scientific Participation

1. Reviewed Manuscripts for:

- Annals of Statistics
- Annals of Applied Probability
- Annals of Institute of Statistical Mathematics
- Australian and New Zealand Journal of Statistics
- Electronic Journal of Statistics
- European Journal of Clinical Nutrition

IEEE Transactions on Systems, Man, and Cybernetics, Part C: Applications and Reviews
International Journal of Behavioral Nutrition and Physical Activity
International Journal of Child Health and Nutrition
Korean Society of Mathematical Education
Journal of Applied Physiology
Journal of Multivariate Analysis
Journal of Physiological Measurement
Journal of Statistical Planning and Inference
Mathematical Methods of Statistics
Medicine & Science in Sports & Exercise
Obesity Research
PLOS ONE
Psychological Reports
Scandinavian Journal of Statistics
Stochastic Environmental Research and Risk Assessment
Stochastic Processes and their applications

2. Editorial Service

Member, Editorial Board, The Scientific World Journal–Nutrition Division
Member, Editorial Board, Journal of Biometrics & Biostatistics
Member, Editorial Board, Epidemiology: Current Research

3. Review panels

Reviewer for National Science Foundation
Reviewer for Mathematical Reviews

4. Professional societies

American Statistical Association
Bernoulli Society
Institute for Mathematical Statistics
International Biometric Society

5. Selected presentations, research seminars

1. IMS Annual Meeting, August 1989
2. Invited participant at the American Mathematical Society and Institute of Mathematical Statistics conference on “Sequential search and selection in real time”; University of Massachusetts at Amherst, Massachusetts, June 1990.
3. Invited participant at the American Mathematical Society, Institute of mathematical Statistics and Society for Industrial and Applied Mathematics on ‘Multivariate time series’, University of Washington, Seattle, June 1991.
4. Invited participant at the workshop on “Non-stationary random processes and their applications”, Hampton, VA, August 1991.
5. University of South Carolina, Columbia, Department of Statistics, February 1992
6. Stanford University, Department of statistics, July 1992
7. 2nd International Symposium: Probability and Applications, Bloomington, Indiana, March 1993
8. Invited participant at the Institute of Mathematical Statistics workshop on “Directions in sequential analysis”, June 1994
9. University on North Carolina, Department of Statistics, November 1994
10. University of Oklahoma, Department of Biostatistics and Epidemiology, August 2000

11. Rice University, Department of Statistics, January 2002
12. University of Texas at Dallas, Department of Mathematical Sciences, April 2006
13. International Conference on “Recent Advances and Controversies in the Measurement of Energy Metabolism”, University of Colorado, February 2008.
14. University of Delaware, Department of Food and Resource Economics, November 2009.
15. University of Delaware, Department of Applied Economics and Statistics and Delaware ASA, April, 2012.
16. University of Massachusetts Lowell, Department of Mathematical Sciences, April 24, 2017

C. Research Interests:

Biostatistics
Longitudinal Data Analysis
Time Series Analysis
Multivariate Statistical Analysis
Sequential Analysis
Stochastic Modeling
Functional Data Analysis
Applications of Statistical and Machine-Learning Methods to Health Sciences
Nutrition
Obesity

D. PUBLICATIONS

PUBLISHED IN REFERREED JOURNALS

1. **Fakhre-Zakeri I.** Sequential confidence sets with beta-protection in multiparameter families. *Sequential Analysis*, 1989, 1:1-26.
2. **Fakhre-Zakeri I.** Sequential confidence sets with guaranteed coverage probability and beta protection. *Journal of Multivariate Analysis*. 1990, 33:89-105.
3. **Fakhre-Zakeri I**, Lee S. Sequential estimation of the mean of a linear process. *Sequential Analysis*, 1992, 11:181-197.
4. **Fakhre-Zakeri I**, Slud E. Models of empirical-Bayes type for software testing. University of Maryland, Department of Mathematics, Technical Report MD 92-12. 1992.
5. **Fakhre-Zakeri I**, Lee S. Sequential estimation of the mean vector of a multivariate linear process. *Journal of Multivariate Analysis*, 1993, 47:196-209.
6. **Fakhre-Zakeri I**, Farshidi J. A central limit theorem with random indices for stationary linear processes. *Statistics and Probability Letters*, 1993, 17:91-95.
7. Cambanis S, **Fakhre-Zakeri I.** On prediction of heavy-tailed autoregressive sequences: Forward versus reversed time. *Theory of Probability and its Applications*, 1994, 39:217-233.
8. **Fakhre-Zakeri I**, Slud E. Mixture models for reliability of software with imperfect debugging: Identifiability of Parameters. *IEEE Trans. Reliability*. 1995, 44:104-113.
9. Cambanis S, **Fakhre-Zakeri I.** Forward and reversed time prediction of autoregressive sequences. *Journal of Applied Probability*, 1996, 33:1053-1060.

10. **Fakhre-Zakeri I**, Slud E. Optimal stopping of sequential size-dependent search. *The Annals of Statistics*, 1996, 24:2215-2232.
11. **Fakhre-Zakeri I**, Farshidi J. Limit theorems for sample covariances of stationary linear processes with applications to sequential estimation. *Statistics*, 1997, 29:251-260.
12. **Fakhre-Zakeri I**, Lee S. A random functional central limit theorem for stationary linear processes generated by martingales. *Statistics and Probability Letters*, 1997, 35:417-422.
13. **Fakhre-Zakeri I**, Lee S. On functional limit theorems for multivariate linear processes with applications to sequential estimation. *Journal of Statistical Planning and Inference*, 2000, 83(1):11-23.
14. Nicklas TA, Demory-Luce D, Yang S-J, Baranowski T, **Zakeri I**, Berenson G. Children's food consumption patterns have changed over two decades: The Bogalusa Heart Study. *Nutrition Week 2002, San Diego, February 26, 2002, Am J Clin Nutr*, 2002, 75: 4065.
15. Baranowski T, Baranowski J, Cullen KW, Marsh T, Islam N, **Zakeri I**, Honess-Moreale L, deMoor C. Squire's Quest! Dietary Outcome Evaluation of a Multimedia Game. *American Journal of Preventive Medicine*, 2003, 24:52-61.
16. Baranowski T, Baranowski J, Cullen K, Thompson D, Nicklas T, **Zakeri I**, Rochon J. The Fun, Food, and Fitness Project (FFFP): The Baylor GEMS Pilot Study. *Ethnicity & Disease*, 2003, 13:S1-30–S1-39.
17. Nicklas T, Yang SJ, Baranowski T, **Zakeri I**, Berenson G. Eating patterns and obesity in children: The Bogalusa Heart Study. *American Journal of Preventive Medicine* 2003, 25 (1):9-16.
18. Nicklas TA, Yang S-J, Baranowski T, **Zakeri I**, Berenson G. Association of meal patterns and obesity in children: A cross-sectional analysis of The Bogalusa Heart Study. *American Journal of Preventive Medicine* 2003;25:9-16.
19. Baranowski T, Baranowski J, Cullen KW, Thompson DI, Nicklas T, **Zakeri I**, Rochon J. The Fun, Food and Fitness Project (FFFP): The Baylor GEMS Pilot Study. *Ethnicity & Disease* 2003;13:S1-30-39.
20. Nicklas TA, Demory-Luce D, Yang S-J, Baranowski T, **Zakeri I**, Berenson G. Children's food consumption patterns have changed over two decades (1973-1994): The Bogalusa Heart Study. *Journal of the American Dietetic Association*. 2004,104:1127-40.
21. Demory-Luce D, Morale M, Nicklas T, Baranowski T, **Zakeri I**, Berenson G. Changes in food group consumption patterns from childhood to young adulthood: The Bogalusa Heart Study. *Journal of the American Dietetic Association*. 2004: 1684-91.
22. Cullen KW, **Zakeri I**, Pryor EW, Baranowski T, Baranowski J. Goal setting is differentially related to change in fruit, juice & vegetable consumption among 4th grade children. *Health Education and Behavior* 2004; 31(2): 258-269.
23. Cullen KW, **Zakeri I**. Children's Lunch Consumption of Fruit, Vegetables, Milk, and Sweetened Beverages Changes with Access to Ala Carte/Snack Bar School Meals. *American Journal of Public Health* 2004;94: 463-67.

24. Yoo S, Nicklas T, Baranowski T, **Zakeri I**, Yang S-J, Srinivasan SR, Berenson GS. Comparison of dietary intakes associated with metabolic syndrome risk factors in young adults: The Bogalusa Heart Study. *American Journal of Clinical Nutrition* 2004, 80: 841-8.
25. Jago R, Baranowski T, Yoo S, Cullen K, **Zakeri I**, Watson K, Himes J, Pratt C, Sun W, Pruitt LA, and Matheson DM. Relationship between physical activity and diet among African-American girls. *Obesity Research* 2004, 12:56S-63S.
26. Puyau MR, Adolph AL, Vohra FA, **Zakeri I**, Butte NF. Prediction of energy expenditure and physical activity level using accelerometers in children. *Medicine and Science and Exercise* 2004, 36:1625-1631.
27. Cullen KW, **Zakeri I**. The Youth and Adolescent Questionnaire has low validity with African- and Mexican-American 7th and 8th grade students. *Journal of the American Dietetic Association* 2004; Sept. 104(9): 1415-9.
28. Cullen KW, Baranowski T, Klesges L, Watson K, Sherwood N, Story M, **Zakeri I**, Leachman-Slawson D, Pratt C. Anthropometric, parental and psychosocial correlates of dietary intake of African-American girls. *Obesity Research*, 2004, 12:20S-31S.
29. Thompson D, Jago R, Baranowski T, Watson K, **Zakeri I**, Cullen KW, Story M, Sherwood N, Pruitt LA, Matheson DM. Covariability in diet and physical activity in African American girls. *Obesity Research*, 2004, 12:46S-54S.
30. Jago R, Baranowski T, Watson K, Baranowski J, **Zakeri I**. Relationships between maternal and child cardiovascular risk factors: Ethnic Differences and Lack of Influence of Physical Activity. *Archives of Pediatric & Adolescent Medicine* 2004, 158: 1125-1131.
31. Jago R, Nicklas T, Yang S, Baranowski T, **Zakeri I**, Berenson G. Physical activity and health enhancing dietary behaviors in young adults: Bogalusa Heart Study. *Preventive Medicine*. 2005; 41: 194-202.
32. Cullen KW, Watson K, Baranowski T, Baranowski J, **Zakeri I**. Squire's Quest! Intervention changes occurred at Lunch and Snack Meals. *Appetite*. 2004; 45: 148-151.
33. Jago R, Baranowski T, **Zakeri I**, Harris M. Observed environmental features and the physical activity of adolescent male. *American Journal of Preventive Medicine*. 2005; 29: 98-104.
34. Jago R, Baranowski T, Watson K, **Zakeri I**, Yoo S, Baranowski J, Conry K. Pedometer reliability, validity and daily activity targets among 10-15 year old boys. *Journal of Sport Sciences*. 2005; 24:241-251.
35. Deshmukh-Taskar P, Nicklas TA, Morales M, Yang S-J, **Zakeri I**, Berenson GS. Tracking of overweight status from childhood to young adulthood: the Bogalusa Heart Study. *European Journal of Clinical Nutrition*. 2006; 60: 48-57.
36. Yoo S, Baranowski T, Missaghian M, Baranowski J, Cullen KW, Fisher JO, Watson K, **Zakeri I**. Food-purchasing patterns by parents for fruit and vegetables for home. *Public Health Nutrition*. 2006; 384-393.
37. **Zakeri I**, Puyau MR, Adolph AL, Vohra FA, Butte N. Normalization of energy expenditure data

- for differences in body mass or composition in children and adolescents. *The Journal of Nutrition*. 2006; 136 (5):1371-1376.
38. Thompson D, Canada A, Bhatt R, Davis J, Plesko L, Baranowski T, Cullen K, and **Zakeri I**. eHealth Recruitment challenges. *Evaluation and Program Planning*. 2006; 29 : 433-440.
 39. Cullen KW, Watson K, **Zakeri I**, Ralston K. Exploring changes on middle school student lunch consumption after local school food service policy modifications. *Public Health Nutrition*. 2006; 9: 814-820.
 40. Jago R, **Zakeri I**, Baranowski T, Watson K. Decision boundaries and receiver operating characteristic curves: New methods for determining accelerometer cutpoints. *Journal of Sport Sciences*. 2007, 25(8); 937-944.
 41. Thompson V, Cullen KW, Watson K, Zakeri. The increased availability and marketing of fruit, juice and vegetable to middle school students increases consumption. *The Journal of Child nutrition & Management*. 2007; 31(1): 1-6.
 42. Thompson D, Baranowski T, Cullen K, Watson K, Canada A, Bhatt R, Liu Y, and **Zakeri I**. Food, Fun, and Fitness Internet Program for Girls: Influencing Log-on Rate. *Health Education Research*, June 25, 2007.
 43. Cullen KW, Watson K, **Zakeri I**, Baranowski T, Baranowski J. Achieving fruit, juice, and vegetable recipe preparation goals influences consumption by 4th grade students. *International Journal of Behavioral Nutrition and Physical Activity*. 2007; 4:28, pp. 1-7.
 44. Butte N, Cai G, Cole S, Fisher J, **Zakeri I**, Ellis K, Comuzzie. Metabolic and behavioral predictors of weight gain in Hispanic Children: the VIVA LA FAMILIA study. *The American Journal of Clinical Nutrition*. 2007; 85: 1478-85.
 45. Butte N, Puyau MR, Adolph AL, Vohra FA, **Zakeri I**. Physical activity in non-overweight and overweight Hispanic children and adolescents. *Medicine & Science in Sports & Exercise*. 2007; 39(8): 1257-1266.
 46. Butte N, Puyau M, Vohra F, Adolph A, Mehta N, **Zakeri I**. Body size, body composition and metabolic profile explain higher energy expenditure in overweight children. *The Journal of Nutrition*. 2007; 137:2660-2667.
 47. Cullen KW, Watson K, **Zakeri I**. Relative reliability and validity of the block kids questionnaire among youth aged 10 to 17 years. *Journal of American dietetic association* 2008; 108 (5): 862-866.
 48. Cullen KW, Watson K, **Zakeri I**. Improvements in middle school student dietary intake after implementation of the Texas public school nutrition policy. *American Journal of Public Health*. 2008; 98:111-117.
 49. Thompson D, Baranowski T, Cullen K, Watson K, Liu y, Canada A, Bhatt R, **Zakeri I**. Food, fun, and fitness internet program for girls: pilot evaluation of an e-health youth obesity prevention program examining predictors of obesity. *Prevention Medicine*. 2008; 47: 494-497.
 50. Nicklas, TA, O'Neil CE, Mendoza J, Liu Y, **Zakeri I**, Berenson GS. Are Energy Dense Diets Nutrient Dense? *J. Am. Coll. Nutr.* 2008; 27:553-560.

51. **Zakeri I**, Adolph A, Puyau MR, Butte N. Prediction of Energy Expenditure from Heart Rate and Physical Activity in Children and Adolescents using Cross-Sectional Time Series Modeling. *Journal of Applied Physiology* 2008; 104(6): 1665-1673.
52. **Zakeri I**, Adolph A, Puyau MR, Vohra FA, Butte N. Multivariate Adaptive Regression Splines (MARS) Models for the Prediction of Energy Expenditure in Children and Adolescents. *Journal of Applied Physiology* 2010; 108(1): 128-136.
53. Butte N, Wong W, Adolph A, Puyau M, Vohra F, **Zakeri I**. Validation of Cross-sectional Time Series and Multivariate Adaptive Regression Splines Models for the Prediction of Energy Expenditure in Children and Adolescents using Doubly Labeled Water. *The Journal of Nutrition* 2010;104: 1516-1523.
54. Adolph A, Puyau M, Vohra F, Nicklas T, **Zakeri I**, Butte N. Assessment of Physical Activity in Preschool Children Using Uniaxial and Triaxial Accelerometers. *Journal of Physical Activity and Health*, 2012,; 9, 944-953.
55. **Zakeri I**, Adolph A, Puyau MR, Vohra FA, Butte N. Cross-sectional Time Series and Multivariate Adaptive Regression Splines Models Using Accelerometers and Heart Rate Predict Energy Expenditure of Preschoolers. *The Journal of Nutrition*, 2013; 143: 114-122
56. Yang Y, Adolph A, Puyau M, Vohra F, Butte N, Zakeri I. Modeling Energy Expenditure in Children and Adolescents using Quantile Regression. *Journal of Applied Physiology*, 2013, In Press
57. Zhao W, Adolph A, Puyau M, Vohra F, Butte N, **Zakeri I**. Support Vector Machines Classifiers of Physical Activities in Preschoolers. *Physiological Reports*, 2013,
58. Barati Z, **Zakeri I**, Pourrezaei K. Functional Data Analysis View of Functional Near Infrared Spectroscopy Data. *Journal of Biomedical Optics*, 2013, 18(11): 117007-1-13
59. Butte NF, Wong WW, Lee JS, Adolph AL, Puyau MR, **Zakeri IF**. Prediction of Energy Expenditure and Physical Activity in Preschoolers. *Medicine and Science in Sports and Exercise.*, 2013.
60. Kabadi SM, Liu L. Auchincloss AH, **Zakeri IF**. Multivariate path analysis of serum 25-hydroxy vitamin D concentration, inflammation and risk of type 2 diabetes mellitus. *Disease Markers*. 2013; 35(3): 187-93.
61. Butte NF, Wong WW, Wilson TA, Adolph AL, Puyau MR, **Zakeri IF**. Revision of Dietary Reference Intakes (DRI) for Energy in Preschool-aged Children, 2014, *American Journal of Clinical Nutrition*. 2014 July; 100(1):161-7.
62. Lee, JS, **Zakeri I**, Butte N. Application of Smoothing Methods and Functional Principal Component Analysis to Dynamic Energy Expenditure Measurements in Children, 2013, Submitted
63. Barati Z, **Zakeri I**, Pourrezaei K. Cerebral and Extra-cerebral Hemodynamic Response to Cold Pressure Tests: an FNIR Study (submitted)
64. Nassiri S, **Zakeri I**, Weingarten MS, Spiller KL. Relative Expression of proinflammatory and Antiinflammatory Genes Reveals Differences between Healing and Nonhealing Human Chronic Foot Ulcers. *Journal of Investigative Dermatology*. 2015 June; 135(6): 1700-3.

65. Butte NF, ML Bandt, Wong WW, Liu Y, Mehta NR, Adolph AL, Puyau MR, Vohra FA, **Zakeri IF**. Energetic adaptations persist after bariatric surgery in severely obese adolescents. *Obesity*. 2015 March; 23(3): 591-601.
66. Butte NF, Liu Y, **Zakeri IF**, Mohny PR, Mehta N, Vourganti VS, Goring H, Comuzzie AG. Global metabolomic profiling targeting childhood obesity in the Hispanic population. *American Journal of Clinical Nutrition*. 2015 August; 102(2):256-67.
67. Mooreville M, Davey A, Orloski A, Hannah EL, Mathias KC, Birch LL, Kral TV, **Zakeri IF**, Fisher JO. Individual differences in susceptibility to large portion sizes among obese and normal-weight children. *Obesity*. 2015 April; 23(4): 808-14.
68. Puyau MR, Wilson TA, Liu Y, Wong WW, Adolph AL, **Zakeri IF**, Butte NF. Moderate-vigorous physical activity predicts accretion of fat-free mass not fat mass in preschool-aged children. *Medicine and Science in Sports and Exercise*. 2015 (to appear).
69. Puyau MR, Adolph AL, Liu Y, Wilson TA, Zakeri IF, Butte NF. Energy Cost of Activities in Preschool- Aged Children. *J Phys Act Health*. 2016 June; 13(Suppl 1):S11-6.
70. Pourshoghi A, Zakeri I, Pourrezaei K. Application of functional data analysis in classification and clustering of functional near infrared spectroscopy signal in response to noxious stimuli. *Journal of Biomedical Optics*. 2016 Oct; 21 (10):101411
71. Butte NF, Puyau, MR, Wilson TA, Liu Y, Wong WW, Adolph AL, Zakeri IF. Role of physical activity and sleep duration in growth and body composition of preschool-aged children. *Obesity*. 2016 June; 24(6):1328-35.
72. Barati Z, Zakeri I, Pourrezaei K. A Functional Near Infrared Spectroscopy Study on Tonic Pain Activation by Cold Pressor Test. *Neurophotonics*, 2016 (to appear)
73. Butte NF, Watson KB, Ridley K, Zakeri IF, McMurray RG, Pfeiffer KA, Crouter SE, Hermann SD, Bassett DR, Long A, Berhane Z, Trost SG, Ainsworth B, Berrigan D, Fulton JE. A Youth Compendium of Physical Activities: Activity Codes and Metabolic Intensities'. *Medicine & Science in Sports & Exercise*, 2017, DOI: 10.1249/MSS.0000000000001430
74. De Roos AJ, Gurian P, Robinson L, Rai A, Zakeri I, Kondo M. Review of Epidemiological Studies of Drinking Water Turbidity to Acute Gastrointestinal Illness. *Environmental Health Perspective*. 2017, 125(8):086003 doi :10.1289/EPH 1090
75. Lee JS, Zakeri IF, Butte NF. Functional data analysis of sleeping energy expenditure. *PLOS ONE*, May 10, 2017, 12(5):e0177286
76. Butte NF, Watson KB, Ridley K, Zakeri IF, McMurray RG, Pfeiffer KA, Crouter SE, Hermann SD, Bassett DR, Long A, Berhane Z, Trost SG, Ainsworth BE, Berrigan D, Fulton JS. A youth Compendium of Physical Activities: Activity Codes and Metabolic Intensities. *Med Sci Sports Exerc*. 2018 Feb;50(2):246-256. doi: 10.1249/MSS.0000000000001430

BOOK CHAPTERS, REPORTS, OTHER PUBLICATIONS

1. Thompson, D, Baranowski, T, **Zakeri, I**, Jago, R, Cullen, C. "Chapter 8, Effectiveness of School-based Environmental vs Individual Approaches to Diet, Physical Activity, and Sedentary Behavior Change Among Youth". In *Childhood Obesity and Health Research* (R. Flamenbaum, ed). New York: Nova Science Publishers. 2006 (Book Chapter).
2. Cullen, K, Watson, K, **Zakeri, I**. Middle School Student Lunch Consumption: Impact of National School Lunch Program Meal and Competitive Foods-2007 – ushrl.saa.ars.usda.gov
3. Cullen, K, Watson, K, **Zakeri, I**. Middle School Student Lunch Consumption: Impact of National School Lunch Program Meal and Competitive Foods. 2007- ddr.nal.usda.gov
4. Pourshoghi A, Barati Z, Zakeri I, Pourrezaei K. Pain Assessment Using Near-Infrared Spectroscopy. *The Textbook of Advanced Neurophotonics and Brain Mapping*. Yu Chen and Babak Kateb (Editors). Taylor and Francis 2016. ISBN 9781482236859

ABSTRACTS GIVEN

1. Nicklas TA, Demory-Luce D, Yang S, Baranowski T, **Zakeri I**, Berenson G. *Children's Food Consumption Patterns Have Changed Over Two Decades: The Bogalusa Heart Study*. The First Annual Nutrition Week, San Diego, California, February 23 – February 27, 2002.
2. Ayars C, Nicklas T, Baranowski T, Haymond M, **Zakeri I**, Berenson G. *Pediatric Insulin Sensitivity: Are Serum Lipids Temporally Related? The Bogalusa Heart Study*. FASEB Experimental Biology 2002: Meeting Abstracts, New Orleans, Louisiana. Published in the March 2002 FASEB Journal, 16(4):472.6.
3. Nicklas TA, Demory-Luce D, Yang SJ, Baranowski T, **Zakeri I**, Berenson G. *Are Children Consuming More Food Today than Yesterday?* FASEB Experimental Biology 2002: Meeting Abstracts, New Orleans, Louisiana. Published in the March 2002 FASEB Journal, 16(4):494.16.
4. Morales M, Nicklas TA, Demory-Luce D, **Zakeri I**, Baranowski T. *Are Eating Habits of Children Consistent with Those Later in Life?* FASEB Experimental Biology 2002: Meeting Abstracts, New Orleans, Louisiana. Published in the March 2002 FASEB Journal, 16(4):494.15.
5. Morales M, Demory-Luce D, Nicklas T, Baranowski T, **Zakeri I**. *Consistency in Food Group Consumption Patterns from Childhood to Young Adulthood: The Bogalusa Heart Study*. International Society of Behavioral Nutrition and Physical Activity First Annual Meeting: Beyond the Cutting Edge, Seattle, Washington, July 12, 2002.
6. Yang SJ, Nicklas TA, **Zakeri IF**, Baranowski T. *The Association between Eating Patterns and Overweight Status in Childhood*. FASEB Experimental Biology 2003: Meeting Abstracts, San Diego, California. Published in the 2003 FASEB Journal, No. 187.8.
7. Yoo, S, Nicklas T, Baranowski T, **Zakeri I**, Yang S, Srinivasan SR, Berenson GS. *Dietary Intakes among Young Adults with Different Numbers of Metabolic Syndrome Risk Factors: The Bogalusa Heart Study*. Society for Epidemiologic Research 2003 Meeting, Atlanta,

- Georgia, June 11-14, 2003. Published in the June 2003 supplement of the American Journal of Epidemiology.
8. Yoo, S, Nicklas T, Baranowski T, **Zakeri I**, Yang S, Srinivasan SR, Berenson GS. *Is Diet Related to the Clustering of Risk Factors for Metabolic Syndrome? The Bogalusa Heart Study*. Society for Epidemiologic Research 2003 Meeting, Atlanta, Georgia, June 11-14, 2003. Published in the June 2003 supplement of the American Journal of Epidemiology.
 9. Thompson D, Baranowski T, Cullen K, Watson K, and **Zakeri I**. *Relationship between home food purchasing patterns and BMI in a multi-ethnic sample*. *Annals of Behavioral Medicine*, 2004, 26 (2004 supplement).
 10. Jago R, Baranowski T, **Zakeri I**, Harris M, Watson K. *Moderating effect of the environment on adolescent physical activity change*. Abstract for the 2004 Annual meeting of Active Living Research, Del Mar California, January 30-31 2004.
 11. Jago R, Baranowski T, **Zakeri I**, Harris M. *Observed environmental features and the physical activity of adolescent males*. Presented at the second meeting of Active Living Research. Coronado, San Diego Feb 26th 2005.
 12. **Zakeri I**, Adolph A, Puyau M, Vohra F, Butte N. Prediction of Energy Expenditure from Heart Rate and Physical Activity in Children and Adolescents using Cross-Sectional Time Series Modeling. NAASO Meeting Abstract, New Orleans, LA, Oct. 20-24, 2007.
 13. **Zakeri I**, Adolph A, Puyau M, Vohra F, Butte N. Prediction of Energy Expenditure from Heart Rate and Accelerometry in Children and Adolescents using Multivariate Adaptive Regression Splines Modeling. The Obesity Society's 2009 Annual Scientific Meeting, Washington DC.
 14. **Zakeri I**, Adolph A, Puyau M, Vohra F, Butte N. Validation of Uniaxial and Triaxial Accelerometers for the Assessment of Physical Activity in Preschool Children. The Obesity Society's 2011 Annual Scientific Meeting, Orlando, FL.
 15. **Zakeri I**, Adolph A, Puyau M, Vohra F, Butte N. Validation of Uniaxial and Triaxial Accelerometers for the Assessment of Physical Activity in Preschool Children. The Obesity Society's 2011 Annual Scientific Meeting, Orlando, FL.
 16. Fisher, J.O., **Zakeri, I.**, Kral, T.V., Birch, L.L. Individual Differences in Susceptibility to Large Portion Sizes among Obese and Non-obese Children. The Obesity Society 30th Annual Scientific Meeting, September 2012, San Antonio, TX.
 17. **Zakeri I**, Adolph A, Puyau MR, Vohra FA, Butte N. Cross-sectional Time Series and Multivariate Adaptive Regression Splines Models Using Accelerometers and Heart Rate Predict Energy Expenditure of Preschoolers. The Obesity Society 30th Annual Scientific Meeting, September 2012, San Antonio, TX.
 18. Sina Nassiri, Elizabeth Grice, Michele De Palma, Kambiz Pourrezaei, Issa Zakeri. COEXPRESSION NETWORK ANALYSIS OF TIME-COURSE TRANSCRIPTIONAL RESPONSE DURING CUTANEOUS WOUND HEALING IN A MURINE MODEL OF DIABETES. Session Name: Wound Healing Society (WHS) Concurrent Session K1 - CHRONIC WOUNDS Session Date – Time: Friday, April 7, 2017 2:15pm - 3:15pm
 19. Sina Nassiri, Kambiz Pourrezaei, Issa Zakeri. SMOOTHING SPLINES MIXED-

EFFECTS MODELING OF LONGITUDINAL TRANSCRIPTIONAL RESPONSE DURING CUTANEOUS. WHS Poster Session. Friday, April 7, 2017

20. Sina Nassiri, Elizabeth Grice, Michele De Palma, Kambiz Pourrezaei, Issa Zakeri. FUNCTIONAL GENE SET ANALYSIS PREDICTS NOVEL CELLULAR AND MOLECULAR IMMUNE MEDIATORS OF IMPAIRED DIABETIC WOUND HEALING Session Name: WHS Poster Session. Friday, April 7, 2017

STUDENT SUPERVISION

1. Kaiyuan Chin, Master's, University of Maryland, College Park, Fall 1990.
2. Jung Hyun Kim, Master's, University of Maryland, College Park, Spring 1991.
3. Ruth Pfeiffer, Master's, University of Maryland, College Park, Fall 1993.
4. Ehasuyi Obasohan, MPH, Drexel University, Spring 2009.
5. Heidi Ochs, MPH, Drexel University, Spring 2009.
6. Avani Shah, MPH Biostatistics, Drexel University, Spring 2010.
7. Binal Patel, MPH Biostatistics, Drexel University, Spring 2010.
8. Jessica Seniuk-Fullmer, Executive MPH, Drexel University, Spring 2010
9. Lu Mao, MS Biostatistics, Drexel University, Spring 2010.
10. Jeremy Chris Bouwhuis, MPH Biostatistics, Drexel University, Spring 2011
11. MeganDonohue, MPH , Drexel University, Spring 2011
12. Melissa Aquino, MS Biostatistics, Drexel University, Spring 2011
13. Xiaoying Fu, MS Biostatistics, Drexel University, Spring 2011
14. Mirna McDonald, MS Biostatistics, Drexel University, Spring 2011
15. Andrew Harvey Waltersdorf, MPH, Drexel University, Spring 2012
16. Jason Mehr, MPH, Drexel University, Spring 2012
17. Alexandra Sheller, MPH, Drexel University, Spring 2012
18. Wei Zhao, MS Biostatistics, Drexel University, Spring 2012
19. Zeinab Barati, PhD, (Joint with Dr. Pourrezaei), School of Biomedical Engineering, Drexel University, Spring 2013
20. Nirali Shah, MPH Biostatistics, Drexel University, Spring 2014
21. Christina Roberts, MPH, Drexel University, Spring 2014
22. Prashant Vaidyanathan, MS Biostatistics, Drexel University, Spring 2014
23. Matthew Allinder, MS Biostatistics, Drexel University, Spring 2014
24. Sarah Darmon, MS Biostatistics, Drexel University, Spring 2014
25. Dave Shirly, Ms Biostatistics, Drexel University, Spring 2014
26. Thomas Eckmann, MPH Biostatistics, Drexel University, Spring 2015
27. Zhenzhen Rao, MPH Biostatistics, Drexel University, Spring 2015
28. Xuan Yang, MPH Biostatistics, Drexel University, Spring 2015
29. Jingjing Wang, MPH Biostatistics, Drexel University, 2015
30. Jung-Jin Lee, MS Biostatistics, Drexel University, Spring 2015
31. Hui Liu, MS Biostatistics, Drexel University, Spring 2015
32. Ruby Song, MS Biostatistics, Drexel University, Spring 2015
33. Ahmad PourShoghi, PhD, (Joint with Dr. Pourrezaei), School of Biomedical Engineering, Drexel University, Spring 2015
34. Elizabeth Lakata, MS Biostatistics, Drexel University, Spring 2016

35. Michael Thomas, MS Biostatistics, Drexel University, Spring 2016
36. Chi Zhang, MPH Biostatistics, Drexel University, Spring 2017
37. Megan Mansfield, MPH, Drexel University, Spring 2017
38. Sina Nassiri, PhD (Joint with Dr. Pourrezaei). School of Biomedical Engineering, Drexel University, September 2017
39. Sarukkalige Sha De Silva, MS Biostatistics, Drexel University, Spring 2018
40. Yuna Kin, MS Biostatistics (Joint with Dr. Berhane), Drexel University, Spring 2018

STUDENT COMMITTEE SERVICES

1. Robert C. Smucker, Masters, Department of Mathematics, University of Maryland, College Park 1988.
2. Meihui Guo, Ph.D., Department of Mathematics, University of Maryland, College Park, 1989.
3. Sy-Mien Chen, Ph.D., Department of Mathematics, University of Maryland, College Park, 1990.
4. William E. Potts, Masters, Department of Mathematics, University of Maryland, College Park, 1990.
5. Kewen Yin, Ph.D., Department of Mathematics, University of Maryland, College Park, 1991.
6. Sangyeol Lee, Ph.D., Department of Mathematics, University of Maryland, College Park, 1991.
7. Alexandros Karagrigorio, Ph.D., Department of Mathematics, University of Maryland, College Park, 1992.
8. Publo Zafra, Ph.D., School of Business, University of Maryland, College Park, 1992.
9. Jesse Chittams, Masters, Department of Mathematics, University of Maryland, College Park, 1993.
10. Jian-Lun Xu, Ph.D., Department of Mathematics, University of Maryland, College Park, 1993.
11. Shaum Kabadi, PhD., Department of Epidemiology and Biostatistics, Drexel University, Spring 2012

MENTORING

1. Candace Ayars, Ph.D., Baylor College of Medicine
2. Russell Jago, Ph.D., Baylor College of Medicine
3. Sangyeol Lee, Ph.D., University of Maryland, College Park
4. Yan Lui, MS, Baylor College of Medicine
5. Jason A. Mendoza, MD, MPH, Baylor College of Medicine
6. Miriam M. Morales, MS, Baylor College of Medicine
7. Ruangvith Tantibhaedhyangkul, MD, Baylor College of Medicine
8. Deborah I. Thompson, Ph.D., Baylor College of Medicine
9. Kathleen B. Watson, Ph.D., Baylor College of Medicine
10. Su-Jau Yang, Ph.D., Baylor College of Medicine

University and Department Service

Member, Sabbatical Leave Review Committee
Member, Emeritus Review Committee
Member, Tenure and Promotion Committee, College of Computing and Information
Member, Biostatistics Faculty Search Committee
Member, Epidemiology and Biostatistics Department Chair Search Committee
Director of Biostatistics Service Center

III. TEACHING INFORMATION

University of Maryland, Department of Mathematics
University of North Carolina, Department of Statistics
Stanford University, Department of Statistics
Rice University, Department of Statistics
Drexel University, Department of Epidemiology and Biostatistics

UNDERGRADUATE COURSES

Statistics and Data Analysis; Text: Statistics, Principle and Method (1992), R. Johnson and G.K. Bhattacharyya

Probability and Statistics; Text: Statistics for Business and Economics (1994), J.T.McClave and P.G.Benson

Introduction to Biostatistics; Text: Fundamental of Biostatistics (1990), B. Rosner

ADVANCED UNDERGRADUATE COURSES

Mathematical Statistics; Text: Introduction to Statistical Theory (1971), Hoel, Port and Stone

Introduction to Mathematical Statistics; Text: Introduction to Mathematical Statistics (1978), R. Hogg and A. Craig

Statistical Method II; Text: Applied Linear Statistical Methods (1996), Neter, Kunter, Nachtsheim and Wasserman

Introduction to Probability Theory; Text: A First Course in Probability (1998)S. Ross

Introduction to Probability Theory: Text: Probability (1993), J. Pitman

Regression and Analysis of Variance; Text: Applied Regression Analysis (1981), N. Draper and H. Smith

Statistical Methods in Engineering and Physical Sciences; Text: Statistics for Engineering and Sciences (1992), Mendenhall and Sinich

GRADUATE COURSES

Mathematical Statistics I and II; Text: 1) An Introduction to Probability Theory and Mathematical Statistics (1978), V.K. Rohatgi 2) Theory of Point Estimation(1983), E.L.Lehmann 3) Testing Statistical Hypotheses (1986), E.L. Lehmann

Multivariate Analysis; Text: An Introduction to Multivariate Statistical Analysis (1984), T.W. Anderson

Sequential Analysis; Texts: 1) Sequential Analysis: Tests and Confidence Intervals (1985), D. Siegmund 2) Nonlinear Renewal Theory in Sequential Analysis (1982), M. Woodroffe

Stochastic Processes: Text: A First Course in Stochastic Processes (1975), S. Karlin and H. Taylor

Probability; Text: Probability and Measure (1986), P. Billingsley

Nonparametric Statistics; Texts: 1) Introduction to the Theory of Nonparametric Statistics (1979), R. Randels and D. Wolfe 2) Approximation Theorems of Mathematical Statistics (1980), R.J. Serfling

Analysis of Variance; Text: The Analysis of Variance (1959), H. Scheffe

Advanced Topics in Time Series, Fall 2004 (joint with Professors Dennis Cox and Katherine Ensor, Rice University, Department of Statistics)

Advanced Topics in Time Series, Fall 2006 (joint with Professors Katherine Ensor and Rodolf Riedi, Rice University, Department of Statistics)

Statistical Inference I and II (Drexel University); Texts: 1) Mathematical Statistics and Data Analysis (2007), John A. Rice 2) Statistical Inference (2002), George Casella and Roger L. Berger.

Applied Multivariate Analysis (Drexel University); Texts: 1) Applied Multivariate Statistical Analysis, 6th edition, Johnson R.A. and Wichern, D.W. 2) Modern Multivariate Techniques, Regression, Classification, and Manifold Learning,(2008), Alan Izenman.

Nonparametric and Semiparametric Models (Drexel University); Texts: 1) Nonparametric and Semiparametric Models (2004) Hardle W, Muller M, Sperlich S, Werwatz A. 2) Semiparametric Regression (2003) . Ruppert D, Wand MP, Carroll RJ.